Pyle, Walter Lytle (1872-1921) American ophthalmologist. He was a lineal descendant of Robert Pyle of Wiltshire, England, who went to America with William Penn in 1684. His early education was in the Philadelphia public schools, and he graduated from the Medical School of the University of Pennsylvania in 1893. After study in the hospitals and laboratories of London and Paris he returned to Philadelphia and specialized in ophthalmology and became Assistant Surgeon to Wills' Eye Hospital. He was a voluminous writer. BJO 1921,5:575

Qu, Jia (1955-) Chinese ophthalmologist, Vice-President of Wenzhou Medical College and Dean of the School of Optometry and Ophthalmology. He graduated from Wenzhou Medical College in 1982, extended his study and received his Master Degree from the College. He served as the Associate Professor of Ophthalmology and Optometry (1991-1995) and is the Professor since 1995. His joint appointments include Chairman, China National Optometry Association, Director, National Optometry Research Center, Ministry of Public Health, Director of the Affiliated Eye Hospital of the Wenzhou Medical College, Vice-Chairman, Zhejiang Committee of Optics, Dean of Youth Council, Director of Zhejiang College Research Management Council and Chief Editor of *Chinese Journal of Optometry and Ophthalmology*. He is one of the founders of Ophthalmology and Optometry education in China. He and his colleagues started the Ophthalmology and Optometry School, the first education program in 1988 in Wenzhou Medical College. Based on medical science, he implemented the western curriculum, its characteristics of integration of' ophthalmology and optometry was highly valued at home and abroad. He currently works as Chairman of Chinese Consortium Institutes of Sun Yat-san Medical University, West China University of Medical Science, Shanghai Medical University and Tian Jin Medical University which have the same education programs. The graduates of these Schools have started to take important positions serving the eye-care of a large population. His research area includes ophthalmic instrument development and modification, photorefraction for children, myopia and contact lenses. Since 1990, he has published 60 academic papers and 6 books. He won 2 grants from the National foundation, and 6 from the Provincial foundation. He is also the Mentor for the Ph.D. and Master Degree students both in Wenzhou Medical College and other Medical Universities. He established the "*Chinese Journal of Optometry and Ophthalmology*" in 1999, which is the first academic journal on this special topic in China. The journal reached 10,000 copies of each issue at the first year of publication, and gained a good reputation for its specialty and quality. He set up an eye hospital affiliated to Wenzhou Medical College. It includes departments of optometry clinic, laser therapy center, refractive surgery, vision function training, amblyopia and strabismus, ocular disease diagnosis/treatment and cosmetic service. The eye hospital demonstrates a new conception of medical service for the total eye-care needs of its service area population, and it serves as well the teaching institute with aims to give it students a broad and sound training in the science of ophthalmology and optometry. (Wenzhou Medical College, 82 Xueyuan road, Zhejiang, 325003, P. R. China, phone: +86-577-8833801; fax: +86-577-8824115, e-mail: dscl@mail.wzptt.zj.cn, jqu@ppp.zeptt.zj.cn) (SM)

Quadri, Alessandro (1827-1869) Son of Giovanni Battista→Quadri, and a famous Italian ophthalmologist. Born at Naples he there received his medical degree, and there, on the death of his father, was made professor of military surgery. He practised chiefly as ophthalmologist, and was a very skilful operator. Quadri's chief ophthalmologic writings are as follows: 1. *De l'Utilité de la Décoction de Ratanhia dans la Kératite* (Annal. d'Ocul., XXXIII, 1855.) 2. *Cas Remarquable de Guérison d'une Fistule lacrymale.* (Ib.,) 3. *Recherches et Observations sur les Tubes Cornéens.* (Ib.) 4. *De l'Opération du Staphylôme Partiel de la Cornée.* (Ib, XXXIV, 1855.) 5. *Mélanges Ophthalmologiques.* (Ib., XXXVI, 1856 and XXXVII, 1857.) 6. *Compte Rendu des Maladies Oculaires Traitées à l´Hopital Militaire de la Trinité.* (Ib., XL, 1858.) 7. *Clinique Ophthalmologique*. (Ib., XLII, 1859; XLIV, 1860) 8. *De l'Ophthalmie Militaire dans l´Italie Meridionale.* (Ib. XLVI.) American Encyclopedia of Ophthalmology 14,p.10815-10816. Annales d´Oculistique, 1870,63:91-94. Dechambre. JPW.

Quadri, Giovanni Battista (1780-1851) Italian ophthalmologist, father of Alessandro →Quadri. Born at Vicenza, Italy, he devoted himself almost, but, as it seems, not quite, exclusively, to ophthalmology. In 1811 he was prosector at Bologna but later moved to

Naples, where he founded an ophthalmic hospital and became established as a teacher of ophthalmology. He died at Naples. In addition to numerous journal articles on ophthalmologic subjects, Quadri wrote "*Annotazioni Pratiche sulle Malattie degli Occhi Raccolte nella Reale Scuolu Clinica di Napolì*" (Naples, 1818-1830, 4 vols.[the *American Encyclopedia* wrongly quotes only 2 volumes, published 1818-24 as does the Hirsch *Biographisches Lexicon*]); *Cure del Gozzo* Naples 1818. American Encyclopedia of Ophthalmology 14,p.10816; Dechambre. JPW.

Quaglino, Antonio (1817-1894) Italian ophthalmologist, inventor of sclerotomy for the treatment of glaucoma, founder (1870) of the Annali di Ottalmologia, and one of the most distinguished operators of his day. Born at Zubiena, near Biella, in Piedmont he received his medical degree at Pavia in 1842. In 1843 he was made assistant at the Eye Clinic of Prof.→Flarer. In 1849 he became privatdocent for ophthalmology in Milan, and, in 1854, ophthalmologist to the Hospital of the Brothers of Mercy in the same city. In 1860 he won, by competitive examination, the chair of ophthalmology in Pavia, in succession to Flarer. While in this position he became renowned not only as a teacher, but also as operator and writer. Many of the greatest Italian ophthalmologists were Quaglino's students. To him it was also due that the most important medical works in German were translated into Italian, those, in particular, of Niemeyer, Virchow, and →Stellwag von Carion. Late in life Quaglino became completely blind, and, from the time when this occurred, he remained in close retirement. Quaglino's most important writings are: 1. *Dei Progressi dell' Oftalmologia in Italia.* (1850.); 2. *Sulle malattie interne dell´occhio* Milano 1858 (being the first Italian ophthalmoscopic atlas); 3. *Commentario sulle Amaurosi Cerebrali, Spinali e Gangliari*. (1863). Quaglino translated in 1866 Donders famous monograph on the *Anomalies of Refraction and Accommodation* and founded in 1871 the *Annali di Ottalmologia.* He was named President of the International Congress in Milano (1880). American Encyclopedia of Ophthalmology 14,p.10816**.** JPW

Quah, Boon-Long (1963-) Singaporean ophthalmologist, Consultant at Singapore National Eye Centre and Kerdang Kerbau Women's and Children's Hospital. He graduated from the National University of Singapore in 1987 and studied ophthalmology under various public and private sector ophthalmologists in Singapore. In 1993 he became a fellow of the Royal College of Surgeons of Edinburgh and obtained the Master of Medicine degree in ophthalmology from the National University of Singapore. He completed a one year fellowship in paediatric ophthalmology and strabismus at The Hospital For Sick Children in Toronto from 1998 to 1999 and was awarded the University of Toronto John Gaby best fellow research prize for his paper entitled "*The association of ocular dominance and the preferred eye for fixation in intermittent exotropia*". He won the first prize in the Institute of Biology national essay writing competition in 1981 for his paper entitled "*The ethics of bioengineering*". He has published various papers in both local and international refereed journals including "*Analysis of PRK patients who have not had PRK in their second eye*. Ophthalmic Surgery and Lasers 1996; Vol 27(5): 5429-5434", "*A Review of 5 Year's Experience in the use of Botulinum Toxin A in the Treatment of Sixth Cranial Nerve Palsy at the Singapore National Eye Centre*. Singapore Medical Journal 1999; Vol 40(6): 405-409" and "*A Study of Amblyopia in 18 to 19 year old males*. Singapore Medical Journal 1991;Vol 32(3): 126-129". (Dr Quah Boon Long. Singapore National Eye Centre. 11 Third Hospital Avenue S168751, Singapore. Phone: (65) 2277255; Fax: (65) 2277290; e-mail: snecqbl@pacific.net.sg) (SM)

Quarré, François (18th century). French ophthalmologist. He flourished in the middle and latter half of the 17th century. His fame rests almost exclusively on his having been the first to teach that a cataract is really an opacity of the crystalline lens, and not a "corrupt humor" which has collected and inspissated in front of that structure. This latter doctrine had been held and inculcated since at least the Hippocratic period. One does not know definitely whether or not Quarré ever confirmed his theory by anatomical dissection.→Rolfinck, however, in 1656, did in that manner undoubtedly and definitely establish the true doctrine concerning the seat and nature of cataract. Henry →Lasnier as well as Quarré, but a little later (also, presumably, on the same purely theoretical grounds), had declared the intralenticular situation of cataract. American Encyclopedia of Ophthalmology 14,p.10816-10817

Quelmaltz, Samuel Theodor (1696-1758). German surgeon, anatomist, pathologist and therapeutist, who should be borne in mind by ophthalmologists in particular and humanity in general, because he was the *first* to attribute ophthalmia neonatorum to infection. Prior to his time, this terrible disease was ascribed to colds, traumatism, foul air, etc. Born at Freiburg, Saxony, he received his medical degree at Leipsic, and there, beginning in 1737, became, successively, extraordinary professor of anatomy and surgery, professor of anatomy and surgery, professor of pathology and therapy. In 1757 he was elected Dean of the Faculty, and a few months later he died. He wrote a large number of dissertations, of which most relate to general medicine. The special ophthalmic article is "*De Caecitate Infantum Fluoris Albi Materni ejusque Virulenti Pedisequa*" (Lips., 1750). As a matter of course, Quelmaltz knew nothing at all of the germ theory of disease, but, just the same, when he assigned the mother's discharges as the source of the disease in the child's eyes, he had taken a great step forward in ophthalmology. American Encyclopedia of Ophthalmology 14,p.10818

Quengsy, Guillaume, Pellier de *see* **Pellier de Quengsy**

Quickert, Marvin Harold (1929-1974) American ophthalmologist. Graduated from the University of California in 1950, he received his M.D. from the Universitv of California Medical School in 1953, interned at the Santa Clara County Hospital in San Jose, and served for three years in the United States Navy. He took a three-year ophthalmology residency at the University of California Medical School, San Francisco, where he developed an interest in ophthalmic plastic surgery. After a year's Heed Fellowship in this subspecialty, under the direction of Wendell Hughes and at the New York centers, he entered practice in San Jose. Quickert served as associate clinical professor of the University of California Medical School. He rapidly became known for his knowledge and skill in the fields of orbital anatomy and ophthalmic plastic surgery. He lectured extensively both in this country and abroad. He wrote articles and book chapters in his fields of interest, coauthored a book on orbital anatomy, and was a perfectionist in the field of medical photography. He pioneered work in lacrimal and eyelid problems. He had recently become chief of the Section on Ophthalmic Plastic Surgery, founded with Crowell →Beard six years before, at the University of California Medical School. AJO 1974,78:346-347

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Radius, Justus (1797-1884) German ophthalmologist, who in later life abandoned ophthalmology and devoted himself almost exclusively to hygiene and pharmacology. Born at Leipsic, he received there his medical degree in 1822. After a number of scientific journeys, he settled in Leipsic, and became extraordinary professor of ophthalmology at the University in 1825. He had an extremely large ophthalmic practice, but never completely abandoned general medicine. In 1872 he celebrated the semi-centennial of his doctorate, and, in 1882, the 60th anniversary of that dignity. Radius's ophthalmologic writings are as follows: 1. *Scriptores Ophthalmologici Minores*. (3 vols., Leipsic, 1826 1830.) 2. *Handwörterbuch der Gesamten Chirurgie and Augenheil kunde*. (6 vols. 1836-1840), in conjunction with Philipp vonàWalther and àJaeger.) 3. *Ueber die Sogenannte Agyptische Augen-Entzündung und deren Jetzige Behandlung in England*. (J. d. Chir. u. Augenk. von Graefe und Walther, V, 297-304, 1823.) 4. *Ueber einige Augenkrankheiten, die vorzüglich häufig in England Vorkommen. (*Ibid., VII, 370-389.) American Encyclopedia of Ophthalmology 14,p.10861-10862

Raehlmann, Eduard (1848-1917) German ophthalmologist born at Ibbenbüren, Germany. Raehlmann studied medicine at Würzburg, Halle, and Strasbourg (M.D., 1872), was Alfred Graefe's assistant in Halle for a time, and became professor of ophthalmology at Dorpat (1879-1900). He spent his last years at Weimar, pursuing studies in art history. He wrote on a broad range of ophthalmologic topics, but was especially interested in the physiology of color vision and color blindness published in Graefe´s Archiv between 1872 and 1877. He published also anatomical papers on the histology of the cornea, on trachoma, on the movements of the eyes and about the physiological meaning of the width of the opening of the pupil as well on the dependence of the blood flow in the retina from the general blood circulation (in Virchow Archiv). He wrote: *Ueber den Heilwerth der Therapie bei Trachom*. Berlin 1898. Albert.JPW

Rahman, Mustafizur M. (1935-) Bangladesh ophthalmologist, Founder Director and Professor of MIRZA AHMED ISPAHANI (M.A.I.) Institute of Ophthalmology and Chief Consultant of Islamia Eye Hospital. He graduated from Dhaka Medical College in 1958, continued higher studies in London on the State Scholarship in 1963: he received D.O. in London and F.R.C.S Ireland and Edinburgh (1966-1968). He was then awarded the F.C.P.S. by Bangladesh College of Physicians and Surgeons (1978) and F.R.C. Ophth. From the Royal College of ophthalmologists, England (1993). Besides his present position as above, he has joint appointment as Honorary Consultant Ophthalmologist in the Bangladesh Armed Forces. His professional activities include Treasurer (1973-1974), Secretary General (1975-1976) and President (1977-1979) of the Ophthalmological Society of Bangladesh, Chief Editor of the Transaction of the Society (1980) and Chairman of the Scientific Committee of the Society (1982). He served as the Vice-President and the Chairman of the Scientific Committee of the 13th Congress of the Asia-Pacific Academy of Ophthalmology (APAO) held in 1993. He played a pivotal role in the development of Lions Eye Hospital, Islamia Eye Hospital and M.A.I. Institute of Ophthalmology and the Eye Department of Combined Military Hospital Dhaka. His particular interest in Ophthalmology is in corneal diseases and glaucoma and he has many publications, e.g. "*Early surgery, a choice for POAG in developing countries*. Trans. APAO9, 1982", *Penetrating keratoplasty and eye banking in Bangladesh*. Refractive and Corneal Surgery 7: No. 6, 1991". He founded the Glaucoma Research Center in Dhaka in 1988 and has served as the President since then. He is also the President of the Bangladesh Eye Care Society, Member of International Advisor Board of Project ORBIS and Member of Academy Board of International Foundation of Eye Bank and International Member of American Academy of Ophthalmology. He is a recipient of many Awards, e.g. Dr. Alim Memorial Gold Medal (1978), Melvin John Fellow Award, Highest Award by Lions Club International (1989), Sir Jagadish Chandra Bose Gold Medal (1990), Atish Dipankar Gold Medal (1987) and distinguished Service Award of the APAO (1993). He has devoted himself to the prevention of blindness, and built a charitable Eye Hospital in his village home. He was given the highest National Award of Bangladesh, Independence Day Award in 1989.(SM)

Rainy, George (1832-1869). Scottish, Glasgow ophthalmologist, son of HarryàRainy. He became in 1868 surgeon at the Glasgow Eye Infirmary and professor of ophthalmology at the University. Rainy's ophthalmic writings are as follows: 1. *On the Theory of the Ophthalmoscope*. (London, *1860.)* 2. *Ophthalmic Cases*. (Ophth. Rev.,III, 1867.) 3. *Parallactic Movements of the Ophthalmoscopic Image*. (Roy. Lond. Oph.. Hosp. Rep., III, 91.) American Encyclopedia of Ophthalmology 14,p.10864

Rainy, Harry (1792-1876). Scottish surgeon, father of George àRainy (1832-1869) who devoted some attention to ophthalmology. Born in Sutherlandshire, Scotland, he studied at Glasgow, Edinburgh, and Paris, finally settling as physician in Glasgow. In 1828 he became surgeon to the Glasgow Eye Infirmary, in 1844 consulting surgeon, and in 1867 physician. He also lectured at the Glasgow University on physiology and practical therapeutics. American Encyclopedia of Ophthalmology 14,p.10864

Ramazzini, Bernardino (1633-1714) Italian physician who wrote one of the earliest books on occupational diseases. He was born at Capri and was appointed professor of the theory of medicine in the University of Modena about the end of the seventeenth century. While there he wrote the most interesting *De Morbis artificum diatriba* Modena 1700 (*"Treatise on the Diseases of Tradesmen,"*) which he published immediately after being installed as Professor in the University of Padua. His work was translated into English by Dr. R. James, and published, along with a translation of a pamphlet on *"Endemial Distempers,"* by Frederic Hofman, Physician to the King of Prussia. Ramazzini´s works were published London 1716 as *Opera omnia med. Et phys* .American Encyclopedia of Ophthalmology 14,p.10865-10878; The Ophthalmoscope 1916:p.290 ff.

Ramón y Cajal, Santiago (1852-1934) Spanish neurohistologist, born in Petilla de Aragon, Spain. Ramón y Cajal received his medical education at Saragossa (licentiate, 1873); after army service in Cuba and a period as assistant at the Saragossa Medical Clinic, he took his M.D. at Madrid (1877) and became professor of anatomy and histology successively at Saragossa (1877), Valencia (1884), Barcelona (1887), and Madrid (1892).

In the 1880s and 1890s, Ram6n y Cajal improved Golgi's chrome-silver stain and applied it to the entire nervous system, making major discoveries in the microscopic anatomy of the optic chiasm, the innervation of the retina, the olfactory lobes, the medulla, the cerebellum, the cerebral nerves, and the spinal ganglia. He was awarded the Nobel Prize jointly with Golgi in 1906. His later years were devoted to research on the degeneration and regeneration of nervous tissue. Ramón y Cajal's major works include the *Textura del sistema nervioso del hombre y de los vertebrados* (1897-1904) and *Estudios sobre la degeneracion y regeneracion del sistema nervioso* (1913-1914); *Die Retina der Wirbelthiere. Untersuchungen der Golgi-Cajal'schen Chromsilbermethode ... In Verbindung mit den vom Verfasser zusammenengestellt, übersetzt, und mit Einleitung versehen von Dr. Richard Greeff*. Wiesbaden 1894; *Die Structur des Chiasma Opticum nebst einer allgemeinen Theorie der Kreuzung der Nervenbahnen. Aus dem Spanischen übersetzt von J. Bresler* Leipzig 1899.Albert

Ramos-Cortes, Evelyn L. (1943-) Filipino ophthalmologist, Consultant of the Pediatric Ophthalmology and Strabismus Section, Institute of Ophthalmology, St. Luke's Medical Center (1993-present). She graduated from the University of Sto.Tomas, College of Medicine in 1965, with M.D. degree granted. She completed residency in Ophthalmology at Greater Baltimore Medical Center, Baltimore, Maryland, U.S.A. (1967-70) and took the Lancaster Basic Science Course in Ophthalmology in 1969. On homecoming, she served in various positions at the Philippine Eye Research Institute (now the Institute of Ophthalmology) and the Department of Ophthalmology of the University of the Philippines-Philippine General Hospital Medical Center: Research Fellow (1971-74), Researcher (1975-82), Section Chief of Ocular Motility Section (1971-82), Clinical Instructor (1971-75), Clinical Asst. Professor (1976-82). She was also Consultant and Active Medical Staff at the United Doctors Medical Center (1975-93), and Cardinal Santos Medical Center (1986-present); Hospital Chief of Clinics and Chairperson, Dept. of Ophthalmology, United Doctors Medical Center (1990-92), and Visiting Consultant, Children's Medical Center, Quezon City (1995-present). She held the following positions: Councillor, Philippine Society of Ophthalmology (1979-81); Treasurer, Philippine Academy of Ophthalmology & Otolaryngology (1990-95); Vice President (1996), President (1997), Executive Council member (1998-1999) of the Philippine Academy of Ophthalmology. She was also Vice-President of the Organizing Committee of the 17th Congress of the Asia Pacific Academy of Ophthalmology (1997). She is currently the First President of the *Philippine Society of Pediatric Ophthalmology & Strabismus*, since March, 1998. Some of her publications include: "*PERI Color Test for Dark Adaptation, Normal*", Phil. J. of Ophthal. 5: Jan-Mar 1973; "*PERI Color Test for Dark Adaptation & Night Blindness: Malnourished Subjects*" Phil. J. of Ophthal. 5:Jan-Mar,1973; "*Duane's Syndrome: an Analysis of Four Cases*", Phil. J. of Ophth. 10:11,Jan-Mar,1978. She received the First Prize, Basic Category, of the Alcon Research Awards in 1972 for the work on the PERI Color Tesy for Dark Adaptation. (Pediatric Ophthalmology & Strabismus, St. Luke's MedicaL Center, Rm.134 MAB, E. Rodriguez Sr. Ave., Quezon City, Philippines; Phone: 632-727-0109; fax: 632-721-3969; e-mail: rjcortes@info.com.ph).

Ramsay, Andrew Maitland (1859-1946) Scottish ophthalmologist from Glasgow where he became the director of the Glasgow Eye Infirmary. His main work was *Atlas of external diseases of the eye* Glasgow 1898, which was one of the finest productions of its kind. Illustrated with thirty chromolithographs and eighteen photogravures, the plates illustrate cases Ramsay met with at the Glasgow Eye Infirmary" (Becker, 1983).Albert

Ali Syed Ramzan

Ramzan, Ali Syed (1901-1988) Professor Ramzan Ali Syed passed away in Lahore in 1988, the Pakistan Journal of Ophthalmology (Vol.4, 2,39, 1988) paid tribute to him and referred to the "*passing of a pioneer*". Prof. Mahmud Ali Shah detailed his lifetime achievements in an encomium and acclaimed him " *the father of modern ophthalmology in Pakistan*". He was a man of many talents, an erudite scholar and a neat surgeon who pioneered modern surgical techniques in Pakistan. He was elected from an all-lndia competition to be clinical assistant to the Professor of Ophthalmology at the King Edward Medical College, Lahore. Upon his Country's independence, he became the first Pakistani Professor of Ophthalmology, when he distinguished himself by training local ophthalmologists and initiating a local diploma course and examination in Ophthalmology.

He built up a large consultation practice and, after retirement, established an eye hospital, named the "Ali Hospital" in Lahore. In recognition of his excellence in ophthalmology, the Asia-Pacific Academy of Ophthalmology (APAO) awarded him its highest honour, the Jose Rizal Medal at the 7th Congress of the APAO in 1979. On the same occasion, the President of Pakistan, General Muhammad Zia Ul-Haq initiated the Ramzan Ali Syed Gold Medal, to be awarded annually for outstanding accomplishments in Ophthalmology in his Country. (Ophthalmology awakens in Asia -40 years of Asia-Pacific Ophthalmology, Lim, K.H. & Lim Arthur S.M. Singapore National Eye Centre 1999)

Rand, Gertrude (1886-1970) American scientist whose scientific interests were focused on vision and lighting. Rand was born in New York, and graduated in 1908 from Cornell University where she majored in experimental psychology. She became a graduate student at Bryn Mawr College under Dr. Clarence E. Ferree. There she was awarded degrees of both master of arts and doctor of philosophy in 1911. Following postdoctoral work, she became a faculty member at Bryn Mawr , where the research team of Ferree and Rand gained growing recognition in the field of vision and lighting. A significant contribution to ophthalmology was the development of the Ferree-Rand perimeter. In 1918 she became the wife of Dr. Ferree. In 1928, at the invitation of Dr. William H. Wilmer, Ferree and Rand planned and established a research laboratory in physiological optics at the Wilmer Institute of the Johns Hopkins Medical School. Their joint studies in vision and lighting continued until Dr. Ferree's death in 1942. In 1943 Rand accepted an appointment at the Knapp Memorial Laboratory of Physiological Optics of the College of Physicians and Surgeons of Columbia University, which had been established in 1942 under the direction of Dr. LeGrand H. Hardy, She continued her research there in binocular vision and color vision until her retirement in 1957. The research of this period resulted in the development of the Hardy-Rand-Rittler pseudoisochromatic plates for testing of color vision. Gertrude Rand was recognized by Wilson College in 1943 by an award of an Honorary Doctor of Science. In 1951 she was elected as an honorary fellow of the American Academy of Ophthalmology and Otolaryngology, one of the few non-ophthalmologists in this field to be so honored. In 1959 she received the Edgar D. Tillyer Medal of the Optical Society of America and in 1963 the Gold Medal Award from the Illuminating Engineering Society which had elected her as the first woman fellow in 1952. She was a member of the Armed-Forces National Research Council Vision Committee, the Inter-Society Color Council, National Council of Women Psychologists, the Optical Society of America, the American Psychological Association and the National Society for the Prevention of Blindness. Over 150 contributions to the literature of ophthalmology were made in a career that spanned nearly one half a century. AJO 1970,70:653

Randolph, Middleton Elliott (1905-1992) American ophthalmologist, born in Baltimore, Maryland, the son of Dr. Robert L. Randolph, an ophthalmologist. Randolph attended the Episcopal High School in Alexandria, Virginia, and graduated from the University of Virginia. His M.D. degree was from Johns Hopkins, and his ophthalmic training was at the Wilmer Institute where he served as assistant resident from 1933 to 1937 and as chief resident in 1938. He later became instructor and assistant professor in charge of the dispensary while establishing a private practice. In 1942 he joined the United States Army and was stationed initially at Amarillo Hospital in Texas. Subsequently he served as consultant to the Surgeon General and as chief of ophthalmology at Valley Forge General Hospital where he received the Army Commendation Medal. On discharge from the Army he rejoined the Hopkins staff and served as assistant and associate professor of ophthalmology at the Wilmer Institute of the Johns Hopkins Hospital and Medical School. His interests were principally in anterior segment disorders and surgery. Much of his writing was about glaucoma, and his thesis for the American Ophthalmological Society was on syphilitic interstitial keratitis. He served as editor of the Transactions of the American Ophthalmological Society for eight years and as president of the Society in 1975. His two passions were the American Ophthalmological Society and the Wilmer Institute. With Robert Welch he authored "*History of the Wilmer Ophthalmological Institute, 1925-1975.*" AJO 1992,113:608

Ranken, Margaret (? – 1950) British ophthalmologist. She was surgeon -in -charge of the orthoptic department of Sunderland Eye Infirmary. Having successfully organized the training of orthoptists in that institution, she was able to make many constructive

suggestions at the Orthoptic Board, whose meetings she regularly attended in London. Her surgical skill in the treatment of squint was enhanced by her familiarity with the physiology of binocular vision. Miss Ranken was appointed ophthalmic surgeon to the Ingham Infirmary, South Shields, having previously held the post of ophthalmic surgeon to Durham County Hospital. Her early training was varied and thorough. After graduating M.B. from the University of Durham in 1924, she did more than 20 years' work at the Victoria Infirmary, Newcastle-upon -Tyne, as house surgeon, refractionist, registrar, and associate surgeon. Ophthalmology was far from being Miss Ranken's sole interest. She found time to play an active part in the Medical Women's Federation, and was formerly president of the Sunderland branch of the Soroptimists. BJO 1950,34:643

Ranney, Ambrose Loomis (1848-1905). American anatomist and neurologist who, late in life, became an ophthalmologist, and who was one of the first physicians in America to direct the profession's attention to eye-strain as a cause of general diseases. Born at Hardwick, Mass., he received the degrees of Bachelor and Master of Arts at Dartmouth College, and then proceeded to study medicine under his uncle, Alfred L. Loomis, in New York City. His medical degree was received from the University of the City of New York in 1870. The most of A.L.Ranney's life was given to general practice in the city of New York. During all these years, however, he devoted especial attention to anatomy and neurology. Late in his career he became an ophthalmologist, and, as such, was remarkably successful. Ranney was for years professor of nervous and mental diseases in the University of Vermont, and adjunct professor of anatomy in the University of the City of New York. He was, for a time, president of the New York Academy of Medicine. His chief works were: *"Essentials of Anatomy"* (1880); *"Practical Medical Anatomy"* (1882); *"A Treatise on Surgical Diagnosis* (1884); *"The Applied Anatomy of the Nervous System"* (his Opus Majus, 1888).American Encyclopedia of Ophthalmology 14,p.10880-10881

Rao, Gullapali (1945-) Indian ophthalmologist, Founder and Director of L.V. Prasad Eye Institute, Hyderabad, India (1986-), and the Secretary-General of the International Agency for the Prevention of Blindness (1998-). He graduated from Guntur Medical College in 1970, studied Ophthalmology at All India Institute of Medical Sciences under Prof.L.P.àAgarwal. He extended higher studies at Tufts University, Boston (1974-1975), at University of Connecticut (1975-1976) and University of Rochester (1976-1977). He served as Associate Professor of Ophthalmology at University of Rochester (1977-1986) and worked as the Associate Director of Cornea Research Laboratory and Medical Director of the Rochester Eye Bank (1980-1985). He returned home in 1986 and founded the L.V. Prasad Eye Institute and serves as the Director. The Institute is a complex of modern eye hospital with advanced training programs for ophthalmologists and paramedical personnel, an eye research center, rehabilitation program, product development and high quality eye care models for underserved areas. He has many professional assignments, e.g. Medical Advisory Board, the Eye Bank Association of America (1983-1988 & 1996-), Board of Directors of the Castroviejo International Corneal Society (1985-1989), President of the Eye Bank Association of India (1995-1998), Vice-President of the International Contact Lens Council of Ophthalmology (1994-), President of the Asia-Pacific Region of the International Agency for Prevention of Blindness, and many others. He is a Member of the Academia Ophthalmologica Internationalis. He served as the Editor-in-Chief of the *Indian Journal of Ophthalmology* and the editor of many other Professional Journals. His research interest has been in corneal diseases, keratoplasty, contact lenses and cataract surgery, and he published more than 140 papers. He has been invited Lecturer to many International Congresses and gave many teaching courses not only in India but also overseas. He is a recipient of many honor Awards, e.g. from All India Ophthalmological Society (1982,1984,1986), American Academy of Ophthalmology (1983), Senior Honor Award of the American Academy (1998). Followings are some of the publications : Rao GN, Shaw EL, Arthur EJ and Aquavella JV. *Morphological Appearance of the Healing of Corneal Endothelial*. Arch Ophthalmol 96; 2027-2029, 1978; Rao GN, Shaw EL, Stevens RE and Aquavella JV. *Automated Pattern Analysis of Corneal Endothelium*. Ophthalmol 86; 1367-1373, 1979; Lohman LE, Rao GN and Aquavella JV. *The Normal Human Corneal Epithelium--In vivo Microscopic Observations*. Arch Ophthalmol 100:991-993, 1982; Rao GN, Lohman LE and Aquavella JV. *Cell size-shape. Relationship in Human corneal endothelium*. Invest. Ophthal Vis Sci 22:271-247, 1982; Ishida N, Rao GN, del cerro M and Aquavella JV.

Corneal Nerve Alterations in Diabetes Mellitus. Arch Ophthalmol 102:1380-1384, 1984; Dandona L, Naduvilath TJ, Janarthanan M, Ragu K, Rao GN. *Survival Analysis and Visual Outcome of a Large Series of Corneal Transplants in India*. Br J Ophthalmol 81:726-731, 1997; Kunimoto DY, Sharma S, Reddy MK, Gopinathan U, Jeevan Jyothi, Miller D,Rao GN. *Microbial Keratitis in Children*. Ophthalmology 46(1):31-35; 1998 (L.V. Prasad Eye Institute, L.V. Prasad Marg, Banjara Hills, Hyderabad- 500 034, India, phone: +91-40-354-8098, fax: +91-40-354-8271, e-mail: gnrao@lvpeye.stph.net) (SM)

Raqiqa, Sadid b. *see* **Sadid b. Raqiqa**.

Rasquin, Emile (1883-1954) Belgian ophthalmologist. Rasquin obtained the M.D. degree in Leuven and specialized in ophthalmology in Leuven (with Vander Straeten), Bern, Freiburg-in-Breisgau, Paris, Vienna and Zurich. During the first World War he served as a military physician in Le Havre. He wrote on the *pupillary symptoms of syphilis* (1919), on *uveal melanoma and orbital tumours*, but is know chiefly for his *E-optotypes without serifs* which are still used in medico-legal expertises (1918, 1938). (Verriest)

Rathlauw, Johann Peter (18th century). Dutch obstetrician, surgeon and ophthalmologist. The dates of his life and death are not precisely known, but he flourished in the middle third of the 18th century. He studied in Paris and London under àSt.Yves and Ferrein, and shortly afterward settled in Amsterdam. He was for a time excluded from practising as a physician (but not, it, would seem, as an obstetrician) because he had purchased and kept to himself the secret of the obstetrical forceps. By the aid of Thomas Schwencke, professor of anatomy and surgery at Amsterdam, he finally secured admission to the College of Physicians. In addition to works of a general medical character, he wrote *"Verhandeling van de Cataracta, derzelve Oorzaken, Kentekenen en Gevolgen, en inzonderheit de Manier der Operatie"* (Amsterdam, 1752).American Encyclopedia of Ophthalmology 14,p.10881

Rau, Wilhelm. A well known German pediatrist and oto-ophthalmologist. Born at Schlitz, Germany, in 1804, son of the physician, Gottlieb Martin Wilhelm Ludwig Rau, he studied at Erlangen, Tübingen, Giessen, and Heidelberg, receiving his medical degree at Giessen in 1826. He was for a time Privatdocent in ophthalmology at Giessen. Later he was made professor extraordinarius in pediatry and ophthalmology at Bern. The date of his death is not known. Rau's ophthalmologic writings are as follows: 1. *Ueber die Erkenntnisse, Entstehung und Heilung der Staphylome des Menschlichen Auges* (Heidelb. and Leipz., 1828.) 2. *Die Krankheiten und Bildungsfehler der Regenbogenhaut.* (2 vols.Bern, 1844-45.) 3. *Ueber die Sinnesorgane Ueberhaupt und die Pflege des Auges Insbesondere.* (Bern, 1858; 2d ed., 1859.) American Encyclopedia of Ophthalmology 14,p.10881-10882

Rava, Jacob (1837-1911). Italian surgeon, who devoted especial attention to hygiene and ophthalmology, and who revived the ancient operation of coloring opacities of the cornea. Born at Milan, he received his medical degree in 1859, and fought for a time under Garibaldi. Settling in Pavia he became assistant to the eye clinic in that place. In 1864 he moved to Sassaria, there to accept the chair of ophthalmology, and, in 1878, the full professorship. He wrote: *Manuale de oftalmologia* Sassari 1877. American Encyclopedia of Ophthalmology 14,p.10882

Ravin, James Gordon (1942-) American ophthalmologist born in Toledo, OH. Ophthalmologists in his family include his father Louis (1912-), paternal uncle Oscar (1916-1991), daughter Tracy (1973-). He received his BA, MD (1968), and MS (1974) degrees from the University of Michigan. His residency was spent (1971-74) at the University of Michigan Medical Center under John Woodworth.Henderson, MD, PhD. Ravin became Clinical Associate Professor at the Medical College of Ohio (1990*)*. He has served on the editorial boards of the *Archives of Ophthalmology* and the *Survey of Ophthalmology*. Ravin co-authored, with Michael Marmor, *The Eye of the Artist*. Mosby, St.Louis 1997. He authored articles since 1967 in *Arch Ophthalmol*, *JAMA*, *Ophthalmol*, *Am J Ophthalmol*, *Survey Ophthalmol*, *Doc Ophthalmol*, *Ann Ophthalmol*, *J Ped Ophthalmol*. Ravin has special interests in the history of ophthalmology and medical aspects of art. Address: 3000 Regency Ct, Toledo, OH 43623. E-mail jamesravin@aol.com.

Ray, James Morrison (1860-1918) American ophthalmologist of Louisville, where he received his MD in 1882. He went to New York where he studied the eye , ear, nose and throat in the Manhattan Eye and Ear Hospital. While in this institution he was assistant to the famous Dr. Cornelius Rea àAgnew. Returning to Louisville in 1885, Dr. Ray settled in that city as ophthalmologist and oto-laryngologist, and was immediately afterward appointed a clinical assistant in ophthalmology, otology, and laryngology in the Medical Department of the University of Louisville. He afterwards studied the eye, ear, nose and throat in Paris, London, and Vienna, and, returning to Louisville, was awarded the full Professorship of ophthalmology in his alma mater. When the various Louisville schools merged with the Medical Department of the University, Ray was elected chairman of the medical faculty, a position which he held till his death. He was ophthalmic surgeon to the Louisville City and to the SS.Mary and Elizabeth Hospitals, a member of the American Ophthalmological Society, a delegate to the International Medical Congress at London in 1913, and a Fellow of the American College of Surgeons. AJO 1919,2:460-461. American Encyclopedia of Ophthalmology 14,p.10882-10883

Read, Sir William (18th century). English ophthalmologist of the 18th century, concerning whom we know almost nothing. He was knighted by Queen Anne and appointed ophthalmologist to King George in 1714. He wrote a book entitled *"Treatise of the Eye Containing a Short but Exact Description of the Structure, Situation . . . . . as also the Causes, Symptoms and Cures of 130 Diseases Incident to Them"* (London, 1706), copies of which are extremely rare. American Encyclopedia of Ophthalmology 14,p.10889

Reber, James Wendell (1867-1915?) American ophthalmologist. Born at St.Louis, Mo., he received his medical degree at Washington in that city in 1889 (afterwards the ad *eundem* at Jefferson medical college) and also practised general medicine at St. Louis for a number of years. It seems that his entrance into ophthalmology was very gradual, and not to be referred to any particular date. After a time he moved to Norristown, Pennsylvania, where he was long in the Hospital for the Insane. For about three years he practised ophthalmology at Pennsylvania. Moving to Philadelphia, his career as a specialist of international reputation was soon begun. He was professor of ophthalmology in the Medical Department of Temple University, professor of diseases of the eye in the Philadelphia Polyclinic, ophthalmologist to the Garretson, Samaritan, and Philadelphia General hospitals; Fellow of the American College of Surgeons, honorary Fellow of the Chicago Ophthalmological Society, past president of the American Academy of Ophthalmology and Oto-Laryngology. For years he was a member of the Oxford Ophthalmological Congress, and in 1914 was the only American member of its Council. Socially he was past president of the Meridian Club, a member of the Union League, Manufacturer´s Club and Olivet Lodge of Masons. For the very long list of the Doctor's contributions to periodical literature, the reader is referred to the *Index-Catalogue* of the Library at the Surgeon General's Office. In conjunction with Dr. Howard F. Hansell, he wrote "*Muscular Anomalies of the Eye," a book at his time well* known to every ophthalmologist. He was Department Editor of the *Ophthalmic Year Book,* author of "*Anesthesia, Local and General*" in Wood's *"System of Ophthalmic Operations,"* and was one of the busiest and most esteemed collaborators on the American Encyclopedia of Ophthalmology. American Encyclopedia of Ophthalmology 14,p.10889-10892

Reclus, Paul (1847-1914) French surgeon, born in Orthez, France. Reclus received his M.D. in 1876 at the University of Paris becoming prosector at the Faculté. He became (1879) surgeon at the Hopitaux, (1880) lecturer and (1895) professor of surgery at the Faculté in Paris. Mastopathia chronica cystica was named after him (Reclus syndrome). Reclus introduced local anesthesia in France (*L´anesthésie localisée par la Cocaïne* Versailles 1903). In ophthalmology he authored *Des ophthalmies sympathiques*. Paris 1878 (his thesis for his lecturership); *De la syphilis du testicule* 1882 ; *Clinique et critique chirurgicale* 1884 ; *Manuel de Pathologie externe* 1885.

Recordon, Frédéric (1811-1889) Swiss ophthalmologist, founder of the first eye clinic in Switzerland. Recordon was born in Rances (Canton Vaud), Switzerland. Around 1831-1833 he was studying in Heidelberg under Tiedeman, Chélius and Buchholt. He went to Paris, and became interested in Sichel who had recently settled there and was offering unofficial free lectures to a very few students. Recordon spent a relatively long time at the

Sichel clinic. His master let him do different works which were appreciated and consequently Ricordon was rapidly promoted from *helper* to *assistant*. On his return to Lausanne, he had not only a solid general culture of medicine, but also a vast ophthalmic knowledge. He now spent two years in the canton hospital of Lausanne and continued to enlarge his practical knowledge of ophthalmology under Mathias Mayor who allowed him to practice successfully cataract operations. Recordon now hired a small room, inviting poor people to be treated for cataract. With the help of his wife he kept going this little private ophthalmic dispensary. Introduced by a clergyman to the philanthropist William Haldimann. The consequences of this interview emerged later with the founding, in 1843, of an *Institute for the blind and for the treatment of people suffering from eye diseases*. During the building of that institute, and at the costs of Mr. Haldimann, Recordon founded an eye clinic in a private house in Lausanne. The building of the institute for the blind was achieved in 1844, and young blind people moved in on the second floor. The ophthalmic department had 20 beds and became very successful soon attracting patients from abroad, resulting in an enlargment of the clinic. Recordon operated on about 1500 to 2000 patients per year and attracted patients from as far as Lyon in France (at that time quite a distance!). JPW

Reddy, P. Siva, Padmabhushan (1920-) Indian ophthalmologist, Director of Dr. P. Siva Reddy Eye Hospital Hyderabad. He graduated from Madras University in 1946, finished the Postgraduate training in Ophthalmology at the Andhra University, Vizag in 1952. He was appointed the Assistant Professor at the Osmania Medical College and Sarojini Devi Eye Hospital, Hyderabad in 1953 and then promoted to Professor of the College. He has been responsible for reorganizing the General Hospital to the Eye Hospital of high quality: he established Ophthalmology training courses and Specialty Services, e.g. Cornea, Eye Bank, Retina, Orthoptics and a separate Children‘s ward which is the first of its kind in the country. He took responsibility in establishing Research facilities and teams at the Sarojini Devi Eye Hospital. One of the many outcomes of the research efforts is the discovery of Gordia Worm (now named Gordia Reddy), and the results was reported at the 20th International Congress of Ophthalmology in Munich (1966) (*Gordia worm of the orbit and lids*. Proc. XX Inter. Cong. Ophthalmol. Munich). He was the *first* person to introduce the Eye Camp approach in rural areas where no established Medical Institute is available. By this approach, he conducted more than 300 Eye Camps and performed more than 2 million cataract operations. He has also planned and conducted a unique project called “*Operation Cataract Project*” which has made one of the districts of the State of Hyderabad “Medak”(Cataract Free Zone). He has published more than 200 scientific papers and written 2 books, e.g. “*A review of penetrating keratoplasty*, All India Ophthalmol. Soc. (AIOS) 1969”, “*Amblyopia with eccentric fixation - Management*. Ind. J. Ophthalmol.1972”, “*Cataract blindness – Priorities for epidemiological research*, Symposium of Lens Metabolism, Dec. 1987” and “*Indications and patient’s selection for radial keratotomy*. Eye Science (Sun-Yat Sen University, China), June 1992. His extensive activity for the prevention of blindness was internationally recognized and he was invited as the Guest of Honor to the American Academy of Ophthalmology and was named the Man of the Year 1998 by the American Biographical Institute. He has been active in many National Organizations: Former President of the National Academy of Medical Sciences, Former President of AIOS, Chairman of A.P. State Ophthalmological Society, President of A.P. Academy of Sciences and of Kalasagaram (a Cultural Organization), and many others. In International Organizations, he has been Vice-President of the Asia-Pacific Academy of Ophthalmology (APAO), Vice-President of the International Agency for Prevention of Blindness, Visiting Professor to Sun-Yat Sen University of Medical Sciences, Guangzhou, China and Member of the International Council of Ophthalmology. In recognition of his meritorious service, he received many Awards, e.g. Jose Rizal Medal from the APAO, “Padmashri” and “Padmabhushan” from the Government of India, an Honorary Doctorate from the S.V.University Tirupati and an Award from Mrs Indira Gandhi when he completed 100,000 cataract operations. He is currently the Honorary Surgeon to the President of India.(3-5-886, Hymayatnagar, Hyderabad-500 029, India, phone: +91-40-322-3889, fax: +91-40-232-470) (SM)

Reddy, Venkat N. (1922-) American Ophthalmic researcher who is currently Professor of Ophthalmology and Visual Sciences at the Kellogg Eye Center of the University of

Michigan has been a major contributor to the studies on aqueous humor formation and lens biochemistry and experimental cataracts. His research interests have included transport characteristics of physiologically important substances across the blood aqueous barrier, blood-retinal barrier and the metabolism of lens in relation to cataract etiology. After receiving an undergraduate degree in chemistry from the university of Madras in India he was awarded his Ph.D. in Biochemistry from Fordham University in New York in 1952. He then spent the next 4 years at the College of Physicians and Surgeons of Columbia University studying the metabolism of nucleic acids during normal and neoplastic growth. His career in ophthalmic research started in 1956 when he joined the Kresge Eye Institute of Wayne State University as assistant professor of ophthalmic research under the mentorship of EverettàKinsey. During the next 12 years he and Kinsey, together, published extensively on the mechanism of aqueous humor formation and the nature of the primary aqueous secreted into the posterior chamber and amino acid transport across the blood aqueous barrier and the metabolism of the ciliary body and lens. In 1968 Reddy accepted the position of professor of Biomedical Sciences and assistant director of the newly established Institute of Biological Sciences (later named Eye Research Institute) with Everett Kinsey as the first director. He succeeded Kinsey as director in 1975 and continued in that position until 1998 when he was named Distinguished Professor emeritus. During his tenure as director, his laboratory attracted many ophthalmologists and basic scientists from throughout the world; nearly 20 of whom were from Japan. At Oakland University his research interests emphasized X-ray and diabetic cataracts, cell biology of lens epithelium and its differentiation, growth factors and the use of transgenic animal models to investigate the role of antioxidant enzymes in protection against oxidative damage to ocular structures. Reddy's research contributions were recognized through many national and international awards and lectureships including the prestigious Friedenwald Memorial Award of the Association for Research in Vision and Ophthalmology in 1979. (*Dynamics of Transport Systems in the Eye, Invest. Ophthal & Vis. Sci.* 18: 1000-1018, 1979) In addition to his research, Reddy has been an active member of the Vision Research community and served as a Trustee and president of ARVO. At NIH, he served on the Visual Sciences Study section, Board of Scientific Counsellors of NEI (chairman 1981) and as a member of the National Advisory Eye Council. His other activities included membership of the editorial boards of *IOVS, Ophthalmic Research* and as executive editor of *Experimental Eye Research*. He is presently a Trustee and president of the National Foundation for Eye Research. Reddy's long and productive career is summarized in his reflections "*A forty-two year voyage through vision research*" at the International Symposium held in his honor in October 1998. (*J. Ocular Pharmacol & Therapeut.* 2000, in press) (Venkat Reddy, Ph.D. Prof. Ophthalmology & Visual Sciences, Kellogg Eye Center, University of Michigan, Ann Arbor, MI 48105, U.S.A.: Phone: +1-(734)763-7246; Fax:+1-(734)936-8633, e-mail : venreddy@umich.edu)(JPW)

Redi, Francesco (1626-1697). A versatile and distinguished Italian poet, naturalist-historian and physician, who became professor of medicine at Pisa and body-physician to Cosmo II of Tuscany. He is to be remembered for his investigations into the nature of poison and into the manner of reproduction of the lower form. He is of interest to ophthalmologists chiefly because the light he sheds on the first employment of spectacles, or the lenses of any form used for the betterment of vision. Thus, quoting from a manuscript work in his possession, dated 1299, and entitled "*Trattato di governo, della famigli adi Santro di Pipozzo di Sando cittadino Fiorentino fatto nel 1299, assemprato da Vanni del Busca Cittadino Fiorentino suo genero*" he has preserved for us of the following passage from the "Introduction": "*I find myself so burdened by years that I have no power to read and write without the glasses which are called eyeglasses and which were recently invented for the convenience of poor old men, when they become weak in sight,*, Redi also quotes from a sermon of Giordano da Rivalto, preached at Florence Feb. 23, 1305, with the following interesting passage: "It is not yet 20 years since the art was discovered of making eyeglasses, which give the power to see distinctly, which is one of the best and necessary arts which the world possesses." In both these passages, however, not the invention, but the reinvention of "eyeglasses" was the fact in the minds of the original writers. *See* Spina, Alexander de. Redi wrote: *Lettera intorno all´invenzione degli occhiali* Florence 1678 and *Osservazioni intorno alle vipere fatte…*Naples 1687. American Encyclopedia of Ophthalmology 14,p.10898.

Redslob, Edmond (1876-1966) French, Alsatian ophthalmologist. Redslob studied medicine in Strassbourg. As soon he received his medical degree, Redslob, who was not in a very health at that time, started to work as a ship physician, needing sea air to build up his strength. After a time he felt better, and returned to Strassbourg where he asked Nordman to give him a position as assistant in the ophthalmic clinic. The German government (Strassbourg was German at that time) did not allow Strassbourgian students to specialize in Strassbourg, so Redslob turned to Switzerland and was warmly welcomed by Siegrist under whom he specialized in ophthalmology. Returning to Strassbourg as an ophthalmologist he started a school for amblyopies that became a model of its kind. After the first World War he returned to Strassbourg and worked as head of the laboratory of the ophthalmic clinic. He became a very well known histologist in France and abroad. On the suggestion of Victor Morax, Redslob was accepted, in 1925, as a member of the French Ophthalmological Society. In 1932 he was charged by the society to write the Rapport *Anatomie du Corps Vitré* . This rapport became and still is a classic in ophthalmic literature. In 1925 he was named member of the editorial committee of the Annales d´Oculistique, for which he worked until his death. Redslob contributed the *Anatomy of the Eye Ball* to Baillart´s *Traité d´Ophtalmologie*, and was one of its five directors. Annales d´Oculistique 1966,199:737-739.JPW

Reese, Algernon Beverly (1896-1981) Born in Charlotte, North Carolina, the second of two children. His father, the son of a Virginia doctor, was a pharmacist. His mother, Mary Cannon Wadsworth Reese, came from a prominent local family. His childhood was apparently the usual one for a boy growing up in the "Bible belt" before World War I. He attended public elementary schools; when he reached high school age, he enrolled in a private preparatory school in Charlotte. From there he went to Davidson, nearby Presbyterian liberal arts college for men, from which he was graduated in 1917. During the college period, his uncle, R. G. Reese, M.D., a well-known New York ophthalmologist, offered to supervise and help with Algernon's education. He completed studies at Harvard Medical School in 1921 and in the next few years served on the house staff of Roosevelt Hospital, New York (general surgery), studied pathology with àFuchs Vienna and àVerhoeff in Boston, and filled residency in ophthalmology at the New York Eye and Ear Infirmary. After this 12-year period of preparation, Reese entered private practice in New York with his uncle, whose untimely death occurred two weeks later. Young Algernon joined the staff of the new Institute of Ophthalmology under John M.àWheeler.There he found full scope for his splendid qualifications in ocular pathology, and was able to concentrate on correlating the clinical and histopathologic diseases. His magnus opus is *Tumors of the Eyes* (1951).AJO 1971,71:135-151[Festschrift with full bibliography]; AJO 1981,92:868-870; Archives of Ophthalmology 1982,100:663

Reeve, Richard Andrews (1842-1919). Canadian ophthalmologist, born in Toronto he received the degree of B.A. at Toronto University in 1862, winning the medal in Natural Sciences. In 1865 he received his M. D. at University, Kingston, and, again in 1889, at the University of Toronto. He became a Fellow of the Royal College of Physicians and Surgeons in 1866. From 1865 until his death, 55 years later, he practised continuously in Toronto, excepting when engaged in study for the *ad eundem* degree. In 1867 he began to devote his attention exclusively to diseases of the eye and ear. For many years he lectured on ophthalmology in the Toronto School of Medicine, and, from 1885 until his death, on ophthalmology and otology in the University of Toronto. In 1890 he was chosen Dean of the Medical Faculty, a position which he resigned in 1908. He was made chief of the eye department in the Toronto General Hospital in 1907. He was also, for a time, a member of the Toronto University Council and of the Board of Regents of Victoria University. Reeve was once president of the Canadian Medical Association, and was president of the British Medical Association when it met at Toronto in 1906. He was a delegate to the British Medical Congress in 1910 and from 1904-7 president of the University alumni Association. He was also a Fellow of the American College of Surgeons.American Encyclopedia of Ophthalmology 14,p.10912-10914. AJO 1919,2:461-462

Refojo, Miguel F. (1928-) American polymer chemist of Spanish origin, a leading researcher on biomedical polymers in ophthalmology. He received degrees of Licentiate of Sciences in Chemistry (1953), Doctor of Sciences in Organic Chemistry (1956) and

Doctor "Honoris Causa" in Medicine (1988) at the University of Santiago de Compostela, Spain. He did postdoctoral work on the synthesis and characterization of electron-exchange polymers at the Department of Chemistry of Yale University (1956-1959). Then, he served as a Senior Research Chemist at DuPont of Canada (1959-1962), Research Associate, Massachusetts Eye and Ear Infirmary, Boston (1962-1964), Research Associate, Departments of Cornea and Retina Research, Retina Foundation (present Schepens Eye Research Institute), Boston (1964-1971), Senior Scientist, Head of Biomedical Polymers Laboratory, Schepens Eye Research Institute, Boston (1971-1998), simultaneously Dr. Refojo was Director of Chemistry, Corneal Sciences Inc., Boston (1972-1978), and served as a Principal Associate in Ophthalmology (Biochemistry) (1975-1982), and Associate Professor, Department of Ophthalmology, Harvard Medical School (1982-1998). Other academic appointments were, Visiting Professor, College of Optometry, University of Houston, Texas (1984), Visiting Scientist, Corneal and Contact Lens Research Unit, School of Optometry, University of New South Wales, Sydney, Australia (1986), Adjunct Associate Professor, School of Optometry, University of Missouri-St. Louis (1990), Visiting Scientist, Department of Experimental Sciences, University Jaime I, Castellon, Spain (1992), Visiting Professor, School of Optics and Optometry, University of Valencia, Valencia, Spain (1997), Visiting Professor, School of Optics and Optometry, University of Alicante, Alicante, Spain (1998). Dr. Refojo serves as Emeritus Senior Scientist, at the Schepens Eye Research Institute, Boston (1998-) Among the awards received by Dr. Refojo are the Gold Badge, University of Santiago, Spain (1979), Honorary Member of the Academia Medico-Quirurgica of Santiago de Compostela (1988), award "*Emilio Diaz Caneja*" for research in ophthalmology, University of Valladolid, Spain (1995), Academic Correspondent of the Royal Academy of Pharmacy, Spain (1996), The Ruben Medal, For Outstanding Contribution to Contact Lens Research from the International Society for Contact Lens Research, Florence, Italy (1997), and the Clemson Award for Applied Research of the Society for Biomaterials (1999) Dr. Refojo was President of the International Society for Contact Lens Research (1984-1986) and has given many invited lectures and was a keynote speaker at many international conferences dealing with contact lenses and other uses of biomaterials in ophthalmology. Dr. Refojo Trained over 40 Postdoctoral Fellows, including ophthalmologists and basic scientists. Dr. Refojo and his collaborators carried out a series of studies on hydrogels and developed intracorneal implants permeable to water and metabolites, expanding scleral buckling implants and vitreous substitutes and contact lenses. Some examples of this early work were "*Synthetic polymers in corneal surgery*". Arch Ophthalmol. 77:252, 1967", "*Glyceryl methacrylate hydrogel as a vitreous implant*. Arch Ophthalmol. 80:120, 1968. "*Polyelectrolyte complexes: Permeability to water and potential uses in ophthalmology*. J Appl Polym Sci. 11:1991, 1967. "*Water-dissolved oxygen permeability coefficients of hydrogel contact lenses and boundary layer effects*. J Membr Sci. 4:415, 1979. Because hydrogel contact lenses tend to dehydrate on the eye Dr. Refojo become interested in water evaporation from the ocular surface, and with his collaborators invented a *tear evaporimeter*, that was used to determine the water evaporation from the ocular surface of normal and pathological eyes and described a syndrome of increase tear evaporation in "dry eye" patients that have but unstable tear film. "*Tear evaporimeter for measuring water evaporation rate from the tear film under controlled conditions in humans*." Exp Eye Res. 36:25, 1983. "*Increased tear evaporation in eyes with keratoconjunctivitis sicca*." Arch Ophthalmol. 101: 557,1983." Dr. Refojo and his collaborators also performed a series of studies on the adhesion of bacteria to contact and intraocular lenses. "*Time course of experimental Pseudomonas aeruginosa keratitis in contact lens overwear*. Arch Ophthalmol 108:1012, 1990." "*Reduced bacterial adhesion to surface-modified intraocular lenses*. J Cataract Refractive Surg ; 19:755,1993. He and his collaborators also developed the first expandable silicone rubber implants for scleral buckling in retinal detachment surgery. With these implants the scleral indentation can be modified by increasing or decreasing the inflation of the device. "*Expandable silicone implants for scleral buckling*. Arch Ophthalmol. ; 89:500,1973". Also, developed a hydrogel implant for scleral buckling that lacks the macroscopic cavities for bacterial contamination found in silicone sponge implant. "*A poly(methyl acrylate-co-hydroxyethyl acrylate) hydrogel implant material of strength and softness*. J Biomed Mater Res. 15:497, 1981. "*Long-term complications of the MAI hydrogel*

intrascleral buckling implant. Arch Ophthalmol ; 110:86, 1992."They also did extensive research with a series of alkyl cyanoacrylate adhesives for tolerance, biodegradability and effectiveness in ophthalmic surgery. Of all the potential applications on the cyanoacrylates in ophthalmology, the most indicated is for sealing corneal perforations and ulceration. "*Evaluation of adhesives for corneal surgery*. Arch Ophthalmol. 80:645,1968. "*Adhesives in ophthalmology*: A review. Surv Ophthalmol.; 15:217,1971." Dr. Refojo and his collaborators also investigated the mechanism of intraocular emulsification of silicone oil, and made recommendations to decrease its incidence, and identify the low molecular weight components in "medical grade" silicone oils, and developed a method for the removal of these components from the oils. "*Analysis and fractionation of silicone and fluorosilicone oils for intraocular use*. Invest Ophthalmol Vis Sci ; 31:2059,1990". "*Factors contributing to the emulsification of intraocular silicone and fluorosilicone oils*. Invest Ophthalmol Vis Sci. ; 31:647,1990." They have investigated the use of intraocular silicone oils to deliver antiproliferative substances to prevent proliferative vitreoretinopathy in complicated retinal detachment surgery. "*Antiproliferative effect of retinoic acid in intravitreous silicone oil in an animal model of proliferative vitreoretinopathy*. Invest Ophtahlmol Vis Sci. ; 34:522,1993." And, have developed devices for sustained drug delivery in ocular diseases. Among these was a refillable silicone rubber implant that released the anticancer agent carmustine (BCNU) at a constant rate. "*Pharmacokinetics of the antineoplastic agent 1,3 bis-(2-chloroethyl)-1-nitrosourea (BCNU) in the aqueous and vitreous of rabbit*. Invest Ophthalmol Vis Sci. ; 23:199,1982," as well as injectable biodegradable microspheres of poly(lactide-co-glycolide) loaded with antiproliferative substances for proliferative vitreoretinopathy or with ganciclovir for cytomegalovirus retinitis. "*Sustained delivery of retinoic acid from microspheres of biodegradable polymer in PVR*. Invest Ophthalmol Vis Sci. 34:2743,1993." "*Ganciclovir-loaded polymer microspheres in rabbit eyes inoculated with human cytomegalovirus*. Invest Ophthalmol Vis Sci. ; 38: 665,1997". Dr. Refojo retired from laboratory work in 1998, but remains active as a scientific writer, journal reviewer, lecturer and consultant. (Senior Scientist Emeritus, The Schepens Eye Research Institute, 20 Staniford St., Boston, MA 02114, U.S.A. Phone: 1+617-912 7435; fax: 1+617-912-0101; e-mail: mrefojo@vision.eri.harvard.edu)

Regan, James Joseph (1888-1965) American ophthalmologist. Regan was born in Boston, Massachusetts. He was graduated from Tufts Medical School in 1913, an internee at the Carney Hospital in South Boston, and specialized in ophthalmology after World War I, training in St. Louis and Philadelphia. In 1921, he was made an assistant in ophthalmology at the Massachusetts Eye and Ear Infirmary, a position he filled until 1934 when he became ophthalmic surgeon-in-chief at Boston City Hospital. He was also ophthalmic surgeon-in-chief at the Carney Hospital, and consultant in ophthalmology to the U. S. Naval Hospital, Chelsea, Massachusetts, the Beth Israel and the Kennedy Memorial Hospitals and the Massachusetts Division of the Blind. Regan served from 1913 to 1958 as school physician to the city of Boston and, after 1921, as ophthalmologist to the Boston Public Schools, in which capacity he developed and conducted the program of conservation of vision classes. During World War I, Regan was on active duty with the Medical Corps of the U. S. Navy. From 1921 to 1941, he was in the Naval Reserve, where he became a flight surgeon for the First Naval District (Boston). He served on active duty from 1941 to 1945, when he was retired as Commander, U.S.N.R. (MC). He was a member of the American Legion and past president of the Michael J. Perkins Post. Regan was a member of the American Medical Association, the American Academy of Ophthalmology and Otolaryngology, and the New England Ophthalmological Society, of which he was a past president. He also held appointments as instructor in ophthalmology at Harvard Medical School and assistant professor of ophthalmology at Tufts Medical School. He maintained all his positions, including a very active private practice, until his retirement in 1958. Regan's main professional interest centered around refraction and especially the improvement of subjective methods of refraction, culminating in the Lancaster-Regan dials. He was not a prolific writer. His main contributions were materials for courses in refraction, especially Academy manuals. AJO 1966,61:358-360

Reiberg, Jacob Munch (1843-1888) Norse surgeon and ophthalmologist. Born at Christiania, son of the general surgeon, Joh. Fritzner Heiberg, he was from 1867-69

Assistant at the Imperial Hospital and at the Lying-in Asylum, and for a time was Assistant to the Prosector. During the Franco-German War he served as military surgeon in Berlin hospitals. After the war, he studied in various cities, and then returned to Christiania, where he resided until his death. Here he founded an ophthalmic hospital, and was editor of the Norse *"Magazin Laegev."* . Heiberg's chief (or only) ophthalmic writings are: 1. *Om de Extrabulböse Svulster i Orbita. (Norsky Magaz.,* 1873.) 2. *Die Methodik der Ophthalmologischen Untersuchung, ein Leitfaden für Anfänger.* (Christiania, 1875.) 3. *Overplanting af Bindehuden fra en Kanin*. (Christiania, 1875.) American Encyclopedia of Ophthalmology,Vol.8,p.5732-5733

Reichenbach, Johann Friedrich (18th century). German ophthalmologist of Tübingen, Germany, whose life dates cannot be ascertained. He was pupil of Mauchart, studied at Strassburg and at Paris, and seems have been a skilful operator. His dissertation for the doctorate was entitled *Cauteloe et Observationes circa Extractionem Cataractae, Novam Methodum Synezesin Operandi Sistentes, etc., 2 Dec. 1767.*American Encyclopedia of Ophthalmology 14,p. 11179

Reichling, Walter (1894-1972) German ophthalmologist. Reichling was born in Cologne, Germany. He was a voluntary assistant between 1925 and 1926 at the pathological institute at the Berlin University under prof. Lubarsch. In 1926 he received his medical degree with the thesis *Über die Anwendung des Ossophyt b.d. Behandlung unkomplizierter Rippenfrakturen* . Between 1927 and 1935, Reichling was assistant at the Charité Eye Clinic in Berlin and became (1933) ophthalmologist and (1935) lecturer with the theme *Die Arten der am Auge vorkommenden krankhaften Veränderungen der Gefäße u. der Lamina vitrea*. Reichling was between 1935 and 1947 first assistant (Oberarzt) at the Chaité Eye Clinic in Berlin. During that time, he became professor extra-ordinarius and (1946) full professor of ophthalmology with a chair. He was, from 1947 to 1950, director of the ophthalmic department of the city hospital in Berlin-Tempelhof and became (1951) director of the University Eye Clinic in Würzburg. He remained in that position until 1964. Rechling´s ophthalmic teachers were R. Greeff, A. Meesmann, E. Krückmann and W. Löhlein. His main interest was the pathological histology of the eye, therapy and surgery of the ocular orbit. Reichling contributed a chapter in the 18th edition of Brugsch *Therapie an den Berliner Universitätskliniken* 1949 and in Bier-Braun-Kümmel Chirurgische *Operationslehre*, 7th edition, the chapter *Chirurgie der Orbita*, 1953. see Hollwich *Ophthalmologen Verzeichniss* p.344. JPW

Reid, Alexander Christie (1877-1950) Scottish ophthalmologist. Reid was born in Dundee, the son of the Rev. Alexander Reid. He was educated at Dundee High School and proceeded to Aberdeen University where he obtained the degrees of M.A. and B.Sc. in 1897. Turning to medicine he graduated M.B. (Hons.) in 1902, and M.D. (Hons.) in 1905. He took the post of House Surgeon to the West Norfolk and-King's Lynn Hospital, and afterwards went into general practice, first in Rotherham, where he became interested in coal miners nystagmus, and then in Nottingham. He was appointed Honorary Assistant Surgeon to the Nottingham and Midland Eye Infirmary in 1909, and full Honorary Surgeon in 1919, having meanwhile obtained the Diploma in Ophthalmology of Oxford in 1913. He was also Honorary Ophthalmic Surgeon to the Mansfield and Worksop Hospitals, and Adviser in Ophthalmology to the Kesteven County Council. Reid served in the R.A. M.C. in the great war, when he was mentioned in despatches. He retired from practice in 1947. His publications include. "*Miners' Nystagmus*" (Brain, 1906, 29, 363), "*On Nystagmus* " (Ophthalmic Review, 1908, 27, 165), and " *The Problem of the Hypermetropic Miner* " (B. J. O. 1943, 27:110). BJO 1950,34:642-643

Reid, Russel E. (1870-1919) American ophthalmologist and otolaryngologist of Asheville, N. C., born at High Point, N. *C.* He received his first degree at the Virginia Military Institute, Lexington. Va., and his Doctor of Medicine, in 1895, at the University of Maryland. For four years he practised general medicine at Hickory, N. C., and took a special course at the Presbyterian Eye, Ear, Nose and Throat Hospital, of Baltimore, his chief instructor being Prof. Hiram Woods. In 1900 he began to practice the eye, ear, nose and throat at Charlotte, N. C. where he was one of the organizers of the Presbyterian Hospital. For a number of years he was Professor of Eye, Ear, Nose and Throat at Davidson and Charlotte. In 1904 he was elected President of the Charlotte Medical

Society. In 1910 he moved to Asheville, where he lived and practised till his death. On a number of occasions he made brief trips to Europe for the purpose of studying his specialties.AJO 1920,3:633

Reid, Thomas (1830-1911) British ophthalmologist. Reid was first apprenticed as a cabinet maker and came to Glasgow in order to study furniture. Finding medicine a more promising fulfilment he started studying at Glasgow University and graduated M.D.1857. He first went in to general practice. Scientific work brought Reid into association with Allen Thomson who recommended him to take up pathology. He preferred however to study ophthalmology as a special subject and became student at the Glasgow Eye Infirmary in 1861 under George ®Rainy and William ®Anderson. He was in 1862 non-resident house surgeon and junior assistant surgeon and became assistant surgeon in 1865, and surgeon in 1867. In 1884 he accepted the post of Senior Surgeon which previously had been held by William ®Mackenzie and George Rainy. In1869 Reid was appointed Waltonian Lecturer at Glasgow University in succession to George Rainy. Reid developed the well known *Reid ophthalmometer* and the less known , but ingenious, *colour perimeter*. He received from his *Alma Mater* the degree of LL.D. in 1896 and was awarded a gold medal by the University of Turin, and, in 1898 received from the King of Italy the high order of *„Commendatore of the Crown of Italy"*. His portrait in oil was presented to the Airdrie Public Library by a large number admirers, on Nov. 3, 1911, the speech of presentation being made by A. Maitland àRamsay of Glasgow. American Encyclopedia of Ophthalmology 14,p.11179-11180 The Ophthalmoscope, 1911,p.388-390.

Reim, Martin (1931-) German ophthalmologist, Emeritus Professor of Ophthalmology and former Director of the University Eye Clinic, of the Faculty of Medicine at the Technical University Aachen (Rheinisch-Westfalische Technische Hochschule - RWTH, Germany). Born as son of a protestant minister on February 26, 1931 in the Eastern Province of Brandenburg (former Germany, now Poland), grew up with a brother and two sisters, he attended school there till 1945. He graduated in 1951 from a gymnasium in the State of Hessen, Federal Republic of Germany, and then studied medicine at the Philipps-University Marburg/Lahn from 1951 - 1957. Two years Internship followed at the University Clinics in Marburg/Lahn: Internal Medicine with Professor H. E. Bock and surgery with Professor W. Zenker. He then studied under Professor G. Schettler, and received his Doctor of Medicine in 1958 (thesis the dietetic significance of unsaturated fatty acids). From 1959 - 1961, he carried out research at the Institute of Physiological Chemistry, Philipps-University Marburg/Lahn under Professors Th. Buecher and H. J. Hohorst on the regulation of energy producing metabolism in liver and skeletal muscles. He completed residency training in Ophthalmology during 1961 - 1965 at the Eye Clinic of the Philipps-University Marburg/Lahn. Beside clinical work with Professor W. Straub, he conducted research on the energy producing metabolism of the cornea. He was appointed senior resident (1965-1966) and Oberarzt (1966-1967) of the Eye Clinic of the Philipps-University Marburg/Lahn. In 1966, he was promoted to Venia Legendi for Ophthalmology (Privatdozent für Augenheilkunde). (Title of the thesis: Energy producing metabolism and transparency of the cornea). Subsequently he worked as a Senior Research Fellow at the Retina Foundation and Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston, USA (1967-1968), with Professor C. H. Dohlman (research on the nutrition of the cornea) . Back to Germany, he worked again as Oberarzt of the Eye Clinic of the Philipps-University Marburg/Lahn(1968 - 1972), Provisional Director of the Eye Clinic of the Philipps-University (1972 -1973) and Full Professor of Ophthalmology and Director of the Eye Clinic of the Technical University (RWTH) Aachen, Germany (1973 - 1996). In 1985, he was invited to become the Director of the Eye Clinic of the University of Düsseldorf, but in 1986 he decided to stay at Aachen. He has been a member of the Gesellschaft Deutscher Naturforscher und Ärzte (1960-), the German Ophthalmological Society (1961-), The Association for Research in Vision and Ophthalmology (ARVO) (1968-), the Association for Eye Research (AER) (1969-), the International Society for Eye Research (ISER) (1974-), the German Society for Plastic and Reconstructive Surgery (1980-) and The Castroviejo Corneal Society (1982-). Special academic functions include Dean for Student Affairs of the Faculty of Medicine (1974-1984), Medical Director of the University Hospital (Klinikum) of the Faculty of Medicine, Technical University (RWTH) Aachen (1981-1984), Regional Representative of

the Association for Eye Research (AER) (1971-1981), General Secretary of the Association for Eye Research (AER) (1981-1990). Member of the Council of the International Society for Eye Research (ISER) (1983-1988), Member of the Council (1983 - 1989) and President of the German Ophthalmological Society (1985 - 1986), elected Member to the Council of the Societas Ophthalmologica Europaea (S.O.E.) (1990-), Board of Directors of the Castroviejo Corneal Society (1993 - 1997), Member of the International Subcommittee of ARVO (1994 - 1996) and Organizer of the Cornea Section for the XI. Congress of the International Society for Eye Research (ISER) at New Dehli (1994), elected expert of the Deutsche Forschungsgemeinschaft (DFG) (1984-1992), in addition consultant for the Wellcome Trust, London and the Funds zur Förderung der wissenschaftlichen Forschung (FWF), Vienna. Clinical and scientific activities embrace corneal and cataract surgery, retinal and vitreous surgery, medical retina, plastic lid surgery, diseases of the ocular surface, eye burns, strabismus - i.e. general medical and surgical ophthalmology. His research has been continuously supported since 1961 by grants from the Deutsche Forschungsgemeinschaft (DFG), Bonn-Bad Godesberg: 1) On metabolism and diseases of the cornea, experimental and clinical eye burns, corneal ulceration, corneal cultures, eye banking. 2) Together with Dr. Ing. Dr. med. Sebastian Wolf, now Professor of Ophthalmology at Leipzig, Germany: Microcirculation of the retina and choroid, first introduction of videofluorescence angiography with fluorescein and indocyanine green in ophthalmology, computerized image evaluation and blood flow measurements and Investigation of diseases of the microcirculation of retina and choroid, age related macula degeneration, diabetic retinopathy. Publications: Original and review articles in scientific and ophthalmological journals, some book chapters, and a textbook on ophthalmology, 400 pages, 5 editions, the last one 1996. The textbook was edited on CD-ROM disc 1995. This includes short resumés, the complete long text, extra explanations of figures and interactive questions, extra video animation and the complete index. Awards and named lectures include Award on Mircrosurgery of the German Ophthalmological Society (1988: together with Professor Dr. med.Christian Teping, for the invention of Tenon plasty in anterior segment surgery, especially in severe chemical and thermal injuries, The Alcon Research Institute Annual Award for merits in corneal research (1989), The Gullstrand Lecture in Stockholm (1986: Pathophysiology, surgical and medical treatment of eye burns, and The Louis Emile Javal Lecture in Amsterdam (1998: Interaction of corneal stroma, epithelium and ocular surface fluid). Since July 15, 1996, he retired from clinical and administration responsibilities and is entitled Professor Emeritus. However, he is active in research and current projects embrace: Corneal cultures and eye banking (together with Privatdozentin Dr. med. Claudia Redbrake), and Development of an artificial cornea for anterior and posterior segment surgery, investigation on the mechanisms of chemical injuries to cornea and conjunctiva, and the influence of rinsing media on the anterior eye segment (together with Privatdozent Dr. med. Norbert Schrage). His currently active memberships are: Representative of the German Ophthalmological Society in the European Council of Ophthalmology, Member of the Jury of the International MSD Chibret Award, Chairman of the German Jury of the Chibret Award, Member of the Jury of the German Ophthalmological Society for dedication of the Leonhard Klein Award for New Achievements in Ophthalmic Microsurgery and Member of the Ethic Committee of the Faculty of Medicine of the Technical University Aachen. (Address: Professor Dr. med. M. Reim: Augenklinik - Medizinische Fakultät, Rheinisch-Westfhalische Technische Hochschule Aachen, Klinikum, Pauwelsstrasse 30, D - 52057 Aachen, Germany; Telefon: ++49 (241)8088 193; Fax: ++49 (241) 74479; martin.reim@post.rwth-aachen.de (SM)

Reisinger, Franz (1787-1855) German ophthalmologist, son of Dr. Felix Reisinger, body-physician to the last Elector of Trier, and himself a physician of note, being a well known ophthalmologist and inventor of the ophthalmo-phantom [and playing a major role in to-day´s history of corneal transplantation-JPW] Born at Coblenz, Germany, he moved with his parents at the age of seven to Augsburg, and pursued his professional studies at Landshut, Würzburg and Göttingen. At the latter institution he graduated in 1814, his dissertation being "*De Exercitationibus Chiro-technicis et de Constructione atque Usu Phantasmatis in Ophthmologia*." After a number of scientific journeys, he settled in Augsburg, as a general practitioner, paying, however, especial attention to diseases of the eye. In 1819 he moved to Landshut, in order to accept the chair of surgery and

ophthalmology. Here he was active in very many ways, being a man of marked executive ability and great kindheartedness and benevolence. [He also was the founder of the University Medical Clinic of Munich-JPW] Reisinger's more important ophthalmologic writings, in addition to the dissertation above-mentioned, are as follows: 1. *Beiträge zur Chirurgie und Augenheilkunde* (Göttingen 1814) 2. *Ueber das Wirken der Chir. Lehranstalt zu Landshut . . . nebst einem. Bericht über die Chir. Ophthalmol. Klinik und Polikinik*. (Sulzbach, 1823.) 3. *Hyoscyamin und Atropin*. *(*Salzburger Med. Chir. Zeitung 1825, Vol. 1, p. 237 ff.) 4. *Bayerische Annalen der Chir.Augenheilkunde und Geburtshilfe*. (Vol. 1, Sulzbach,1828.) American Encyclopedia of Ophthalmology 14,p.11180; M.Mannis & A. Mannis: *Corneal Transplantation-A History in Profiles* (Ostend 1999:Wayenborgh)

Remky, Hans (1921-) German ophthalmologist, born in Tilsit (East Prussia), professor of ophthalmolgy. Remky studied medicine 1940 to 1945 at the Militärärztliche Akademie Berlin, becoming physician in 1945 and receiving his Doktor der Medizin (MD) 1947, under W.Tönnis, in Münster/Westphalia, with the doctoral thesis "*Subdurale Empyeme nach Schussverletzungen des Gehirns*" He became lecturer 1950 and Professor of ophthalmology in Munich, 1957. He was assistant of ophthalmology in Münster from 1946 to 1953 under E. Zeiss, A. Jäger and W. Rohrschneider. He followed Rohrschneider to Munich and was there senior ophthalmic surgeon from 1953 to 1965. He was interim Director of the Munich University Eye Clinic from 1965 to 1968. Remky started practicing in 1969 and opened 1970 the Remky Eye Clinic in Munich. Presently he is director of the Remky Eye Clinic. He published c.180 papers in ophthalmic reviews and numerous historical ophthalmic papers and essays. Remky authored *Toxoplasmosis. Argumenta et documenta ophthalmologica* Lehmann, Munich 1961 and edited: *The uveal tractus and its endogenous inflammations* Little,Brown & co., Boston, 1966; *Aktuelle Ophthalmologische Probleme* Bücherei des Äugenarztes, vol.65; 1974; *Aktuelle Ophthalmologische Probleme* Bücherei des Augenarztes, 72; 1978; *Aktuelle Ophthalmologische Probleme* Bücherei des Augenarztes, vol.86; 1981; *33 Beiträge zur Geschichte der Augenheilkunde* Facultas, Wien 1991; *24 Beiträge zur Geschichte der Augenheilkunde* (mit Ch.Habrich) , München 1995. He wrote chapters in following the treatises and textbooks: *Die Kammerwasserräume des menschlichen Auges* in: *Der Augenarzt* (Ed.: Velhagen) vol.III, 1960; *Grundlagen der neuroophthalmologischen Diagnostik* in *Der Augenarzt*, vol.V, 1963; *Die optische Wahrnehmungsbahn* in: Lehrb.der Augenheilkunde (Ed. by Pau) 12.Aufl.1973; *Kammerwasser* in: *Der Augenarzt* , 2nd ed, vol.III,1975; *Grundlagen der neuroophthalmologischen Diagnostik* in: *Der Augenarzt* 2nd ed., vol.IV, 1976; *Kammerwasseruntersuchungen in vitro* in: *Die ophthalmologischen Untersuchungsmethoden* (ed. By Straub) vol.II, 1976;*Toxoplasmose* in : *Manifestations ophtalmologiques des parasitoses* (Ed.by J.Diallo) Masson, Paris 1985; *Die Sehbahn (retino-corticale Wahrnehmungsbahn)* in: *Lehrb.der Augenheilkunde* (Ed.by Pau), 13th.ed., 1991; *Augenärztliche Befunde bei akuter Alkoholeinwirkung* in *Der Straßenverkehrsunfall* (Laves, Bitzel, Berger) 1956 and *Ophthalmological Transplantation Research*: *Immunology of Keratoplasty* IOC Boston 1963 (Ed.by Duque Estrada). To the Julius Hirschberg Society for the History of Ophthalmology (Julius Hirschberg Gesellschaft) Remky presented the following papers: *Ophthalmoskopieversuche vor Helmholtz* 1987; *Erich Zeiss, erster Erfinder des Non-Contact-Tonometers* 1988; with Pierre Amalric: *Zur Geschichte der Photochirurgie des Auges* 1889; in 1990 *Die Kanäle und sogenannten Kanäle von Hovius, Petit, Fontana, Schlemm und Hannover*; 1991: *Petrus Lusitanus (Hispanus) (Pope John XXI.) und sein "Liber de oculo"* ; 1992 *Narkose und Lokalanaesthesie im 19.Jahrhundert; erste ophthalmologische Anwendungen*; 1993 *Helmholtz über Ätiologie und Therapie des Heufiebers*; 1994 *Die Frühzeit der operativen Schielbehandlung (1839-1841)*; 1995 *Beobachtungen und Untersuchungen des „tensionellenl" Kammerwassers von Fallopio (1561) bis Hovius (1702/16)* . 1996 (with Massin) *Aussaugung (Suction-Aspiration) weicher Stare von der Antike bis zur Mitte des 20.Jahrhunderts*; 1997 (with Locher) *Zur Geschichte der Keratoplastik: Rückblick auf Keratoprothesen-Implantation und Hornhaut-Transplantation*; *Lorenz Heister (1683-1758). Boerhaave-Schüler, Mitbegründer der wissenschaftlichen Augenheilkunde in Deutschland*; 1998 *Galvanische Lichterscheinungen* ; 1999 *Fluorescenz-Fluoreszin: Stationen des langen Weges klinischen Fluorometrie und Fluoro-Angiographie*; *12.September,1879: Hirschberg extrahiert mit seinem elektrischen Handmagneten "zum*

ersten Male einen Fremdkörper aus einem menschlichen Auge„ ; 2000 *Henri Dor (1835-1912)*; *Benvenutus Grapheus - der berühmteste Augenarzt des spätmittelalterlichen Europa.* Following papers were read at the meetings of the French *Société Francophone d´Histoire de l´Ophtalmologie*: 1980 *Les perimètres à coupole hémisphèriques du XIXe siècle* ; 1984 *La Pepinière de Berlin, ses relations avec la Charîté, Hôtel des Invalides et l'Université, ses Pépins* ; 1986 *Bernhard Aloys von Gudden et son oeuvre ophtalmo-neuro-anatomique* 1987 *Les ophtalmoscopes de Kussmaul (1844) et de Babbage (1847)* 1990 *António Plácido da Costa et l´invention de la kératoscopie*; suivi d'un annexe: *Le grand Trio nordique au laboratoire d'ophtalmologie de Javal* ; 1991 *Les ophtalmologistes Carl Ferdinand de Graefe. Eduard Adolph Graefe et Alfred Graefe - Père, oncle et cousin d'Albert de Graefe* 1992 *Quels noms associer au syndrome de retraction ?* ; 1994 *Le phenomène de Bell décrit et dessiné en 1793 : l'oeil de Margarete Elisabeth Grunelius, épouse Soemmerring* ; 1997 *Les frères Pellier et la kératoprothèse.* At the Halle Symposium he read in 1994 *Der Magnet in der Augenheilkunde bis 1900* and in 1999: *Die Syndrome von A.Graefe-Liebreich-Lent und A.Graefe-Sinclair-Türk.* At the Graefe-symposium in Berlin Remky presented in 1995: *Augenmuskellähmungen - Albrecht von Graefes bevorzugtes Forschungsgebiet zwischen Physik und Psychophysik.* He was Invited Lecturer and Guest of Honour, 1961, at the Argentinian Ophthalmic Society in Rossario; 1963 at the Hungarian Society in Budapest; 1965 at the Pan-American Congress in Rio de Janeiro; Invited Lecturer at the International Congress of Ophthalmology in Munich; Guest of Honor and Lecturer, 1967, at the Ophthalmic Society of CSSR in Bratislava; 1973 at the Pan-Hellenic Congress in Thessaloniki (with Witmer, Perkins and others); Invited Lecturer at the International Congres of Ophthalmology in Paris in 1974; in 1978 Remky was Guest of Honor and Lecturer at the Postgraduated Courses in Medellin; invited Lecturer at the International Congress for Toxoplasmosis in Treviso (Italy). In 1983, Remky held the "*Lettura Magistrale*" at Rome. He is the founder, in 1986, with H. Koelbing, R.Sachsenweger and H.Slezak, of the *Julius Hirschberg Gesellschaft Deutschsprachige Vereinigung für die Geschichte der Augenheilkunde* (Julius Hirschberg Society. German speaking Society for the History of Ophthalmology) JPW

Rendle, Edmund M. R. (1831-1909). British ophthalmologist. Rendle was consulting surgeon to the Royal Plymouth Eye Infirmary , from 1866 to 1893 he was surgeon and from 1896 President of the institution. The Ophthalmoscope 1909, p.585.

Repka, Michael X. (1954-) American ophthalmologist, with an university education at the University of Delaware (summa cum laude; Phi Beta Kappa) and a medical education at Jefferson Medical College (magna cum laude; Alpha Omega Alpha), graduating in 1979. Following a medical internship at the Pennsylvania Hospital in Philadelphia, Repka became a resident at the Wills Eye Hospital of Thomas Jefferson University in Philadelphia under the direction of Professor Thomas Duane and Professor Robert D. Reinecke. He completed his residency in 1983. He then completed a 12-month fellowship in neuro-ophthalmology and orbital disease under the direction of Professor Neil R. Miller. Repka then completed a 6-month fellowship in Pediatric Ophthalmology and strabismus under the direction of Professor David L. Guyton. He joined the academic fulltime faculty of the Wilmer Eye Insitute in 1985 and was promoted to Professor of Ophthalmology in 1997. Repka has also served on several editorial boards, including the Journal of Pediatric Ophthalmology and Strabismus, the Journal of the AAPOS, and Strabismus. He has served as Secretary for the Program of the American Association for pediatric Ophthalmology and Strabismus, as well as the Chairman of the Diagnostic and Procedural Coding Committee and the Health Policy Committee of the American Academy of Ophthalmology. Repka's major research and clinical interests have included the following: retinopathy of strabismus, prism adaptation for acquired esotropia, and neuro-ophthalmologic problems in childhood. He has published approximately 150 original articles, and 15 chapters on these and related subjects. (Deputy Director, The Zanvyl Krieger Children's Eye Center, The Wilmer Ophthalmological Institute, the Johns Hopkins University School of Medicine, 233 Wilmer Building, 600 North Wolfe Street, Baltimore, MD 21287-9028, U. S. A. phone:+1-410-955-8314; fax: +1-410-955-0809, e-mail: repka@jhmi.edu) (SM)

Reuling, George (1839-1915). American ophthalmologist and oto-laryngologist of German birth and education, from Baltimore, Md., widely known in particular as an

operator on the eye, and the *first* American ophthalmologist to remove a cataractous lens within its capsule. Born in Darmstadt, Germany, he studied medicine at the University of Giessen from 1860 to 1865, and, in 1865-1866, at Munich, Vienna and Berlin. His degree was received at Giessen in May, 1866. From the day of graduation until September of the same year he served as surgeon in the Prussian Army in the war against Austria. Late in 1866 he became assistant surgeon at the eye hospital, Wiesbaden. The following year he studied at Paris under de àWecker, àLiebreich and àMeyer. In 1868 he removed to America, settling as ophthalmologist and laryngologist in Baltimore. Here he was soon widely known as an operator on the eye. In 1869 he was appointed surgeon-in-charge of the Maryland Eye and Ear Infirmary. He was also at various times oculist and aurist to the Baltimore Home for the Aged and the German Hospital. From 1871-73 he was professor of eye and ear surgery in the Washington University, and in 1893 was appointed to the chair of ophthalmology and otology in the Baltimore Medical College-a position which he held for many years. He was a member of numerous societies, both social and scientific, among them the American Academy of Arts and Sciences, the Heidelberg Ophthalmological Society, the American Laryngological, Otological and Rhinological Society. American Encyclopedia of Ophthalmology 14,p.11420-11422

Reuss, Adolf (1804-1878). A German-American physician, who devoted considerable attention to ophthalmology. Born at Frankfort a.M. he received his medical degree at Göttingen in 1825, presenting as dissertation "*Diss. Anatomico-Physiologica de Systemate Lentis Cryslinae Humanae*." He practised for a time at Frankfort, but in 1834 moved to Belleville, Illinois. American Encyclopedia of Ophthalmology 14,p.11422

Reuss, August, Ritter von (1841-1924) German physician, son of August Emanuel Reuss, born in Bilin, Bohemia. Reuss received his M.D. in 1865 at Vienna, where he worked as Arlt's assistant before becoming (1870) lecturer, then professor extraordinarius of ophthalmology in 1885 and finally ordinary professor in 1904. He was chief ophthalmologist of the Vienna Polyclinic from 1872, and general director of that institution from 1909 until 1918. Reuss wrote on myopia, determination of the curvature of the cornea, color blindness, perimetry, and other aspects of physiological optics. Reuss wrote with M. Woinow: *Ophthalmometrische Studien*. Wien 1869. Albert

Reveillé-Parise, Joseph Henri (1782-1852) French physician born at Nevers, France. He studied medicine in Paris and interrupted his training to serve as a military surgeon during the Napoleonic wars, including the battle of Waterloo. Returning to Paris after Waterloo, he completed his M.D. in 1816, with the thesis *Relation medical du siege de Saragosse en 1808 et 1809 etc.*, Reveillé-Parise was physician to the Gros Caillou Military Hospital until 1830, and afterward pursued private practice and a literary career. He was a member of the Académie de médecine. Most of his medical writings concern hygiene: *Hygiène oculaire, ou avis aux personnes dont les yeux sont faibles et d'une trop grande sensibilité; avec de nouvelles considérations sur les causes de la myopie ou vue basse, sur l'action des verres concaves et convexes; ouvrage particulièrement destiné aux gens de lettres, aux hommes d'état, et à toutes les personnes qui se livrent aux travaux du cabinet*. Paris 1816 (Italian edition Milano 1825) ; *Examen de Pathologie* Paris 1817 ; *Une saison aux eaux d´Enghien* Paris 1842 ; *Traité de la Vieillesse hygiénique etc*. Paris 1853 (his most famous work). JPW

Rewson, Adinell (1820-1889). American surgeon, of some importance in ophthalmology. Born the eighth son of Professor Thomas T.Hewson of Philadelphia, he received the degree of A. B. at the University of Pennsylvania in 1848, and that of M. D. at the Jefferson Medical College in 1850. For a time he studied at the Rotunda Hospital, Dublin. Returning to Philadelphia in 1851, he practised there for the remainder of his life. He was for several years surgeon to the Wills Eye Hospital, and wrote the following papers of ophthalmologic interest: "*On the Prominence of the Eyeball with Sinking of the Caruncle and Semilunar Folds Following the Ordinary Operations for Strabismus*" (*N. Am. Surg. Review,* Phila., 1858) ; "*On Localizid Galvanism as a Remedy for the Photophobia of Strumous Ophthalmia*" (*Am. Jour. of Med. Sciences,* Phila., 1860). He also edited, with numerous excellent notes, William Mackenzie's "*Practical Treatise on Diseases of the Eye"* (1855).American Encyclopedia of Ophthalmology,Vol.8,p.5916-5917

Reybard, Jean François (1790-1863). French surgeon who occupied himself considerably with diseases of the lachrymal drainage apparatus. Born at Croysiat (Jura) he received his medical degree at Paris in 1816. He practised first at Annonay, then at Lyons. A very kindly and charitable man, he not only treated and operated on the poor *gratis*, but he even gave them board, lodging and clothing without money and without price. He invented a worthless instrument with which he perforated the lachrymal bone in cases of dacryocystitis. His writings of a special ophthalmologic character are: "*Nouv. Procédé pour Guerir la Fistule Lacrimale*." *(Arch. Générales.,* 1852) and "*Etiologie des Fistules Lacrimales*" *(Gaz. Heb.,* 1862). He died in Paris, of an infected wound of the finger, received during the performance of an operation. American Encyclopedia of Ophthalmology 14,p.11423

Reyes-Noche, Rosie M. (1944-) Filipino ophthalmologist, Director of the Institute of Ophthalmology of the National Institute of Health, University of the Philippines (UP) Manila. She graduated and received her M.D. degree from the UP College of Medicine Class 1967. After completing Residency training in 1971, she started working as a Research Associate, then Researcher at the Institute. In 1998, she became the Director. She is also a member of the Faculty of the UP College of Medicine starting as an Instructor in 1971, then Clinical Assistant Professor, and in 1995, Clinical Associate Professor. She served as the Vice-President (1989-1990) and President (1991-1992) of the Philippine Society of Ophthalmology. In 1998, she became the Secretary of the newly formed Philippine Ocular Inflammation Society. She carried out research on uveitis during her stay at Juntendo University in Tokyo (1983) and at Yokohama City University (1990). She published 36 scientific papers and contributed chapters to 4 books. Of note are the following publications: "*Subconjunctival FK506 in experimental acute uveitis.* " Acta Med. Philppina Vol. 20: 99, 1992, "*Humoral immune response to porcine retinal –S antigen in Filipino Patients with uveitis and in normal volunteers*." Trans. Dept. Ophthalmol. UP 2: 41, 1994 and "*A study of the evolution of optic neuritis in rabbits caused by ethambutol*." J. Phil. Med. Assoc. 64: 67, 1988. She received Awards from the Philippine Society of Ophthalmology, and for the last paper on ethambutol she received the *Alcon Research Award*, *Abbott Research Award* and *NAST Outstanding Published Paper Award*. (Institute of Ophthalmology, National Institute of Health, UP Manila, PGH Compound Taft Avenue, Manila, phone/fax: 63-524-7119)

Reyling, Frederick Thomas(1859-1920) American ophthalmologist and otolaryngologist, as well as-teacher of histology, pathology, bacteriology, and some other branches. He was born in Havana, Cuba. He came to New York when a boy, and received a liberal education at the University of New York at which institution, in 1884 he received also the M.D. After a brief period of general practice, he studied the eye, ear, nose and throat, and from that time forward practiced as a specialist in those branches. For a time he was Professor of Pathology at his alma mater, and Professor of Materia Medica and Therapeutics in the New York College of Comparative Histology and Veterinary Surgery as well as visiting ophthalmic surgeon to the Manhattan Eye, Ear , Nose and Throat Hospital. In 1896 he moved to Kansas City, MO. Here he practised as ophthalmologist and otolaryngologist but was also, from 1899-1901 Professor of Histology and pathology in the University Medical College, and from 1901 to 1905, professor of Histology, Pathology and Bacteriology in the Kansas City College of Physicians and Surgeons. AJO 1920,3:631-632.

Reymond, Carlo (1833-1911). Italian ophthalmologist, born in Albertville (France). Studied first in Chambery , went later to Turin and received there his medical degree in 1857. His apprenticeship in ophthalmology was served respectively under ®Desmarres and ®Sichel in Paris. He returned to Turin and became 1876 professor of ophthalmology, a chair founded 1859. He was among the first to apply antiseptic principles to eye surgery in Italy. Numerous publications. American Encyclopedia of Ophthalmology 14,p.11423; The Ophthalmoscope, 1911,pp.673-674 .

Reynolds, Dudley Sharpe (1842-1915). American ophthalmologist of Louisville, Ky., born near Bowling Green, Warren Co., Ky., he received the degree of A. M. at Ogden College, Bowling Green, and, in 1868, his medical degree at the University of Louisville. From 1869-71 he was surgeon-in-chief to the Western Dispensary-a position which he signed to begin the study of ophthalmology and otology. After a considerable period at the

University of Pennsylvania, the Wills Eye Hospital, Philadelphia, and the New York Eye and Ear Infirmary, proceeded to Europe where he studied at the Royal London Ophthalmic Hospital (Moorfields), the London Throat Hospital, and, in Utrecht, under àDonders and àSnellen, in Paris under de àWecker,àSichel, Ed. àMeyer, and àGalezowski; in Vienna under Stellwag vonàCarion, àFuchs,àGrul andàPolitzer; in Berlin, under àSchweigger, àHirschberg, and von Bergmann. Returning to America, he was soon widely known as an oto-ophthalmologist. One of the organizers of the Hospital College of Medicine (the Medical Department of the Central University of Ky.), he was professor of ophthalmology and oto-laryngology at this institution from its very inception in 1874. He was also professor of general pathology and hygiene from 1882 to '92. In 1892, on the establishment of a chair of medical jurisprudence at the college in question, Reynolds was made the first incumbent, retaining the position until 1901, when he retired from teaching altogether. Reynolds was one of the organizers of the Association of American Medical Colleges, and was Chairman of the Judicial Council of that body for a number of years. He was later the chairman of the Judicial Council of the Association of American Medical Colleges. In 1880 he was elected Chairman of the Section of Ophthalmology, Otology, and Laryngology of the American Medical Association. He was once foreign delegate of the A. M. A., and in 1881, was made an honorary member of the British Medical Association. In 1887 he was President of the Mississippi Valley Medical Association. He wrote: *Accommodation and Refraction: a Review of Dr.Fenner´s Pamphlet* Louisville 1873. American Encyclopedia of Ophthalmology 14,p.11424-11426

Reynolds, Edward (1793-1881). American surgeon, one of the founders of the Tremont Medical School and of the Massachusetts Charitable Eye and Ear Infirmary. Born at Boston, Mass., he received the degree of A. B. at Harvard College in 1811, and, for a time, was engaged in the study of medicine with Dr. John CollinsàWarren. Then for three full years he studied at Paris and London, in the latter city coming much under the influence of Sir WilliamàLawrence, who turned his attention strongly toward diseases of the eye. Returning to Boston, Reynolds found his aged father blind from double-sided cataract. With a boldness rare enough among the operators even of the present day (1920), he couched both lenses at a single sitting and both the couchments were brilliantly successful. The cataract operation had not previously been performed at all in Boston, and the consequence was that Reynolds was a made man. In 1824 Reynolds, together with JohnàJeffries, established a dispensary which developed into the well known Massachusetts Charitable Eye and Ear Infirmary. Jeffries, for a time, was senior surgeon, but upon his resignation, the vacancy was filled by Reynolds. Reynolds was one of the founders of the Tremont, Medical School in which he was professor of surgery for some years. He also, for a time, taught anatomy and surgery at the Harvard Medical School. In 1864, at the founding of the American Ophthalmological Society, he was made an honorary member. He wrote: *Hints to Students on the Use of the Eyes* Edinburgh 1835 and *An Address at the Dedication of the New Building of the Massachusetts Eye and Ear Infirmary* Boston 1850. American Encyclopedia of Ophthalmology 14,p.11426-11427

Rhazes *see* **Ar-Razi**.

Rhee, Sang Wook (1931-) Korean ophthalmologist, Professor Emeritus of Catholic University, Seoul, Director of the Eye Center of Kangnam Medical Center Seoul. He graduated from the Seoul National University School of Medicine in 1956, and studied at the Postgraduate School of Medicine at Seoul National University and received the degree Doctor of Medical Sciences in 1966. He served as the Professor and Chairman of the Department of Ophthalmology of Catholic University during 1964-1991. He conducted research at Johns Hopkins University Hospital, Baltimore, and NIH, U.S.A. in 1968-1970. After retirement from the University, he is currently serving in the present position as above. His professional activities are numerous: Vice President and Councillor, Korean Foundation for the Prevention of Blindness (1974-presnt), Executive Director, the Korean Ophthalmological Society (1982-1984), President, Korean Intraocular Implant Club (1984-1989), President of the Asia-Pacific Academy of Ophthalmology (APAO) (1993-1995), Chairman of the Organizing Committee of the 12th Congress of the Asia-Pacific Academy of Ophthalmology (1989), Founding Member of the Asia-Pacific Intraocular Implant Club (1988- present), the President of the Korean Contact Lens Society (1993-1996), the Founding Member of the Korean Academy of Science and Technology (1994-

present) and a Member of the International Council of Ophthalmology (1994-1995). He founded the Korea-Japan Joint Meeting of Ophthalmology and served as the President in 1992-1998. He has many editorial assignments for Professional Journals: J. Kr. Ophthalmol. Soc., Kr. J. Ophthalmol. , Asia-Pacific J. Ophthalmol., Afro-Asian J. Ophthalmol. and many others. He has published 170 articles in Professional Journals and has written many books, e.g. "*Textbook of Ophthalmology*, Soomonsa Seoul 1970", *Refraction and Refractory Error*, Korean Optical Association, 1977", "*Acute hemorrhagic conjunctivitis in Korea*, in *Acute Hemorrhagic Conjunctivitis*, Tokyo Univ. Press, 1989" and " *Cataract and Glaucoma*, Seoul Publ. Co. Seoul 1996". He delivered a Special Lecture " *Epikeratoprosthesis*" at the 27th Congress of the Korean Ophthalmological Society. He is a recipient of many honor Awards, e.g. *Distinguished Service Award of the APAO* (1987), *de Ocampo Award Lecture of APAO* (1993)(*Keratoplasty and Eye Banking in Asia Pacific Zone*), *Jose Rizal Medal* from APAO (1999), *APIIA Medal* from the Asia Pacific Intraocular Implant Club (1996). In recognition of his meritorious serviced, he was granted the *National Medal of the Republic of Korea* in 1988. (402, Dongsu Villa, 115-1 Chungdam-Don, Kangnam-ku, Seoul, Korea; Phone: 82-2-512-4235)(SM)

Rhoads, George (1859-1912). A well-known homeopathic ophthalmologist and oto laryngologist. Born at Richmond, Vt., he received his liberal training at the Goddard Seminary and at the University of Vermont. He then studied medicine at the Hahnemann Medical College, Philadelphia. He practised for a time at Fitchburg, Mass., then at Winchendon, and moved in 1894 to Springfield, where he remained until his death. American Encyclopedia of Ophthalmology 14,p.11432

Riberi, Alessandro , Italian Turinese ophthalmologist, inventor of an excellent ectropion operation for the lower lid, a procedure which is, however, only occasionally called by his name. This is the well-known operation whereby a V-shaped incision is made in the skin of the lid and of the cheek below it, apex downward, the sides extending to the inner and the outer canthus of the eye respectively. The procedure in question has been attributed, quite wrongly, both to Thomas WhartonàJones and toàVelpeau. Riberi was born at Turin, became professor of surgery and obstetrics at Turin University and president of the Medical Faculty. His chief ophthalmic writings are as follows: 1. *Trattato di Blepharottalmo-Terapia Operativa*. (Torino, 1837, 2d ed., 1839). 2. *Su i Seni e su le Fistole delle Vie Lagrimali*. 3. *Della Ceratitide*. (Torino 1839.) American Encyclopedia of Ophthalmology 14,p.11435-11436

Richter, August Gottlieb (1742-1812). German surgeon and ophthalmologist. Born at Zoerbig, Saxony, the nephew of a well-known Göttingen professor of medicine, he received his medical degree at Göttingen in 1760, his dissertation being *De Prisca Roma in Medicos suos haud Iniqua*." After extensive travels in search of further scientific education, he returned to Göttingen, where, in 1766, he was made extraordinary professor of medicine, and, five years later, full professor. He was both an eloquent speaker and a dextrous and highly successful operator. Being of a warm heart and frank disposition, he was almost worshipped by his students. He simplified and made more practical the surgical techique of his day, and for these facts alone he deserves the title he has always borne of the "Reformer of German Surgery." Among his numerous services, furthermore, should not be forgotten that of putting an effective brake upon the reckless operating of his day. In ophthalmology he rendered the special service of removing the cataract-extraction operation (Daviel, 1748) almost entirely from the hands of the itinerant quack and of placing it in those of the scientific surgeon. According to àHirschberg he was also probably the first to call attention to the fact that frontal sinus inflammation may be the cause of ocular inflammation and even blindness. Of Richter's general writings, the following should be remembered even by ophthalmologists, so epoch-making are they: 1. *Chirurgische Bibliothek*. 2. *Abhandlung von den Brüchen*. (2 vols., 1777) 3. *Anfangsgründe der Wundarzneikunst*. (7 vols., 1782-1804.) 4. *Specielle Therapie*. (9 vols. and a supplement Berlin, 1813-'36.) His ophthalmologic writings are as follows: 1. *Varias Cataractam Extrahendi Methodos Exponit et ad Orationem qua Munus Professoris Med. Extraord*. Clementissime sibi Demandatum die viii Oct. 1766 Aditurus est ....Invitat D. Aug. Gottlieb Richter, Gött., (1766,4to) 2*. Operationes Aliquot, quibus Cataractam Extrahit*, (Gött., 1768) 3. *Observ. Chir. Fascic. Continens de Cataractae Extractione Observationes*. 2 vols (Gött., 1770-1776, 8vo.) 4. *Abhandlung von der Ausziehung des Grauen Stars*. (Göttingen, 1773, English ed. 1791) 5. *Observatione de*

Fistula Lacrymale. (Göttingen 1778.) American Encyclopedia of Ophthalmology 14,p.11436-11438.

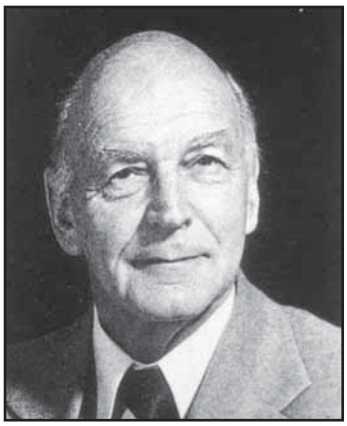
Ridley, Nicholas Charles (1863-1937) British ophthalmologist of Leicester, father of Harold Ridley, the pioneer of IOL. He was a founder and an original member of the Council of the Congress. He was also a founder and Past President (1915-1917) of the Midland Ophthalmological Society. Ridley was born the eldest son of the Rev. Charles George Ridley, Vicar of Bratoft, Lincolnshire. He was educated at Boston and proceeded to St. Mary's Hospital, where he qualified and then acted as House Surgeon to Edmund 0wen. He entered the Navy as Surgeon, being second out of 40 examined, but unfortunately after a few years' service was invalided out, on account of ankylosis of a knee due to pyogenic infection following fever. He then specialized in ophthalmology and became Clinical Assistant to Silcock at Moorfields, afterwards becoming temporary Curator for five months in the absence of Treacher Collins. Succeeding Hodges at Leicester, he passed the primary and final F.R.C.S.Eng. within six months and was appointed Ophthalmic Surgeon to Leicester Royal Infirmary where he was the sole Ophthalmic Surgeon for 28 years. At the outbreak of the Great War he volunteered for active service but was refused on account of his disability. BJO 1937,21: 460-461.

Ridley, Nicholas Harold Lloyd (Sir Harold) (1906 – 2001) British ophthalmologist. Ridley was the eldest son of a naval surgeon who later graduated into ophthalmology. He was educated at Charterhouse and Pembroke College, Cambridge completing his basic medical training at St Thomas' Hospital. In 1938 he was appointed to the consultant staff at Moorfields Eye Hospital (1938 - 1971). Early in the war he was posted as a major in the Royal Army Medical Corp to the Gold Coast. Here he studied the cause of local blindness, the parasitic tropical disease known as onchoceriasis (river blindness) He published a monograph on the subject in 1945. In 1949 at St Thomas' Hospital, Ridley performed the first cataract extraction with an artificial lens implantation, pioneering the surgery that would restore sight to millions of people around the world. During the Second World War, as surgeon at Moorfields Eye Hospital, Ridley treated injured RAF pilots whose eyes had been penetrated by slivers of Perspex from the cockpit. He noted how well the eyes tolerated the material. His early pioneering work was unsuccessful and the ophthalmic establishment was hostile to such a daring project . With the courage of his convictions that the concept of the operation was correct, ultimate triumph came in the 1970s with new technology, new instrumentation and the adoption of microsurgical techniques, all of which combined to bring a success rate hitherto unknown. After his retirement in 1971 he was elected to the Royal Society and amongst his many medical honours he received the Gullstrand Medal of the Swedish Medical Society and the Gonin Medal from the International Council of Ophthalmology. Belatedly, in 2000 he received a Knighthood. (John Winstanley) R.C.K.

Riehm, Wolfgang (1896-1971) German ophthalmologist born in Halle/Saale, Germany. Riehm studied medicine in Halle and Marburg, receiving his medical degree 1923 in Halle. From 1923 to 1925 he was assistant at the Eye Clinic in Halle and from 1925 to 1935 first assistant (Oberarzt) at the University Eye Clinic in Würzburg under Schieck. During the second named period he became (in 1928) lecturer and (1933) professor extraordinarius. Riehm became full professor of ophthalmolgy at Giessen in 1935 and remained there until 1941. He then moved to Bonn becoming professor of ophthalmology at the Bonn University Eye Clinic and receiving a teaching position there in 1953. Riehm then accepted becoming professor and director of the Münster University Eye Clinic where he remained until 1964 having reached the age limit. Riehm was particularly interested in allergy and immunity and became very successful on that special topic in ophthalmology reflected in his contribution to the treatise *Allergie* by Hansen, published in Stuttgart 1957. *Klin Monatsbl f.Augenheilkunde* 1971,159:138.JPW

Rigal, Jean Jacques (1755-1823). French surgeon, who devoted considerable attention to ophthalmology. Born at Cussac, he received his medical degree at Montpellier. Settling at Gaillac, he became especially renowned for his skill as an operator. Rigal's only ophthalmologic writing is entitled "*Considération Pratiques sur les Maladies des Voies Lacrymales* " (Hist. et Mém. 1'Acad. Roy. de Toulouse, Vol. XXX) American Encyclopedia of Ophthalmology 14,p.11440.

Rinecker, Franz von (1811-1883). German pediatrist, microscopist and physiologist of slight ophthalmologic importance because of his graduation dissertation, "*Die Entzündung der Gefäss-Nerven-und Glashaut des Auges und ihre Ausgänge*." Born at Schlesslitz, Germany, he received his medical degree at Munich in 1832. He taught and practised chiefly at Würzburg. American Encyclopedia of Ophthalmology 15,p.11442



C. Calvin Ring

Ring C. Calvin (1910 -1998) New Zealand ophthalmologist. He graduated from Otago Medical School in 1938. Following his overseas war service, he was trained at Moorfields Eye Hospital where he became the senior registrar in 1948 (He received FRCS, FRACO, DOMS, DLO). Subsequently he started private ophthalmic practice in Auckland, New Zealand. He held many important positions in the professional organizations and societies: they embrace Senior Medical Staff, Auckland Hospital Board (1968-), Chairman Combined Medical Staff, Auckland Hospital Board, Chairman, Division of Surgery, Auckland Hospital (1976-1979), Secretary of Ophthalmological Society of New Zealand (1956-1961) and its President (1968), Founder and President of New Zealand Society for the Prevention of Blindness (1966-1977), Organizer and Trustee of Auckland Eye Research and Education Trust (1976-), Examiner in Ophthalmology, Royal Australian College of Surgeons (1968-1973) and Member of New Zealand Committee RACS (1972-1976). He was Vice-President of the Asia-Pacific Academy of Ophthalmology (1987-1989) and served as the President of the Academy (1989-1991).(Lim K.H. & Lim Arthur L.S.M. *Ophthalmology awakens in Asia, 40 years of Asia-Pacific Ophthalmology*, Singapore, 1999)

Ring, G. Oram (1861-1933) American ophthalmologist. G. Oram Ring graduated from the Medical School of the University of Pennsylvania in 1885, and later worked in the Eye Department of the out-patient service of the University Hospital. He at once became interested in ophthalmology, and soon became Ophthalmic Surgeon to the Episcopal Hospital, an active service which he continued for over twenty-one years, until he was made Consulting Ophthalmologist to the Hospital. He was also Ophthalmologist to the Widener Home for Crippled Children, and Consulting Ophthalmologist to the American Oncologic Hospital. Some of his most important papers were based on cases seen and operated on at the latter institution. He became a Fellow of the College of Physicians of Philadelphia in 1895, and in 1901 a member of the American Ophthalmological Society. He was a member and President of the Medical Club of Philadelphia, and early took the certificate of the American Board for Ophthalmic Examinations.

Riseley, Stanley (1868-1915). British ophthalmologist of Sheffield, England. Born at Bristol, he graduated at Edinburgh University, and then settled in 1898 as ophthalmologist at Sheffield. In 1912 he was president of the Sheffield Medico-Chirurgical Society, and, at the time of his death, was ophthalmic surgeon to the Sheffield Royal Hospital, and to Rotherham Hospital. American Encyclopedia of Ophthalmology 15,p.11445-11446

Risley, Samuel Doty (1845-1920) American ophthalmologist of Philadelphia. Born at Cincinnati, 0. His medical degree was received at the University of Pennsylvania in 1870. For the next two years he engaged in general practice. Having studied the eye at the Wills Eye Hospital and at the University of Pennsylvania under William F. Norris, he engaged, in 1872, in the practice of diseases of the eye exclusively. He was Lecturer and Assistant Surgeon in ophthalmology at his alma mater from 1872 to 1879; professor of diseases of the eye in the Philadelphia Polyclinic from 1886 to 1900, and emeritus professor thereafter; attending surgeon to Wills Eye Hospital Philadelphia, 1890; a member of the board of managers of the Pennsylvania Training School for Feeble-Minded; alumni manager of the University of Pennsylvania Hospital since 1896. He was Chairman of the Section on Ophthalmology of the American Medical Association in 1893, a member of the House of Delegates in 1907, President of the American Academy of Medicine in 1891, Chairman of the Ophthalmological Section of the College of Physicians of Philadelphia in 1904 and of the American Ophthalmological Society in 1907. He was a member of the International Congress of Ophthalmology at Edinburgh, Scotland, in 1894, and at Utrecht, Holland, in 1899. Among the doctor's more important articles were "*The Comparative Value of Mydriatics*," ' "*School Hygiene*," "The *Genesis of the Myopic Eye*," and "*The Etiology of Uveitis*." He devised a form of a "rotary prism" for the measurement of ocular imbalance, a phoropter, an ophthalmoscope combining cylinders with the usual spheres, a

secondary cataract knife with its blade hand tooled so that the shaft, equaling the size of the corneal puncture, served as a check to the escape of vitreous.AJO 1920,3:632-633

Ritch, Robert (1944-) American ophthalmologist, Professor of Clinical Ophthalmology (since 1983), The New York Medical College, Valhalla, New York, USA, Surgeon Director (since 1991) and Chief, Glaucoma Service (since 1983), The New York Eye and Ear Infirmary, New York, NY, USA. He received BA from Harvard College, Cambridge, Massachusetts in 1965, MA from Harvard University, Cambridge, Massachusetts in 1967 and MD from Albert Einstein College of Medicine, Bronx, NY in 1972. He completed Residency Training in Ophthalmology at Mount Sinai School of Medicine, New York, NY during 1973-76. He further extended his studies under the fellowships of Heed Ophthalmic Foundation (1976-1977) and of National Eye Institute Health (1976-1978) at Mount Sinai School of Medicine under Dr. Steven M. Podos. Subsequently, he has held the following positions: Assistant Professor, Mount Sinai School of Medicine (1978-1980), Associate Professor, Mount Sinai School of Medicine (1980-1982) and is Professor of Clinical Ophthalmology, NYMC (as above) since 1983. He was elected as a Member of the American Ophthalmological Society in 1994 by submitting a thesis *Exfoliation syndrome: clinical findings and occurrence in patients with occludable angles*. Trans Am Ophthalmol Soc. 1994, 92:845-944. He is and has been a Member of many prestigious professional societies, some selected societies where he has served as an officer are as follows: 1. Fellow, American Academy of Ophthalmology, 2. Fellow, American College of Surgeons, 3. Fellow, International College of Surgeons, 4. Fellow, Royal College of Ophthalmologists, 5. Fellow, New York Academy of Medicine, Chairman, Program Committee, Ophthalmology (1991-92), President, Section on Ophthalmology (1993-1994), 6. Fellow, American Society for Laser in Surgery and Medicine, Chairman, Ophthalmology section (1991-1992), 7. Ophthalmic Laser Surgical Society, Co-Founder with Francis L'Esperance, 1981, Secretary-Treasurer (1982-1998), President (1998-2000), 8. New York Society for Clinical Ophthalmology, Chairman, Program Committee (1990-1991), President (1991-1992), 9. New York Glaucoma Society, Co-Founder President (1991-1993), 10. Association for Research in Vision and Ophthalmology, Program Committee, Glaucoma Section (1991 – 1993), Chairman, Program Committee, Glaucoma Section (1993-1994), 11. Glaucoma Committee, International Congress of Ophthalmology, 12. The Glaucoma Foundation, Founder, 1985, Vice-President, Secretary, Medical Director and Chairman of the Scientific Advisory Board (1985 – present), 13. American Telemedicine Association Member, International Task Force, 14. Lindberg Society Co-founder with Drs. Ahti Tarkkanen and Gottfried O.H. Naumann, President (1998-), 15. New York Glaucoma Research Institute, Founder (1995), President (1995-). He has founded many organizations and they are 1. *Ophthalmic Laser Surgical Society* (1981), 2. *New York Glaucoma Society* (1991), 3. *The Glaucoma Foundation* (1985), 4. *Lindberg Society* (1998), 5. *New York Glaucoma Support Group* (1983), 6. *Alt.support.glaucoma newsgroup* (1995), 7. *New York Glaucoma Research Institute* (1995) and 8. *Annual Optic Nerve Rescue and Regeneration Think Tank* (1994). He has written 280 original papers and 68 book chapters, and he has recorded 359 abstracts. His main interest is glaucoma and some examples of his books are 1. Ritch R, Shields MB: *The Secondary Glaucomas*. CV Mosby Co, St Louis, 1982, 2.Ritch R, Shields MB, Krupin T: *The Glaucomas*. CV Mosby Co, St. Louis, 1989. 2 vols., 3.Ritch R, Shields MB, Krupin T: *The Glaucomas*. CV Mosby Co, St. Louis, 1996, 2d edition. 3 vols. and 4.Ritch R, Caronia R: *Classic Papers in Glaucoma*, Kugler Pub, Amsterdam, 1999. He has given 14 Named Lectures, and has been Visiting Professor to 22 Universities and organized 41 International Symposia. He also serves as a member of Editorial Board to 6 professional journals. In recognition of his significant contributions, many organizations conferred honor awards upon him, and they are 1. Founders Award, National Exhibits by Blind Artists(1985), 2. Executive Director's Award, International Center in New York (1985), 3. Honor Award, American Academy of Ophthalmology (1985, 1987), 4. Listed, Who's Who in the World, Who's Who in America (1987 –present), 5. 1990 Special Honoree, The Glaucoma Foundation (1990), 6. Senior Honor Award, American Academy of Ophthalmology (1995), 7. Ophthalmologist of the Year, Heed Ophthalmic Foundation (1996), 8. Gold Medal of Merit and Honour of A. Anagnostakis and A. Trantas - Greek Glaucoma Society (1998), 9. Commander of Grace and Lieutenant Knight Hospitaller of the Sovereign Order of the Orthodox Knights Hospitaller of St. John of Jerusalem (1998), 10. Ophthalmology Times Achievement in

Ophthalmology Award (1998), 11. 1998 Louis Rudin Award for Research in Glaucoma (1999), 12. Special Honoree, Helen Keller Foundation (2000) and 13. Special Honoree of the Glaucoma Foundation (2000). (Glaucoma Associates of New York, 310 East 14th Street, New York, NY 10003, USA. Phone: +1-212-673-5140; Fax: +1-212-420-8743; e-mail: ritch@inx.net) (home-pages : http://www.glaucoma.net ; http://www.nyee.edu) (SM)

Ritterich, Friedrich Phillipp (1782-1866). German ophthalmologist. Born at Leipsic, he received his medical degree at the University of his native town. He then studied ophthalmology exclusively at Vienna under àBeer and Adam àSchmidt. Returning to Leipsic, he there practised as ophthalmologist until his death. He was one of the founders (in 1821) of the Leipsic Eye Infirmary, and its director from 1821-1852. In 1828 he was made extraordinary professor of ophthalmology at the University, and, in 1847, Hofrath. For a long time he was wholly blind. He was a friendly, warm-hearted man, and liked by all who knew him, but he had very little ability as a teacher. His judgment and his operative skill, however, are said to have been of a high order. His chief ophthalmologic writings are as follows - 1. *Jährliche Beiträge zur Vervollkommnung der Augenheilkunst*. (Bd. 1, 1827.) 2. *Enumeratio Instrumentorum ad Tollendam Canalis Nasalis Obstructionem- Commendatorum et Depictorum*. (1830.) 3. *Die Heilanstalt f. Arme Augenkranke zu Leipzig zur Zeit ihres 25jäh. Bestehens*. (1845.) 4. *Anweisung zur Erhaltung des Sehvermögens.* (1847 ;2 Aufl. 1852.) 5. *Das kiinstliche Auge*. (1852.) 6. *Zur Lehre vom Schielen und über das Anpassungsvermögen der Augen*. (1856.) 7. *Lehre von den Blutigen Augenoperationen am Menschlichen Körper*. (G. B. Guenther's *Lehre v.d. Blutigen Operationen*, 1858.) 8. *Die Hornhautbeere, Staphylom der Hornhaut*. (1859.) 9. *Weitere Beiträge zur Vervollkommnung der Augenheilkunst*. (1861.) American Encyclopedia of Ophthalmology 15,p.11446

Rittmann, Alexander (1827-1882). German ophthalmologist. Born in Mährisch-Trübau, he received his degree in medicine and surgery at Prague in 1856. For a time he was assistant to àArlt, in the Eye Clinic, afterwards settling in Brünn. From 1862 till 1870 he was chief of the Eye Division at the Brünn Hospital, and, after a number of other official positions, died Jan. 21, 1882. American Encyclopedia of Ophthalmology 15,p.11446

Rivaud-Landrau, Louis (1817-1874). French ophthalmologist. Born at Poitiers, France, he received his medical degree in 1839. He married a daughter of Dr. Parfait-Landrau, and at once joined his father-in-law at Poitiers in the practice of ophthalmology exclusively. In 1854, he, in company with Parfait-Landrau, moved to Lyons, where they two together founded a private Eye Infirmary, called *Maison de Santé Spécae pour les Maladies Ophthalmiques*. Rivaud-Landrau was especially renowned as an operator, yet, in addition, he wrote almost a score of articles which appeared in the *Annales d'Oculistique* from 1854-'62 inclusive. Parfait-Landrau, according to Hirschberg, discovered the condition now termed "*synchisis scintillans*." American Encyclopedia of Ophthalmology 15,p.11446-11447

Rivaud-Landrau, Paul, was the son of the better known ophthalmologist, Louis Rivaud-Landrau, 1817-1874, who practiced in Lyons where he had an ophthalmic clinic (see *Annales d´oculistique* vol.31,p.45) and was esteemed as a cataract surgeon and ophthalmologist. He wrote: *Du strabisme*. La Guillotière 1846 and *Études ophthalmiques*. La Guillotière 1852.

Rivers, Edmund C (1858-1915). American, Denver ophthalmologist and oto laryngologist. Born in 1858, he received the medical degree in 1879 at the University of Maryland, Baltimore. For many years he practised his specialties at Denver, and was president of the board of trustees and professor of ophthalmology in the Denver and Gross College of Medicine, as well as vice-president of the board of directors and consulting oculist to the Denver Maternity and Woman's Hospital Association. He was drowned in Barr Lake, near Denver.American Encyclopedia of Ophthalmology 15,p.11447-11448; Ophthalmology,1915, 3: 432

Rivière, Lazare (1589-1655). French, Professor of Medicine at Montpellier, and follower of Paracelsus. He is memorable to ophthalmologists because of the following passage, which occurs in his "*Praxis Medica*": "When a cataract cannot be dissolved by any sort of medicine, then the last resort is a surgical operation. If the cataract mass be thick and

enclosed in a little membrane, it is thrust down into the depths of the eye with a needle (with which the eye has been penetrated) just as one opens a window. This operation is sometimes successful, but often not. However, if there is no hope in any other means, it is better, according to the opinion of Celsus, to try an uncertain remedy rather than none at all.. Yet, because of its great uncertainty, the cataract operation should be performed not by ordinary surgeons,, but by quacks, who, for the sake of this practice, travel hither and thither and, therefore, the choice of the time for and the kind of operation should be left to them too." American Encyclopedia of Ophthalmology 15,p.11448-11449

Jose Rizal y Mercado

Rizal y Mercado, Jose (1861-1924) Filipino ophthalmologist and hero of the Independence of the Philippines. Rizal was born in the town of Calamba of the province of Laguna. Volumes have been written on his life and works. Among the best known are those by W. Retana. a Spanish writer; that by Austin Craig, former Rizal research professor in the University of the Philippines, and that by Russell and Rodriguez. He is known at home and abroad, not only as a patriot and a hero who died for his country, but also as a most versatile genius, who according to Russell and Rodriguez scarcely has a companion in human records. "*He was a physician that had chosen diseases of the eye for his specially, wherein he stood in a place of distinction before his profession. He was next an artist in sculpture and painting; a poet; a master of verse and prose in Spanish, in his native Tagalog, and in ten other languages English, French, German, Italian, Japanese, Greek and even Hebrew, Sanskrit, Arabic. He was next a scientist distinguished in original research, already honored with regard by leading European minds in many branches of recondite knowledge*." Rizal obtained his early education at home and in Binan, a town near Calamba, and then in Manila where he took his A. B. degree with highest honor at the age of 15 in the Ataneo de Manila, a school conducted by the Jesuit Fathers. He then began the Medical course in Santo Tomas University. But shortly after he had to leave the islands because of the beginning of troubles which his family had with Spanish officials. That was a time of unrest and discontent in the Philippines, because of the increasing abuses committed by the Spanish government. No wonder that the greater part of this great man's energy and thoughts was centered, as shown in his writings, in the sufferings and needs of reform in the Philippines under the heavy yoke of Spanish rule. He finished his medical course in the Universidad Central de Madrid in 1885, there also obtaining honors. He also studied philosophy and literature in this University, and while outside he devoted his time to arts and modern languages. In 1866 he received the degree of Licentiate in Philosophy. He then visited the Universities of Leipzig, Heidelberg and Berlin. In 1887 he traveled in Austria, Switzerland and Italy. In April 1888 he went to the United States and from thence he proceeded to London, Paris, Belgium and Holland. In his travel he made the acquaintance and was honored by the friendship of great men like Virchow,àJäger,àMeyer, Blumentritt and others. From Madrid he went to Paris and was chosen clinical assistant to Dr. Louis deàWecker, one of the famous oculists of Europe. He had also worked with àGalezowski in Paris and Schulzer in Heidelberg. He had a special liking for this branch of medicine and devoted much time to ophthalmic surgery. In Vienna he studied under Prof.àFuchs. In 1887 he returned to the Philippines, anxious to be of assistance to his mother after having received the news of her gradual failing of sight. In the same year he successfully performed in their house in Calamba the cataract extraction of her left eye which restored her vision. This was the first operation of its kind done in the Philippines. News of his success spread rapidly throughout the islands and neighboring countries and this brought him into eminence and great practice. Patients came from all parts of the Islands and even from China. During that year he also performed in Calamba an enucleation, two cases of correction of strabismus, and one removal of pterygium. AJO, 1924, 7:560-561. To honor this Hero Ophthalmologist, the Ophthalmological Society of the Philippines established the “Dr. Jose P. Rizal Memorial Lectureship” in 1955. (*A Century of Ophthalmology in the Philippines*, by àSalceda S.R., 1997). The Asia-Pacific Academy of Ophthalmology also honored this hero and created the “Jose Rizal Medal” in 1968 as the highest Honor Medal of the Academy. (Hui andàLim: *Ophthalmology awakens in Asia: 40 Years of Asia-Pacific Ophthalmology*, by Singapore National Eye Centre, 1999). (SM)

Roaf, H.E. (1881-1952) British physiologist, George Holt Professor of physiology at Liverpool University. Roaf worked 1906 under Sir Charles Sherrington and was appointed

1920 to the Chair of physiology at St.Mary´s Hospital Medical College, London. He returned to Liverpool University in 1932 where he became George Holt professor of physiology. He did much research on the physiology of the central nervous system, vision and particularly colour vision. He wrote a *Textbook of Physiology*. The Optician 1952,522

Roaldes, Arthur Washington de (1849-1918) American, blind ophthalmo-oto-laryngo and aurologist from New Orleans, born in Opelousas, Louisiana from an old south of France family. He was educated by the Jesuits in France, and later awarded the diploma of "bachellier és-lettres" in 1865. The following year he was made "bachelier ès sciences". Returning to America, he received the medical degree at the University of Louisiana in 1869 and then went back to France for further medical study. His ad eundem was received at the University of Paris in 1870. He served with great distinction during the Franco-Prussian war, rescuing at one time seventeen wounded from a burning house in Bazailles during the heat of battle. In 1872 he returned to New Orleans, and soon was widely known as a general practitioner. In 1887-89 Dr. de Roaldes made a special study of the eye, ear, nose and throat in the hospitals of Europe; and returning again to New Orleans, began to practice otology and laryngology in New Orleans. In 1889 he founded the *Eye, Ear, Nose and Throat Hospital*, also known as "*The Senses Hospital*" and was a trustee thereof and its surgeon-in-chief for many years. In 1890 he was made professor of diseases of the ear, nose and throat in the New Orleans Polyclinic. We cannot mention here all the numerous honors which came to Dr. de Roaldes. He was made, however, a Knight of the Legion of Honor, and when he founded the Eye, Ear, Nose and Throat Hospital, the French government promoted him, and made him a grand commander in the Legion. He was also a Fellow of the American College of Surgeons, member of the Institute of Social Sciences, and Chevalier of the Italian Order of St. Maurice and St. Lazare and Commander of the Papal Order of St. Gregory the Great. For the last twenty years of his life he was wholly blind.AJO,1:695-696.

Robert, Professor (19th century). A German ophthalmologist who lectured on his specialty at Marburg about the middle of the 19th century. He also had a private eye infirmary in that city. His ophthalmologic writings are as follows: 1. *Ueber Subkutane Durchschneidung des Orbicularis und die Canthoplastik zur Heilung der Blepbarophimosis, nebst Bemerkungen über die Subkutane Durchschneidung der Sphinkteren überhaupt*. (Jour.d.Chir.und Augenhk., 1843,32:27-37) 2. *Angeborene Geschwulst der Sklerotica und Cornea des Linken Auges bei Gleichzeitig Angeborener Missbildung des Rechten Aeusseren Ohres und Naevus der Linken Wange*. *(*Ibid., pp. 38-42.) American Encyclopedia of Ophthalmology 15,p.11449

Roberts, Bernard Hamilton St.Clair *see* **St.Clair Roberts**

Robertson, Charles Archibald (1829-1880). American ophthalmologist (mistakenly spelt "Richardson" by Hirschberg in the chapter "American ophthalmologists". Born at Mobile, Alabama, he received the degree of A. B. at Harvard University in 1850, and his medical degree at Jefferson Medical College. For a time he studied diseases of the eye and ear in Boston at the Perkins Institution and at the Boston Eye and Ear Infirmary, and, later, at the Wills Eye and Ear Hospital in Philadelphia. After a year and a half in Europe, he settled at Boston as ophthalmologist and oto-laryngologist, but in a very short time moved to New York City. For about two years he served with the Northern Army in the Civil War, but, having been retired on account of illness, be practised at Poughkeepsie, then at Albany. Here he remained until his death. He was ophthalmic and aural surgeon at St. Peter's Hospital, and to the Albany Hospital. He was also attending oculist at the Troy Hospital. He was one of the founders of the American Ophthalmological Society, a member of the International Ophthalmological Society, and of the American Otological Society. Robertson's most important ophthalmologic writings are as follows*: 1. The Importance of Examining the Dioptric Media in Some Pathological Affections of the Eye.* (1865.) 2. *Glaucoma and its Cure* (transl. From the French, 1866) *3.Some curious reflex phenomena after injuries of the eye* (1870) *4. Remarkable perturbation of the Olfactory Nerve following Extraction of Cataract* (1873) *5. An Eye Case in the Courts* (1874) *6. Pigmentation of the Retina* (1877) American Encyclopedia of Ophthalmology 15,p.11449-11450

Robertson, Douglas Moray Cooper Lamb Argyll (1837-1909) British ophthalmologist. Argyll Robertson received his medical education in Edinburgh, St.Andrews and on the continent. He took his degree in medicine 1857 at St.Andrews(Scotland) and became Fellow of the Royal College of Surgeons of Edinburgh five years later. From the first he devoted his attention exclusively to ophthalmology. In 1863 he published a pioneer communication in the Edinburgh Medical Journal: „*The Calabar Bean as a New Ophthalmic Agent*“.In December 1869 he published in the same journal an article: „*Four Cases of Spinal Myosis with Remarks on the Action of the Light on the Pupil*“. In that communication he described a symptom later called „Argyll Robertson pupil“.From 1867 to 1870 he was assistant surgeon in the ophthalmic department of the Edinburgh Royal Infirmary under William ®Walker . After Walker´s retirement in 1882 he took charge with G.A. Berry of the department of ophthalmology. For several years, Robertson was lecturer on diseases of the eyes in the University of Edinburgh. He received a post as honorary surgeon-oculist to Queen Victoria and later of King Edward VII at the Scottish Court. He wrote *Trephining the Sclerotic, a new operation for glaucoma* London c.1880 and *The Calabar bean as a new agent in ophthalmic medicine* Edinburgh 1863. The Ophthalmoscope, London 1909,p.135-141 (with notes by A.Critchett; S.Snell; G.Mackay and H.Sattler.).American Encyclopedia of Ophthalmology 14,p. 11450-11457

Robertson, John Argyll (18th c.) British surgeon, father of the much more famous Douglas Argyll àRobertson, himself a distinguished operator, and the first compiler of a comparative table of statistics of the cataract operation. The dates of his birth and death are not known. He was, however, surgeon to the Eye Dispensary at Edinburgh, and lecturer on surgery at the Edinburgh University. He wrote on iritis, amaurosis and the cataract operation. His most important article is entitled "Observations on Extraction and Displacement of the Cataract, with Tables Showing the Relative Success from the Performance of These Operations- *(Edinburgh Journal, No. 131* XLVII: 378-390). American Encyclopedia of Ophthalmology 15,p.11457-11458

Robin, Albert (1847-1928) French physician born in Dijon. Robin received his M.D. in 1877 at the Paris Faculté, with the thesis *Essai d´urologie clinique* (Paris 1877) where he became lecturer in internal pathology in 1883 and professor of clinical therapy in 1905. He became (1887) a member of the Academie de médecine. He published extensively on pharmacology and therapeutics. He wrote: *Des troubles oculaires dans les maladies de l'encéphale*. Paris 1880 ; *Des affections cérébrales consécutives aux lésions non traumatiques du rocher et de l´appareil auditif* Paris 1883 ; *Leçons de clinique et de thérapeutique médicales* Paris 1887 ; with Nicolle *De la rupture du cœur* Paris 1885 : *Les maladies de la nutrition* Paris 1900

Rochon-Duvigneaud, André (1863-1952) French ophthalmologist, a pupil of Ph.Panas. Following his book *Titres et travaux scientifiques du Dr.Rochon-Duvigneaud* (Paris 1900) he was first, from 1885 to 1888, preparator at the histological laboratory of the faculté de medicine at Bordeaux, and at the same time and place, anatomical assistant. His internship was served at the Hopitaux de Paris between 1889 and 1892. During the same period Rochon-Duvigneaud was serving an internship at the Clinique Ophtalmologique de l´Hôtel-Dieu. He was also (1890-1892) preparator at the ophthalmic laboratory of the Hôtel-Dieu. He received his medical degree June 23, 1892 with the thesis *Recherches de l´angle de la chambre antérieure et le canal de Schlemm* (published the same year also in book form) and became head of the ophthalmic clinic at the Faculté in 1892, keeping this position until 1895. He was medical assistant at the Hôpital Lariboissière from 1895-1898. Rochon-Duvignead became a member of the Société d´Ophtalmologie de Paris November 1895. He wrote: *Précis iconographique d´anatomie normale de l´Œil* Paris 1895 ; *Recherches sur l´Œil et la Vision chez les Vertébrés* Laval 1933 ; *Les yeux et la Vision des vertébrés* Paris 1943. JPW

Rodger, Anderson (? – 1909). A wealthy English shipbuilder, once Provost of Greenock. In 1894 he founded the Greenock Eye Infirmary. American Encyclopedia of Ophthalmology 15,p.11459

Rodgers, John Kearney (1793-1851) American surgeon, of much importance in early American ophthalmology. Born in New York City, he received his training in the liberal

arts at Princeton College, and afterwards studied medicine with a preceptor, Dr. Wright Post, in New York. In 1816 he received his degree from the College of Physicians and Surgeons. After a term as house surgeon at the New York Hospital, he proceeded to London in company with Dr. Edward Delafield. Soon these two were greatly interested in ophthalmology, and, returning to New York, they, in collaboration with a number of others, established in 1820 the New York Eye Infirmary. For very many years Rodgers was surgeon to this institution, and some of the more important later ophthalmologists for example, Cornelius ReaàAgnew, were students (and sometimes protegés) of his. Rodgers' chief performance was the tying of the left subclavian artery (in 1845) within the scaleni muscles, a procedure which he was the first to execute upon the living human subject. As an operator on the eye, he was swift bold, and brilliant. He wrote but little, his most important paper being "*Ligature of the Left Subclavian Artery within the Scalenus Muscles for Aneurysm*" (1846).American Encyclopedia of Ophthalmology 15,p.11459-11460.

Rodriguez, Juan Sixto (2nd half 18th century). Spanish surgeon of the latter half of the 18th century, who devoted considerable attention to diseases of the eye. He was professor of surgery at the University of Seville, surgeon to the navy and to the royal family, and Fellow of the Royal Society of Medicine. His chief ophthalmologic writing was *"De la Fistula Lagrimal Completa y su Método Curativo"* (Seville 1789). American Encyclopedia of Ophthalmology 15,p.11460

Rognetta, Francesco (1800-1857). Italian ophthalmologist, who spent most of his professional career in Paris. Born at Reggio, Calabria, he received his medical degree at Naples, and for a time was privatdocent in that University. For political reasons he moved to Paris, where he began to practice in 1833 becoming in a short time a most influential personage. According to Pagel, he it was who introduced operative ophthalmology into France, a statement which is strongly objected to by Hirschberg, and which, undoubtedly, is an exaggeration. He established a free course in ophthalmology at the Ecole Pratique, and was an esteemed collaborator on the *Gazette Médicale* and the *Gazette des Hôpitaux*. He was also prominent as a medico-legal expert. In addition to a number of works on legal medicine and surgery of the bones, he wrote or edited: 1. *Traité Pratique des Maladies des Yeux* (Edited and elaborated by Rognetta, Paris, 1839.) [this a translation of Antonio Scarpas famous treatise "*Saggio di Osservazioni* etc. Pavia 1801-JPW] 2. *Cours d'Ophtalmologie ou Traité Complet des Maladies de l'Oeil*, etc. (Paris, 1839.) 3. *Traité Philosophique ou Clinique d'Ophtalmologie*, etc. (Paris, 1844.) American Encyclopedia of Ophthalmology 15,p.11462

Rohault, Jacques (17th century) A Cartesian of the 17th century, who was one of the first, but not the very first, to promulgate the doctrine that a cataract is not a pellicle of inspissated humor, seated in front of the lens, but the lens itself in a more or less opaque condition. The passage in which the statement occurs is found in his work entitled "Physics" (1672), and runs as follows: "*Cataract is not a skin which forms in front of the crystal, as has been long believed, but rather an alteration in the crystal itself, which has lost its transparency*." The first to announce this, of course the true doctrine, was probablyàQuarré (1643-1650 ?) ; the first, however, to demonstrate the theory by actual anatomical dissection was Rolfinck (1599-1673), in 1656.American Encyclopedia of Ophthalmology 15,p.11462

Rohrschneider, Wilhelm (1895-1966) German ophthalmologist, born in Berlin. Rohrschneider studied medicine in Berlin and Heidelberg, becoming physician in 1921 and receiving his medical degree (1922) in Berlin with the thesis *Ein Fall von primärem Sarkom der Iris mit ringförmiger Ausbreitung* . 1921-1923 he was assistant at the Nauen district hospital. He received (1923) a stipendium from the Rockefeller Foundation to work at the pathologic institute of professor Versé at the Marburg University (until 1925). Rohrschneider was from 1925 to 1931 assistant to Krückmann at the Berlin University Eye Clinic. During that time, in 1928, he became lecturer with the thesis *Experimentelle Untersuchungen über die Veränderungen normaler Augengewebe durch Röntgenstrahlen*. Between 1935 and 1936 he was first assistant at the Cologne University Eye Clinic under professor Meisner and became 1936 professor of ophthalmology at the University of Königsberg, remaining there until 1945. Rohrschneider settled as ophthalmologist 1945 to 1948 in Weimar. He received (1948) a call to Münster and became there professor and director of the University Eye Clinic. He was in that position in Münster until 1953. Rohrschneider now received a call

from the Munich University which he accepted and became (1953) professor and chairman of the Munich University Clinic, remaining there until he was named Professor Emeritus, in 1964. Rohrschneider contributed many chapters in different treatises between 1930and 1962. see also Klin Mbl f Augenheilk 1995,206:280-281.JPW

Rolando, Lorenzo. An 18th century naval physician of Spain, who, in 1755, invented a serrated forceps for the extraction of the central portion of after-cataracts. American Encyclopedia of Ophthalmology 15,p.11462

Rolfinck, Werner (1599-1673) German anatomist, botanist, chemist, and physician, and the first important supporter of William Harvey, as well as the first to demonstrate by actual dissection that the natural position of a cataract is actually in, not in front of, the crystalline lens. The son of a well known professor and the nephew of the celebrated Schelhammer, he was born at Hamburg, Germany. He studied philosophy at Wittenberg, and medicine there and at Leyden. After a number of journeys to England, France, and Italy, he studied medicine again, this time at Padua, where he received his professional degree. He held in succession a number of notable positions: the chair of anatomy at Wittenberg; the chair of anatomy, surgery and botany at Jena; the directorship of the botanical garden at the same institution, etc. He founded, at the Jena University, a laboratory and an anatomical theater (unusual institutions in those times). He wrote a very large number of articles and dissertations, but nothing at all of a longer character. Ophthalmologically, he is very important, because of the aforesaid demonstration by him (in 1656) of the true situation and nature of cataract. Quarré, a little before this date, had theoretically taught, but not anatomically demonstrated, the same truth. American Encyclopedia of Ophthalmology 15,p.11462-11463

Romaine, Hunter H. (1910-1968) American ophthalmologist, Executive Surgeon of the New York Eye and Ear Infirmary and Clinical Professor of Ophthalmology at the New York University Medical College. Romaine was born in Morristown, New Jersey in 1910 and received his degree of Doctor of Medicine from the University of Virginia in 1939. He was a graduate of the Phillips Exeter Academy of 1928 and Yale University in 1932. During World War II, he served in the Army Medical Corps. He was active in the programs of the New York Academy of Medicine, and had served as Chairman of the Section of Ophthalmology, initiating afternoon seminars for residents. He had a long and distinguished career in the early development of the Association for Research in Ophthalmology, first as secretary and finally, chairman of the board of trustees. He was also active in the National Society for the Prevention of Blindness. For many years, Romaine was one of the outstanding instructors in the graduate courses of the American Academy of Ophthalmology and Otolaryngology. During the 1954 International Congress of Ophthalmology, he performed an advancement of the inferior oblique and recession of the superior rectus muscles on the first color television program of that Society. In addition to being Chief of the Research Department of the New York Eye and Ear Infirmary at one time, Dr. Romaine found time to teach such basic subjects as refraction and orthoptics in the resident training program. He was consultant to the New York University Reading Clinic for many years and was emeritus Professor of Ophthalmology at the Polyclinic Hospital and Medical School. He was active in the American College of Surgeons and assisted in many examinations of the American Board of Ophthalmology. He was a descendant of Nicholas Romaine one of the founders of the Columbia-Presbyterian Medical Center. AJO 1968,66:353-354

Romano, Paul Edward (1934-) *see p.489*

Rones, Benjamin (1902-1984) American ophthalmologist. Having lived all of his early life in Baltimore, Dr. Rones obtained his bachelor's degree at the Johns Hopkins University in 1922, pursued graduate studies at Harvard and the University of Chicago, and obtained his medical degree from Johns Hopkins in 1926. He was the first Hopkins graduate to become an intern in ophthalmology under Professor William Holland àWilmer and was almost immediately promoted to the status of second assistant resident. While in residency training he came under the stimulating influence of the great Jonas Friedenwald, who indoctrinated him in the basics of pathology, which subsequently became the focal point of his academic pursuits for his entire career. In 1928, in collaboration with Alan

Churchill Woods, Rones Published the first paper from the Wilmer Institute on the therapeutic use of tuberculin in ocular tuberculosis. During the academic year 1929-1930, Rones inaugurated a structured didactic teaching program in ophthalmology, which included a sort of home-study course, at the Hopkins Hospital. He was also the one who arranged for Dr. Friedenwald to conduct bimonthly clinico-pathologic conferences. This was the beginning of what gradually emerged as Wilmer's world-renowned postgraduate training program in ophthalmology. During his second year as senior resident (1930-1931), Rones learned how to handle the "prima donnas" among Dr. Wilmer's famous patients who included Booth Tarkington, J. P. Morgan, Adolph Lewinsohn, and the King of Siam. Midway during his residency, the formal dedication of the Wilmer Ophthalmological Institute was held on Oct. 15, 1929. Three of the greatest ophthalmologists of' all time: Professor George E. àdeSchweinitz, Professor Hofrath ErnstàFuchs, and Sir John HerbertàParsons delivered lectures and were photographed with Dr. Wilmer. Some believe that Dr. Rones took that famous photograph himself. After five years of specialty training in ophthalmology at the Johns Hopkins Hospital, he became an Associate in Ophthalmology at the Wilmer Ophthalmological Institute. When Professor Wilmer retired from Johns Hopkins and returned to private practice in Washington in 1934, Rones joined him and then carried on Dr. Wilmer's practice after the latter's death. During his many years of active practice in Washington, Dr. Rones became a dynamic leader and stimulating academician at the Episcopal Eye, Ear, and Throat Hospital, and a driving force in developing the Department of Ophthalmology when the Washington Hospital Center was established. In his capacity as director of the Eye Pathology Laboratory at those institutions, Dr. Rones had a profound influence on many generations of young physicians-in-training, who have subsequently become leaders in the ophthalmologic world of Washington and elsewhere. At the same time Rones maintained a busy surgical practice and had Presidents Truman, Kennedy, and Johnson, innumerable congressmen, senators, diplomats, judges, journalists, and other dignitaries and their families among his private patients. Rones expertise was used by many organizations. He was Clinical Professor of Ophthalmology at the George Washington University and a consultant to the Armed Forces Institute of Pathology, to the National institutes of Health, and to the Howard University School of Medicine. He served as a member of the Committee on Pathology of the National Research Council. He wrote many scientific papers and was a popular public speaker. He held memberships in the American Medical Association, the American Academy of Ophthalmology, the Medical Society of the District of Columbia, the Southern Medical Association, and the Cosmos Club. In 1946, he, together with the late JohnàMcLean of New York and TheodoreàSanders of St. Louis, was a co-founder of the Ophthalmic Pathology Club (now the Verhoeff Society), which became the prototype for several similar organizations in the United States, Europe, Canada, South America, and Asia. After retiring in 1971 he spent six months in Guadalajara, Mexico, where he served as a volunteer educator in ophthalmology and ophthalmic pathology at the University of Guadalajara, and where he also studied the history of Mexican civilization and the Spanish language. AJO 1984,98:256-257

Rönne, Henning (1878-1947) Danish ophthalmologist. Rönne graduated M.B. B.Ch. in 1903. He immediately began to specialize in ophthalmology in different Copenhagen clinics. Among his superiors àBjerrum was the man who became of the greatest importance to him. Rönne's scientific production comprised in the first instance a number of original papers dealing with the visual pathway, investigations into the primary visual centres in the midbrain, and visual field investigations with demonstration of the nasal step in glaucoma simplex. The series of visual pathway papers was introduced in his M.D. thesis in 1910: "*Anatomical, Pathological, and Clinical Studies on Alcoholic Amblyopia*." Immediately before his illness Rönne finished a paper giving a comprehensive account of the Architecture of the Visual Pathway. Rönne's numerous contributions to periodicals show his wide interests and knowledge of such subjects as colour sense, Weber's law, dark vision, squint, orbital inflammations, choroidal sarcoma, syphilitic choroiditis, and dyslexia, to mention only the more important. Rönne's great interest in the pathological anatomy of the eye manifested itself in the establishment of a central laboratory attached to the Eye Department of the Rigshospital, to which all eyes enucleated in Denmark were sent. In addition to his great work as university professor and head of the leading eye clinic of Denmark, Rönne had a large private practice. He was widely travelled and was

honorary member of various foreign societies, including the Royal Society of Medicine. BJO 32. Annales d´oculistique 1948,181:191.JPW

Roosa, Daniel Bennett St. John (1838-1908) American ophthalmologist, chief of the founders of the New York Post-Graduate medical school and for many years the president of that institution. Born at Bethel, N.Y., he attended for a single year at Yale, but left that institution because of ill-health. Afterwards he received from this institution the degree of A.M., *honoris causa.* The year after he left Yale he entered the Medical Department of the University of New York, from which institution he received his degree in 1860. He served for some years in the Federal Army as assistant surgeon of the 5th New York volunteers, and was for a time house surgeon at the New York Hospital. Then, for a year, he studied ophthalmology and otology in Berlin and Vienna. For a very brief period, be served in the U. S. Army again, and having completed the service for which he had been engaged, he settled (in 1863) in New York City as ophthalmologist and otologist exclusively. For five years he was professor of ophthalmology and otology at the University of Vermont, and from 1866 till 1894 he held the corresponding chair at the University of the City of New York. He was a member of the American Ophthalmological Society and a corresponding member of the Medico-Chirurgical Society of Edinburgh, etc. He was president of the New York Academy of Medicine and of the New York State Medical Society, and was twice president, of the American Otological Society and once president of the International Otological Society. As stated above, he was chief of the founders of the New York Post-Graduate Medical School, in which institution he taught from I883 until his death. He was also one of the founders of the Manhattan Eye and Ear Hospital, of New York, and of the Brooklyn Eye and Ear Hospital, Brooklyn. In both of these institutions he was a surgeon for many years. In 1880 he received the degree of LL. D. *(honoris causa)* at the University of Vermont. Roosa's more important ophthalmologic writings and translations are as follows: 1. Stellwag *On the Eye*. (Trans. with Drs. Hackley and Bull, 1868.) 2. *Ophthalmic and Otic Memoranda.* (In conjunction with Dr. E. T. Ely.) 3. *Remarks on Simulated and Hysterical Loss of Sight*. (N. Y. Med. Rec., 1874.) 4. *On Conjunctivitis*. *(Ibid.,* 1878.) 5. *Oil Sympathetic Ophthalmia*. (*Jbid.,* 1878.) 6. *An Examination Under Atropine of the Refractive State of Eyes with Normal Vision (201,20.) and Which had Never Been Affected with Asthenopia or Inflammation.* (New York, 1878.) 7. *Keratitis; its Relation to the General Condition of the Patient*. (N. Y. Med. Rec., 1879.) 8. Lacrymal Catarrh. *(Ibid.,* 1879.) 9, *The Cure of Constitutional Diseases by the Use of Glasses*. (N.Y. Med. Rec., 1880.) 10. *A Doctor's Suggestions.,* (1880.) 11. *Traumatic Retinal Hemorrhage*. *(*Trans. Am. Oph. Soc., 1881.) 12. *Handbook of the Anatomy and the Diseases of the Eye and Ear*. (In conjunction with A.Edward Davis, Philadelphia, 1904, p. 297.) We may add, as of interest to oto-ophthalmologists: "*A Practical Treatise on the Diseases of the Ear."* (1866, 6th ed., 1885. One English and one German edition.) *A clinical manual of diseases of the eye including a sketch of its anatomy* New York 1894; *Defective Eyesight; the Principles of its relief by glasses* New York 1899. American Encyclopedia of Ophthalmology 15,p.11463-11465

Roosbroeck, Jean Julien van (1810-1869) Belgian ophthalmologist. Van Roosbroeck was born in Leuven and died in Ghent. He obtained the M.D. degree at the Leuven University in 1833. He specialized in ophthalmology in Berlin under Jüngken and in Vienna under Friederich Jäger. In 1834 the Belgian government asked both Jüngken and Van Roosbroeck to help the ophthalmologists of the Belgian army in their fight against military ophthalmia. By Royal decree of April 4, 1838 Van Roosbroeck was nominated professor of sanitary science and of theoretical and practical ophthalmology at the University of Ghent. In 1849 he became chief of the eye clinic at the Ghent public hospital. Other duties were added: the direction of the Ophthalmic Institute of Brabant since 1853, and teaching of legal medicine and of pediatrics at the Ghent University since 1854. However ophthalmology remained his principal occupation. He was known as an excellent surgeon. He operated (by inferior incision) the cataract of the right eye with his right hand and that of the left eye with his left hand. Could we believe that he healed corneal pannus by Jäger's inoculation technique of pus from gonococcal urethritis with succes in more than 100 cases and with corneal perforation in only 2 cases ? His principal publication was the two volumes of his course of ophthalmology teached at the Ghent University (*Cours d´ophtalmologie enseigné à l´Université de Gand ou traité théorique et*

pratique des maladies des yeux, 2 vols. 1853). He also wrote : *Coup d'Oeil sur l'Opération de la Pupille Artificielle*. (Leuven, 1841.) and *Précis de l'Ophthalmie des Nouveau-Nés* (Brussels, 1843.) According to the school of Lucas Schönlein and Theodor Ruete he subdivided the ocular diseases in morphoses, hematoses and neuroses with an infinity of subdivisions. He was member of the Belgian Academy of Medicine. (Verriest) American Encyclopedia of Ophthalmology 15,p.11465. Annales d´Oculistique 1869,61: 81-91, JPW

Roose, Arthur (1860-1918) Belgian ophthalmologist, the first ophthalmologist established in Kortrijk. He obtained the M.D. degree in Leuven in 1886 and specialized in Vienna in eye diseases and neurosurgery. He wrote between 1896 and 1898 many practical ophthalmological papers in the "*Annales de l´Institut St. Antoine à Courtrai*". In 1900 he abandoned medicine for the rubber industry. His private practice was taken over by Léon Peeters. (Verriest)

Roper, Kenneth L. (1898-1984) American ophthalmologist, 76th president of the American Academy of Ophthalmology and Otolaryngology (1973). Roper was born in South Dakota. He received his M.D. degree from Creighton University in 1922 and interned at Mercy Hospital and the Veterans Hospital in Chicago. He was in general practice and was a physician for the Pennsylvania Railroad for many years. In 1938, he began basic graduate studies in ophthalmology at the Graduate School of Medicine of the University of Pennsylvania. He was then a resident at the Wills Eye Hospital and received a master of medical science degree from the University of Pennsylvania in 1941. He joined the staff of the clinical division of the Dartmouth Eye Institute in Hanover and became chief of the clinical division and assistant professor of ophthalmology at Dartmouth Medical School. He was a close associate of WalteràLancaster at the Dartmouth Eye Institute and worked closely with him in refraction problems and cataract extraction. In 1945, he returned to Chicago and joined the staff of Northwestern University Medical School and the attending staff of Wesley Memorial Hospital. He retired as associate clinical professor of ophthalmology. He was named to the Scientific Exhibit Committee of the Academy in 1947 and became chairman in 1949. From 1952 to 1971, he served as secretary responsible for the annual ophthalmology program. He was president of the Academy in 1973. From 1956 to 1957, he was president of the Chicago Ophthalmological Society. Roper wrote extensively on cataract surgery with particular emphasis on Walter Lancaster's technique. His "*Manual on Cataract Operation*" was published by the Academy in two editions. In later years, Dr. Roper developed a great interest in genealogy and was author of "*The Ropers. A Biographical Record from Circa 1300 to 1982*," published by Gateway Press, Baltimore, 1983. AJO 1984,97:525

Rosas, Anton (1791-1855) Austrian, Viennese ophthalmologist, author of a textbook now forgotten but very useful in its time. Born at Fünfkirchen, Hungary, he studied at Pest and Vienna, at the latter institution receiving his medical degree in 1814. On this occasion his dissertation was "*Diss.…quae Rejecta Fistulae Lacrymalis Idea, Veram Fistulae Sacci Lacrymalis Nationem et Sanandi Methodum, Excepta Occlusi Ductus Nasalis Operatione, Proponit*." In 1816 he received the degree of Master of Surgery, and was at once appointed assistant physician in the General Hospital. For a time be was assistant to Beer, and then (1819) became professor of ophthalmology at Padua. In 1821, however, he returned to Vienna in order to accept the chair of ophthalmology. He was ennobled in 1837. He wrote with equal facility in German and in Italian. His ophthalmologic compositions are as follows: 1. *Saggio sul Ottalmia, che Regno negli Anni 1822-23 nell, J. R. Regimento ital. N.13 d'Infanteria Wimpfen*. (Venice, 1824.) 2. *Handbuch der Theoretischen und Practischen Augenheilkunde*, 3 vols. Vienna, 1830. 3. *Lehre von den Augenkrankheiten*, (597 pp., Vienna, 1834.) 4. *Ueber den Werth der Staar-Ausziehung im Allgemein und ihrer Verschiedenen Methoden insbesondere, nebst Vorschlägen zur Sicherung des Erfolges derselben*. (Med. Jahrb.d.K.K. Oesterreichischen Staates, Vol. XXI.) American Encyclopedia of Ophthalmology 15,p.11466-11467

Rosenwasser, George Otto Daniel (1957-) American ophthalmologist born in Flemington, New Jersey. Rosenwasser received his bachelors degree in 1979 and M.D. degree in 1983, at the University of Miami. He did his residency training at Duke University Eye Center (1985-87), returning to Miami for a fellowship at Bascom Palmer

Eye Institute in Cornea and External Disease (1987-88). He worked there under Richard Forster, Eduardo Alfonso, Scheffer Tseng, Steven Pflugfelder, and Thomas Roussel. After training, he took a faculty position at Penn State University's Department of Ophthalmology as a Director of Cornea and External Disease Services. He is currently associate professor with tenure in the department. He reactivated the Lions Eye Bank of Central Pennsylvania and has been its medical director since 1988. His research works include describing the clinical variation in Avellino Cornea Dystrophy, participating in the genetic studies to map neurofibromatosis, myotonic dystrophy and Avellino cornea dystrophy. Other facets of his research interests include Eye Banking and very high frequency ultrasonography. Other interests include the history of ophthalmology. He is a member of the Ocular Heritage Society and member of and part of the executive board of the Cogan History of Ophthalmology Society. He serves on the board of the American Academy of Ophthalmology Museum. He authored the *first* Atlas of Eyebanking Practice with a former student and medical illustrator, William Nicholson, to be published in 2002 (Wayenborgh Oostende). Important publications include: Rosenwasser, G.O.D., Sucheski, B., Rosa, N., Pastena, B., Sebastiani, A., Sassani, J.W., Perry, H.D., *Phenotypic Variation in Combined Granular/Lattice (Avellino) Corneal Dystrophy*, Archives of Ophthalmology 1993; 111:1546-1552; Stone, E.M., Mathers, W.D., Rosenwasser, G., Holland, E., Folberg, R., Krachmer, J.H., Nichols, B.E., Gorevic, P.D., Taylor, C., Streb, L.M., Fishbaugh, J.A., Daley, T.E., Sucheski, B., Sheffield, V.C., *Three Autosomal Dominant Corneal Dystrophies Map to Chromosome 5q*. Nature Genetics 6(1): 47-51, 1994; Rosenwasser, G.O.D., Corneal Abnormalities in the Newborn and Infant, Diagnostic Problems in Clinical Ophthalmol., Edited by Margo, Mames, and Hamed, W.B. Saunders Publishing, Orlando, Florida, (By Invitation of the Editor); Rosenwasser, G.O.D., M, Rosenwasser, "*Vladimir P. Filatov*", in Corneal Transplantation: A History in Profiles, Hirschberg *History of Ophthalmology*, The Monographs, Vol.6: 170-191, JP Wayenborgh, Oostende, Belgium 1999; Rosenwasser, G.O.D., *A Photomuseum of Keratoplasty*, in Corneal Transplantation: A History in Profiles, Hirschberg History of Ophthalmology, The Monographs Volume 6, pp 337-365, 1999, JP Wayenborgh, Belgium. (Penn State University of Ophthalmology, 500 University Drive, Hershey, Pennsylvania 17033, or 985 Greenlea Road, Hershey, Pennsylvania 17033.)

Roser, Wilhelm (c.1817-1888). German ophthalmologist whose observations and investigations related chiefly to staphyloma of the cornea and specific ophthalmia. According to Wernich, he was born at Marburg; according to àHirschberg, however (who is probably right) be was born at Stuttgart. His father was a well-known entomologist; and his uncle, the poet Ludwig Uhland. He received his medical degree at Tübingen in 1839. After a number of scientific journeys, he qualified in surgery at Tübingen. About the same time, he founded, in conjunction with Wunderlich and Griesinger, the *Archiv für Physiologische Heilkunde.* In 1844 he published his masterpiece, *"Handbuch der Anatomischen Chirurgie"* (8th ed. in 1884). In 1851 he was called to the ordinary professorship of surgery at Marburg, where he lectured on ophthalmology, as well as on general surgery. Aside from works of a general character, he wrote the following: 1. *Die Lehre vom Hornhaut-Staphylom.* (Marburg, 1851.) 2. *Ueber die Sogenannte Specificität der Ophthalmien. (*Arch.f.Physiol.Heilk., 1847.) 3.*Thränen-Absorption und Thränen-Fisteln. (Ibid.*, 1851 and 1857.) 4. *Zur Lehre von der Chorioiditis. (Ibid.*, 1852.) 5. *Ueber einige Operationen am Augenlid. (Ibid.*, 1853.) 6. *Ueber Hypopyon-Keratitis. (*Arch. f. Ophth., 1856.) 7. *Ueber Klappenwirkung bei Sogenannten Glaukom*. (Arch. f. Physiol. Heilk., 1859.) 8. *Zur Behandlung der Granulösen Augen-Entzündung. (Ibid.*, 1863.) American Encyclopedia of Ophthalmology 15,p.11467-11468

Rosmini, Giovanni (1832-1896) Italian, Milanese ophthalmologist, founder of the Eye Hospital at Milan. He was a student ofàQuaglino's, and, for about four years, his first assistant. In 1859 he became a military physician. He was, however, almost exclusively occupied with ophthalmology. He wrote no book, but a number of practical articles and case reports, and he very materially assisted Quaglino in the introduction into Italy of Graefe's iridectomy for glaucoma. American Encyclopedia of Ophthalmology 15,p.11468

Ross, Gustav (1818-1861) German. Well-known physician, brother of the celebrated archeologist, Ludwig Ross. Born near Altkoppel, he received his medical degree in 1843,

presenting as dissertation " *De Morbis Brightianis Adnumerandi Specimini Memorabili*." For a number of years he served as physician in the German army, and then established at Altona a private infirmary for surgical and ophthalmic patients. In addition to a number of general works, he wrote *"Mittel und Wege des Abflusses der Thränen."* American Encyclopedia of Ophthalmology 15,p.11469

Ross, James Alexander (1881-1965) Scottish ophthalmologist. Born in Perth, he went to St. Andrews University where he studied arts and then to Edinburgh University where he completed his medical course; afterwards he studied in Sunderland. Having served during the First World War in Salonika and Italy, he became ophthalmic surgeon to the Cumberland Infirmary at Carlisle where he worked until 1943, when he retired because of ill health. Brit.J.Ophthal.1965,49:609

Rosset, Moses John de (1838-1881). American chemist, physician and ophthalmologist. Born at Pittsboro, North Carolina, his early education was received at Diedrich's Academy, Geneva, Switzerland. Returning to America in 1857, he entered the medical department of the University of New York, from which institution he received his degree in 1859. From then until the outbreak of the War he was resident physician at Bellevue Hospital, but, throughout the Civil War was assistant surgeon in the Confederate Army. At the close of the War he settled in Baltimore, and there became adjunct professor of chemistry in the University of Maryland and full professor of the same subject in the Dental School. In 1873, however, he moved to North Carolina as ophthalmologist, shortly afterward returning to New York. Here he practised as ophthalmologist till shortly before his death. Among his ophthalmologic articles is an excellent one in the *American Journal of the Medical Sciences* entitled "*The Muscle of Accommodation and its Mode of Action.*" American Encyclopedia of Ophthalmology 15,p.11468-11469

Rosset, Otto (1790-1859) Polish surgeon, who devoted considerable attention to diseases of the eye. Born at Polock, he was for a time a surgeon in the Russian army. His medical degree was conferred in 1849 at Warsaw, his dissertation being "*De Usu Lapidis Infernalis in Blepharophthalmia et Illius Sequelis*." From 1851 until his death he was a Fellow of the Medical Council for Poland. He published a number of ophthalmologic writings in a Polish journal, *Pamictnik Tow. lek. Warzawskiego.*American Encyclopedia of Ophthalmology 15,p.11469

Rossi, Vincenzo (? – 1948) Italian ophthalmologist, professor of ophthalmology in Pisa. Rossi qualified as a medical man at Naples University in 1914, and became an assistant at the ophthalmic clinic of that university in the following year. Here he worked for a number of years under àAngelucci. In 1929 he was appointed Professor of Ophthalmology at the University of Modena, and afterwards at Pisa University. His academic output covered a wide range of subjects, including trachoma, endocrinology and glaucoma, but perhaps his chief interest lay in linking-up ophthalmic signs with general derangement of the constitution. BJO 1948,33:521.Annales d´oculistique 1949,182:568.JPW

Rothmund, August von (1830-1906) German ophthalmologist, known throughout the world for his writings on cataract, bullous keratitis, and the artificial pupil. Born at Volkach, Germany, the son of Franz ChristophàRothmund, a well-known general surgeon, he received the degree of M.D. at Munich in 1853. He then studied ophthalmology in Berlin under vonàGraefe, in Prague under vonàArlt, and in Vienna underàJaeger. From 1854 he taught ophthalmology at the University of Munich until his retirement at the age of 70. He wrote: *Beiträge zur künstlichen Pupillenbildung* Munich 1855. American Encyclopedia of Ophthalmology 15,p.11470

Rothmund, Franz Christoph von (1801- ?) Father of August von Rothmund and himself a German ophthalmologist. He received his medical degree in 1823 at Würzburg, and settled as court physician (expert in legal medicine) first at Miltenberg then at Volbach. In 1843 he became professor of surgery and ophthalmology at Munich, a position which he held till 1871, when he was superceded by Nussbaum.-[the time of his death is not known, however he was still alive in Munich in1887-JPW] American Encyclopedia of Ophthalmology 15,p.11470

Rousille de Chamseru. ***see*** **Chamseru**.

Roustan, Fé1ix Marie Gabriel (1849-1885). French, Montpellensian surgeon, who devoted considerable attention to ophthalmology. Born at Mirabel (Drôme) he was for a time a surgeon in the army, after which he received his medical degree at Montpellier (1874). His dissertation on this occasion was entitled " *Traitement par la Lumière des Maladies des Yeux et en Particulier de 1'Hémeralopie*." In 1875 he was made professor agrégé (associate) in Paris, and two years later moved to Montpellier in order to accept a similar position there. He died only 35 years of age.American Encyclopedia of Ophthalmology 15,p.11471

Roux, Philibert Joseph (1780-1854) French surgeon. Born in Auxerre, he studied in Paris under Bichat, whose prosector and assistant he soon became. In 1810 he became a surgeon at the Charité. In 1820 he was made professor of surgery. About this time he began to devote a great deal of attention to ophthalmology, though his chief activity continued in the general field. He was one of the warmest supporters of cataract extraction, as opposed to depression or reclination. He was an operator of extraordinary skill, but not as great a surgeon as his rival, Dupuytren. Most of the writings of Roux relate to surgery in general. The following compositions are, however, ophthalmologic in character: 1. *Observation d'un Strabisme Divergent*, etc. (1814.) 2. *Mém. sur l'Opération de la Cataracte par Extraction.* (Jour. Gén. de Méd., 1818.) 3. *Cours Complet des Maladies des Yeux*. (Paris, 1820.) 4. *Remarques sur le Strabisme. (*Comptes Rendus de l'Acad. des Sc., 1840.) American Encyclopedia of Ophthalmology 15,p.11471-11472

Rowland, Henry Augustus (1848-1901) American physicist, born at Honesdale, Pa. Appointed in 1874 assistant professor of physics at the Polytechnic Institute, Troy, N. Y., he spent the following year underàHelmholtz in Berlin, and while there established experimentally the fundamental principle that a moving electric charge gives rise to a magnetic field. On his return in 1876 he became the first professor of physics in Johns Hopkins University, Baltimore, and held the post until his death. He determined in 1878-1879 the unit of electrical resistance and the mechanical equivalent of heat; constructed in 1881 a dividing-engine for ruling diffraction gratings, and invented in 1882 the concave grating by which spectra can be photographed without the intervention of lenses. By its aid he prepared his great map of the solar spectrum, which, in conjunction with his tables of standard lines and measurements of elemental spectra, placed solar chemistry on a new basis. American Encyclopedia of Ophthalmology 15,p.11472

Rowley, William (1743-1806). An English obstetrician and ophthalmologist. Born at London, he received his medical degree at Oxford, became a naval physician, in which capacity he served for several years, and then returned to London. Here he had a large practice. His most important writings are: 1. *Essay on Ophthalmia or Inflammation of the Eyes.* (London, 1771.); 2. *A treatise on the principal diseases of the eyes* etc. London 1773 (German edition Breslau 1792); 3. *A treatise on the 118 Principal Diseases of the Eyes and Eyelids*, etc. (London 1790.); 4. *The rational practice of physic* London 1792. American Encyclopedia of Ophthalmology 15,p.11472. JPW

Rubbrecht, Raphael (1874-1955) Belgian ophthalmologist. Rubbrecht obtained his M.D. degree in Liège in 1897 and specialized in ophthalmology and oto rhino laryngology in Zürich (withàHaab), Paris, Vienna (withàFuchs and Politzer) and London. He settled in Bruges in 1889 and married a niece of Eugeen Van Oye. He wrote papers on *dacryocystorhinostomy* (from 1914), *cataract operation* (from 1926), *treatment of retinal detachment* (from 1927), *treatment of corneal ulcers* (from 1931, with a report for the Belgian Ophthalmological Society in 1940) and *textbooks for nurses*. Many of this papers were published not only in French but also in Dutch (in the *Vlaamsch Geneeskundig Tijdschrift* founded in 1920). He is the only ophthalmologist who has been member of the Flemish Royal Academy of Medicine of which he was the president in 1943. His brother Oswald was professor of stomatology at Ghent University. (Verriest)

Rubinstein, Kazimierz (1916-1985) British ophthalmologist of Polish origin. Born and educated at Lódz, Poland he began his medical studies in Wilno. These were interrupted by the Russian occupation of East Poland at the begin of World War II. He managed to leave Poland to join the Polish Forces in the Middle East. There he was given the chance the complete his medical training at the University of Beirut. After the war he started his ophthalmic specialisation in Sheffield, and having passed the DOMS and FRCS

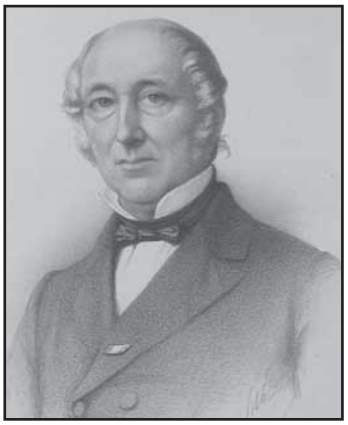
examinations he obtained a consultant post in Burton-on-Trent. He developed a special interest in the surgery of the oblique ocular muscles, obtained considerable experience in this subject and published his results. A few years later he was appointed consultant in Birmingham. The new technique of cryosurgery appealed to him, and with the help of a low temperature engineer he created a cryosurgical unit based on liquid nitrogen. Rubinstein became also fascinated by fluorescein fundus angiography, and mastering this technique , he used it combined with the application of laser in the treatment of diabetic retinopathy and senile retinal dystrophy. Publishing his results he gained international recognition.BJO 1986; 70:77.

Rucker, Charles Wilbur (1900-1991) American ophthalmologist. M.S.in ophthalmology, consultant in ophthalmology at Mayo Clinic, Rochester, Minnesota from 1937 until 1967, head of the Department of Ophthalmology from 1949 until 1961, and professor of ophthalmology in the Mayo Graduate School of Medicine. Rucker was born in Goodhue, Minnesota. After high school in Red Wing, Minnesota, be attended the University of Minnesota, where he received his B.S. degree in 1922 and his M.D. degree in 1926, after completing a year of internship at Letterman General Hospital in San Francisco. He entered the Mayo Foundation as a fellow in ophthalmology April 1, 1926, and spent 27 months in ophthalmology, three months in experimental surgery, and three months in ENT. He attended the University of Minnesota Medical School for six months. He was awarded the M.S. degree in ophthalmology in 1929. After leaving the Mayo Foundation July 1, 1929, he began a private practice in Minneapolis. He was appointed instructor in the University School of Medicine, as ophthalmologist in the Student Health Service, and was on the staff of Northwestern Hospital. In 1937, Rucker rejoined the Mayo Clinic as consultant in ophthalmology and was appointed assistant professor of ophthalmology in the Mayo Graduate School of Medicine. He became associate professor in 1944 and professor in 1950. He was chairman of the Department of Ophthalmology from 1949 until 1961, and senior consultant until his retirement in 1967. He restricted his practice to medical ophthalmology and neuro-ophthalmology. He was certified by the American Board of Ophthalmology in 1929, and in 1956 was elected to the Board. He served eight years as a director and four additional years as consultant, and as chairman in 1962 and 1963. Rucker contributed over 100 published papers to the medical literature, most concerning medical ophthalmology, neuro-ophthalmology, and ophthalmic history. He collected old and rare ophthalmic books and donated these to the Mayo Medical Library. He wrote and published privately: *A History of the Ophthalmoscope* (1971). For many years he was an active member of the Mayo Medical Library Committee, and in 1972 the Library presented him with a plaque in recognition of his services. He was a member of the American Medical Association (chair of the Section on Ophthalmology in 1962), the American Academy of Ophthalmology, the Minnesota Academy of Ophthalmology, the American Ophthalmological Society (74th president in 1970), the Alumni Association of the Mayo Graduate School of Medicine, the Phi Rho Sigma medical fraternity, the Society of Sigma Xi, and the Tau Kappa Epsilon academic fraternity. Rucker was awarded the Lucien B. Howe medal twice: in 1966, from the Section on Ophthalmology and the American Medical Association, and in 1971 form the American Ophthalmological Society. In 1974, he received the Leslie Dana Medal from the Society for the Prevention of Blindness. He delivered the Gifford Memorial Lecture in Chicago in 1956, the Charles H. May Memorial Lecture in New York in 1960, and the de Schweinitz Lecture in Philadelphia in 1962. He was associate editor of the *Archives of Ophthalmology*.AJO 1991,112:223-224; [GM 6007.1]

Rudall, James Thomas (1828 - 1907) a founder of ophthalmology in Australia and a leading pathologist, worked at the Melbourne Hospital 1865-75, the Alfred Hospital 1887-1901 and was an examiner in pathology and physiology at the University of Melbourne 1866-1901.

Ruedemann, Sr., Albert Darwin (1897-1971) American ophthalmologist, son of Dr. Rudolph Ruedemann and the former Elizabeth Heitzmann. He was born in Dolgeville, New York. Ruedemann's father was a scientist of international fame who retired in 1937 after 38 years as a paleontologist in the New York State Museum at Albany. "Ruede" entered the University of Michigan the fall of 1914, and received his M.D. degree from that school in 1921. Following graduation he worked there for three years as an assistant

in the department of ophthalmology. In 1924, he organized the department of ophthalmology for the Cleveland Clinic and in 1926 he received his certification by the American Board of Ophthalmology. In 1945, he experienced a close brush with death in an automobile accident that took the life of his colleague and friend, Dr. Albert D. àFrost, Professor and Chairman of the Department of Ophthalmology at Ohio State University. The two men and their wives were returning from the American Ophthalmological Society meeting when the accident occurred. In 1947, Dr. Ruedemann entered the office of Parker Heath, in Detroit. Later the same year, Dr. Heath became Director of Ophthalmic Pathology at the Massachusetts Eye and Ear Infirmary and Dr. Ruedemann succeeded him as Professor and Chairman at the Wayne State University College of Medicine, a post he held until 1968, when he was made Professor Emeritus. In 1947, he also became Chief of the Department of Ophthalmology at the City of Detroit Receiving Hospital, where he became senior surgeon in 1964. He was also named senior surgeon at Harper Hospital where he was Chief of the Eye Department from 1950 to 1963. In addition, he served as ophthalmic consultant to the Veterans Administration and Herman Kiefer hospitals in Detroit. Ruedemann played a key role in the organization of the Kresge Eye Institute which was incorporated November 22, 1948, “for the purpose of conducting science to improve the status of eye care”. The activities of the institute were expanded in 1951 under his direction to include the ocular biochemistry and biophysics, Orthoptics, and ophthalmology residency programs. The A.D. Ruedemann Memorial Library fund was established by the Kresge Eye Institute Alumni Association. Ruedemann served as president of the American Academy of Ophthalmology in 1963: as its secretary for instruction, 1938-61, and its secretary for public relations, 1964-67. In addition, he was chairman of the Section of Ophthalmology of the American Medical Association, and president of the American Society of Ophthalmologic and Otolaryngologic Allergy. Many honors were bestowed upon Dr.Ruedemann during his long and distinguished career: the American Academy of Ophthalmology and Otolaryngology Honor Award, 1944: the Lucien Howe Medal, University of Buffalo (N.Y.), 1959; the civic citation for creative leadership and contribution to the community, University of Detroit, 1961 ; and an honorary Doctor of Science degree, California College of Medicine, 1944. He was also the recipient of a number of awards for scientific exhibits: the AMA gold medal and the Academy's blue ribbon for "*Lesions in the region of the optic chiasm*," the AMA certificate of merit for "Use of radium in ophthalmology," and the Academy's blue ribbon for "Beta radiation in ophthalmology." AJO 1972,74:359-360



Christian Georg Theodor Ruete

Ruete, Christian Georg Theodor (1810-1867) German ophthalmologist, born at Scharenbeck, near Bremen. He received his medical degree at Göttingen in 1833, and at once became an assistant toàHimly. Three years later he became a privat-docent (lecturer) for ophthalmology, and, the year following, resigned his assistantship. In 1841 he became extraordinary, and in 1847 ordinary professor. In 1852 he moved to Leipsic in order to accept the chair of ophthalmology and the directorship of the Eye Infirmary in that city -a position which he held until his death. From 1853 to 1861 he was chief of the Medical Polyclinic. Ruete was very inventive. Ophthalmoscopy by means of the inverted image was introduced by him in 1852. His first monograph was titled *Die Scrophelkrankheit* Göttingen 1838. His most important writings are as follows: 1. *Die Anwendung der Physiologie in die Augenbeilkunde.* (Wagners *Handwörterbuch,* 1845.) 2. *Neue Untersuchungen und Erfahrungen über das Schielen und seine Heilung.* (Göttingen, 1841.) 3. *Klinische Beiträge zur Pathologie der Augen und Ohrenheilkunde.* (Braunschweig, 1843.) 4. *Lehrbuch der Ophthalmologie.* (Braunschweig, 1845, '46; 2. Aufl. 1855.) 5. *Ophthalmotrop.* (Göttingen, 1846.) 6. *Der Augenspiegel und das Optometer. (Ibid.,* 1852.) 7. *Bildliche Darstellung der Krankheiten des menschlichen Auges.* (Leipsic, 1854-'60.) 8. *De Irideremia, Congenita ejusque Vi in Facultatem Accommodationis Oculorum.* (Ibid., 1855.) 9. *Explicatio Facti quod Minimae paulum Lucentes Stellae tantum Peripheria Retinae Cerni Possint.* (Ibid., 1859.) 10. Das *Stereoskop.* (Ibid., 1860; 2. Aufl. 1867, Dutch edition Hoorn 1863) 11. *Commentatio de Visu Insectorum cum Oculis Polyedricis.* (Ibid., 1861.) 12. *Ueber die Einheit des Princips im Bau der Augen bei den Verschiedenen Thierclassen,* etc. (Ibid., 1861.) 13. *Uebersicht der in den Jahren 1862-'64 in der Augenheilanstalt zu Leipzig Verrichteten Lappenextractionen.* (Ibid., 1867.) American Encyclopedia of Ophthalmology 15,p. 11473-11474

Rufus of Ephesus (early 2nd century). A famous physician of Alexandria, who lived in the time of Trajan, i. e., the early portion of the second century, A. D. His genuine works were: 1. *On the Names of the Parts of the Human Body*. 2. On Diseases of the Kidneys and Bladder. 3. *On Purgative Medicines*. 4. *On Arthritis*. Only the first of these is of special interest to ophthalmologists. American Encyclopedia of Ophthalmology 15,p.11474-11476

Ruggieri, Cesare (1768-1828). Italian surgeon, of slight importance in ophthalmology. Born at Crema, Italy, he studied at Pavia, visited France and London, and, returning to his native country, settled at Padua. For a time he was police-physician. In 1803 he became instructor at the Medical School for Marine Surgeons, and twelve years later full professor of surgery at the University of Padua. He seems to have written nothing on the eye, but was widely known as an ophthalmic operator, and from 1817 to 1819 was chief of the clinic at Padua. Perhaps his greatest achievement was the *"Dizionario Encyclopedico di Chirurgia, traduz. dal Francese, accresciuto di aggiunte e note pratiche"* (6 vols., Padua, 1805-'09). American Encyclopedia of Ophthalmology 15,p.11476

Ruprecht, Klaus W. (1940-) German ophthalmologist. Ruprecht received his medical education at the universities of Tübingen, Vienna (Austria) and Hamburg. He earned his MD (Dr.med.) in 1966 and became, under G.O.H.àNaumann, ophthalmologist in Hamburg in 1974. In 1979 he became lecturer in ophthalmology at Tübingen University and professor of ophthalmology 1980 at Erlangen University. In 1989 Ruprecht became Professor and Chairman of the Department of Ophthalmology and Eye Hospital at the University of Saarland in Homburg (Saar). Ruprecht co-authored with G.K. Lang, K.W. Jacoby and K. Schott "*2.Kongress der Deutschen Gesellschaft für Intraokularlinsen Implantation*" (2nd Congress of the German Society of Intraocular Lens Implantation) and published two chapters "*Auge und Allgemeinkrankheiten*" (The Eye and General Diseases) and (with J. Weindler) "*Morphologie der Augenveränderungen bei medikamentöser Therapie*" (Morphology of Eye Alterations in Drug Therapy) both in G.O.H. Naumann: "*Pathologie des Auges*" Berlin Springer Verlag 1997, pp.1451-1456, 1547-1594. Ruprecht is a member of the following societies: Deutsche Ophthalmologische Gesellschaft, American Academy of Ophthalmology, The Royal College of Ophthalmologists, Societe Francaise d'Ophtalmologie, European Professors of Ophthalmology, Association for Research in Vision and Ophthalmology. Phone: +49 (0) 6841/16-2387 Fax: +49 (0) 6841/16-2400 email aurupr@med-rz.uni-saarland.de Internet: http://www.med-rz.uni-saarland.de/med_fak/augen-poli/index.html (AB)

Rust, Johann Nepomuk (1775-1840) Austrian surgeon born at Jauernig, in Austrian Silesia. Rust received his M.D. in 1799 at Prague, and was professor of surgery at Cracow (1803-1809) and chief surgeon at the Allgemeines Krankenhaus in Vienna (1810-1815) before settling in Berlin as surgeon general of Prussia and professor of surgery at the University. Rust's major activities were in the field of medical civil service; he oversaw Prussian medical-surgical teaching and hospital administration for over two decades. Although an effective teacher of ophthalmic and general surgery, he was himself a clumsy operator. Late in life he developed bilateral cataracts but continued to lecture while Dieffenbach performed his operations for him. Of his many publications, a few address eye diseases, most notably the treatise on Egyptian ophthalmia: *Die Agyptische Augenentzündung unter die Königl. Preuss. Besatzung ... ein Beitrag zur nähern Kenntniss und Behandlung dieser Augenkrankheitsform*. Berlin 1820 (Dutch edition by F.v.d.Breggen, Amsterdam 1821) ; *Theoretisch-Prakt. Handbuch der Chirurgie , mit Einschluss der syphil.u.Augenkrankheiten*, 18 vols.incl.index volume, Berlin 1830-1836; *Aufsätze und Abhandlungen aus dem Gebiete der der Med., Chirurgie und Staatsarzneikunde* 3 Vols. Berlin 1834-1840. American Encyclopedia of Ophthalmology 15,p.11481-11482.Albert. JPW.

Uthai Rutnin

Rutnin, Uthai (1929-1992) Thai ophthalmologist, Professor of Ophthalmology, Ramathibodi Hospital of Mahidol University. He graduated from the University of Medical Sciences, Bangkok, and received his M.D. Degree in 1952. He continued further studies in the United States of America, at Mount Vernon Hospital (1953-1954), New York University (1954-1955), New York Eye and Ear Infirmary (1954-1957) and Massachusetts Eye and Ear Infirmary (1957-1958). From 1960, he carried out clinical

research at the Retina Service of the Massachusetts Eye and Ear Infirmary, Harvard University, and was named the Senior Fellow in the Retinal Service in 1963. In the same year, he also received the degree M. Sc. in Ophthalmology from New York University. He was Fellow of the International College of Surgeons from 1963 and Fellow of American College of Surgeons since 1966. On homecoming he worked as the Head of the Retina Service, Siriraj Hospital, Mahidol University in 1964-1967, then he was appointed the Professor and Chairman of the Department of Ophthalmology, Faculty of Medicine, Ramathibodi Hospital of Mahidol University in 1969 and served until 1975. He left the University and founded the Rutnin Eye Clinic and worked as the Director. He was on the Training and Examination Committee of the Thai Board of Ophthalmology (1968-1975), and served as the Chairman of the Scientific Committee of the Ophthalmological Society of Thailand (1977-1981), President of the Ophthalmological Society of Thailand (1982-1986) and the Chairman of the Scientific Committee of the 8th Congress of the Asia-Pacific Academy of Ophthalmology (APAO) in 1981. He received the *Distinguished Service Award of the APAO* in 1981. (SM)

Rutten, Louis (1856-1923) Belgian ophthalmologist. Rutten was born in Sittard (Holland), obtained the M.D. degree in Liège, specialized in ophthalmology in Vienna, and practized in Namur from 1883 before becoming in 1901 director of the Liège Ophthalmic Institute. He published about many ocular diseases and specialized in *nystagmus*, on which he wrote important papers from 1908 to 1922 (mainly on miners nystagmus). (Verriest)

Ruysch, Fredrik (1638-1731) Dutch apothecary and physician, who was first to describe the arteria centralis retinae, the tunica Ruyschiana, the venae vorticosae, and the ciliary nerves. Born at the Hague in 1638, he there became an apothecary in 1661, and received his medical degree at Leyden in 1664. He was made prelector of anatomy to the Surgeon's Guild at Amsterdam in 1666, and, in 1672, prelector to midwives. He was afterwards appointed professor of legal medicine and of botany at the Athenaeum. He was one of the first (and certainly the best) to practice the injection of vessels in anatomical specimens. By Baas (medical historian-JPW) he is called "the inventor of minute injections." He made a remarkable collection of anatomical specimens, including a number of eyes and eye-tissues, which he sold to Peter the Great in 1717 for 30,000 florins. Only a part of the collection, however, arrived in the Russian capital, for the sailors on the vessel which carried the collection, having somehow (perhaps instinctively) learned of the character of the fluid employed in the preservation of the specimens, drank the most of it. Our patient Dutch professor, however, set to work with characteristic placidity to form another collection which he succeeded in doing at the end of ten years. Ruysch also discovered the valves in the lymph-vessels, the bronchial arteries, and pointed out the differences between the male and the female skeleton. American Encyclopedia of Ophthalmology 15,p.11482

Ryba, Joseph Ernst (1795-1856). A Bohemian surgeon and ophthalmologist. Born at Rozmintal, Bohemia, he received his medical degree in 1829 at Prague. Here he settled, and, for a number of years, was professor of ophthalmology at the University. He was a slow, but very successful, operator. Ryba's chief ophthalmologic writings are: 1. *Beschreibung Zweier Fälle von Behaarten Muttermälern der Hornhaut*. (v. Ammon's Zeitschr. f. Ophthalm.) 2. *Ueber den Ausserlichen Gebrauch der Karlsbader Thermaldämpfe und des Karlsbader Säuerlings in Augenkrankheiten.* (De Carro's Almanach de Carlsbad.) *3. Ueber Theorie und Anwendung des Augenspiegels*. 4. *Fälle von Symblepharon*.American Encyclopedia of Ophthalmology 15,p.11482-11483

Rycroft, Peter Vere (1928-1968) British ophthalmologist, son of Sir Benjamin W.àRycroft, the well known pioneer in modern corneal transplantation. Peter Rycroft studied medicine at Trinity College, Cambridge, and carried out his clinical studies at St. Bartholomew's Hospital, graduating M.B., B.Ch. in 1955. He held an appointment of house-surgeon at St. Bartholomew's and subsequently served in the R.A.M.C. before deciding to specialize in ophthalmology. He was appointed house-surgeon to Moorfields Eye Hospital and later became senior resident officer there. He gained the D.O. in 1959 and his Fellowship of the Royal College of Surgeons in 1963. From Moorfields he went to Guy's Hospital as ophthalmic registrar and as clinical assistant at the Queen Victoria

Hospital, East Grinstead. His organizing ability and zest for hard work were displayed to the full in the work involved in the 2nd World Corneo-Plastic Conference held in July, 1967. A work which devolved upon him because of the sudden death of his father, B.W. Rycroft.

Rycroft, Sir Benjamin William (1902-1967). British ophthalmologist. Sir Benjarnin Rycroft studied medicine at St. Andrews University (1919-24) and after qualifying started general practice in Bradford, Yorkshire. He soon took up ophthalmology studying in London during the week and returning north to work at the weekends; when he was admitted to the Fellowship of the College of Surgeons in 1931 he moved south to Taplow and London, where he worked as a clinical assistant at St. George's Hospital and later at Moorfields Eye Hospital. Even at this early stage enthusiasm and industry had their rewards, and he became a Hunterian professor and Leverhulm Scholar at the Royal College of Surgeons, a Lang Research Scholar at Moorfields, and Middlemore Prizeman of the British Medical Association. His hospital staff-appointments included the Maidenhead Hospital, King George's Hospital, Ilford, the East Ham Memorial Hospital, and the Royal Eye Hospital in London. On the outbreak of war in 1939 he joined the R.A.M.C., serving first in Northern Ireland, then Africa, and finally, in Italy where he acted as ophthalmic adviser to the Army. On the way to North Africa his ship was torpedoed and he had the very unpleasant experience of being rescued with difficulty from the sea. After the war he resumed his practice in London and was appointed consultant ophthalmic surgeon to Park Prewett E.M.S. Hospital near Basingstoke, the Royal Eye Hospital in London, the Canadian War Memorial Hospital, Taplow, and the Queen Victoria Hospital, East Grinstead; at the last hospital his permanent interest was centred, and here he developed a corneo-plastic unit which rapidly increased in scope and importance. Keratoplasty, a subject on which he published his first paper in 1935, was his major interest. In 1955 he edited a series of essays on corneal grafts by, world authorities, the *first* book on this subject to be published in the English language. His most valuable contribution to British ophthalmology, was the active part he played in the advocation of the Corneal Grafting Act of 1952 which put surgeons in Britain in a position to practise keratoplasty on a useful scale for the first time. Arising out of this he foresaw the need for Eye Banks: the first was established at East Grinstead and this now has successors elsewhere, in London and the provinces. Subsequently he became clinical director of the Pocklington Eye Transplantation Research Unit at the Royal College of Surgeons of England, and he gave the Doyne Lecture at Oxford on corneal grafting in 1965. In 1960 he was knighted. Brit.J.Ophthal. 1967,51:431-432; AJO 1967,64:173-174

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Sabatier, Raphael-Bienvenu L (1732-1811). French surgeon of Paris, whose work, entitled *"De la Médecine Opératoire"* (Paris, 1796, 1810, 1821, 1824) was highly valued in its day for its full and clear account of the most important ophthalmic operations. Sabatier was born at Paris, studied under Petit and Verdier, and became both a Fellow of the College of St.Côme and of the Royal Academy of Surgeons in 1752. He became a celebrated anatomist, as well as surgeon, and wrote in addition to the treatise named above, *"De Bronchotomia, Thèses Anatomicae et Chirurgicae"* (1752) ; and *"Traité d'Anatomie"* (3 vols., Paris, 1775; 17SI). American Encyclopedia of Ophthalmology 15,p.11485

Sachs, Albert (1803-1835) German, Berlin surgeon and ophthalmologist. Born at Berlin, he there received his medical degree in 1825. For a number of years he practised, or attempted to practise, in Berlin, but died of phthisis only 32 years of age. Sachs's ophthalmologic articles were as follows: 1. *Neues Ophthalmophantom. (*Hufeland's Jour., 1827.) 2. *Augenentzündung bei Erschütterung des Schädels und Verletzung der Hirnhäute ist ein Zeichen des Nahen Todes. (Ibid.,* 1828.) American Encyclopedia of Ophthalmology 15,p.11485

Sachs, Th (? – 1897) Swiss ophthalmologist, who was privat-docent at Innsbruck. His most important writing was "*Anatomical and Clinical Contributions to the knowledge of Central Scotoma in Affections of the Optic Nerve.* " American Encyclopedia of Ophthalmology 15,p.11486

Sadid b. Raqiqa (1168-1237). Syrian oculist, friend of the famousàUsaibia and one of the official ocular surgeons to the Bagdad Hospital. Usaibia has the following to say

concerning him: "*He possessed at the same time knowledge of ophthalmology and of the treatment of wounds, and devised many of the methods of treatment with the iron for the cure of diseases of the eye, and also operated on immense numbers of cataracts, and his operations were successful, and every person saw again, and the needle which he employed was hollow and presented a curve which rendered possible the sucking-out of the cataract at the time of the operation, which made the healing more successful.*" It is to be remembered that the process of extracting cataract, in the modern sense of the term, was not discovered till the 18th century. Sadid b. Raqiqa wrote a kind of medical treatise in verse. American Encyclopedia of Ophthalmology 15,p.11486

Sadili *see* **As-Sadili.**

Saemisch, Edwin Theodor (1833-1909). German ophthalmologist, renowned for his investigations into diseases of the conjunctiva, sclera, and cornea, and one of the founders of the famous Graefe-Saemisch *Handbuch der Gesammten Augenheilkunde.* Born at Luckau, Nieder Lausitz, he studied at Würzburg and Berlin, at the latter institution receiving the degree of M. D. in 1858. He then studied ophthalmology for more than a year under Albrecht vonàGraefe. From 1860 till '62, he was assistant to AlexanderàPagenstecher at Wiesbaden, with whom he published the *"Klinische Beobachtungen,"* .In 1862 he settled as ophthalmologist at Bonn, where he remained until his death. In 1867 he became extraordinary, in 1873 ordinary, professor of ophthalmology and director of the University Eye Clinic. He was a great operator, teacher, investigator, author and editor. In 1907, at the age of 74, he resigned his professorship. His most important ophthalmologic writings are: 1. *Klinische Beobachtungen aus der Augenheilanstalt in Wiesbaden.* With Pagenstecher, 2 issues, Wiesbaden 1861 till '62.) 2. *Beiträge zur Normalen und Pathologischen Anatomie des Auges.* (Leipsic, 1862.) 3. *Das Ulcus Corneae Serpens.* (Bonn, 1870.) . He edited with Alfred Graefe the Handbuch der gesammten Augenheilkunde, Vol.1-7 (Leipzig 1874-1880) followed by a second, much enlarged edition in 37 parts. American Encyclopedia of Ophthalmology 15,p.11486-11487 The Ophthalmoscope 1910, p.155. JPW

Saint-Yves, Charles de (1667-1733) French ophthalmologist. Born at Maubert-Fontaine, near Rocroy, entered the College of St.Côme, in Paris, where he studied and practised ophthalmology for more than 25 years. In 1711, however, he established his own private infirmary for eye-patients, where he worked for one more quarter century. St. Yves is to be remembered for a number of very important innovations, most of which are described in his great book, *Nouveau Traité des Maladies des Yeux..etc*. (Paris 1722, German ed. 1730, Dutch 1739, Italian Venice 1781) *"New Treatise on the Diseases of the Eyes, the Remedies which are Proper Therfor, and the Surqical Operations which their Cure Requires, with the Discoveries on the Structure of the Eye which Demonstrate the mediate Organ of Vision"* London 1741. American Encyclopedia of Ophthalmology 15,p. 11496-11498

Saishin, Mototsugu (1934-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology of Nara Medical University. He graduated from Nara Medical University in 1964, studied under Prof. àNAKAO Shuitsu and received his Doctor of Medical Sciences in 1969 (thesis: *Statistical study of visual acuity distribution in school children*. J. Jpn. Ophthalmol. Soc. 75: 1495, 1971). He has been in the present position since 1983. His major interest is ophthalmic optics and amongst his many publications is included "*On the theory of retinoscopy*. Optik 51: 257. 1978" and "*Fundamentals of ophthalmic optics*. Kanehara Publ. Co. Tokyo 1990". He is the President of the Ophthalmological Optics Society of Japan, and a Councillor of the Japanese Ophthalmological Society (1983-), Board of Trustees of Japanese Association of Ophthalmic Medical Electronics (1982-), Japanese Society of Cataract and Refractive Surgery (1993-), Japan Contact Lens Society (1978-) and Japanese Association of Strabismus and Amblyopia (1984-). He is a member of the Optical Society of America. (Department of Ophthalmology, Nara Medical University, Shijo-cho 840, Kashihara-shi, Nara, 634-8522, Japan. phone: +81-7-4429-8884; fax: +81-7-443-23-8032)(SM)

Saito, Takuma (1932-) Japanese anatomist, Professor Emeritus of Jichi Medical School. He graduated from Kyoto University in 1957, and studied at the Department of Anatomy of the Kansai Medical School, and received his Doctor of Medical Sciences in 1969

(thesis: *Ultracytochemical study of enzyme activities in rat hepatic parenchymal cells during the course of carcinogenesis induced by 3'-methyl-4-dimethyl-aminoazobenzene [3'-MeDAB]*). He served as the Professor and Chairman of the Department of Anatomy of Jichi Medical School from 1976 to retirement in 1998. He served on the Board of Directors of the Japanese Association of Anatomists, (1976-1998), Directors of the Japan Society of Histochemistry and Cytochemistry (1987-1992), Board of Directors in Japan Society of Histochemistry and Cytochemistry (1993-1997) and the President of the Japanese Society of Histochemisitry and Cytochemistry, (1988), Chairman of the Board of Directors in Japan Society of Histochemistry and Cytochemisty (1997-1998), and Board of Directors of Japanese Society of Electron Microscopy (1984-1985). For the excellence of his research the Japanese Society of Electron Microscopy granted him the Seto Prize in 1990. He has many publications in the field of Histology and Histochemistry, e.g. "*Ultra thin cryosection techniques. In Electron Microscopic Cytochemistry and Immunocytochemistry in Biomedicine*, Eds. Ogawa K. et al. pp. 34, CRC Press Florida, 1993" and " *The identification of an active enzyme site by rapid feeze substitution enzyme histochemistry on rat retina*. Acta Histochem. Cytochem. 24: 121, 1992". He is currently serving as the President of the Organization for Social Welfare in Sabae City Fukui, Japan. (4-14-12, Funatsu-machi, Sabae, 916-0054, Japan, phone:81-7-7851-2116,fax: 81-7-7851-2437, e-mail: honsaito@lilac.ocn.ne.jp)(MS)

Sakai, Shizu (1935-) Japanese Physician, Professor and Head of the Department of History of Medicine, Juntendo University. She graduated from Mie University in 1960, studied in the Graduate School of Medicine of Tokyo University and completed the course under Prof. OGAWA Teizo at the Brain Institute: she received the degree Doctor of Medical Sciences in 1967. When Prof. OGAWA founded the Department of History of Medicine at Juntendo University, she moved to the Department and was promoted to Lecturer in 1973 and to Associate Professor in 1984. She has been in the present position as above since 1991. She has extended studies as a visiting Fellow at the Wellcome Institute for History of Medicine in London in 1989. She has held many executive positions in the professional societies and they are Executive Board of Trustees of the Japan Society of History of Medicine (1984-), Executive Board of Trustees of Noma Archives of Medical Sciences (1983-), Councillor of Juntendo University (1997-), Councillor of Japan-Holland Association (1985-), Councillor of Japan-China Medical Association (1985-), and Honorary Member of Korean Association of History of Medicine (1998-). Her Department is the main office of the Japan Society of History of Medicine. She has published many papers and wrote many books that cover various aspects of History of Medicine in Japan. Some examples are "Translation of *Kaitai-Shinsho of SUGITA Genpaku* (see his biography) into the modern Japanese Language, Kodansha, Tokyo (1st Edition, 1982, 2nd Edition 1998)", "*The First Japanese Translation of an Anatomy Book*, Shibunkaku Publ. Kyoto, 1995", "*Historical Documents of Hansen's Disease*, in *Modern Life of the Public 20*, Ed. Okada, Y. San-Itsu Shobo, 1995", "*Era of Epidemic Diseases*, Taishukan Publ. 1999" and "*Modern Medicine in View of History*, Journal Izumi, currently in periodical publications". At the 90th Congress of the Japanese Ophthalmological Society, she delivered a Special Lecture "*History of the Japanese Ophthalmological Society*, J. Jpn. Ophthalmol. Soc. 91: (12), 1987" and the paper was translated into English in a concise form "*History of the Japanese Ophthalmological Society*, Documenta Ophthalmologica 68: 171, 1988". She also wrote "*A History of Ophthalmology in Japan*. Hist. Ophthal. intern. 1: 67-110, 1979" (Department of History of Medicine, Juntendo University, 2-1-1 Hongo, Bunkyo-ku, Tokyo 113-0033, phone: +81-3-5802-1052, fax:+81-3-3813-1592, e-mail: shist@med.juntendo.ac.jp)

Sakaue, Ei (1923-) Japanese ophthalmologist, Professor Emeritus of Ehime University. He was born as the son of a scholarly Ophthalmologist in Niigata and graduated from Kyoto University in 1946. He studied Ophthalmology at the University under Prof.àYAMAMOTO Seiichi, Prof. àASAYAMA Ryoji and Prof. àKISHIMOTO Masao, and received his Doctor of Medical Sciences in 1957 (thesis: *Influence of thyroid hormone on the distribution of vitamin B1 in the retina, choroid and optic nerve*. No.1-5: J. Jpn. Ophthalmol. Soc. 58: 288, 1954; 58: 293, 1954; 59: 934, 1955; 61: 71, 1957; 62: 48, 1958). He extended his studies in 1957 at the Department of Ophthalmology of the University of Bonn, Germany and he was promoted to the Associate Professor of Kyoto

University in 1966. He was invited to become the Professor and Chairman of the Department of Ophthalmology of Ehime University in 1975 and worked in this position until 1982, when he was elected to the President of Ehime University and he remained in this position until 1988. Subsequently he served as the Director of Ehime Juzen School of Medical Sciences and the Director of its Hospital. He worked in the field of retinal detachment, retinal and choroidal diseases, and published more than 100 papers: some examples are "*Custodis Plombe method for retinal detachment*. Jpn. J. Clin. Ophthalmol. 18: 7, 1964" and "*Retinal Detachment*, Vol. 4 of *Handbook of Ophthalmology*, Kanehara Publ. Tokyo, 1971". He delivered a special report to the 81st Congress of the Japanese Ophthalmological Society (JOS) (*Problems and Possibilities of photocoagulation*. J. Jpn. Ophthalmol. Soc. 81: 1966, 1977). In recognition of his meritorious service, the Government of Japan conferred on him the Second Order of the Sacred Treasures in 1996.(SM)

Sakimoto Takashi (1936-) Japanese ophthalmologist, Professor of Nihon University. He graduated from Nagasaki University in 1962, studied Ophthalmology at Tokyo University under Prof. àMISHIMA Saiichi and received his Doctor of Medical Sciences in 1970. He worked with Prof. H.àKaufman at the University of Florida in 1972 and published " *Intermediate term corneal storage*. Invest. Ophthalmol. 13: 219, 1979. His interest is in the cornea and contact lens, and his many publications include "*Absorption of preservatives in therapeutic soft contact lenses*. J. Jpn. Contact Lens Soc. 35:177, 1993. He is a member of many domestic professional Societies and also of the Association for Research in Vision and Ophthalmology.(Department of Ophthalmology, Nihon University, Hikarigaoka Hospital. 2-11-1 Hikarigaoka Nerima-ku, Tokyo 179-0072, Japan, phone: +81-3-3979-3611)(SM)

Sakuragi Shozo (1937-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Akita University. He graduated from Tohoku University in 1963, studied Ophthalmology in the Graduate School of Medicine of the University under Prof.àKIRISAWA Naganori and received his Doctor of Medical Sciences in 1968 (thesis: *Electron microscopic studies of leaking vessels of the eye*. Jpn J Ophthalmol. 13: 158, 1969). He was invited to Akita University as the Assistant Professor to Prof.àURAYAMA Akira in 1971. He worked as a research fellow for one year (1979-1980) at the Francis I Proctor Foundation (publication: *Minocycline in the chemotherapy of murine toxsoplasmosis*. Parasitology 84: 297,1982. , *Effects of conjunctival resection on the corneal immune response*. Am J Ophthalmol.94: 388,1982.). He was promoted to the present position as above in 1984. He is interested in molecular biology underlying uveitis and some examples of his many publications are "*Molecular cloning of the S-antigen cDNA from bovine retina*. Biochem.Biophys. Res. Commun 142: 904, 1987" and "*analysis of uveitogenic sites in phosducin molecule*. Curr. Eye Res. 17: 677, 1998". He is a Councillor of the Japanese Ophthalmological Society and a member of the International Ocular Inflammation Society, besides being a member of many Japanese professional Societies. (Department of Ophthalmology, Akita University, Hondou 1-1-1, Akita, 010-8543, phone: +81-1-8834-1111, fax: +81-1-8836-2621, e-mail: sakuragi@oph.med.akita-u.ac.jp)(SM)

Tsuya Sakurai

Sakurai (Kitagawa) Tsuya (1911-1995) Japanese ophthalmologist. She graduated from Tokyo Womens Medical School (presently Tokyo Women's Medical College) in 1933, and studied Ophthalmology at Mitsui Charity Hospital (presently Mitsui Memorial Hospital). While working in this Hospital, she published an article "*Multiple small nodules on the anterior iris surface in patients with neurofibromatosis*. Acta Soc.Ophthalmol. Jpn. (J. Jpn. Ophthalmol. Soc.) 39: 87, 1935". The point of this paper was that she printed very detailed sketches of her findings. This was the first description of the ocular signs of neurofibromatosis 2 years earlier than àLisch (Zeitschr. Augenheilkd. 93: 137, 1937). The iris nodules are now known as the typical ocular changes of this disease and contribute to early diagnosis of the disease. Because of her discovery, she is exalted as a pioneering Ophthalmologist in "*The History of Ophthalmology*, Eds. D. M. Albert and D. D. Edwards, Centennial Publication of the American Academy of Ophthalmology. She married Dr. KITAGAWA and practiced in the city of Tokyo.(SM)

Salah ad-din ibn Jusuf al-kahhal bi-Hamat. A distinguished oculist, of Hama, who flourished in the latter half of the thirteenth century, and who wrote an important work on ophthalmology titled *"The Book, Light of the Eyes and Collection of Divisions"*.In the first book of this work occurs the earliest illustration of now extant.

Salceda, Salvador Rances (1932-) Filipino ophthalmologist, Professor Emeritus, College of Medicine, University of the Philippines (UP), Manila, and Chairman of the Department of Ophthalmology, Manila Medical Center. He graduated from the College of Medicine, University of the Philippines in 1959 and received the M.D. degree. He completed residency training in Ophthalmology at the Philippine General Hospital under Prof.àde Ocampo G. He extended his study at National Institute of Health (U.S.A.) (1965-1967) and carried out research in histochemistry, immunology and ophthalmic pathology: "*Endothelial cell survival after keratoplasty in rabbits, the effect of storage of donor corneas*." Arch. Ophthalmol. 78: 745, 1967. He further received training at Harvard University School of Public Health (1976) and at the College of Public Administration of University of the Philippines (1977-1978). He was appointed the Professor of Ophthalmology of the College of Medicine, University of the Philippines in 1967, and he held many key positions since then, and some examples are Chairman, Department of Ophthalmology, College of Medicine UP (1979-1982), Assistant to the Dean of the College of Medicine and Director of the Philippine General Hospital (PGH) Planning, Research and Development (1979-1983): he was in charge of the planning of the PGH renovation and expansion project and its implementation. He also served as the Director of the Institute of Ophthalmology, UP (1972-1984, 1987-1997), Director of the PGH (1984-1986) and many others. Currently, he serves as the Chairman of the Department of Ophthalmology, Manila Medical Center (1987-), Vice-president of the Board of Trustee, Philippine eye bank, International Federation of Eye Banks (1993-), Editorial Board Member of the Philippine Journal of Ophthalmology (1985-), Vice-Chairman of the Philippine Board of Ophthalmology (1995), Editor-in-Chief of the Proceedings of the XVII Asia-Pacific Academy of Ophthalmology (APAO) 1999, and the Chairman of the National Program of Research on Blindness and Philippine Council for Health Research and Development of the Republic of the Philippines (1995). He carried out extensive research and published more than 150 original papers, e.g. "*subconjunctival feramycetin in pseudomonas aeruginosa corneal infection*." Philip. J. Ophthalmol. 1: 128, 1969, "*Keratomycosis with emphasis on the diagnostic and therapeutic value of anterior keratectomy*." Trans. Ophthalmol. Soc. New Zealand 25: 202, 1973, "*Serratia marcescens endophthalmitis*." Arch. Ophthalmol. 89: 163, 1973 and "*Intermediate-term preserved corneas in penetrating keratoplasty*." UP Manila Journal, 1: 3, 1995. He is the recipient of many honor awards, e.g. XVth Jose Rizal Memorial Lectureship (1983), Distinguished Service Award of the APAO (1981) and many others. He delivered many Award Lectures, e.g. "*Fungi and Human Eye*, 4th Ocfemia Memorial Lecture, Phil. J. Biol. 5:143, 1976, and a Centennial Lecture "*A Century of Ophthalmology in the Philippines*" in 1997, and the book describes in detail the process of evolution of modern Ophthalmology and the current state of Prevention of Blindness in the Philippines. (Institute of Ophthalmology, University of the Philippines, Manila, PGH Compound, Taft Avenue, Manila, Philippines, fax: 63-2-524-71-19) (Institute of Refractive Laser Surgery, G/F Alegria Bldg. 2229 Chino Rooces Ave. Makati City, Metro-Manila, Pholippines, phone: 632-813-0343, fax:632-893-1152, e-mail: info@4u2c2020.com) (SM)

Isak Salim

Salim Isak (1911- ?) Indonesian ophthalmologist, Professor Emeritus of the University of Indonesia. He graduated from the University of Indonesia, and then worked as a Research Fellow in 1953-1956 at University of Amsterdam. He submitted his thesis on the iris tumor to the University of Amsterdam and received Ph.D. in 1956. He returned home and began his career as a teacher and was appointed the Professor of Ophthalmology of University of Indonesia. He played central roles in organizing an efficient ophthalmic service for the Indonesian people. He founded the Indonesian Association of Ophthalmology in 1964, and in the following year he initiated publication of the Journal of the Indonesian Association of Ophthalmology, which is now named "*Ophthalmologica Indonesiana*". He has published many articles on ocular tumors, glaucoma, Vitamin A deficiency, keratoplasty and many the fields of Ophthalmology. He served as the Vice-president of the Asia-Pacific Academy of Ophthalmology (APAO) (1972-1972) and the

President of the 6th APAO Congress in 1976. In recognition of his outstanding service, the APAO granted him the highest honor, Jose-Rizal Medal in 1976.(SM)

Sallmann, Ludwig J. K. von (1892-1975) American ophthalmologist of Austrian offspring. Von Salmann was a major contributor on experimental cataract, and glaucoma and trained many of America's current generation of research ophthalmologists. Born in Vienna, Dr. von Sallmann graduated from the University of Vienna Medical School. He took his ophthalmic training at the same institution and had the good fortune to be associated with such luminaries as àFuchs, àMeller, and àLindner during his early professional years. In the early 1930s he served as assistant professor of ophthalmology at Peking Union Medical College in China; and before coming to this country in 1939, he became head of the Ophthalmology Department of the Empress Elizabeth Hospital in Vienna. A vigorous opponent of Nazism, Dr. von Sallmann left his homeland at the outbreak of World War II. He was welcomed to this country by Dr. Hermann àKnapp of New York City, founder of the Knapp Eye Hospital and of the *Archives of Ophthalmology*. Dr. von Sallmann served as director of the research laboratories of the Knapp Eye Hospital before joining the staff of the College of Physicians and Surgeons of Columbia University, where he later became professor of ophthalmology. In 1955 Dr. von Sallmann became director of the Ophthalmology Branch of the National Institute of Neurological Diseases and Blindness in Bethesda. In the following 15 years he was highly productive in the fields of experimental cataract, glaucoma, and ocular immunology. He was a prolific writer, having authored more than 200 papers in his career. In the latest volume of his "*System of Ophthalmology*," Sir Stewart Duke-Elder wrote:"Much work has been done on the subject of experimental cataract for more than a century.On this subject Ludwig von Sallmann has not been surpassed by anyone in this generation" AJO 1975,80:1095

Salomon, Christian. A surgeon and ophthalmologist of St. Petersburg, Russia. He was academician, Fellow of the Medical Council and professor of surgery and clinical ophthalmology. His life dates are not known. Salomon's ophthalmologic writings are as follows: 1. *Beiträge zur Anatomie des Auges*. (Graefe's und Walther's Jour., 1825.) 2. *Beschreibung einer im J. 1823 zu Oranienbaum Beobachteten Contagiösen Augenentzündung.* (Petersb. Verm. Abhandl. der Heilk.,Samml., 3.) American Encyclopedia of Ophthalmology 15,p.11500

Salomon, Jakob (1801-1862) German physician and ophthalmologist, father of max Salomon. Born at Schleswig Sept. 24, 1801, he received his medical degree in 1823 at Kiel, presenting as dissertation "*De Pupillae Artificialis Conformatione.*" He then, until his death, practised at Schleswig both as an ophthalmologist and general practitioner. In addition to his graduation dissertation, above-mentioned, his only ophthalmologic writing was "*Beitrag zu den Beobachtungen über das eindringen Fremder Körper in dem Augapfel*" (Graefe u. Walther's Jour., XIV., 1830.American Encyclopedia of Ophthalmology 15,p.11500-11501

Salomon, Max (1837-1912) German ophthalmologist, son of Salomon Jakob Salomon, born at Schleswig. Salomon received his M.D. in 1861 at Kiel. After a period of ophthalmologic study under von Graefe in Berlin and several years as a medical officer in the Prussian army, he established a general and ophthalmologic practice, first in Hamburg (1870-1874) and then in Berlin (1874-1912). Salomon was a biographer and historian of medicine as well as the author of numerous papers and monographs on clinical topics in both general and ophthalmologic medicine. He wrote: *Die Krankheiten des Linsensystems; auf Grundlage von v. Graefe's Vorträgen, bearbeitet von Dr. Max Salomon*. Braunschweig 1872.

Salter, Richard Wash (?- 1918) American ophthalmologist and oto-laryngologist of New Orleans, La. Born in New Orleans, his medical degree was received from the medical department of Tulane University, New Orleans, in 1892, whereupon he proceeded to the study of ophthalmology and oto-laryngology in New York, London, and Vienna. Returning to New Orleans, he soon was widely known as a skilful operator, especially on the eye. In 1908-18 he was connected with the New Orleans Eye, Ear, Nose and Throat Hospital. American Encyclopedia of Ophthalmology 15,p.11501

Salzmann, Maximilian (1862-1954) Austrian ophthalmologist born in Vienna. Salzmann received his M.D. at the University of Vienna in 1887 and worked as assistant of Ernst Fuchs for some time before becoming professor of ophthalmology at Vienna (1906) and Graz (1911). He was the editor of the thirteenth, fourteenth and fifteenth editions of Fuchs' *Lehrbuch der Augenheilkunde* (1921-1926). He wrote: *Durchschnitt durch das menschliche Auge*. Breslau 1899. (Magnus/ *Augenärztliche Unterrichtstafeln*, Heft 18); *Anatomie und Histologie des menschlichen Auges im normalzustande, seine Entwickelung und sein altern* Leipzig & Wien 1912 (same year published in USA: *The Anatomy and Histology of the Human Eyeball* etc.translated by E.V.L.Brown, Chicago 1912). JPW

Samelsohn, Julius (1841-1899) German ophthalmologist, founder of the Ophthalmic Institute for the Poor, at Cologne. Born at Marienbad, West Prussia, he studied at Breslau and Berlin, at the latter institution receiving his medical degree in 1864. Three years later he settled as ophthalmologist at Cologne. He was a prolific writer and a fairly good operator. American Encyclopedia of Ophthalmology 15,p.11526

Samelson, Adolf (1817-1888) German-English ophthalmologist. Born in Berlin, he received the degree of Doctor in Medicine (at Berlin?) and settled as practising physician in a village near Berlin-Zehdenick. Because of his participation in the political upheavels of 1848-49, he suffered a number of months' imprisonment and was deprived of his right to practise medicine. Again attempting to study medicine in Berlin, he was promptly and definitely rejected by the University authorities. Although given by A. v. Graefe an excellent opportunity to study ophthalmology, poor Samelson was exiled from the capital. For a number of years he studied ophthalmology in Paris, Holland and Belgium, and eventually (1856) settled in Manchester. Three years later his right to practise medicine in Prussia was restored but he continued to reside and to practise in England until his death. From 1862-1876 he was physician to the Manchester Eye Infirmary. His latter years were rendered miserable by an almost intractable trachoma for which he was treated in Berlin in 1865 by his old and loyal friend, Albrecht von àGraefe. He died at Cannes, whither he had gone in search of health. Samelson wrote but little an article or two on the iris and one on pyramidal cataract.American Encyclopedia of Ophthalmology 15,p.11526-11527

Sampaolesi, Roberto (1925 -) Argentinian ophthalmologist, Professor Emeritus University of Buenos Aires. Sampaolesi was Professor and Chairman of the Department of Ophthalmology, Universidad del Salvador (1962-1992) and later Professor and Chairman of the University Clinic of Ophthalmology of Buenos Aires. Sampaolesi started his medical studies in 1944, receiving his medical degree in 1951, and specialising in Ophthalmology under Bernasconi Cramer. He was first appointed as ophthalmologist at the University of Buenos Aires in 1953. Since 1998 Sampaolesi holds an appointment as Director of the Course of Specialisation in Ophthalmology at the University of Buenos Aires. He is a Member of the Academy of Medicine of Rome. Member of the American Academy of Ophthalmology and of the French, German and Italian Societies of Ophthalmology; Honorary member of many Latin American Societies of Ophthalmology; Honorary Member of the Argentine Medical Association and of the Argentine Society of Ophthalmology. He is Emeritus Member of the "International Ophthalmic Microsurgery Study Group" and a Founding member of the Club Jules Gonin and of the International Glaucoma Society, a Member of the International Society of Ultrasound (SIDUO), of the International Perimetric Society, etc. He is Past President of the Argentine Society of Ophthalmology (1983-1984). Sampaolesi has authored following books: "*Glaucoma*" Buenos Aires 1974 (2nd edition 1991) and "*Ultrasonidos en Oftalmologia*" (Buenos Aires 1983 (Ultrasound in Ophthalmology). He edited following books: "*Modern Problems in Ophthalmology* vol. 6" (proceedings of the First South American Symposium, held in 1966) and "*Ultrasonography in Ophthalmology*" (proceedings of the 12th SIDUO Congress held in 1988). He co-authored: "*Bases de la Oftalmología*" [with Schieck and Leydhecker] (Basics of Ophthalmology), "*Tomografia confocal de la retina y del nervio optico*"[with Juan Sampaolesi] (Confocal Tomography of the retina and optic nerve) and "*Confocal Tomography of the Retina and the Optic Nerve Head*" [with Juan Sampaolesi]. He has been the President of the 12th Meeting of the SIDUO, of the 14th Argentine Congress of Ophthalmology and of the Seventh International Meeting on Scanning Laser, Ophthalmoscopy, Tomography and Microscopy, held in Bariloche, Argentina, in 1999.

Sampaolesi was awarded the following Prizes: Biennial "*Pedro Lagleyze*" (1955), "*Josefina Sabin*" (awarded by the Argentine Society of Ophthalmology in 1960) and "*Noceti Tiscornia*" (awarded by the National Academy of Medicine in 1961 and 1987) Awards. In 1994 he was the "*Jules Francois Memorial Lecturer*", with a lecture on congenital glaucoma, at the SIDUO Meeting held in Cortina D'Ampesso, Italy. In 1995, the Pan-American Society of Ophthalmology created the *"Roberto Sampaolesi Honorific Conference"* and he was in charge of the first one during the 20th Pan-American Congress of Ophthalmology, held in Quito, Ecuador, which was entitled: "*Computerized tomography of the optic nerve in congenital glaucoma. Its correlation with echometry and intraocular pressure*". In October, 1995 he was in charge of the "Annual Report", organized by the Argentine Society of Ophthalmology, on "Computerized confocal tomography of the retina and optic nerve", and in the same month he was invited by the University of Texas, to give the Special Lecture at the Meeting on Scanning Laser Ophthalmoscopy, Tomography and Microscopy held in San Antonio, Texas, where he gave a lecture on "*Laser scanning optic disc tomography with the Heidelberg Retina Tomograph. Elschnig's ring does change*". In 1998 he was guest of honor at the Joint SOG-SSO Meeting held in Zurich and presided over by Prof. Gloor. In February 2001 he was invited as "keynote lecturer" to speak on non-penetrating deep sclerectomy at the "First International Congress on non-penetrating glaucoma surgery" held in Lausanne, Switzerland. Email: sampaolesi@interar.com.ar AB.JPW.

Samuels, Bernard (1879-1959) American ophthalmologist, professor emeritus of Cornell University. Born in Front Royal, Virginia, Samuels received his early education at Randolph Macon Academy and his Doctor of Medicine from Jefferson Medical College in Philadelphia. His training in ophthalmology was received under the direction of Ernst Fuchs of Vienna and he continued his work in Prague and Berlin before he returned to the United States. While in Europe, Samuels became proficient in languages and spoke German and French fluently and was able to converse in Spanish and Italian. He became interested in the history of ophthalmology and the development of eye hospitals in the Americas. This background aided him in his future writings on the progress of ophthalmology in the United States and especially concerning the New York Eye and Ear Infirmary. Through the influence of Prof. Fuchs, Samuels developed a special talent for ophthalmic pathology. With the slides he made himself and the preparations he was able to obtain in Vienna and Prague, Samuels returned to New York prepared to give his course in histopathology of the eye with great success. In 1914, Samuels joined the ophthalmic staff of the New York Eye and Ear Infirmary in the clinic of Robert G. Reese. He became an instructor in ophthalmology in the Cornell University Medical College and was made full professor of ophthalmology in 1927, a post he occupied until his retirement in 1946. He introduced the study of histopathology of the eye in the sophomore year of the medical curriculum, which was an innovation at the time and proved extremely popular. Samuels was elected to the positions of attending surgeon and pathologist at the New York Eye and Ear Infirmary in 1930. His clinic became one of the most active at the infirmary; on one memorable operating day, more than 30 operations were performed by him and his staff. He conducted his course on histopathology in the evening with the assistance of Edgar Burchell, as a part of the Post-Graduate School of the New York Eye and Ear Infirmary. Students from all parts of the world attended the lectures. It was during this period that the famous collection of slides for teaching was prepared in the Eno Laboratory of the Infirmary. He became an advisory surgeon and pathologist of the hospital in 1946, the time of his retirement. Samuels served as editor of the *Transactions of the American Ophthalmological Society* for many years and succeeded ArnoldàKnapp as representative to the International Council of Ophthalmology. He attended the council for the last time in Brussels just prior to the XVIIIth Congress in 1958. With the aid of the Board of Directors and the Board of Surgeons of the New York Eye and Ear Infirmary, Samuels established the Institute of Ophthalmology of the Americas, a postgraduate teaching division of the hospital. It received enthusiastic support from Dr. Moacyr Alvaro of Sao Paulo, Brazil, the executive director of the PanAmerican Association of Ophthalmology, and many other Latin American ophthalmologists. Since the opening in 1957, the institute has been patronized by many students from North and South America. Samuels was president of the XVII International Congress of Ophthalmology, which he obtained for New York in 1954. He served on the Board of Directors of the National

Society for the Prevention of Blindness and was a member of the Executive Committee at the time of his death. Samuels wrote with A.Fuchs *Clinical Pathology of the Eye- A practical Treatise of Histopathology* 1952. In addition to being a student of history, Samuels was a collector of rare books, works of art, and antiques. He established a library in one of the old houses on his estate in Front Royal, Virginia, and furnished the main house with many interesting objects. He was a member of the New York Historical Society, the Sons of the Revolution, the St. Nicholas Society, the Veterans of Foreign Wars, the Century Club, and the Southern Society. He served as a major in the Medical Corps of the American Expeditionary Forces in World War I and became identified with many patriotic enterprises. Due to his interest in the library and portraits of the founders, directors, and surgeons of the New York Eye and Ear Infirmary, the Samuels Library was established and named for him in a special ceremony in 1954. Samuels was a member of the leading medical and scientific societies of the world. AJO 1960, 687-689, JPW

Sancto Paulo, Johannes de *see* **John of St. Paul**.

Sandford, Arthur Wellesley (1858-1938) Irish ophthalmologist, born in Ireland, the son of the Rector of Clonmel. Sandford was educated privately and at Queen's College, Cork. He graduated M.D., M.Ch. in 1882 and at once began his long connection with Cork as an ophthalmic and aural surgeon. He soon acquired a great reputation all over the South of Ireland and for many years had a very large practice both private and in hospital. He held the post of Ophthalmic and Aural Surgeon to the Cork County Hospital and Southern Infirmary, and on retirement was elected Consulting Surgeon. Sandford joined the Ophthalmological Society of the United Kingdom in 1884, he served on the Council from 1896 to 1899 and was Vice-President, 1902 to 1905. On the formation of the British Journal of Ophthalmology he became the representative in South Ireland and held that post until 1922. He had also served as President of the Irish Ophthalmological Society, and as Professor of Ophthalmology and Otology at University College, Cork. BJO 23, 499, 1939

Sanitprachakorn Panom (1931-) Thai ophthalmologist, Managing Director of Mitraparp Memorial Hospital, Saraburi, Thailand. He graduated from Mahidol University in 1956 and received his M.D. degree. He then extended his studies at the Institute of Ophthalmology, London, and received his Diploma in Community Eye Health in 1981, and became Fellow of the International College of Surgeons in 1991. He is the Founder of the First Low Cost Spectacles Project, MOPH, Thailand (1985) and served as the Principal Investigator of Trachoma Studies in the Urban Communities in 1984. He has been in the present position as above since 1994. He also serves as Regional Co-Chairman, Southeast Asia International Agency for Prevention of Blindness (PBL) since 1993 and senior advisor of the National PBL program of the Ministry of Health. He worked as the Chief of the Eye Department of Phraputtabat General Hospital (1981-1989). His academic assignments are the Faculty of Korat Institute of Public Health Ophthalmology (1993-present) and Lecturer at the Korat Institute of Public Health Ophthalmology (1986-present). He received a Distinguished Service Award from the Asia-Pacific Academy of Ophthalmology in 1993 for his outstanding service for the Prevention of Blindness.(SM)

Sanson, Louis Joseph, (1790-1841) French surgeon born at Nogent-surSeine, France. Sanson received his medical degree in 1817 at Paris with the thesis *Des moyens de parvenir à la vessie par le rectum etc*.(reedited 1921), where he was a student of Dupuytren. In 1825 he became second surgeon at the Hôtel Dieu and in 1830 director of its eye clinic; he succeeded Dupuytren as professor of surgery of the Paris Faculté in 1836. Sanson published numerous monographs and papers on general surgery and ophthalmology; he is chiefly remembered as the first to employ diagnostically, (though not the discoverer of) the Purkinje-Sanson images. He wrote: *Leçons sur les maladies des Yeux faites a l´hopital de la Pitié, Partie 1 Cataractes* Paris 1838 ; *Traité de la cataracte*. 2nd ed. Paris 1842 (2nd ed. of *Leçons sur les maladies des Yeux*). .American Encyclopedia of Ophthalmology 15,p.11532-11533.Albert. JPW

Santa Anna, Joaqim José de. Portuguese ophthalmologist of the 18th century, concerning whom but little information seems now to be procurable. He published at Lisbon in 1793, a book containing 293 pages, and entitled *"Elementos de Cirurgi Ocular Offrecidos a Sua Altezza Real 0 Senhor D. Jaâo Principe de Brasil par Joaqim José desta*

Corte. (Lisbon 1793) "American Encyclopedia of Ophthalmology 15,p.11533

Santos, Sabino S. Sr. (1925-) Filipino ophthalmologist, Vice-President of the Ophthalmological Foundation of the Philippines. He graduated from University of Santo Tomas College of Medicine, with M.D. degree granted, meritissimus cum laude. He received training abroad, i.e. postgraduate studies in Ophthalmology at New York University Bellevue Medical Center (1952-53), Pennsylvania Graduate Hospital (1953-54), Armed Forces Institute of Pathology, Washington DC (1953), Institute of Ophthalmology, University of London (1954-55) and also in New York , Eye and Ear Infirmary(1975). On home coming, he continued to serve as the Head of Santos Clinic (Malolos) Inc. which his father Luis U. Santos founded. He is an active member of many National and International Ophthalmological Societies and a Fellow of International College of Surgeons. He served as the President of the Ophthalmological Society of the Philippines (1965-1966), Director of the Philippine Ophthalmological and Otolaryngological Society (1965-1966), President of the Central Luzon Chapter, Philippine College of Surgeons and Governor of the International College of Surgeons, Philippine Section (1987-1989). The Santos Clinic is maintained by 3 ophthalmologists, Remedios A. (Wife and Assistant Director), and two sons, Sabino A. Jr. and Jose Gabriel.(SM)

Sarenko, Wassili (1814- ?) Russian physician and ophthalmologist. He received his medical degree in Moscow, and became a military surgeon. He afterwards practised at St. Petersburg. The date of his death is not known. Sarenko's chief ophthalmologic writings are: 1. *De Affectione Oculorum Cacochymica.* (1854) 2. Ueber Glaucom. (Drug. Sdraw., 1838 and 1839.) American Encyclopedia of Ophthalmology 15,p.11545-11546

Sargent, Elizabeth (? – 1900) American, Californian ophthalmologist. Born in Nevada City, Calif., the daughter of Senator A. A. Sargent (who for a number of years, was U. S. Minister to Germany). She received her medical degree at Cooper Medical College, San Francisco, now the Medical Department of Stanford University. While her father was minister to Germany, she studied ophthalmology at Zurich and Vienna. Settling as ophthalmologist exclusively in San Francisco, she soon was widely known as an expert in her profession. In 1883 she became oculist to the Hospital for Children and Training School for Nurses, a position which she held till 1891, when obliged to resign because of failing health. Sargent never married. She was, however, deeply interested in children, and was devoted to her practice among them. She was also an ardent advocate of woman's suffrage, thus following in the footsteps of her mother.American Encyclopedia of Ophthalmology 15,p.11546

Sasaki, Kazuyuki (1935-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology at Kanazawa Medical University. A son of SAKAKI Toichiro, he graduated from Tohoku University in 1961 and from the Graduate School of Medicine of the University in 1966, and received the degree Doctor of Medical Sciences in 1969. He has been in the present position as above since 1987. His professional activities are numerous: President of the Japan Cooperative Cataract Research Group and Asian Cataract Research Conference, and Councillor of many domestic Societies. His many publications include "*Multipurpose Camera: A new anterior eye segment analysis system*, Ophthalmic Res. 22 (Suppl) 3, 1990" and "*Scheimpflug photography as a tool for anterior eye segment biometry*. Optical Engineering, 34: 758, 1995". He received Awards at the Scheimpflug Club Meeting in 1985, International Association for Cataract and Related Research (Italy) in 1989 and International Award from US-CCRG in 1995.(Department of Ophthalmology, Kanazawa Medical University, Daigaku 1-1, Uchinada, Ishikawa-ken, 920-0265, Japan. phone: +81-7-6286-2211, fax: +81-7-6286-1010, e-mail: sakaki-k@kanazawa-med.ac.jp)(SM)

Toichiro Sasaki

Sasaki, Toichiro (1905-1980) Japanese ophthalmologist, Professor of Manshu Medical College (presently China Medical University Shenyan, China). He graduated from Manshu Medical College in 1925 and studied Ophthalmology under Prof. FUNAISHI Shinichi. He received the degree Doctor of Medical Sciences in 1933 from Kyoto University (thesis: *experimental studies of lactic acid content in the aqueous humor*). He further studied at the University of Frankfurt and of Berlin in 1937-1939 and he published " *Untersuchungen der Linse, des Blutes und des Kammerwassers von ratten bei*

galaktosevefärbung. I: v Graefe Arch. Ophthalmol.138: 351, II: Ibid. 123:365, 1938. He was appointed Professor and Chairman of the Department of Ophthalmology of the Manshu University in 1943 to succeed Prof. àFUNAISHI Shinichi. After the World War II, he returned home and practiced in Sendai. (SM)

Sato Tikasi (1914-) Japanese ophthalmologist, a leading researcher of Myopia. He graduated from Tokyo University in 1938, studied Ophthalmology under Prof. àISHIHARA Shinobu and received the degree Doctor of Medical Sciences in 1943 (thesis: *Studies of myopia*, series of articles in J. Jpn. Ophthalmol. Soc. 45: 2277,1941; 46: 71, 509, 1457 1942; 47: 23, 919 1352, 1943). He is a member of the International Society for Myopia Research and delivered the Honorary Lecture "*Pitfalls of ignoring refractive emmetropization*" at the 6th International Conference on Myopia in 1996. He is the author of "*The Cause and Prevention of acquired Myopia*", Yokohama 1957 and "*The cause and prevention of school myopia*", Excerpta Medica, Tokyo 1993 and is an Honorary Member of the Japanese Ophthalmological Society.(SM)

Tsutomu Sato

Sato, Tsutomu (1902-1960) Japanese ophthalmologist, Professor of Ophthalmology of Juntendo University. He graduated from Tohoku University in 1927, and studied Internal Medicine: he received the degree Doctor of Medical Sciences in 1932 (thesis: *Studien über die Gewebsquellung*. Tohoku J. Med. 1932). Then he studied Ophthalmology at Tokyo University under Prof. ISHIHARA Sinobu, and became the Head of the Eye Clinic of Juntendo Hospital in 1944, and the Professor and Chairman of the Department of Ophthalmology of Juntendo University in 1947. He was interested in ocular surgery and invented the Sato knife in 1950 and radial keratotomy for myopia. Sato's surgery for keratoconus was exercised by many ophthalmologists before contact lenses and keratoplasty became popular. The technique is the precursor of radial keratotomy for myopia practiced 40 years later. He was interested in contact lenses and produced the corneal contact lens. As a leader in this field, he founded together with Prof. àMAKIUTI Shyoichi, Dr. àHASEGAWA Shyunroku and Dr. àMIZUTANI Yutaka, the Japan Medical Contact Lens Society: this is probably the oldest National Society of contact lenses in the world. (SM)

Satoh, Kenshi (1930-) Japanese biochemist working on the crystalline lens, Professor Emeritus of Science University of Tokyo. He graduated from Tokyo College of Science in 1957, received his D.Sc. Degree in Biophysics from Kyoto University. He worked at the Howe Laboratory of the Harvard University in 1960- 1962 with Dr. KINOSHITA Jin and at Brandeis University with Dr. Nathan O. Kaplan (a famous American oncologist 1943-1986. JPW) in 1962-1965. He served as the Professor at Science University of Tokyo from 1974 to 1997; after retirement he has worked as the Professor and Chairman, Department of Informatics, Higashi Nippon International University. His many publications include "*Age-related changes in the structural proteins of human lens*. Exp. Eye Res. 14: 533, 1972" and "*Identification of a new fluorescent compound isolated from human lens insoluble protein fraction*. BioMed. Chem. Lett. 13: 345, 1993. He served as the President of the 11th Congress of the Japanese Chapter of the International Society for Eye Research in 1997. He is an Honorary Member of the International Society for Eye Research. (phone & fax : 81-4-7191-3233)(SM)

Sattler, Hubert (1844-1928) German emeritus professor of ophthalmology in Leipzig. He was born in Salzburg, Austria. His father was a painter, creator, of the Sattler panorama which is still displayed in Salzburg. From him the son acquired his skill in drawing and his joy in products of the plastic arts. At the age of twenty-eight years Sattler became assistant to Ferdinand Arlt in Vienna, after having spent some time with Theodor Billroth at the surgical Clinic. He became privatdozent in 1876, in the following year was called as professor to Giessen, two years later to Erlangen, and seven years later still to Prague. In 1891, he succeeded àCoccius at the University of Leipzig, where he remained as director of the University Eye Clinic and as emeritus professor until his death. For decades the clinic which he conducted was one of the leading centers for ophthalmologic training in Germany, and from it went forth many valuable scientific works and many excellent ophthalmologists, among them five teachers at German or Austrian universities. Among other honors, Sattler became president of the German Ophthalmological Society and joint editor of *Graefe's Archiv für 0phthalmologie*. Sattler was outstanding as an operator. Plain and unassuming as to his own person, he was receptive to everything fine

that art and nature had to offer. How he enjoyed masterpieces of music and of plastic art, he who knew every good picture, whether it hung in an Italian castle, or in a museum of Germany, Holland, or England. How sensitive he was to the beauties of nature, especially when in bodily vigor he wandered through his beloved mountains, he who knew intimately every flower. His was a personality of unusual gifts and extraordinary alertness and productivity. He demanded much of his pupils, but still more of himself. He was inspired on behalf of the branch of medicine which he represented, its scientific basis, and its practical activity. In his small, simple workroom in the old Leipzig clinic he spent evening after evening at his beloved microscope, adding to his knowledge of the normal and pathologic anatomy of the eye, his mastery of which was equalled by few others. His interest was by no means limited to ophthalmology, but reached out into all branches of medical science, whose relation to ophthalmology he followed indefatigably. Whoever carefully studies his book, published in 1926, on malignant tumors* will hardly consider it possible that this should come from the pen of a man of eighty-three years. His strictly scientific tendency had a strong influence on Sattler's clinical activities. Every individual case was for him an object of scientific inquiry, which stimulated him to the most careful and scientifically thorough investigation. It was this unity of science and practice which inspired the most profound respect in his pupils. Sattler wrote: *Über die sog. Cylindrome und deren Stellung im Onkologischen Systeme*, Berlin 1877; *Die Basedowsche Krankheit* in Graefe-Saemisch *Handbuch der Augenheilkunde*, 1st edition, volume 6); *Trachombehandlung einst und jetzt*, Berlin 1891; *Sehnervengeschwülste und ihre chirurgische Behandlung*, Stuttgart 1892 and **Die bösartigen Geschwülste des Auges*, Leipzig 1926. AJO 1929,12:236 ; Klin Monatsbl f.Augenheilk. 1928,81:857. Fischer 1365. JPW

Saunders, John Cunningham (1773-1810) English, London anatomist, surgeon, and ophthalmologist. Born in Lovistone, Devonshire, he studied his profession for the most part in London. In 1804, moved by "the terrible suffering of our troops from ophthalmia in the expedition to Egypt," he founded the Royal London Ophthalmic Hospital, or "Moorfields," the name at the time, however, being "The London Dispensary for the Relief of the Poor Afflicted with Eye and Ear Diseases. " The building was in Charterhouse Square, and was very small and inconveniently arranged. It was not opened till 1805. The institution grew rapidly, however. In the first year only 600 patients were treated, but two years after it was founded, its accomodations had to be restricted to ophthalmic patients only, while in 1821 the number of new patients amounted to 5,000; in 1862 to 12,000; in 1914 to more than 42,000. In 1890 the hospital was incorpord by Royal charter. This institution has been of enormous importance for the development of ophthalmology in England. According to the *London Lancet*, ophthalmologic instruction began to be given at this institution in 1814, and, at the present time, "Moorfields" is a Mecca for students of ophthalmology from every portion of the world. Saunders was a man of middle height, and was cheerful and friendly in manner. He was a great teacher, as well as a skilful operator. He will always be remembered chiefly as the founder of "The Royal London Ophthalmic Hospital." Saunders' most important writings were: 1. *The Anatomy and Diseases of the Ear*. (London, 1806; 2d ed., 1817.) 2. *Treatise on Some Practical Points Relating to Diseases of the Eye*. (London, 1811; 2d ed., 1816.) 3. with Farre, B. Travers and W. Lawrence *A Special report of the General Committee of the London Infirmary for curing the diseases of the Eye* London 1815. American Encyclopedia of Ophthalmology 15,p.11547-11548

Saurel, Louis Jules (1825-1860) French surgeon of Montpellier. He worked for several years as a naval surgeon before taking his M.D. in 1851 at Montpellier, where he subsequently taught both surgery and ophthalmology. He was editor of the *Revue therapeutique du midi* from 1852 until his death, and was the author of numerous papers and monographs on a broad range of surgical topics.In ophthalmology he wrote: *De l'importance de l'ophtalmologie. Première leçon du cours d'ophtalmologie professée a la faculté de médecine de Montpellier pendant le semestre d'hiver de 1857-1858*. Paris & Montpellier 1858. Albert

Savage, Giles Christopher (1854-1930), American ophthalmologist born in Mississippi, received his M.D. in 1878 at Jefferson Medical College in Philadelphia. After

postgraduate ophthalmologic study there and in London and Vienna, he settled in Nashville, Tennessee, where he joined the faculty of Vanderbilt University as professor of ophthalmology (1886-1911). Savage was the author of several treatises on ophthalmic neuromyology. He authored: *New truths in ophthalmology* Nashville 1893. Albert

Savaresi, Antonio M. T.(late 18th century) Italian military physician, whose life-dates seem to be unascertainable. He was born, however, in the latter years of the 18th century at Naples, and there received his medical degree. In 1824 he was made physician-in-chief of the Neapolitan Army and First Scientific Fellow of the Milito-Sanitary Commission. His only writing of ophthalmic interest is an article entitled "*Description et Traitement de l'Ophthalmie d'Egypte*" in Des Genette's *Hist. Med. de l'Armee d'Orient*., 2d ed., Paris, 1830. American Encyclopedia of Ophthalmology 15,p.11549

Sawa Mitsuru (1948-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology of Nihon University. He graduated from Tokyo University in 1973, studied Ophthalmology under Prof.àMISHIMA Saiichi and received the degree Doctor of Medical Sciences in 1980 (thesis: *The morphometry of the human corneal endothelium and follow-up of postoperative changes*. Jpn. J. Ophthalmol. 23: 337, 1979). He has been in the present position since 1992. His professional activities are numerous: he is the President of the Japan Cornea Society, Executive Councillor of the Japan Eye Bank Association and Councillor of many Japanese Societies. He is Executive Editor of the *Jpn. J. Ophthalmol*. and Editor of "*Ganka*: Ophthalmology". He is also a member of the Association for Research in Vision and Ophthalmology, International Society of Eye Research and many other international Societies. His many publications include " *Topical indomethacin in soft cataract aspiration.* Jpn. J. Ophthalmol. 20:514, 1976" and "*New quantitative method to determine protein concentration and cell number in aqueous in vivo*. Jpn. J. Ophthalmol. 32: 132, 1988": he is the developer of "*Aqueous Flare-Cell Meter*".(Department of Ophthalmology, Nihon University School of Medicine, 30-1 Oyaguchi-Kamimachi Itabshi-ku, Tokyo 173-8610, Japan. phone: +81-3-3972-8111, fax: +81-3-3554-0479, e-mail: msawa@med.nihon-u.ac.jp)(SM)

Sawada Atsushi (1932-) Japanese ophthalmologist, Professor Emeritus of Miyazaki Medical College. Born as the 3rd generation in an Ophthalmology Family, he graduated from Kumamoto University in 1958, studied ophthalmology at the University under Prof.àSUDA Keiu and received his Doctor of Medical Sciences in 1963 (thesis: *Rheological study on the vitreous body of the normal rabbit*. J. Jpn. Ophthalmol. Soc. 67: 296, 1963). He was appointed the Professor and Chairman of the Department of Ophthalmology of Miyazaki Medical College in 1976 and served until retirement in 1998. He served as the Secretary General of the Japan Society for Glaucoma Research (now the *Japanese Glaucoma Society, JGS*) (1977-1989) and recorded the *History of Glaucoma Research in Japan*, " *Progress of Glaucoma Research – Records of Glaucoma Group Discussions*, Igakushoin, 1992". His research interest has been glaucoma and ultrasonography in Ophthalmology. He served the JGS on the Executive Board of Trustees and the President of the 5th Congress of the JGS. He studied ultrasonography of the eye at the University of Iowa, U. S. A. under Prof. Karl C. Ossoinig (1974-1975) and he serves the International Society for Ophthalmic Ultrasound (SIDUO) as the Vice-President (1997-). He has been an executive board member of many National Societies, and is Honorary Member of the Japanese Ophthalmological Society, of the Asia-Oceanic Glaucoma Society and Eminent Member of the Japan Society of Ultrasonics in Medicine. He delivered the Suda Award Lecture at the 6th Congress of the JGS in 1995 (Glaucoma and Ultrasonic Diagnosis). His many publications include "*Glaucoma and ultrasonic diagnostic techniques*. Atarashii Ganka, Journal of the Eye, 13: 921, 1997" and "*Ultrasound biomicroscopic findings of acute angle-closure glaucoma in Vogt-Koyanagi-Harada syndrome*. Am J. Ophthalmol 122: 735, 1996". Currently he is engaged in teaching at Kyushu University of Health and Welfare, School of Health and Science, and serves as the Professor and Chairman of the Department of Orthoptics and Visual Science. (Kyushu University of Health and Welfare, School of Heal and Science, 1714-1, Yoshino Nobeoka, Miyazaki 882-8505, Japan. phone:+81-9-8223-5555, fax: +81-9-8223-5697)(SM)

Sawaguchi, Shoichi (1955-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology of Ryukyu University, Okinawa. He graduated from Niigata University in 1979, studied under Prof. IWATA Kazuo and received his Doctor of Medical Sciences in 1987.(Thesis: "*Axonal transport damage in glaucoma*"). He has been in the present position as above since 1998. His research interest is in glaucoma and anterior segment surgery. His many publications embrace "*Effects of intracameral injection of chondroitinase ABC in vivo*. Arch. Ophthalmol. 110: 110, 1992" and "*Three dimensional scanning electron microscopic study of keratoconus corneas*. Arch. Ophthalmol.116: 62, 1998". He is a Councillor of the Japanese Glaucoma Society and many other National professional Societies. He is also a member of many international Societies including the International Ophthalmic Pathology Society and Association for Research in Vision and Ophthalmology. (Department of Ophthalmology, Ryukyu University Hospital, Nishihara-cho, Nakagami-gum, Okinawa, 903-01 Japan. phone: +81-9-8895-3331; fax: +81-9-8895-6024, e-mail: sshoichi@med.u-ryukyu.ac.jp)(SM)

Say, Antonio S. (1950-) Filipino ophthalmologist, Assistant Professor of Ophthalmology, University of Santo Tomas, Faculty of Medicine and Surgery. He graduated from the College of Medicine of Santo Tomas University in 1976 and received his M.D. degree. After having completed residency training at the University Hospital and the postgraduate Course of the University, he received the Diplomate of the Philippine Board of Ophthalmology in 1985. He has been in the present position as above since 1984. He was appointed the Chief of the Section of Cataract and Refractive Surgery in the Department of Ophthalmology, University of Santo Thomas Hospital in 1999. He serves as the Board Examiner of the Philippine Board of Ophthalmology (1989-present), Treasurer and Founding Member of the Philippine Implant and Refractive Surgery Society and Chairman of the Community Service (1989-present). He was appointed as one of the Governors of the Philippine College of Surgeon (1988-present) and is a member of many National and International Societies in Ophthalmology. He served as the President of the Philippine Academy of Ophthalmology (1996) and joined the organization of the 17th Congress of the Asia-Pacific Academy of Ophthalmology as Scientific and Executive Committee member. He also received humanitarian awards for his medical missions in the Philippines from his residency days to the present. His special interest is in cataract, vitreous and retinal surgery and has presented papers, e.g. "*Sutureless Phacoemulsification*." Bali, Indonesia, 1995 and "*Combined phacoemulsification and Pars plana vitrectomy with liquid perfluoroenophtane and argon laser endo-photocoagulation for giant retinal tear*." Annual Meeting of Philippine Academy of Ophthalmology, 1996. He contributed a chapter on ocular trauma to the Philippine College of Surgeon Treatment Guidelines in Trauma. (Department of Ophthalmology, University of Santo Tomas, Espana St. Sampaloc Manila. fax: 63-2-890-6547, 63-2-415-3914)(Institute of Refractive Laser Surgery, G/F Alegria Bldg, 2229 Chino Roces Ave. Makati City, Metro-Manila Philippines, phone 632-813-0343, fax:632+893-1152, e-mail: info@4u2c2020.com)

Scarpa, Antonio (1752-1832) Italian anatomist, surgeon and ophthalmologist, whose name is commemorated in the expression, "*Scarpa's triangle*." Born in Italy, he received his medical degree at Padua when only 18 years of age. In 1772, at the early age of 20, he was elected full professor of anatomy and theoretical surgery at the University of Modena. At his instigation, Duke Franz III, caused to be constructed the Modena Anatomical Institute. In 1783, on the invitation of Emperor Joseph II, he was called to the chair of anatomy at the University of Pavia. For many years he was Director of the Medical Faculty at the same institution. The importance of Scarpa for medicine and surgery in general, can hardly be overestimated. The first to describe "Scarpa's triangle," he also discovered the naso-palatine nerve, as well as the "true posterior staphyloma of Scarpa," and wrote the greatest work on ophthalmology that had appeared until his time. In this memorable book, the distinguishing features are, a clear and almost brilliant literary style, greatly bettered definitions of ophthalmologic technicalities, and a well-marked tendency to the practical application of the then known pathology and optics. The book (No. 4 below) was a high authority in a number of countries for many years. Scarpa's most important writings are as follows: 1. *Anatomicarum Annotationum Lib. I et 11* (2 vols., Modena and Pavia, 1779, 85; 2d ed., Pavia and Milan, 1792.) .2. *Anat. Disquisitiones de*

Auditu et 0lfactu. (Pavia and Milan, 1789.) 3. *De Penitiori Ossium Structura Commentarius.* (Piacenza, 1800; 2d ed., Leipsic, 1799; Ger. trans., Leipsic, 1800; Eng. trans., London, 1830.) 4. *Saggio di Osservazioni ed Esperienze sulle Principali Malattie degli Occhi.* (Pavia, 1801; later eds., 1802,1805, 1811, 1817, 1836; Ger. trans., Leipsic, 1803, 2d ed. 1823; Eng. trans., London, 1806, 2d ed., 1818; French trans., Paris, 1802, 2d ed. 1807, 3d ed. 1811 and a French elaboration by Fournier-Pescay and Bégin, Paris, 1839; Dutch trans., Groningen, 1812; Spanish by Don Jayme Ysern y Jener, Barcelona 1828) 5. *Sull' Aneurisma, Riflessioni ed Osservazioni Anat.-Chirurgiche.* (Pavia, 1804; numerous later eds. and translations.) 6. *Mem. sulla Legatura delle Principali Arterie degli Arti, con una Appendice sull' Opera dell' Aneurisma.* (Pavia, 1817; Ger. trans., Berlin, 1821; French trans., 1822.) 7. *Mem. sull' Ernie del Perineo.* (Pavia, 1821) 8. Istoria d´una specie straordinaria di cecità congenita Florence 1824. American Encyclopedia of Ophthalmology 15,p.11558-11559. JPW

Schacher, Polycarp Gottlieb (1674-1737). German anatomist and surgeon, who first described the ophthalmic ganglion, and who first proved, by means of an artificial, or schematic, eye, that opacities in the vitreous might be the cause of the so-called *muscae volitantes.* In addition to an excellent work on anatomy, he wrote *"De Cataracta"* (Leipsic, 1701). American Encyclopedia of Ophthalmology 15,p.11559

Schaeffer, Johann Gottlieb (1720-1795). German physician who paid considerable attention to ophthalmology. Born at Querfurt, Saxony, younger brother of the celebrated scientist, Jakob Christian Schaeffer, he was for a time an apothecary. Turning his attention to medicine, he received his degree at Altdorf in 1745. Having held a number of high official positions, he died at Ratisbon. His only ophthalmologic writing was entitled *"Geschichte des Grauen Staares und der Neuen Operation, solchen durch Heraus-nehmung der Krystallinse zu Heilen"* (1764).American Encyclopedia of Ophthalmology 15,p.11559

Schalling, Jacob (1587- c.1620) German physician. Schalling was born in Windsheim/Mittelfranken, Germany, the son of the school rector Azarias Schalling who was originated from Nürnberg. Schalling was enrolled at the University of Altdorf in 1603, aged 15. The same year he moved to the Jena university were we lose track of him, only to find him back, at the Giessen university 1611 and at Erfurt university 1612/13, inscribed as *Jacobus Schalling, Winshemio-Francus, medicinae candidatus* . This means that Schalling, after 9 years of studies, still did not have his doctoral degree! We also know Schalling was a member of the fraternity *Orden der Rosenkreutzer*, which society was founded by Johann Valentin Andreae (1586-1654) who was much interested in mathematics, optics and astronomy. Andrae´s teacher was Michael Mästlin who himself had been Kepler´s teacher. From a remark in *Augentrost* one can conclude that Schalling had a stay in Kassel in the year 1614 when Andreae had his idea of the *Rosenkreutzer* fraternity printed. Schalling was involved as its lector as well as in its printing too. The contact Schalling had had with Andreae explains his estonishing knowledge of optics shown in *Augentrost*. Schalling´s trail is definitively lost after the printing of *Augentrost* which was shortly before the eruption of the Thirty Years War where he might have vanished. Wolfgang Münchow who had received an original copy of *Augentrost* from Wayenborgh in the early seventies, was the first ophthalmologist to do intensive research about this book as well as about Schalling, refuting Hirschberg´s negative remarks. A multi-page analyse of Schalling´s *Augentrost* can be found in W. Münchow *Geschichte der Augenheilkunde* Stuttgart, Enke, 1984, 271-280. The title of this rather unknown and very rare book is: *Ophthalmia sive Disqusitio Hermetico-Galenica: De natura oculorum eorumqu visibilibus characteribus moribus et remediis* Erfurt 1615, printed in Latin and German. JPW

Schauenburg, Karl Hermann (1819-1876). German physician, who devoted much attention to ophthalmology. Born at Bünde, near Herford, Westphalia, he received his medical degree at Berlin in 1843. He practised in many places: Herford, Schildesche near Bielefeld, Brodenbach near Coblenz, Diisseldorf, Quedlinburg, and elsewhere. He was an excellent operator on the eye, incidentally a poet and dramatist of no mean ability. His chief ophthalmologic writings are: 1. *Das Accommodationsvermögen der Augen.* Nach A. Cramer und Donders. (Lahr 1854). 2. *Ophthalmiatrik. (Ib.,* 1856). 3. *Der Augenspiegel,*

nebst Beiträgen zur Diagnostik innerer Augenkrankheiten. (*Ib,* 1854; 5th ed., 1873) 4. *Ueber Cholestearinebildung in dem Menschlichen Auge* Erlangen 1852.American Encyclopedia of Ophthalmology 15,p.11559.JPW

Scheffler, Hermann (1820-1903) German scientist of Braunschweig, was educated at the technical college of his native city and in 1846 went to work for the government railway system. He published numerous papers on mathematics and physics (especially mechanics), and wrote on philosophy and economics as well. Included here are his works on physiological optics. Scheffler wrote: *Die physiologische Optik; eine Darstellung der Gesetze des Auges und der Sinnesthätgkeiten*. Braunschweig 1865; *Die Gesetze des Räumlichen Sehens* Braunschweig 1866 (supplement to *Die Physiologische Optik*); *Die Theorie der Augenfehler und der Brille* Wien 1868 (english by Robert Brudenell Carter: *The theory of ocular defects and of spectacles*. London 1869).

Scheie Harold G. (1909-1990) American ophthalmologist born in Brookings, South Dakota. Scheie received the B.S. degree and the M.D. degree from the University of Minnesota. He interned at the University of Pennsylvania Hospitals where he was a resident in the Department of Ophthalmology, and received the Doctor of Science degree from the University Of Pennsylvania. During World War II, Scheie was chief of ophthalmology of the 20th General Hospital in the China-Burma Theater and later at Crile General Hospital. He was subsequently named a brigadier general in the Army reserves and served as commanding general of the 303rd Hospital Center. Scheie was a professor at the University of Pennsylvania and at the Graduate School of the University of Pennsylvania. He succeeded FrancisàAdler as the William F.Norris and George E. de Schweinitz Professor and chairman of the Department of Ophthalmology at the University of Pennsylvania in 1960. He was also chairman of the ophthalmology services at Philadelphia General Hospital, Childrens' Hospital, and the Veterans Administration Hospital. In 1972 he founded the Scheie Eye Institute. Scheie was secretary and then chairman of the Section on Ophthalmology of the American Medical Association, and received the Prize Medal of the Section. The Section developed the Knapp awards for the best paper and the best exhibit under his direction and also had a large and active program committee. He served as president of the Pennsylvania Academy of Ophthalmology and Otolaryngology and vice president of the College of Physicians of Philadelphia, the National Society for the Prevention of Blindness, and the American College of Surgeons, which he also served as regent. He was an honorary member of the Order of the British Empire. He received honorary doctorate degrees from Villanova University and the University of Pennsylvania, which also established the Scheie Research Professorship. A Scheie professorship was established at the University of Minnesota. Modern Medicine awarded him the Distinguished Achievement Award; the American Schools and Colleges Association, the Horatio Alger Award; the American Academy of Achievement, the Golden Plate Award. He received the Howe Awards of the American Ophthalmological Society and the University of Buffalo, the honor award of the American Academy of Ophthalmology and Otolaryngology, and the Strittmatter Award of the Philadelphia County Medical Society. Scheie gave many named lectures and was an honorary member of many foreign ophthalmological societies. Scheie published widely and his name is associated with two phenotypes of mucopolysaccharidosis I, the Hurler-Scheie syndrome, and a mild form, the Scheie syndrome. He popularized scleral cautery in glaucoma filtration procedures. Together with FrancisàAdler, he localised the site of the lesion in Adie's syndrome. He was co-author with Meyer Weiner of "*Surgery of the Eye*" and co-author with Daniel M.àAlbert of "*History of Ophthalmology at the University of Pennsylvania*" and two editions of a "*Textbook of Ophthalmology*." Two editions of his "*Lecture Notes in Ophthalmology*" were published. He served on the editorial board of the *Archives of Ophthalmology* and several other ophthalmic journals. AJO 1990,109:753-754.

Scheiner, Christoph (1575-1650). More commonly called "Pater" Scheiner. Born at Walde, near Mindelheim in Swabia, he entered the order of Jesuits in 1595, became professor of Hebrew and Mathematics, first at Freiburg later at Ingolstadt, taught for a number of years at Rome, and finally became Confessor to the Grand Duke at Neisse in Schlesien, where he died. He wrote: *Oculus hoc est: fundamentum opticum, in quo ex accurata oculi anatome*, (Innsbruck 1619) & *Pantographice, seu ars delineandi res quaslibet per parallelogrammum lineare seu cavum, mechanicum, mobile* etc. (Rom 1631) American Encyclopedia of Ophthalmology 15,p.11560

Schell, Henry S. (1835-1890). American ophthalmologist and otolaryngologist. Born at Philadelphia, he received his medical degree of the University of Pennsylvania in 1857. For the next three years he practised general medicine in Philadelphia. From 1860-'69 he was assistant surgeon in the regular army. Retiring to private life, he settled as ophthalmologist and oto-laryngologist in Philadelphia, where he lived until his death. Schell was a rather prolific writer. Among his more important ophthalmologic articles, are 1. *Iritis.* (Phila. Med. Times, 1874). 2. *Hemiopia*. (Med. and Surg. Reporter, Aug., 1876). 3. *Glaucoma*. (*Ibid.*, Nov., 1876). He authored *A Manual of Ophthalmic Practice* Philadelphia 1881. American Encyclopedia of Ophthalmology 15,p.11560

Schelske, Ludwig Eduard Rudolf (1830-) German ophthalmologist born in Marienburg, Germany, received his M.D. in 1856 at the University of Berlin, where he subsequently lectured on ophthalmology and wrote a voluminous textbook on ophthalmology: *Lehrbuch der Augenheilkunde*. Berlin 1874.

Schenck von Grafenberg, Johannes (1530-1598) German physician born at Grafenberg, Germany. He studied under Leonhart Fuchs and Jakob Schegk at Tübingen, receiving his M.D. in 1554; he practiced for some years in Freiburg im Breisgau. Schenck's main work is his *Observationum medicarum rararum, novarum, admirabillium et monstrosarum* etc. 7 vols. Basle and Freiburg 1584-97, the most important compilation (of that time) about the pathological observations of earlier physicians together with Schenck's own observations. Interesting for ophthalmology is this part of his above mentioned work: *Observationes medicae de capite humano: hoc est, exempla capitis morborum, causarum, signorum, evetum, curationum* Basle 1584.

Schepens, Charles L. (1912-) American Ophthalmologist, born and educated in Belgium, Clinical Professor of Ophthalmology, Emeritus, Harvard Medical School and Founder of the Schepens Eye Research Institute. He graduated from the University of Ghent and received his M.D. degree in 1935 (Thesis University Competition, Therapeutic Sciences [1933-35]: *Mechanisms of the stimulating action of the dinitroderivatives on cellular respiration*). He was a first time assistant to Léon Hambresin from 1937 to 1939. An early resistant in the second World War, he had to stop precipitately an eye operation in order to escape by running on the roof of the hospital. He reached England through Spain and was from 1939 to 1944 captain in the Belgian Air Force in England. He received ophthalmology training at Moorfields Eye Hospital (1936-37) and as Moorfields Research Scholar (1943-1944) with the DOMS granted in 1944. After a year in Moorfields he was again assistant to Leon Hambresin from 1945 to 1947. He presented his *binocular ophthalmoscope* at the Belgian Ophthalmological Society in 1945. He further extended his studies as fellow in ophthalmic research, Harvard Medical School (1947-1949) and received his Diploma in Ophthalmology from the American Board of Ophthalmology in 1950. He then served as Instructor in Ophthalmology, Harvard Medical School (1950-1952), Clinical Associate in Ophthalmology, Harvard Medical School (1953-1968), Associate Clinical Professor, Harvard Medical School (1968-1978) and Clinical Professor of Ophthalmology, Emeritus, Harvard Medical School (1978). He also has held the following positions: Senior Consulting Surgeon, Massachusetts Eye & Ear Infirmary (1972-), Founder and Director of Retina Service, Massachusetts Eye & Ear Infirmary (1949-1972), Director Emeritus of Retina Service, Massachusetts Eye & Ear Infirmary (1972-), Director of Retina Research, Eye Research Institute of Retina Foundation, Boston (1951-1983) and Member of the National Advisory Eye Council, Washington, D.C. (1975-1977). He contributed to the following professional societies as a key Member: American Association of Ophthalmology; American Academy of

Ophthalmology; New England Ophthalmological Society; Belgian Society of Ophthalmology; French Society of Ophthalmology; Ophthalmological Society of the United Kingdom; Jules Gonin Club; Retina Society which he founded; Association for Research in Vision and Ophthalmology; Schepens International Society; Brazilian Society of Retina and Vitreous. He carried out research on the stimulating action of dinitroderivatives on cellular respiration (Comptes Rendus Soc Biol 115, 1388, 1933; 118, 369, 1934; 115, 1727, Inst. J.F. Heymans of Pharmacodynamics and Therapeutics (3998, 1935). Then he became interested in optical neuritis (Ann Oculist 176, 519, 1939; Bull Soc Bel Ophthalmal 79, 115, 1940; 82, 45, 1945; Ann Oculist 179, 191, 1946; Trans Ophthalmal Soc UK 66, 309, 1947; Ophthalmologica 118, 751, 1949). For the balance of his career he concentrated his interest on retinal detachment, its examinations and its treatment, and the relations between the retina and the vitreous body. These subjects are best summarized in three of his books: *Retinal Detachment and Allied Diseases*, W.B. Saunders, Philadelphia, 1983; *Atlas of Vitreous Biomicroscopy*, Butterworth-Heinemann, Boston, 1999, and *Schepens' Retinal Detachment and Allied Diseases*, Butterworth-Heinemann, Boston, 2000. He has published numerous original articles, and some examples of the books he edited are *Importance of the Vitreous Body in Retina Surgery*, C.V. Mosby, St. Louis, 1960; *Controversial Aspects of the Management of Retinal Detachment* (co-edited), Little Brown, Boston, 1965, *The Vitreous and Vitreoretinal Interface* (co-edited), Springer-Verlag, New York, 1987. He established an excellent training course in vitreo-retinal diseases at his Institute, and many Schepens fellows spread all over the World and are teaching as professors in many Countries. He is a recipient of numerous honor awards, that include Winner of "*Concours Universitaire*" of Belgium in Therapeutic Sciences (1935), *Medaille des Evades*, Belgium (1946), *Croix de Guerre*, France (1948), Honorary Member, Instituto Barraquer (1948), *Croix de Guerre* Belgique (1959), Honorary Member, The Australian College of Ophthalmologists (1952), New England Ophthalmological Prize for outstanding Work in the Field of Ophthalmology (1955), Honorary Degree, Doctor of Science, Middlebury College, Middlebury, Vermont (1956), Honorary Degree, Doctor of Science, Pfeiffer College, Misenheimer, North Carolina (1973), Honorary Member, Penido-Burnier Institute, Brazil (1973), Honorary Degree, Doctor of Science, Suffolk University, Boston (1974), Dr. Luis F. Perez-Martinez Memorial Lecture, Cuban Ophthalmological Society in Exile (1979), Memorial Lecture, Kansas Medical School, Department of Ophthalmology (1980), American Academy of Ophthalmology, Jackson Memorial Lecture (1980), Honorary Doctorate Degree, University of Pennsylvania School of Medicine (1982), Honorary Doctorate Degree, Jacksonville University (1984), Honorary Doctorate Degree, Thomas Jefferson University, Philadelphia (1985), Plantin Award for outstanding work abroad; Antwerp, Belgium (1985), Honorary Doctor of Science degree from Lehigh University (1987), Honorary Member and first gold medal, Fondacion Oftalmologica Nacional, Bogota, Colombia (1988), Albrecht von Graefe Award, Society for Contemporary Ophthalmology, Hollywood, Florida (1988), Festschrift honoring Doctor Schepens, New England Ophthalmological Society (1988), Foreign Correspondent at the Royal Academy of Medicine, Brussels (1989), Hermann Wacker Prize, Club Jules Gonin, Lausanne, Switzerland (1990), Everett L. Goar Memorial Lecture, Houston Ophthalmological Society Meeting (1991), Honorary Member of the Sociedad Dominicana de Oftalmologia (1993), One of the Ten Most Influential Ophthalmologists of the Twentieth Century (Living or Dead) by American Society of Cataract and Refractive Surgery (1999) and Award by Ophthalmology Times - *The Ten Greatest Living Ophthalmologists* - Millennium Awards (1999). In recognition of his outstanding contributions, many Governments conferred on him their National Orders, and they are Officer of the Order of Leopold (Belgium, 1960), Honorific Commandantore (Italy, 1981), Order of Merit de Duarte, Sanchez y Mella (Santo Domingo, 1983), Commandeur de l'Ordre de la Couronne (Belgium, 1985) and Commandeur de l'Ordre de Leopold (Belgium, 1988) (Schepens Retina Associates, 100 Charles River Plaza, Suite 201, Boston MA 02114, U.S.A. Fax: +1-617-523-0878)

Schevensteen, Auguste *see* **Van Scheventeen**

Schiess-Gemuseus, H. (1833-1914) Swiss ophthalmologist from Basle. He had the chair of ophthalmology in Basle, and, after retiring, became totally blind. He received his M.D.

in Basle in 1856, studied under A.v.®Graefe in Berlin and was professor of ophthalmology in Basle from 1867-1896. He founded the *first* eye hospital in Basle 1864 and was its director for over thirty years. Schiess was the author of numerous articles and monographs on pathology of the eyes: *„Kranke Augen , in 30 Bildern Dargestellt und beschrieben für Aerzte und Studirende“* , Basel 1876, *„Kurzer Leitfaden der Refractions- und Akkommodations-Anomalien.Eine leicht fassliche Anleitung zur Brillenbestimmung.“* Wiesbaden 1893. The Ophthalmoscope, 1915,p.312. Albert:Source Book of Ophthalmology,p.303.

Schiferli, Rudolph Abraham (1773-1837) 18th century Swiss obstetrician and surgeon, who devoted much attention to ophthalmology. Born at Thun, Switzerland, he received his professional degree at Jena in 1796, presenting as dissertation "*De Cataracta*." After a brief period of graduate study in Paris, he became Chief Field Surgeon in the Swiss Army, a position which he held throughout the war with Austria. After he had held a number of other state and military positions, he was appointed in 1805 professor of surgery and obstetrics at Bern. Late in life he retired to Elfenau, where he died.American Encyclopedia of Ophthalmology 15,p.11564

Schiff-Wertheimer, Suzanne (1895-1958) French ophthalmologist, pioneer in retinal detachment surgery. She was native of Lyons, where her father was a physician and her brother Pierre (1892-1982) was an esteemed professor of neurosurgery. MD, Faculte de Medicine, Paris, with an important thesis, *Les Syndromes hemianopsiques dans le ramollisement cerebral* (1926). Wertheimer married the psychoanalyst and war hero, Paul Schiff. Studied with Henri Vaquez, Pierre Marie, Charles Foix, and Paul Bailliart. Schiff-Wertheimer became Chef de serviceat the Quinze-Vingtsin Paris (1934-1958). She narrowly escaped from the Gestapo while continuing to work at the Quinze-Vingts during World War II. Mme.Schiff-Wertheimer was well known for her charm, devotion to patients, surgical skill, teaching and research. She was the author of about 100 case studies in the *Annales d'oculistique* and *Archives d'ophtalmologie*. She co-authored, with Marc Amsler, the section on retinal detachment in *Traite d'ophtalmologie* (1939). She co-authored with L.Guillaumat, G. Offret and A.Dubois-Poulsen the section ophthalmology in *Collection Medico-Chirurgicale*: *Ophtalmologie* (1953) and with A.Busacca and H.Goldmann: *Biomicroscopie du corps vitre et du fond de l´oeil* (1957). (Ann d'Ocul 1959; 192: 317-318; Arch d'Ophtal 1959; 19: 181-184; Bull Mem Soc Fr Ophtal 1959; 72: cxii-cxiv) (James Ravin)

Schindler, Heinrich Bruno (1797-1859). German surgeon and ophthalmologist, grandson of Heinrich Wilhelm S. and son of Heinrich Traugott Schindler. Born at Greiffenberg, in Silesia, he studied at Dresden and Breslau, receiving his professional degree at the last-named institution in 1819. His dissertation, on this occasion, was "*De Iritide Chronica, ex Keratonyxide Orta*." Even before his graduation he had become assistant at the Breslau surgical clinic. Settling in his native town, he became a famous operator, especially on the eye. In his latter years he was Sanitary Councillor and President of the Society of Physicians of Silesia. Among his writings, which are very valuable, the following should be especially noted: 1. *Ueber Entzündung der Kapsel der Wässrigen Feuchtigkeit, über Iritis Chronica als Folge der Keratonyxis und über die Kapsel selbst.* (Langenbecks Neue Bibl. f. Chir. und Augenh.II, p. 401-417, 1819). 2. *Neurologisch-tberapeutische Ophthalmologische Andeutungen.* (v. Graefes und v. Walthers J. der Chir. u.. Augenh., XII, p. 165-271, 1828). 3. *Reminiscenzen aus der Praxis der Augenkrankheiten.* (1832). 4. *Die Entzündungsformen der Menschlichen Hornhaut.* (Ammons Monats-Schr., 1838). 5. *Zur Lehre von den Traumatischen Augen-Entzündungen* (Ammon's Zeitschr. f. Ophthalm., V, p. 54-72, 1837). 6. *Die Neuesten Richtungen in der Augenheilkunde*. (Ammons Monats-Schr., II, p.111, 1839). 7. *Resorptio Cataractae Spontanea*. (Ammons Zeitschr. f. Ophthalm., V, 1837). 8. *Die Lehre von den Unblutigen Operationen, Ahaematurgia.* (2 Vols., Leipsic, 1844). American Encyclopedia of Ophthalmology 15,p.11564

Schirmer, Rudolph (1831-1896) German ophthalmologist. Born at Greifswald, Germany, he received his medical degree at the Greifswald University in 1856. After a "Wanderjahr" at Göttingen, Berlin, Paris, and Vienna, he returned to Greifswald, where he settled as ophthalmologist. In 1860 be became the first teacher of ophthalmology in Greifswald.

Seven years later, his chair was made an extraordinary professorship, and in 1873 an ordinary one. He was also Director of the University Hospital for Eye Diseases. Schirmer was an operator of great skill, but not a prolific writer. Among his compositions, are *"Die Lehre von der Refractions-und Accommodations-Störungen des Auges"* (Berlin, 1866) and "*Die Krankheiten der Thränenorgane*" (Graefe-Saemisch *Handbuch der ges. Augenheilkunde*, 1st ed.)

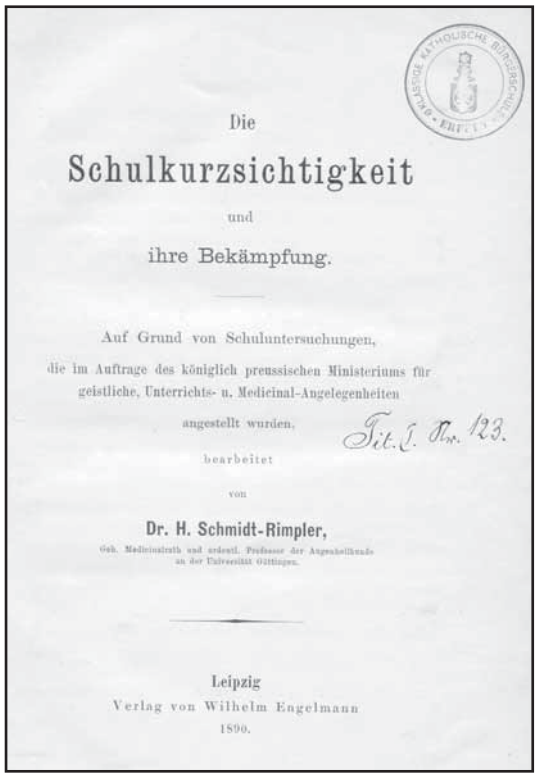
Schlagintweit, Wilhelm August Joseph (1792-1854) German ophthalmologist. Born at Regen, Germany, he received his medical degree at Landshut in 1816, presenting as dissertation "*De Cataractarum Origine*. " Devoting himself almost exclusively to ophthalmology, he settled in Munich and became a renowned operator. In May, 1822, he founded in Munich a private infirmary for eye diseases, of which he was the first superintendent, and in which, although an institution of sixteen beds in 1852, much excellent work was done. His ophthalmologic writings are: 1. *Ueber den Gegenwärtigen Zustand der Künstlichen Pupillenbildung in Deutschland.* (Munich, 1818). 2. *Erfahrungen über mein Iriankistron*. (Rusts Mag., 1820, VIII*).* 3. *Jahresberichte über die Privatheilaustalt für Augenkranke.* (Munich, 1822-1854) 4. *Die bösartige Augenentzündung der Neugeborenen etc.* München 1852. American Encyclopedia of Ophthalmology 15,p.11565

Schleich, Gustav (1851-1928) German ophthalmologist born inWaldenbruch, near Stuttgart. He was a pupil of Liebermeister and of Nagel at Tübingen and received there his medical degree. He was first employed at the medical, later at the ophthalmic clinic becoming, in 1880, lecturer and in 1884 professor of ophthalmology. He became (1889) professor at the veterinary high school in Stuttgart and 1895 Professor and Chairman at Tübingen. He became emeritus in 1921. Schleich was mainly interested in clinical ophthalmology and veterinary ophthalmology and wrote: *Beitrag zur Lehre der Myopie* Tübingen 1882; *Das Sehvermögen der höheren Tiere* Tübingen 1896;*Tieraugenheilkunde* Berlin 1922.JPW

Schmidt, Johann Adam (1759-1809) German anatomist, surgeon and ophthalmologist of Vienna, who invented the term "*iritis*," and did much to advance our knowledge of that disease. He also wrote extensively on the various affections of the lachrymal apparatus. Born at Aub, near Würzburg, Germany, he was apprenticed in his fourteenth year, very much against his will, to a private instructor in anatomy and surgery. Afterwards, however, he learned to love the medical profession, and became an enthusiast in everything connected with the art of healing. In his eighteenth year he ran away, and joined, as assistant surgeon, the Austrian regiment of the Grand Duke Charles. In 1779 he was stationed in the garrison at Vienna, and, while in that city, he studied anatomy with Barth, surgery with Leber, and internal medicine with Stoll. Under all these teachers he was an earnest and capable student. In 1780 Schmidt was appointed clerk to the Sanitary Division of the army, in which position he remained for more than five years. On August 11, 1788, he became extraordinary instructor in anatomy and surgery and prosector at the Joseph's Academy in Vienna. In 1789 he received his medical degree. In the very same year (it was 1789) that the Emperor Joseph II, instructed Barth to educate two young physicians as specialists in ophthalmology, there being at the time, in addition to Barth, no expert on this subject throughout the whole of his domains. Barth was given the privilege of selecting the physicians, either from within or from without the Austrian Empire. He was also granted a yearly allowance of a thousand guldens for the maintenance and education of these ophthalmologic students. Barth chose his prosector, Ehrenritter and Schmidt, the subject of this sketch. In 1795 he was appointed full professor at the Josephinum, as well as Field-surgeon-in-chief of the armies in Austria and Italy. In 1801 he founded with àHimly the *"Ophthalmologische Bibliothek,"* the first ophthalmologic journal in history. In 1807 he received the honorary M.D. from the University of Würzburg. He died of typhoid fever. Aside from works of a general character, his most important writings are as follows: 1. *Ueber Nachstaar und Iritis nach Staar-Operationen.* (Wien, 1801). 2. *Ueber die Krankheiten des Thränen-Organs.* (Vienna, 1803). 3. *Ueber eine Neue Heilungsart der Augenliderlähmung und des Anhaltenden Augenlidkrampfes.* (Abh. d. Josephs-Akad., II, p. 365, 1801). 4. *Prüfung der von Herrn D. Beer bekanntgemachten "Methode, den Grauen Staar sammt der Kapsel Auszuziehen."* (J. f. d.

Chir., Geburtsh. und Gerichtl. Arzneikunde.III, 3, pp. 395-446, 1801). 5. *Praelectiones de Morbis Oculorum Professoris Adami de Schmidt.* (1801). 6. *Ansicht der Ophthal-monosologie und Ophthalmiatrik als Theorie und Kunst im Jahre 1801*. (Ophth. Bibl. von Himly u. Schmidt, I, 2, 1802, pp. 1-66). 7. *Ueber Herrn D. Beer's Antwort zur Vertheidigung seiner Handgriffe, die Staar-Linse samt der Kapsel Auszuziehen.* (Vienna, J. f. d. Chir, Geb., etc.IV, pp. 17-26, 1802). 8. *Ueber Pupillen-Bildung durch Einschneidung, Ausschneidung und Ablösung der Iris*. (Ophth. Bibl. von Schmidt u. Himly, 1803, II, 1). 9. *Beschreibung einer Merkwürdigen Abnormen Metamorphose des Augapfels*. (Ophth, Bibl. II, 1, p. 54-72, 1803). 10. *Reihen von Krankheitsformen, deren Substrat die Conjunctiva des Menschlichen Auges ist.* (Ophth, Bibl.,III, 1, 1-74, 1805). 11. *Augenlid-Tripper*. (Ophth. Bibl., 111, 2, 107-192, 1806). 12. Des Herrn D. Beer, zu Wien, Antwort auf des Herrn Rath und Prof. Schmidt's Prüfung s. Methode, den Staar mit der Kapsel Auszuziehen. (J.f.d. Chir., Geburtsh, etc., III, pp. 654-667, 1801). 13. *Der erste Gelungene Versuch, den Ueberwiegenden Expansionstrieb der Iris,* etc. (Ophth. Bibl.,III, 1, p. 178, 1805). American Encyclopedia of Ophthalmology 15,p.11566-11569

Schmidt-Rimpler, Hermann (1838-1915) German ophthalmologist. Pupil of A.v.Graefe and assistant both in the Master´s private clinic and in the Berlin Charité. In 1871 Schmidt-Rimpler was appointed extraordinary professor of ophthalmology in Marburg, where he became, two years later, ordinary professor. In 1885 he opened a new fourty-four bed eye clinic due largely to his efforts. He became rector of the University of Marburg in 1880. Most of Schmidt-Rimpler´s scientific work was accomplished during his time in Marburg. Schmidt-Rimpler also became vice-mayor of Marburg and using his political influence he improved public hygiene, schools and care for the blind. He accepted 1890 a call to Göttingen , and one year later to Halle a.S. where he later died. During the year 1905/06 he became also Rector of the Halle University. Schmidt-Rimpler wrote: 1. „*Die Erkrankungen des Auges im Zusammenhang mit anderen Krankheiten*“ Wien 1898 (in Nothnagel´s *Handbuch der Speziellen Pathologie und Therapie*) and a second edition in 1905; : 2. *Glaucom und Ophthalmomalacie.* (Graefe-Saemisch *Handb.*, Leipsic, 1873). 3. *Augenheilkunde und Ophthalmoscopie*. (Braunschweig, 1884;2nd ed 1886, 6 ed., 1894; trans. into English (Amer.ed.1889), Italian, and Russian). 4. *Die Erkrankungen des Auges im Zusammenhang mit anderen Krankheiten.* (Vienna, 1898). 5. *Die Schulkurzsichtigkeit und ihre Bekämpfung*. (Leipsic, 1890). 6. *Ueber Blindsein.* (Breslau, 1882). and further more than 140 articles.; The Ophthalmoscope, 1916,p.56.[GM 5943]; Albert:Source Book of Ophthalmology, p.306. R. Franz:Deutsche Ophthalmologische Gelehrte 16-19.American Encyclopedia of Ophthalmology 15,p.11569-11570


Die

Schulkurzsichtigkeit

und

ihre Bekämpfung.

Auf Grund von Schuluntersuchungen,
die im Auftrage des königlich preussischen Ministeriums für
geistliche, Unterrichts- u. Medicinal-Angelegenheiten
angestellt wurden,

bearbeitet
von

Dr. H. Schmidt-Rimpler,

Leipzig
Verlag von Wilhelm Engelmann
1890.

Schmucker, Johann Leberecht (1712-1786). German, Prussian military physician of some importance ophthalmologically. He studied in Berlin and Paris, became "General-Chirurgicus," and was extremely active in a medical and surgical capacity throughout the Seven Years War. A keen observer and skilful operator, he was also a clear and forceful writer, and his *"Chirurgische Warnehmungen"* (Berlin and Stettin, 1774) and *"Vermischte Chirurgische Schriften" (3 vols.*, Berlin, 1776-'82) constitute veritable mines of accurately observed and well-expressed experience. In the latter of these works, the author presents a highly valuable treatise on the cure of "Black Cataract."American Encyclopedia of Ophthalmology 15,p.11570

Schnabel, Isidor (1842-1908) Austrian ophthalmologist, renowned especially for his studies in internal eye diseases. Born at Neubidschow, Bohemia, he received his medical degree at Vienna in 1865. His graduation thesis was entitled "*The Position and Size of the Upright Retinal Image.* " He was then for a time assistant to àJaeger, soon thereafter becoming privatdocent for ophthalmology at the University. In 1877 he was made professor ordinarius of ophthalmology at Innsbruck, and in 1887 was called to the like chair at Graz, in 1892 at Prague, and, at length, in 1896, at Vienna, in succession to the great Stellwag von Carion. He also was the inventor of an ophthalmoscope. American Encyclopedia of Ophthalmology 15,p.11572; Schett/*The Ophthalmoscope*,vol.1,p.100.

Schneideman, Theodore B. (1861-1931) American ophthalmologist. His parents having come from North Germany to Philadelphia, Schneideman was educated in the schools of that city and at Princeton College, where he gained a fine knowledge of mathematics, and worked with Professor Young. His medical training was gained at Jefferson Medical College, where he received his M.D., in 1883. His knowledge of optics naturally turned his attention to ophthalmology. He was placed in charge of the eye service at St. Christopher's Hospital for Children, and soon after became a clinical assistant at the Philadelphia Polyclinic. His faithful performance of every duty, and keen interest in teaching, rapidly brought promotion to Chief of Clinic, Instructor, Adjunct Professor, and in 1897 Professor of Ophthalmology, in that institution. He was, also, Assistant Surgeon at Wills Hospital from 1890 to 1898. His knowledge of optics made him the first to appreciate and teach the use of the cross-cylinder, as a practical advance in the measurement of refraction. Although he had good surgical judgment and operative skill, he had no ambition to be known as a great operator; but devoted his attention rather to refraction, muscle anomalies and the medical aspects of ophthalmology. He read widely, and his excellent knowledge of French and German made him a valuable contributor and collaborator in the conduct of ophthalmic journals. He became the first collaborator to assist the editors of the *Ophthalmic Year Book* in 1907, and continued his editorial assistance until it was finally embodied in the *American Journal of Ophthalmology*. As a collaborator of this journal he continued his interest in it and service to his profession, until the last year of his life. From the beginning of his professional career he took an active interest in general and special medical societies. He became a member of the American Academy of Ophthalmology and Otolaryngology in 1904, and continued a member until his death. He joined the American Ophthalmological Society in 1898, and resigned his membership in 1930 because of inability to attend its meetings. His activity in society meetings may be gathered from the list of his published papers. He was never a voluminous writer, and only wrote when he had something worth bringing to the attention of the profession. His abstracts, prepared for the *Ophthalmic Year Book* and the Am J. Ophthalmol. , illustrate his clear and accurate thinking, his unusual selective judgment of what was important, his careful translation, and his mastery of English. Schneideman had a good preliminary education and with his keen sense of medical ethics quickly came to appreciate his professional responsibility toward every patient. On this basis he quickly gathered a good practice, and his patients continued to return for his advice over long periods of years. His duties as a practitioner limited what he might have done in other directions. Some of his papers were: *Ointment of yellow oxide of mercury*. Philadelphia Polyclinic, 1892, p. 118; *Acute inflammation of the lacrimal sac*. Phila. Polyclinic, 1893, p. 318; *Spontaneous absorption of cataract* Phila. Polyclinic, 1894, pp. 334-336; *Report of Eighth International Ophthalmological Congress, Edinburgh, August, 1894*. Phila. Polyclinic, 1895, pp. 336, 345, 354,365; *Opacity of lens after injury*. Reports of Wills Hospital, v., 1, 1895; Clinical Lectures*: Extraction of cataract, Optic neuritis, Glaucoma*. Phila. Polyclinic, 1895, p. 141-143; *Skiascopy*, Phila. Polyclinic, 1895.,p. 406; *Antisepsis and asepsis in ophthalmic surgery* Phila. Polyclinic, 1897, p. 276; *Operative treatment of high myopia*. Phila. Polyclinic, 1897, p. 289; *Pupillary inequality in health and disease*. Phila. Polyclinic, 1898, pp. 1-418; *The crossed cylinder*. Ophthalmic Record, 1900, p. 169; *Central superficial choroiditis*. Ophthalmic Record, 1904, p. 413; *Spontaneous hemorrhage into vitreous*. Trans. Amer. Academy of Ophthalmology and Otolaryngology, 1905, p.109; *High hyperopia*. Trans. Amer. Acad. - Ophth. and Oto-Laryngology, 1906, p. 125; *Pseudo-optic neuritis*. Ophthalmic Record, 1908, Nov.; *Double paralysis of motor oculi*. Trans. Amer. Acad. Ophthalmology and OtoLaryngology, 1909, p. 211; *Paralysis of third nerve in both eyes*. Ophthalmology, 1910, p. 428. He wrote with Lucien Howe, and H.F. Hansell,: *Report of Committee on collective investigation concerning ocular muscles.* Trans. Section on Ophthalmology, Amer. Med. Assn., 1921, p. 311 and with H.F. Hansell, *Luetic ophthalmitis*. Trans. Amer. Ophth. Soc., 1922, p. 270. Further: *Correction in ametropia and heterophoria*. Atlantic Med. Jour., 1925, p. 150. AJO 1932,15:255-256

Schneider, Eugen (1795-1874) German surgeon and professor of anatomy at Landshut, Germany, of a slight importance in ophthalmology because of his *"Das Ende der Nervenhaut im Menschlichen Auge"* (Munich, 1827). He was born in Tischenreuth, Upper Palatinate, and received his medical degree at Würzburg in 1820.American Encyclopedia of Ophthalmology 15,p.11572

Schneller, Moritz (1834-1896). German ophthalmologist. Born at Heinrichswalde, East Prussia, he studied at Königsberg, Vienna and Berlin, receiving, however, his medical degree at the first named institution in 1854. In 1855 he settled as ophthalmologist in Danzig, where he soon was widely known as an operator. In 1855 he founded, with àNagel, a private eye infirmary, whose director he at once became, so remaining until his death. He was one of the first to understand the advantages of the ophthalmoscope, an instrument which he improved materially. He had peculiar views regarding specialisation, the chief of which was that every specialist should remain throughout his life in general practice. He himself, in fact, lived up to this idea. His most important investigations were made in connection with medical ophthalmoscopy, heterophoria and the development of myopia in schools. His well-known "test-letters" are extremely accurate, though not in common use. American Encyclopedia of Ophthalmology 15,p.11572-11573

Schober, Herbert (1905-1975) Austrian born in Innsbruck. Schober studied physics and medicine in Munich, Innsbruck, Prague, Vienna and Hamburg. He received a Doctoral degree in philosophy in Vienna 1928 and became in that town lecturer in physics in 1933. Schober was assistant in physics at the physical institute of the Technical High School in Vienna from 1933-1935 and was guest assistant from 1935 to 1936 at the Oceanographic Institute in Göteborg. From 1936 to 1938 he was employed at the Spectroscopic Laboratory of the Physical Technical Reichsanstalt in Berlin and became in 1938 Director of the Institute for Medical Physics at the Veterinary High School in Vienna. Schober became in 1940 professor extraordinarius and director of the Institute of Applied Physics at the Technical High School in Vienna. During the war he was a member of the Marine at the Hydrographical Institute in Hamburg. After the war he was employed at the Ophthalmic Clinic of the Hamburg University under prof. Marchesani. From 1948 Schober was head of the physical department at the Tuberculosis-Research Department in Borstel. Schober received his medical degree 1950 with the thesis *Physiologisch-optische Betrachtungen über die Möglichkeiteiner stereoskopischen Röntgendurchleuchtung*. In 1955 he became professor for medical physics at the Hamburg University and 1957 professor and director of the Institute for Medical Optics at the Munich University. He was one of the most important specialists in medical optics in Germany. He contributed many chapters in different treatises: *Handbuch der Feinmechanik und Optik* (1950); *Praxishelfer für Augenärzte* (1954); *Handbuch der Radiologie* (1962) and *Der Augenarzt*, Vol.7 (1966 and 2nd edition Vol.1, 1972). He co-authored with R. Roehler *Abbilden und Sehen* (1962); with E. Ingelstam *Visual Problems in Night Traffic* (1964); with H. Schmidtke *Sehanforderungen bei der Arbeit* and with J. Rentschler *Das Bild als Schein der Wirklichkeit* (1972, translated into Dutch 1973). Schober was very well known for books he authored and which became classics: *Das Sehen* (1950, 4th ed. 1970) and *Photographie und Kinematographie in der Wissenschaft* (Hamburg 1957). He was editor from 1957 to 1971 of *Technische Informationen, Feinmechanik und Optik* and co-editor of *Röntgenblätter* (1953-1973); *Zenralblatt für Verkehrsmedizin* (1954-1961) and *Vision Research* from 1961. Klein. Mbl.f.Augenheilk.1975,167:639. JPW

Schöbl, Josef (1837-1902). Bohemian ophthalmologist. Born at Pilsen, he received his medical degree at Prague, and was for a time assistant to àHasner. Settling in Prague, he became in 1866 the Royal Bohemian oculist, and in 1883 the full professor of ophthalmology at Prague. Schöbl was a very prolific writer of journal articles, and in 1898 composed "*Diseases of the Retina*" for Norris and Oliver's *System of Diseases of the Eye*.American Encyclopedia of Ophthalmology 15,p.11573

Schoeler, Heinrich Leopold (1844-1918) German ophthalmologist born in Hellin, Livonia. He received his M.D. in 1869 at Dorpat with the thesis *Experimentelle Beiträge zur Kenntniss der Irisbewegung* and continued ophthalmologic studies at Berlin, where he became assistant to Ewers in 1870 and from 1879 until his death was professor of ophthalmology. He wrote on the physiology and surgical treatment of the eye, and devised a number of ophthalmologic instruments, including an ophthalmometroscope and stereoscope for the treatment of strabismus. He wrote with Wilhelm Uhthoff *Beiträge zur Pathologie des Sehnerven und der Netzhaut bei Allgemeinerkrankungen nebst einer Operations-Statistik 1882/1883* Berlin 1884; Zur operativen Behandlung und Heilung der

Netzhautablösung Berlin 1889; with Albrand *Experimentellen Studien über galvanolythisch-katophorische Einwirkungen auf das Auge* Wiesbaden 1894.Albert.JPW

Schoen, Johann Matthias Albrecht (1800-1870). German ophthalmologist and general practitioner. Born at Hamburg, Germany, he studied at Halle and Berlin, at the latter institution receiving his degree in 1823. Returning to his native town, he taught and practised there until 1869, when, retiring from medicine absolutely, he moved to Stuttgart. Though he never was an ophthalmologist exclusively, yet most of his practice and nearly all his publications concerned that special field. The most important of his writings are: 1. *Handbuch. der Pathologischen Anatomie des Auges.* (Hamburg, 1828). 2. *Die Erweichung im Menschlichen Auge*. (Hecker's *Annalen*, Bd. 16). 3. *Einige Worte über die neu Empfoblene Keratoplastik.* (Rust's *Magazin*, Bd. 23, 1826). 4. *Ueber Kegelförmige Hervortreibung der Hornhaut*. *(1b.*, Bd. 24, 1827). 5. *Anat. Untersuchungen von Zwei Kranken Menschlichen Augen.* (1829). 6. *Ueber farbige Augengläser,bes. Bernsteinbrillen.* (1830). 7. *Ueber die Eigentümliche Lage und Bewegung des Auges bei Krankheiten.* (Hecker's *Annalen*, 1830). 8. *Ueber Marasmus Senilis der Kapsel und Linse*. (Ammon's *Zeitschrift*, Bd. 1, 1831). 9. *Zwei Fälle von Angeborener Atrophie des Augapfels*. (Ib.) 10. *Zur Geschichte des Epicanthus.* Jb., Bd. 2, 1832). 11. *Nosologisch-therapeutische Darstellung der Gonorrhoischen Augenentzündung.* (Hamburg, 1834). 12. *Zur Pathologischen Anatomie des Auges*. (Ammon's *Zeitschrift*, Bd. 4, 1835). 13. *Beiträge zur Praktischen Augenheilkunde.* (Hamburg, 1861) 14. with W. Uthoff *Beiträge zur Pathologie des Sehnerven und der Netzhaut bei Allgemeinerkrankungen nebst einer Operations-Statistik 1882/1883* Berlin 1884. American Encyclopedia of Ophthalmology 15,p.11573-11574

Schoen, Wilhelm (1848-1917) German ophthalmologist born in Minden, Germany. Schoen studied in Bonn, Zürich, Prague, and Berlin, receiving his M.D. in 1870. Schoen was for several years assistant to Horner at the Zürich eye clinic before joining the faculty at Leipzig as lecturer (1874-1896) and then as professor of ophthalmology (1896-1917). He was particularly interested in glaucoma. He wrote: *Die Lehre vom Gesichtsfelde und seinen Anomalien* Berlin 1874; *Die Functionskrankheiten des Auges. Ursache und Verhütung des grauen und grünen Staares* 2 vols. Wiesbaden 1893-1901; *Die geschichtliche Entwicklung unserer Kenntnis der Staarkrankheit* Leipzig 1897; *Kopfschmerzen und verwandten Symptome* Wien 1903 and *Das Schielen* München 1906.Albert.JPW

Schoenlein, Johann Lucas (1793-1864). German surgeon of moderate ophthalmologic importance. Born at Bamberg, Germany, he studied at Landshut and Würzburg, at the latter institution receiving his degree in 1816. After certain scientific journeys and a period of practice at Bamberg, he qualified in 1817 as privatdocent (lecturer) in Würzburg in pathological anatomy. From 1820 till 1830 he was professor of special pathology and therapy and superintendent of the University Hospital. During this period be lectured on ophthalmology. He died in his native city of Bamberg of exophthalmic goitre. American Encyclopedia of Ophthalmology 15,p.11574

Schopenhauer, Arthur (1788-1860) German philosopher, born in Danzig (now Gdansk), studied at Göttingen, Berlin, and Jena. After an unsuccessful attempt to challenge the teachings of Hegel and establish himself as a lecturer at Berlin, he lived and worked in retirement; he died in Hamburg. Schopenhauer's pessimistic vision of man as driven by blind forces that he can neither understand nor control, of the world as a scene of competing, unsatisfied wants and ceaseless pain without purpose or meaning, is given fullest expression in The World as Will and Idea (1818). Urged by Goethe, who was himself interested, he wrote about optics and colors: *Ueber das Sehn und die Farben* Leipzig 1816 and *Exponens theoriam colorum physiologicam*. Berlin 1829 in Radius, *Scriptores ophthalmologici minores*, (German edition 1854).Albert

Schott, Gaspar (1608-1666) German compiler of works on physics and technology, born near Würzburg. Schott entered the Jesuit order in 1627 and was sent to Würzburg University, where he became the pupil and admirer of Athanasius Kircher. While a teacher of mathematics and physics at Palermo (1631-1652), he corresponded with such leading

physicists as Guericke, Huygens, and Boyle, collecting and publishing their reports of new discoveries and inventions in a series of compilations, of which the most important are *Mechanica hydraulico-pneumatica* (1657), *Magia universalis* (4 vols., 1657-1659, and many other editions), *Physica curiosa* (2 vols., 1662) and *Technica curiosa* (1664).Albert

Schreger, Christian Heinrich Theodor (1768-1833) German physician born at Zeitz, Germany. He studied law and political economy before turning to medicine; he received his M.D. in 1800 at Erlangen, where his brother, the renowned surgeon Bernhard Nathaniel Schreger (1766-1825), was teaching. He practiced in Erlangen for a decade, and subsequently was professor of chemistry and materia medica at Wittenberg; after a considerable period of service in the army in a medical capacity, he became the professor of medicine at Halle. The majority of his writings are concerned with general medicine. He wrote: *Synonymia Anatomica* Fürth 1803; *Versuch einer vergleichenden Anatomie des Auges und der Thränenorgane der Menschen* Leipzig 1810. Albert.JPW

Schroeter Paul Julius (1840-1930) German ophthalmologist born near Riesa, Germany. Schroeter received his M.D. at Leipzig in 1864 with the thesis: *Hundert Fälle von granulöser Conjunctivitis*. He was assistant to Ruete in Göttingen from 1865 to 1867, then returned to Leipzig as assistant to Coccius (1867-1872). He established an ophthalmologic practice in Leipzig in 1872, became lecture in 1873 and in 1890 was named professor at the University. Schroeter's investigations of miners' nystagmus and traumatic anesthesia of the retina are particularly noteworthy. Albert.JPW

Schubert (? – 1885) Belgian artist, the author of many magnificent lithographic portraits published in the *Annales d´oculistique*, and partly reproduced in IBBO. JPW

Schubert, Paul (1849-1905). German ophthalmologist and otologist, known especially for his work in school hygiene. Born at Neisse in Silesia, he studied at Breslau, Berlin, Würzburg and Vienna, receiving his medical degree in 1876. Three years later he settled as ophthalmologist and otologist in Nürnberg. His more important ophthalmologic writings are: 1. *Ueber Syphilit. Augenkrankheiten.* (Berlin, 1881.) 2. *Schiefsschriftfrage.* (Aertzl. Intelligenzblatt, 1881; 1882; *Berliner Klin. Wochens.*, 1884.) 3. *Schulbankfrage.* (Aertzl. Intelligenbl., 1881.) 4. *Schulbücherdruck*. (Mittheil. des vereines f. Oeffentl. Gesundheitspflege, Nuremberg, 1882.) 5. *Retinitis Syphilitica.* (Centralblatt f. pkt. Augenh., 1881.) 6. *Amaurose bei Bleivergiftung*. (Aerztl. Intelligenzblatt, 1880.) American Encyclopedia of Ophthalmology 15,p.11586

Schulek, Vilmos (1843—1905) Hungarian Ophthalmologist. Vilmos Schulek was the son of a clerk in the City of Pest. He studied medicine in Vienna. After having obtained his doctor’s degree, he visited the ophthalmological institutes of Berlin, London and Paris. From 1867, for five years, he was Assistant of Professor F.àArlt. In 1872 he was appointed to the newly established Chair of Ophthalmology at the University of Kolozsvar, and in 1874 he received an appointment as professor at the Eye Clinic of the University of Budapest. Within a short time, he became so well-known that his hospital soon proved too small, owing to the growing number of his patients. He fought tenaciously for a larger hospital and eventually succeeded in obtaining 60 beds in the central building of the Medical Faculty. Soon he came to realize that a specialized library was essential for research work and so he established a comprehensive medical library, partly from his own resources. He had many scientific publications. In 1881 he took over the Editorship of ‘Szemeszet (‘Ophthalmology’) from Ignacz Hirschler, and with a fair number of new authors he succeeded in raising the level and interest of the Journal. Recognizing the fact that the language barrier was a serious obstacle hindering the results of Hungarian ophthalmology from being known abroad, he started a German publication in 1894, entitled ‘*Ungarische Beitraege zur Augenheilkunde*’, the second volume of which appeared in 1899, and the third in 1903, containing valuable scientific material. He was a skilled surgeon, and was also active in the training of young ophthalmologists. Professor Schulek — like his great ideals, Graefe and Arlt, — established a school of ophthalmology. During his activities as Professor, over a period of 30 years, he trained such a great number of ophthalmologists that, for a long time to come, all professors and outstanding ophthalmologists came from the ranks of his students. We must consider

Professor Schulek as the greatest Hungarian ophthalmologist at the turn of the Century. Magda Radnòt:: Famous Hungarian Ophthalmologists (Budapest 1970)

Emil August Wilhelm Schultze

Schultze, Emil August Wilhelm (1840-1924) German Army Surgeon, Teacher at Tokyo University, 1874-1881. He graduated from Friedrich-Wilhelm Medical School in Berlin in 1863 and was invited to Tokyo University as a teacher of surgery. During his stay in 1875-1881, he taught very up-to-date Ophthalmology of that time, and his lecture was translated into Japanese and published in 1880. This book was used as the textbook of Ophthalmology in Japanese Medical Schools before 1887.(MS)

Schultze, Max Johann Sigismund (1825-1874). German, son of a famous anatomist and physiologist, Karl August Sigismund Schultze, and himself a distinguished anatomist of much ophthalmologic importance. Born at Freiburg, Germany, he studied at Greifswald and Berlin, returning, however, to Greifswald in 1849 in order to receive his medical degree. From 1850-'54 he was prosecutor and privatdocent in Greifswald, from 1854-'59 in Halle, and from 1859 until his death he was director of the Anatomical Institute in Bonn. His services in connection with the further development of the cell theory and to comparative anatomy and physiology were truly very great. To him, in fact (together with àBrücke and Beale), is owing the absolute rejection of the cell-membrane as an essential portion of the cell. In the words of Waldeyer, "He became thereby the creator of the modern conception of the cell." Hardly less important were his services in connection with microscopic technique. For the ophthalmologist the following articles of Schultze possess an especial interest: *Observationes de Retinae Structura* etc. Bonn 1859 and also: 1. *Note sur une Matière Colorante Existant chez Plusieurs Animaux et Identique avec la Chlorophylle Végétale*. (Compt. Rend., 1852.) 2. *Zur Kenntniss des Gelben Fleckes und der Fovea Centralis des Menschen und Affenauges*. (*1b.,* 1861.) 3. *Zur Kenntniss der Leuchtorgane von Lampyris Splendidula*. (Archiv f. Mikr. Anat., 1, 1865.) 4. *Zur Anat. u. Physiol. der Retina*. (Bonn 1866.) 5. *Untersuchungen über die Zusammengesetzten Augen der Krebse und Insecten*. (Bonn, 1868.) 6. *Ueber die Nervenendigungen in der Netzhaut des Auges bei Menschen und bei Thieren*. (Archiv f. M. Anat., V.) 7. *Neue Beiträge zur Anat. u. Physiol. der Retina*. (*Jb.,* VII) 8. *Die Retina*. (Stricker's *Handbuch der Lehre von den Geweben.)* 9. *Ueber die Retina der Neunaugen*. (Sitzungsber. der Niederrhein. Gesellsch., 1871.) 10. *Ueber den Bau der Netzhaut von Nyctipithecus Felinus*. (*Ib.,* 1872.) 11. *Ueber die Netzbaut des Störs,* (*Jb.,* 1872.) American Encyclopedia of Ophthalmology 15,p.11586-11587

Schurig, Martin (? – 1733). German physician, who paid considerable attention to ophthalmology. He received his medical degree at Erfurt in 1688, and practised at Dresden until his death in 1733. Schurig edited and elaborated Verbrugge's German translation of Guillemeau's *"Traité des Maladies de L'Oeil"* under the title, *"Der Aufrichtige Augen- und Zahnarzt, oder 113 Augenbeschwerungen mit ihren Ursachen, Signis, und Curen,"* Dresden, 1810). American Encyclopedia of Ophthalmology 15,p.11587

Schuster, Michael Philip (1860-1918) American ophthalmologist and otolaryngologist of El Paso, Texas, and founder of the Providence Hospital in that city. Born in Gyor, Hungary, in 1869, he received his medical degree in 1889 at the University of Vienna, Austria. For the next three years he was chief assistant to the celebrated Ernst àFuchs. Coming to America, Schuster settled in Kansas City, where, for a time, he was chief surgeon to the American Smelting and Refining Co. He also taught for a number of years in the Kansas City College of Medicine. Moving to El Paso, Texas, he remained chief surgeon to the American Smelting and Refining Co., a position which he held, for eighteen years. In 1905 he was President of the El Paso County Medical Society. He was also a Fellow of the American College of Surgeons and a thirty-second degree mason.American Encyclopedia of Ophthalmology 15,p.11587-11588 AJO 1919,2:167-168

Schwalbe, Gustav Albert (1844-1916) German ananatomist born in Quedlinburg, Germany. He received his M.D. in 1866 at Berlin and, after histologic study under Max Schultze in Bonn and under Wilhelm Ktilme in Amsterdam, became professor of histology at Leipzig (1871-1873) and professor of anatomy at Jena (1873-1881), Kbnigsburg (1881-1883), and Strasbourg (1883-1914). The majority of Schwalbe's many works deal with the microscopic anatomy of the sensory organs. He wrote *Die Lymphbahnen des Auges* (in Stricker´s *Handbuch*) Wien 1871; *Mikroskopische Anatomie der Sehnerven, der*

Netzhaut und des Glaskörpers (in Graefe-Saemisch Handbuch, 1st.edition) Leipzig 1874; *Lehrbuch der Anatomie der Sinnesorgane* Erlangen 1887. He wrote *Morphologischen Arbeiten* (8 volumes) Jena 1891-1898 and edited from 1892 to 1916 the *Jahresbericht über die Fortschritte der Anatomie und Entwickelungsgeschichte*.Albert.JPW

Schwartz, Bernard (1927-) American ophthalmologist of Canadian origins. Born in Toronto. Pre-med University of Toronto 1945-1947, M.D. University of Toronto 1951. M.S. degree State University of Iowa and Ph.D. degree (physiology) State University of Iowa 1959. Dr. Schwartz was a pupil of Alson E. ®Braley; Hermann M. Burian, Frederick C. ®Blodi and Placidus J. Leinfelder. He became Research Fellow , Department of Physiology, State University of Iowa 1952 and 1956-1958 , Laboratory Teaching Assistant in Medical Physiology, State University of Iowa from 1956 to 1958. Assistant Professor of Ophthalmology, State University of New York, Downstate Medical Center from 1958 to 1963 and Associate Professor at the same institution from 1963 to 1968. Bernard Schwartz then went to Tufts University School of Medicine and became there Chairman of Department of Ophthalmology from 1968 to 1990 and Professor of Ophthalmology from 1968 to 1993 at the same place. Professor Emeritus since 1993 and lecturer at Boston University School since 1968. *Publications*: Schwartz B (ed): "*Corticosteroids and the Eye*". International Ophthalmology Clinics, Vol. 6, No. 4, Little, Brown and Company, Boston, Mass., 1966. Schwartz B (ed): "*Decision-making in the diagnosis and therapy of the glaucomas*." Little, Brown and Company, Boston, Mass., 1969. Schwartz B (ed): "*Syphilis and the eye*". Williams & Wilkins, Baltimore, NW., 1970. Contributions in following journals: *Acta Opthalmol* 1986-87, 1988 (Suppl), 1993, 1995 (Suppl) ;*Am J Manag Care* 1996 ;*Am J Ophthal* 1954-55, 1981, 1987-88, 1991 ; *Ann Surg* 1979; *Applied Optics* 1989; Arch Ophthalmol 1960, 1962, 1965, 1968, 1972-73, 1977, 1980-81, 1983-84, 1986-87, 1989, 1991; *Bolletino de Oculistica* 1994 ; *Br J Ophthalmol* 1984,1995; *Brooklyn Eye and Ear Bulltetin* 1962; *Bull Soc Belge Ophthalmol* 1992; *Can J Ophthalmol* 1988; *Chibret Int J Ophthalmol* 1986; *Current Eye Res* 1997; *Doc Ophthalmol Proc* 1976, 1981, 1983, 1986-87; *Excerpta Medica* 1971,1979; *Exp Eye Res* 1984; *Eye* 1990; ;*Gen Comp Endocrinol* 1985; Graefe's Arch Clin Exp 1993; Int Ophthalmol 1983,1989; Int Ophthalmol Cl 1966 (ed.), 1994; Invest Ophthalmol 1962,1964,1982; Invest Ophthalmol Vis Sci 1978, 1983-1987, 1991; Japan J Ophthalmol 1986; J Glaucoma 1997; J Ocul Pharmacol Therapeut 1997; Klin Monatsbl Augenheilkd 1972; N Engl J Med 1978; New Trends in Ophthalmology 1986; NY J Med 1962 ; Ophthalmic Res 1997; Ophthalmology 1980-81, 1983, 1985, 1987-89, 1991-92; Ophtalmologie 1991; Photogram Eng and Remote Sensing 1979, 1986-87; S Afr Arch Ophthalmol 1973; Soc Photo-Optical Instrumen Eng 1973; Surv Ophthalmol 1975, 1979-80, 1983, 1997; Trans Acad Ophthalmol Otolaryngol 1960,1976. Professor Schwartz is interested in the history of ophthalmology. Current address : 20 Park Plaza, Ste.535, Boston, MA.02116 (USA) (AB)

Schwarz, Otto (1859-1931) German ophthalmologist born in Stuttgart, Germany. Schwarz studied medicine at Leipzig and Kiel, and after receiving his M.D. in 1886 worked as assistant to Voelkers at Kiel before establishing himself as an ophthalmologist in Leipzig. He joined the faculty of Leipzig University as lecturer (1889-1898) and professor of ophthalmology from 1898 to 1931. Schwarz wrote: *Die Bedeutung der Augenstörungen für die Diagnose der Hirn- und Rückenmarkskrankheiten* Berlin: S. Karger, 1898; *Die Funktionsprüfung des Auges und ihre Verwertung für die allgemeine Diagnostik* Berlin 1904; *Augenärztliche Winke für den praktischen Arzt* Leipzig 1904. Schwarz translated Bjerrum´s *Anleitung zum Gebrauche des Augenspiegels* Leipzig 1892 and was editor from 1902 to 1909 of the *Enzyklopädie der Augenheilkunde*. Albert.JPW.

Schweigger, Karl Ernst Theodor (1830-1905) German ophthalmologist. Born at Halle a. S., the son of Johann Salomon Christoph Schweigger, professor of physiology at the Hallean University, the subject of this sketch studied medicine both at Erlangen and at Halle. At the latter institution he received the degree of M. D. in 1852. For a time he served as assistant in internal medicine to Krukenberg. Turning his attention, however, to ophthalmology, he proceeded in 1856 to Würzburg, where, for some months, he studied with HeinrichàMüller the microscopical anatomy of the eye. In 1857-1864 he was assistant to A. vonàGraefe in Berlin. In 1860 he qualified as privatdocent for

ophthalmology at the Berlin University. In 1867-'68 he made an extensive scientific journey to Holland, England and America. Returning to Germany, he was made professor extraordinary of ophthalmology at Göttingen, as well as director of the newly founded Ophthalmic Hospital in that place. In 1871, however, he was called to Berlin in succession to vonàGraefe, who had just died. He did not, however, attain to the title of professor extraordinarius till 1873. In 1885 he was made privy medical advisor. Five years later, he retired from active service, and died, after a long and painful illness. Schweigger's ophthalmologic writings are numerous and valuable. For many years he was associated with HermanàKnapp as German editor of the newly founded *"Archives of Ophthalmology"* (*"Archiv für Augenheilkunde"),* and, in this capacity, performed much useful literary work. He also wrote *Vorlesungen über den Gebrauch des Augenspiegels* Berlin 1864 (French Paris 1865); *Handbuch der speziellen Augenheilkunde* (Berlin, 1871, American ed. 1878) which soon became a classic, and, in fourteen years, attained its fifth edition. A second book was the justly celebrated *Klinische Untersuchungen iiber das Schielen* (Berlin, 1881; Eng. trans. by Gustavus Hartridge London 1887). His more important journal articles are: 1. *Ueber Amblyopien bei Nierenleiden*. (Graefe's Archiv VI.) *2. Ueber Entstehung des, Capselstaares*. (Ib., VIII.) 3. *Beschreibung eines Demonstrations-Augenspiegels*. *(Ib.) 4. Sehproben*. (Berlin, 1877.) 5. *Beobachtungen über Netzhautablösungen*. *(Archiv f. A.,* XII.) 6. *Resection des Opticus. (Ib., XVI.)* 7. *Vordere Synechie ohne Perforation der Hornhaut*. (*Ib*., XVII.) 8. *Die Erfolge der Schieloperation*. *(Ib.,* XXIX) 9. *Glaucoma Malignum. (Ib.,* XXX*.) 10. Extraction mit Lappenschnitt nach unten ohne Tridectomie*. (*lb*., XXXVI.) American Encyclopedia of Ophthalmology 15,p.11588-11589;Schett/*The Ophthalmoscope*,vol.1,p.55

Schweinitz *see* **DeSchweinitz**

Scobee, Richard C. (1914-1952) was an energetic and cheerful young man at Washington University in St Louis with a passionate interest in straightening children's eyes. He wrote 70 papers on strabismus. He summarized what he was learning in his book *The Oculorotary Muscles.* St Louis 1947. This book had an energizing effect on the new subspecialty of pediatric ophthalmology and on orthoptic training. His tragic death at age 38 was from coronary artery disease.(*One Hundred Important Ophthalmology Books of the 20th Century* by Stan H. Thompson and Donald L. Blanchard, Wayenborgh, Ostend 2002)

Scott, John (1798-1846) British surgeon of considerable repute in the treatment of diseases of the eye. Born at Bromley, Scotland, he studied for a time at St. Thomas's Hospital, London, but later in Edinburgh, where he graduated. Returning to London, he became. in 1828, surgeon to the Ophthalmic Dispensary, and a few years later assistant surgeon to the London Hospital. He died at Brighton. A fairly good teacher, a slow and rather unsuccessful operator, Scott was nevertheless a cautious observer and a writer of valuable articles on general medicine and surgery. His only ophthalmic writing was a work of no importance, entitled *"Cataract and Its Treatment"* (London, 1843). American Encyclopedia of Ophthalmology 15,p.11672

Scott, Kenneth Mackenzie (? – 1918) A well known professor of ophthalmology at the Egyptian Medical School, Cairo. Born at Morton, Bingley, Yorkshire, he received his training in the liberal arts at the Edinburgh Academy, Edinburgh University, and King's College, London. His degree of bachelor in medicine was received at Edinburgh University in 1887. His ophthalmic training was obtained in Moorfield's and he was House Surgeon at the Gray's Inn Road Hospital. He was ophthalmic surgeon to the Kasr-el-Aini Hospital, Cairo, from 1889 to 1899. He was also one of the organizers of the Cairo Blind School. Moving to London, he became assistant ophthalmic surgeon to the West London Hospital and Consulting Ophthalmic Surgeon to St. Mary's Hospital for Women and Children. His writings are mostly on refraction and lid operations. He died in London. American Encyclopedia of Ophthalmology 15,p.11672

Scott, Rupert Strathmore (1887-1963) Consulting Eye Surgeon to St. Bartholomew's Hospital and Consulting Surgeon to Moorfields Eye Hospital, born in Australia and who went to school there. In 1906 Scott entered Caius College, Cambridge, for which he always had a deep affection. He qualified in 1913 and after serving in the first world war

returned to Barts as eye house-surgeon, later became Chief Assistant to the Eye Department, and was appointed Assistant Eye Surgeon to the hospital in 1924. On the retirement of Foster àMoore in 1937 he became surgeon in charge of the department. He was curator and pathologist at Moorfields Eye Hospital, where he became Assistant Surgeon in 1928 and full surgeon in 1933. BJO 1963,47:768

Scott, Xenophon Christmas (1842-1909) American ophthalmologist and oto-laryngologist. Born at Hayesville, Ashland Co., Ohio., he received his training in the arts and sciences at Jefferson College, Cannonsburg, Penna., receiving the degree of A. B. in 1865, and that of A. M. in 1868. After two years service in the Civil war as a private soldier, he began to study medicine in 1864, under Dr. John Weaver. Later he studied under Dr. D. H. Scott, and at the Cleveland Medical College, where he received his degree in 1867. For the next two years he was resident, physician and surgeon at various New York and Brooklyn hospitals. In 1869 he received the degree of M.D. *ad eundem* from the College of Physicians and Surgeons, New York. He then studied diseases of the eye, ear, nose and throat at Heidelberg, Berlin and London. While in Heidelberg, he was for a time first assistant ophthalmic surgeon at the University Eye Hospital. Returning to New York in 1871, he was resident surgeon for one year in the New York Ophthalmic and Aural Institute. The following year he moved to Cleveland to accept the chair of ophthalmology and oto-laryngology, at the Western Reserve University, a position which he held until his death. In 1872 he founded the Cleveland Eye, Ear, and Throat Institute of which institution he was for many years the surgeon -in-chief.American Encyclopedia of Ophthalmology 15,p.11673; The Ophthalmoscope 1909, p.878

Julius Karl Scriba

Scriba, Julius Karl (1848-1905) German Surgeon, teacher at Tokyo University, 1881-1901. He graduated from the University of Heidelberg and was a Privat Dozent of the University. He came to Tokyo University in 1881 as a successor of Schultze. He taught surgery and ophthalmology at the University and served until 1901: he retired and worked further as the Head of the Surgery Clinic of St Lukes Hospital in Tokyo. He passed away in 1905 in Tokyo. He was married to a Japanese woman and their descendant lives in Tokyo. He trained many capable Japanese surgeons, e.g. Prof. àKOMOTO Juriro, the first Professor of Ophthalmology, Dr. àINOUYE Tatsuya, Dr. àSUDA Tetsuzo and Prof. KONDO Shigeji, the first Professor of Surgery of Tokyo University. His statue is in the campus of Tokyo University together with that of Dr. Erwin Baelz. The statues are for the memory of the great contributions that they made at the dawn of modern medicine in Japan. The Government conferred on him the posthumous decoration of the First Order of the Sacred Treasures. (SM)

Sculco, Nicola (1873-1920) Italian ophthalmologist. Born in Strongoli. He studied medicine at Naples under de Vincentiis. In 1900 he went to the laboratory of public health in Catanzaro. There he worked and experimented for six years on trachoma. He obtained in 1916 the gold medal of the Medical Society of Catanzaro for his work. AJO 7:488; Archivio di Ottalmologia 29:283.

Seah, Lay-Leng (1954-) Singaporean Chinese ophthalmologist. Graduated from University of Singapore in 1978 and obtained Diploma of Fellowship of the Royal College of Surgeons of Edinburgh, United Kingdom in 1985 and Diploma of Fellowship of the Royal College of Ophthalmologists, United Kingdom in 1989. Received training in Ophthalmology at Moorfields Eye Hospital, London, United Kingdom between 1984-1985; advanced surgical training in Oculoplastics under Dr J.R.O.Colin at Moorfields Eye Hospital and Dr Tony AG Tyers at the Odstock Hospital, England between 1989-1990; and training in Orbital Surgery under Professor Jack Rootman of University of British Columbia, Vancouver, Canada in 1991 and 1996. Current professional appointments are, Senior Consultant and Head, Oculoplastic Service; Member of Management Committee and Ethics Scientific Subcommittee of Singapore National Eye Centre; Fellow of the Academy of Medicine, Singapore; Clinical Teacher of the Department of Ophthalmology, Faculty of Medicine, National University of Singapore and Member of Expert Panel, Drug Evaluation, Ministry of Health. Editorial assignment was Asia Pacific journal of Ophthalmology, vol.10, no 3, July 1998. Recent publications include, "*Orbital Cellulitis*, A Review of 17 Cases, Annal, vol. 26, 409, 97"; "*Modified Lamellar Division for Treatment of Cicatricial Upper Lid Entropion*, Asia-Pacific J. Ophthalmol. vol.10: 11,

1998". Current research interests are Three Dimensional Reconstruction of Orbital Anatomy and Thyroid Eye Disease. (Dr Seah Lay-Leng: Singapore National Eye Centre Pte Ltd, 11 Third Hospital Avenue, Singapore 168751. Phone: (65) 2277255; Fax: (65): 2277290; e-mail: snecsll@pacific.net.sg) (SM)

Searcy, Harvey Brown (1885-1964) American ophthalmologist from Alabama. Searcy received the A.D. degree from the University of Alabama in 1903 when he was 19 years of age, and the M.D. degree was awarded by the University of Michigan in 1907; postgraduate work in ophthalmology and otolaryngology was done at the University of Michigan, in Philadelphia and in Chicago. He was the first Alabamian to be accredited by the American Board of Ophthalmology, in 1920; in 1925, he was accredited by the American Board of Otolaryngology. Before World War I, he helped organize the first Druid City Hospital, which had 25 beds. During World War I he was associated with Dr. E. C. Ellett of Memphis and was the ophthalmologist for Base Hospital 115 in Vichy, France, officially sponsored by the American Academy of Ophthalmology and Otolaryngology. At the close of World War I, he studied at the Sorbonne University in Paris. He said that his knowledge of ophthalmology was enormously increased by working with Dr. Ellett and his skill was highly developed in helping the injured soldiers. Searcy invented and developed the first tonsillectome and needles and trocars for washing out sinuses, but after World War I, he limited his practice to ophthalmology. His chalazion curet and his pic for steadying the eye while making a cataract section are well-known. He was elected president of the Medical Association of the State of Alabama in 1950, an honor which his father had had before him. In 1934, he was elected chairman of the Section on Ophthalmology of the Southern Medical Association. In addition to scientific articles not limited to eye, ear, nose and throat, he wrote a humorous chronicle of his medical career and happy personal life in a small book entitled *We Used What We Had* (Colonial Press of Birmingham, Alabama). His first operation was assisting with the amputation of a human leg, and when it fell off the kitchen table, onto the ground, hovering dogs snatched it away and fled to the woods. His last operation was observing a corneal graft through the viewing piece of an operation microscope. AJO 1964,58:1076-1077

Sears, Marvin L. (1928-) American ophthalmologist and physiologist, Professor and former Chairman of the Department of Ophthalmology and Visual Science at Yale University School of Medicine, the department which he created. Sears received his B.A. from Princeton and his M.D. from the College of Physicians and Surgeons at Columbia University. An internship at Columbia-Bellevue and residency in ophthalmology at John Hopkins Hospital followed. Sears research career began as a medical student and extended through NIH fellowship sponsored by Ernst Bárány at Uppsala. Thereafter, Sears' work in adrenergic pharmacology of the eye resulted (1978) in the development and approval of timolol, a beta-adrenergic blocker, for the treatment of glaucoma. It was the first useful topical medical for glaucoma since 1908. He has received the most prestigious ophthalmic award for his research, the Friedenwald Lectureship (1977). Sears was awarded a M.E.R.I.T. grant by the National Institutes of Health from 1991 to 1998. He is the author of *Pharmacology of the Eye*, the classic in this field (Springer-Verlag *Handbook Series*, 1984) and of *Surgical Pharmacology of the Eye* (Raven Press 1985) and more than 200 articles in the scientific literature, including two innovative surgical procedures for clot removal and tumor removal from the eye, now used worldwide. Under his direction the residency at Yale earned a reputation for turning out extraordinarily well-trained ophthalmologists. Many of them later hold professorships and directorships at many universities in the U.S. and abroad. Sears also began, at the invitation of the Haitian and Bahamian Ministry of Health, two services, teaching and nutrition programs in these countries. Sears was the structural organizer together with Robert Berliner for the National Eye Institute of the National Institutes of Health. A fully endowed chair, a senior professorship, was established in his name at Yale in 1990, by patients whom he served. Sears studied biochemistry of blood clotting at the laboratories of Erwin Chargaff and Homer Smith at Columbia College of Physicians and Surgeons. On this basis, Sears developed an original method of atraumatic removal of black ball hyphema. During his elective time in medical school, Sears was attracted to Elvin Kabat, one of the founders, together with Michael Heidelberger, of modern immunochemistry. From this laboratory

came Sears' first publication, a study on the rate of turnover of antibody protein. He was accepted as a resident at Wilmer Institute, where Alan Woods, Director of the Wilmer Institute at that time (1953), had long been interested in the immunology of sympathetic ophthalmia. Sears continued his efforts with immunologically sensitized iris epithelia in culture while serving in the United States Air Force in Texas (1954-1956). Upon his return to the Wilmer residency, Sears established a close collegial relationship with neurologist and neurophysiologist Bob Teasdall and Jack MacGladery, under whose supervision he learned to perform EMG recordings from extraocular muscle. Their work confirmed that in myasthenia gravis there was a progressive fallout of motor units, but, that by contrast, in ocular myopathy, the amplitude and duration of the muscle action potential itself was greatly reduced, the first such demonstration. During residency, as a student of Louise Sloan, Sears studied the AC-A relationship. A severe war gas poison with anticholinesterases had taken place in the laboratory of Dr. David Grob, a renowned neurologist and scholar of myasthenia gravis. Sears and Sloan showed that the tonic or base level for the accommodation ratio was raised in the poisoned subjects, but that the AC/A ratio itself was flattened with the anticholinesterases. Sloan later published the observation that recession surgery to the medial recti for esotropia flattened the AC-A ratio, a new finding for the strabismus world, and one among the many original observations he has made. The tradition at Hopkins was to have the selected Chief Resident spend a prior year away. Sears broke the tradition to work at the laboratory of Ernst Bárány, where he began two works. One was a study of the nociceptive or irritative ocular response. He became the first to publish the observation that after axons were severed from their cell bodies, degeneration release of their neurotransmitter norepinephrine occurred. He addressed the synthesis and release of prostaglandins as causative for the vasodilatory induced breakdown of the blood-aqueous barrier by disrupting the tight junctions of the ciliary epithelium. These observations were seminal because they led to the universal use of nonsteroidal anti-inflammatory medicines administered prior to cataract surgery, to prevent the blood-aqueous barrier breakdown consequent to the surgical trauma. In a second most paramount limb of work begun in the Uppsala laboratory with Ernst Bárány in 1960, Sears discovered that beta-adrenergic blockers prevented the effect of norepinephrine release on intraocular pressure. The first such beta-adrenergic blocking compound, synthesized in 1958. Sears persisted studies of these beta blockers. The best blocker with the lowest Ki was called timolol. The data were published in the Friedenwald Lecture in 1977. Between 1961 and 1978, work came from Sears' laboratory, mostly all in collaboration with Gregory and Bausher, showing the centrality of adenylyl cyclase in the regulation of aqueous humor formation. These studies that culminated in the discovery of timolol and its FDA approved application in 1978. Further to Sears contributions in adrenergic pharmacology were studies upon which the clinical development of alpha 2 agonists useful for the reduction of intraocular pressure and aqueous humor formation were based. It was Larry Bausher in Sears' pharmacology lab who noted that alpha 2 agonism regulated (suppressed) the beta-receptor. An important piece of unrecognized work on the physiology of outflow done by Jocson and Sears merits attention. They injected silicone and obstructed Schlemms canal in varying degrees and showed that 15% of circumference was essential for normal outflow. This finding addresses the insidious onset of pressure dependent glaucoma, and also speaks to the surprising abrupt onset that is sometimes seen in open angle glaucoma. In 1986, Sears gave the Gifford Lecture to summarize the defects in the approach that applied study of aqueous humor dynamics to the cause for glaucoma. The shift of emphasis to the posterior segment had begun. Convincing demonstrations were done in a series of patients who had asymmetric glaucoma in which unilateral optic atrophy and field loss occurred, but in the second eye of these patient atrophy in the optic nerve head was evident without changes in the field. Sears developed three useful perfusion techniques. The first of these, done in Uppsala, was the development of intracameral constant low rate infusion. Sears proved there was no feedback pressure regulation mechanism for aqueous inflow, a finding consistent with clinical observations in acute attacks in angle closure glaucoma. The second perfusion technique was the development of close arterial perfusion of the eye without altering its blood flow or aqueous flow characteristics. Sears together with Eichi Yamada, developed the technique of perfusion of the eye via the posterior ciliary arteries to isolate the bilayered ciliary epithelium, a tissue otherwise far too complex in geometry

to study vectorial transport. Finally, Sears, together with his son Jonathan, initiated a series of investigations to show the differential expression of genes within the circadian cycle of aqueous humor formation. Among these is beta arrestin, confirming the regulatory role of the beta-adrenergic receptor in aqueous humor formation. (Yale Department of Ophthalmology and Visual Science, PO Box 208061, New Haven CT 06520-8061. Phone: +1-203-785-2715; Fax: +1-203-737-4227; e-mail: marvin.sears@yale.edu) (SM)

Sebruyns, Marcel (1912-1985) Belgian histologist, head of the histological department at Ghent university since 1953. He wrote in 1950 some papers on the *ultrastructure of pigment epithelium*, *cornea* and *lens*. (Verriest)

Secondi, Ricardo (1832-1903) Italian ophthalmologist. Born at Casale Majocco, in the Province of Milan, he studied at Pavia and Vienna, and settled at first in Pavia. Here he became assistant to àFlarer in 1857, but three years later was called to the full professorship of ophthalmology at Genoa. He was a dexterous operator, a widely celebrated teacher, and wrote many papers on ophthalmic subjects. American Encyclopedia of Ophthalmology 15,p.11684

Sédan, Jean (1891-1967) French ophthalmologist. While serving as a resident in the hospital of Marseilles in 1914, he joined the army as an auxiliary; twice wounded he received the Croix de Guerre with four citations, the Légion d'Honneur, and the Distinguished Service Order. His brother was killed in 1918; the family tradition was maintained by his son, Henry, who joined the Resistance movement and was killed in 1944. On his return from the first world war, Sédan studied in Paris and in 1923 he returned to Marseilles where he contributed richly to many aspects of ophthalmology, frequently in association with his wife, Simone Sédan-Bauby, whom he outlived. Ophthalmic surgery and therapeutics, neuro-ophthalmology, and trachoma were his principal interests, and his delightful monograph on the treatment of amblyopia was translated into several languages. He founded the eye-bank of Marseilles and was perhaps most fully known abroad as the President of La Ligue contre le Trachome, and Secretary of the International Organization against Trachoma. He wrote with Guillot and Saraux *L´exploration Neuroradiologique en Ophthalmologie* (Paris 1966), was co-editor of the *Traité de thérapeutique Médicale en ophtalmologie*, he contributed a chapter to the *Traité d´Ophtalmologie* .BJO 1968,52:432 , Annales d´oculistique 1968,201:129-131.JPW

Seefelder, Richard (1875-1949) German ophthalmologist. Seefelder graduated at Munich and started his early medical career as a regular army medical officer in the Saxon army. In 1904 he was seconded to the University Eye Hospital, Leipzig, then under àSattler. His appointment to the chair of Ophthalmology at Innsbruck University, as successor to Meller, followed his discharge from the army after the first world war in 1919. He stayed at Innsbruck for the rest of his life. In this country, as indeed almost everywhere in the ophthalmological world, Seefelder was best known as the co-author and editor with Ludwig Bach of the *Atlas zur Entwicklungsgeschichte des menschlichen Auges*. Leipzig/Berlin, Engelmann, 1911-1914, this monumental and most beautifully illustrated work became a classic. In later years he covered the same field, together with that of developmental abnormalities, in two large chapters of Schieck-Brückner´s "*Kurzes Handbuch der Ophthalmologie* " (1931). But his interests were by no means confined to this semi-academic approach to ophthalmology. In his early days at Leipzig he made a valuable contribution to the aetiology and clinical study of jequirity ophthalmia. In the late '20s and early '30s of this century he was amongst the first to establish recognition for Boeck's sarcoidosis as a separate entity in the mass of aetiologically ill-defined chronic affections of the outer and inner eye which, so long as they were not definitely syphilitic, were all somewhat summarily attributed to tuberculosis. BJO 1950,34:128

Seerig, Albert Wilhelm Hermann (1797-1862) German surgeon of moderate ophthalmologic importance. Born at Rudolfstadt a. d. Saale, he studied at Jena, Berlin, and Breslau, at the latter institution receiving his degree in 1822. For a time he was prosector in the Breslau Anatomical Theatre, became, however, in 1825, privatdocent, and in 1826 extraordinary professor, at the University. In 1836 he moved to Königsberg in Prussia, in order to accept the chair of ophthalmology and surgery at the University in that place. His only writings possessed of any ophthalmologic importance are the following: 1.

Armamentarium Chirurgicum oder Beschreibung Chir. Instrumente Älterer und Neuerer Zeit. (2 Vols., Breslau 1835-38.) 2. *Bericht über das Klin. Chir.-Augentärztl.Institut der Universität zu Königsberg für die Jahre 1836-44*. (Königsberg 1844.) American Encyclopedia of Ophthalmology 15,p.11684-11685.

Katsuzo Segawa

Segawa, Katsuzo (1929-1996) Japanese ophthalmologist, Professor Emeritus of Shinshu University. He graduated from Tokyo University in 1955 and studied Ophthalmology under Prof. HAGIWARA Hogara; he received his Doctor of Medical Sciences from Tokyo University in 1970 (thesis: *Studies of the fine structure of Schlemm's canal*, J. Jpn. Ophthalmol. Soc. 72: 1611, 1968, ibid. 73: 2031, ibid. 74: 1240, 1970). He was a research Associate at the Columbia University Department of Ophthalmology in 1965-1967 and worked with Dr. G. K. Smelser. He served as the Professor and Chairman of the Department of Ophthalmology of Shinshyu University from 1974 to his retirement in 1995. His research interest was electron microscopy of the chamber angle in glaucoma. He delivered a lecture "Fine structure of the chamber angle in primary open angle glaucoma" at the 79th Congress of the Japanese Ophthalmological Society in 1975, and also he gave the Society's Award Lecture on "*The trabecular meshwork and elastin*" at the 99th Congress of the Society in 1995.

Seggel, Karl (1837-1909) German ophthalmologist. Born at Wassertruedingen, in Mittelfranken, he studied at Erlangen, Würzburg, Jena and Berlin, taking, at last, his medical degree in 1859 at Würzburg. From 1861 till '71 he was a military physician, much of the time in active service. In 1877 he founded at Munich a military hospital, of which he was also director. He was killed in a streetcar accident at Munich. He wrote a large number of articles, which appeared chiefly in the *"Archiv für Augenheilkunde"* and in the *"Klinische Monatsblätter."* American Encyclopedia of Ophthalmology 15,p.11685 The Ophthalmoscope 1909,p.303

Seidlitz, Karl Johann von (1798-1885) Russian military and naval surgeon, who devoted considerable attention to ophthalmology. Born at Reval, he received his medical degree in 1821 at Dorpat. After a period of military service in a surgical capacity, he studied again at Paris, Montpellier, Geneva and Pisa. He was then engaged once more in military service in the Turko-Russian war, then ambassadorial physician at Constantinople, and, from 1837-47, professor at the Medico-Chirurgical Academy at St. Petersburg. Seidlitz's ophthalmologic writings are as follows: 1. *De Precipuis Oculorum Morbis Inter Estonos Obovis.* (Grad. Dis., 1821). 2. *Beitrag zur Geschichte der Agyptischen Augenentzündungen in der Russ. Flotte*.- American Encyclopedia of Ophthalmology 15,p.11686

Seiler, Burkhard Wilhelm (1779-1843) German anatomist, born in Erlangen, Germany. Seiler received his M.D. at the University of Erlangen in 1799 with the thesis *Anatomia corporis humani senilis*; after further anatomical studies in various European cities, he became prosector (1802-1807) and then professor of anatomy and surgery (1807-1817) at Wittenberg. From 1817 until his death he was director of the Medical-Surgical Academy of Dresden. Seiler's importance to ophthalmology lies in his having published the first monograph on congenital ocular anomalies: *Beobachtungen urspruenglicher Bildungs-fehler und gaenzlichen Mangels der Augen*. Dresden: Walther, 1833. He wrote also *Zergliederung des menschl. Körpers im alter.* (a German translation of his thesis in Reil´s Archiv f. physiol. VI, 1805); *De morbis senum particula particula 1-2* Wittenberg 1806-1807 ; *Observationes nonnulae de testiculorum descensu* etc. Leipzig 1817 ; *Die Gebärmutter und das Ei des Menschen in den ersten Schwangerschafts-Monaten* Dresden 1832; *De venditione medicaminum , quae fit a mercatoribus* Wittenberg 1806. Albert. JPW

Seitz, Eugen (1817-1899) German physician, Professor of Special Pathology and Therapy at Giessen University. Seitz was born in Vilbel (to-day Bad Vilbel) near Frankfurt. He studied medicine first under Conrad H. Fuchs in Göttingen, moving later to Giessen where he received, in 1842, his medical degree. He was from 1848 to 1854 lecturer in pathology and therapy in Tübingen, becoming in 1856 Professor of Special Pathology and Therapy in Giessen. He held this position with that of Director of the Medical Clinic in the same university , until 1879. He is of interest to ophthalmologists

because of his authorship of the *Handbuch der ges. Augenheilkunde* which was published in 1855 in Erlangen. A second edition (1869) was edited by Wilhelm von Zehender who remodelled and rewrote the book in a third edition in two volumes published in Erlangen 1874 and 1876. Other, non ophthalmic titles written by Seitz are: *Die Auscultation and Percussion der Respirationsorgane* Erlangen 1860; *Die Erkältungskrankheiten* (a volume on his own in Ziemssen´s *Handbuch der spec. Pathologie*, vol.XIII) 1875; with Niemeyer *Lehrbuch der speciellen Pathologie und Therapie* (many editions, the 11th being 1884 and many translations). JPW

Seki, Ryo (1924-) Japanese ophthalmologist, Professor Emeritus of Dokkyo Medical University. He graduated from Tokyo Medical College (now Tokyo Medical University) in 1945, studied Ophthalmology at the University under Prof. MAZUME Kakichi, and received his Doctor of Medical Sciences in 1951 (thesis: *Studies on color vision*. J. Jpn. Ophthalmol. Soc. 55: 814, 1951). He spent a year in 1963 at University of Ghent, and studied under Prof. J.àFrançois. On return home, he was appointed the Assistant Professor of the Tokyo Medical University and was promoted to Professor and Chairman of the Department of Ophthalmology, Dokkyo University in 1973: he served in this position until retirement in 1990. He special interest has been color vision and its anomalies, and he developed the *Tokyo Medical College (TMC) Color Vision Test* with Prof. MAZUME, and published it from Murakami Color Research Laboratory, Tokyo 1956. He published 125 original papers that include "*Studies on the treatment and counterplan for the subjects with defective color vision*. J. Jpn. Ophthalmol. Soc. 70:2087,1966". He has served the Japanese Ophthalmological Society as a Councillor (1973-1990) and the Color Science Association of Japan as the Auditor (1976-1978): he is an Honorary Member of these Societies.(SM)

Selvarajah, Sivaguru. Dato (1935-) Malaysian ophthalmologist, Professor and Head of Ophthalmology Unit, Faculty of Medicine and Health Sciences, University Putra Malaysia. He graduated from the University of Malaya (Singapore) in 1958, studied in London and received his Diploma in Ophthalmology in 1966 and then was granted the FRCS in Ophthalmology in Edinburgh in 1967. He was appointed the Head of the Department of Ophthalmology, General Hospital, Kuala Lumpur (1982-1990) and then Senior Consultant of the General Hospital (1990-1992). He played a major role in developing the Hospital into a Centre of Excellence for Ophthalmic Service and Postgraduate Training. He then served as the Professor of Ophthalmology, National University of Malaysia from 1992 to 1998. His professional assignments were Chairman of the Ophthalmological Society of the Malaysian Medical Association (1982-1988), Secretary General of the XIth Congress of the Asia-Pacific Academy of Ophthalmology (APAO) in 1987, President of the Malaysian Medical Association (1978-1979) and President of the College of Surgeons of Malaysia (1986-1990). He held executive positions in many International Organizations, e.g. President of APAO (1995-1997), Member of the International Council of Ophthalmology (ICO)(1995-1999), Advisory Council of ICO and Member of Advocacy Committee of ICO, Chairman, WHO Working Group of the Western Pacific Region in 1995,1996, and Councillor of the Confederation of Medical Associations of Asia and Oceania (CMAAO). He is on the Editorial Board of the Asia-Pacific Journal of Ophthalmology and he edited "*30th Anniversary Souvenir Book of the Ophthalmological Society of the Malaysian Medical Association: 1964-1995*" which described the detailed History of Ophthalmology in Malaysia. Dr. Selvarajah published many papers of excellence in National and International Journals, e.g. "*Medicine in Malaysia: Ophthalmology*. Med, J. Malaysia 50: 579, 1995" and "*Vision Care in Malaysia*. Proceedings of the Hoya Vision Care First International Conference: 35, 1998". He is a recipient of many honor Awards, e.g. *Distinguished Service Award of APAO* (1987), Holmes Award Lecture "*The ageing Eye: An Increasing Ophthalmic Concern in the New Millennium*" at the 17th Congress of APAO (1999), and gave many keynote or named orations. He received four Malaysian State Awards and three Federal Awards including the title DATO. (SM)

Semadeni, Bernardo (1906-1953) Swiss ophthalmologist. Born in 1906, he graduated at the University of Zürich where he remained as one of Vogt's assistants from 1932-1936, undertaking during this period extensive studies on the aetiology of radiational cataract. Thereafter he returned to Davos where eventually he became chief of the Eye Clinic of

Guardaval. In 1941 he won the Vogt Prize with a comprehensive study on ocular filariasis, and as President of the Swiss Ophthalmological Society he represented his country at the XVI International Congress of Ophthalmology in 1950.

Kiran Sen

Sen, Kiran (1894-1964) Sen was the doyen of Indian ophthalmologists and had a notable and distinguished career. Obtaining the Gold Medal for Ophthalmology at the Calcutta Medical College in 1916, he joined the Indian Medical Service in 1917 and served in the campaign in Salonika during the first world war. Thereafter he conducted practice in Chittagong, the city of his birth. From 1928 to 1930 he studied for higher degrees in Britain, obtaining the D.O.M.S. (London) in 1929 and the F.R.C.S. (Edin.) in 1930. Thereafter he returned to Calcutta where he spent the remainder of his life working in various hospitals, conducting a large private practice, and teaching. He was appointed professor of ophthalmology in the Lake Medical College in 1947, its principal in 1948, and its superintendent in 1949. He was made honorary ophthalmic surgeon to the governor of West Bengal in 1 948. In 1952 he was appointed professor of ophthalmology at the Medical College, Calcutta. In 1957 he became Professor and Head of the Department of Ophthalmology of the University College of Medicine of Calcutta. Largely through his untiring efforts, the Institute of Ophthalmology of Calcutta was opened in 1961 and he became its first director, retiring in 1963 to become Emeritus Professor. Recognition of his unique academic status was consolidated by his appointment as inspector of Postgraduate Ophthalmic Education in universities as varied as Lucknow, Bombay, Ahmedabad, Jaipur, and Aligarh. Academic work of a high order and the responsibilities of practice, however, did not prevent him from devoting much of his time to research, particularly in the prevention of blindness from such diseases as smallpox, cholera, and meningitis. For his work on nutritional disorders of the eye he was awarded the Adenwala Gold Medal in 1935, and later was made a fellow of the State Medical Faculty of West Bengal and the Indian Academy of Medical Sciences. Nor did he neglect public duties. He was one of those responsible for the inception of the Association for the Prevention of Blindness in Bengal and he served it enthusiastically throughout his life: he was president of the Ophthalmological Society of Bengal (1953-57) and of the All-India Ophthalmological Society (1955-56). In 1958 he went to the International Congress at Brussels to represent the All-India Ophthalmological Society at the International Association for the Prevention of Blindness. From 1959 until his death he attended the meetings of the International Council with the greatest assiduity and the success of the International Congress in New Delhi in 1962 was largely due to the grace and natural charm and yet complete confidence which he exercised as its President. Brit.J.Ophthal. 1964, 48:459 (SM)

Seneaux, Jean (c.1750-1834) French, Monspellensian surgeon, obstetrician and ophthalmologist. Born about 1750, he received the degree of Master of Surgery at Montpellier in 1786, and devoted himself at first to the practice of surgery in general. Owing to his failure to be appointed to the chair of surgery in the Montpellier school, he began, about 1788, to devote himself to ophthalmology exclusively. On March 1, of the same year, he began to lecture on his specialty, but, four years later, when the law of Aug. 19, 1792, put an end to colleges and universities in France, he was of course obliged to, intermit his activities as teacher. When, four years afterward, the school was re-organized, he was not included in the faculty. From this time forward he devoted himself exclusively to obstetrics and pediatrics, and, in a very short time, he was appointed professor of accouchements, diseases of women, and the physical training of children in the Monspellensian University. He died May 1, 1830, according to Hirschberg, but, according to Truc and Pansier, in the year 1834.American Encyclopedia of Ophthalmology 15,p.11691-92

Seo, Shosaku (1868–1903) Japanese ophthalmologist, assistant to the world-renowned Komoto. Having studied with Komoto, he practised with him for a time, later, however, he was appointed in 1896 the first Chief of the Eye Clinic of Taipei Hospital under the Director Dr. YAMAGUCHI Hidetaka in Formosa. Proceeding to Germany for further study in 1900, he was, for a short time, with àAxenfeld in Rostock and Freiburg. The work in Germany was later published with YAMAGUCHI Hidetaka under the titile "*Pathologisch-anatomische Untersuchung von Keratitis fascicularis und Pannus scrophulosus*, Klin. Mbl. Augenheilkd. 41:38, 1903". Acquiring tuberculosis of the scrotum, he was successfully operated on by Kraske; but, returning home, he died in 1903

of pulmonary tuberculosis. At the time of his death he was engaged in writing a text-book on diseases of the eye. American Encyclopedia of Ophthalmology 15,p.11694 ; (SM)

Serapion the Elder. Christian physician of Damascus (802-849 A.D.) who compiled in the Syrian language an immense work in twelve books and a smaller one in seven. Both works were soon translated into Arabic, and the shorter one, in various Latin editions, has been known as *Practica, Breviarium, Therapeutic Methodus, and Aggregator*. The eleventh chapter of the shorter work deals with ophthalmology, briefly but clearly, and under the following heads: (1) Ophthalmia (2) Extravasations (3) Pterygium (4) Pannus *(5)* Trachoma *(6)* Falling of the Lashes (7) False Lashes *(8)* Lid-Lice *(9)* Cataract (10) Night-Blindness (11) Ulcers. The chapter is not, on the whole, of very great value, but it is often indirectly alluded to as well as expressly cited by later Arabian authors. American Encyclopedia of Ophthalmology 15,p. 11695

Serr, Hermann (1895-1972) German ophthalmologist, born in Glarus, Switzerland. Serr became physician in Munich in 1921 and received the same year his doctoral degree with the thesis *Über einen atypischen Fall von Reitinitis pigmentosa mit ungleicher Beteiligung beider Augen*. Serr was assistant at the university eye clinics of Munich and Heidelberg between 1921 and 1932, becoming in 1924 lecturer and 1929 professor extraordinarius. From 1932 Serr was first assistant (oberarzt) at the Heidelberg University Eye Clinic, then, from 1935 scientific assistant at the University Eye Clinic in Jena. He became an ophthalmologist 1939 in Heidelberg and setlled in that town as practicing ophthalmologist and also as teacher at the University. Serr re-edited the 9th and 10th edition of Th. Axenfeld´s textbook *Lehrbuch der Augenheilkunde* in which he altered a few chapters and added one on optics. Lau-Werner 49-50, JPW

Serre d'Alais, August *see* **Serre d'Uzès, August**.

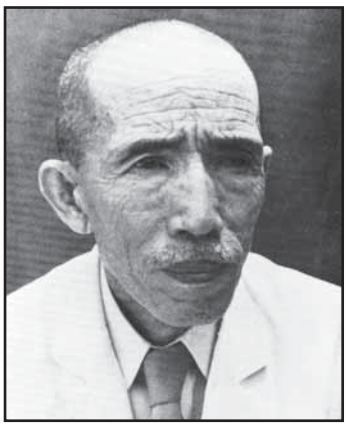
Serre d'Uzès, August (1802-1870) French ophthalmologist. He was also called Serre d'Alais. Born at Uzès (Gard) he received his medical degree at Montpellier, presenting as thesis " *Essai sur les Maladies Périodiques sans Fièvre*." He then for a number of years devoted himself exclusively to the study of ophthalmology in Paris. At first he practised in his native town, but soon removed to Alais (hence "'d'*Uzès*" and "d'*Alais*"). He invented an instrument known as the " Opsiometer, " the purpose of which was to measure visual distances. Serre's most important ophthalmologic writings are as follows: *De la Cautérization de la Cornée dans les Altérations de la Vue avec Dilatation des Pupilles.* (Archives de Méd., 1828, XVII.) 2. *Du Phosphène ou Spectre Lumineux Obtenu par la Compression de l'Oeil, etc. (Ibid.,* 4. Série, XXIV.) 3. *Sur la Phosphène de l'Amaurose et dans ses Rapports avec la Myopie et la Presbytie. (Ibid.)* 4. *Sur la Rétinoscopie Phosphenique. (Ibid., XXVI.)* 5. *Essai sur les Phosphènes ou Anneaux Lumineux de la Rétine Considérés dans leurs Rapports avec la Physiologie et la Pathologie de la Vision*. (Paris, 1853.)-American Encyclopedia of Ophthalmology 15,p. 11730; see also: P. Artières: *Le Docteur Serre (d´Uzès), médecin oculiste, maire d´Alais* (Thesis) Montpellier 1938. JPW.

Serre, August *see* **Serre d'Uzès, August**.

Serre, Michel (1799-1840) French, Monspellensian surgeon of considerable importance in ophthalmology. Born at Montpellier, he there received his medical degree in 1825, presenting as thesis "*Questions de Médecine et de Chirurgie*." He rapidly rose to the full professorship of surgery at Montpellier, a position which he filled with great ability. His most important writings are of a general surgical character. Relating to the field of ophthalmology, he wrote a number of journal articles on the cataract operation, on amaurosis, etc. American Encyclopedia of Ophthalmology 15,p. 11731

Fumio Seto

Seto, Fumio (1899-1966) Japanese ophthalmologist, Professor Emeritus of Kansai Medical University. He graduated from Kyoto University in 1924, studied at the Pharmacology Department and received the degree Doctor of Medical Science from the University in 1918 (thesis: *Intrapulmonary application of drugs*). He then studied ophthalmology under Prof. àMORI Shinnosuke and he served as the Professor and Chairman of the Department of Ophthalmology of Kansai Medical University from 1934 to 1966. (SM)



Tadasu Seto

Seto, Tadasu (1887-1959) Japanese ophthalmologist, Professor and Chairman of the Ophthalmology Department of Kumamoto University (1918-1925). He graduated from Tokyo University in 1912 and studied Ophthalmology under Prof. àKOMOTO Jujiro; he received the degree Doctor of Medical Sciences from Tokyo University in 1921 for his work on the aqueous humor. He returned to Tokyo and worked as the Head of the Eye Clinic of Sanraku Hospital and had a joint appointment as Lecturer of Tokyo University. He was very good at plastic surgery and wrote many books of ocular surgery. (SM)

Setogawa Tomoichi (1933) Japanese ophthalmologist, Professor Emeritus of Shimane Medical University. He graduated from Tottori University in 1960, studied Ophthalmology at the University under Prof.àKANDORI Fumio and Prof. àFUJINAGA Yutaka and received his Doctor of Medical Sciences in 1967 (thesis: *Studies of ERG of experimental retinitis pigmentosa of pigmented rabbits*. J. Jpn. Ophthalmol. Soc., 69: 420, 1965). He served as the Professor and Chairman of the Department of Ophthalmology of Shimane University from 1979 to 1998. He served the Japanese Ophthalmological Society as a Councillor and is Honorary Member of the Society. He is also a member of the American Academy of Ophthalmology. His many publications include "*Talc retinopathy in primates. A model of ischemic retinopathy: 1. Clinical Studies.* Arch. Ophthalmol. 99: 1273, 1981" and "*Choroidal osteoma in an infant.* Am. J. Ophthalmol. 124: 119, 1997". He is currently serving as the Director of the Shimane Rehabilitation College (Shimane Rehabilitation College: 1625-1 Nitachyo Shimane Prefecture 699-1511, Japan. phone: +81-8-5454-0001, fax: +81-8-5454-0002)(SM)

Sevrin, Georges (1900- ?) Belgian ophthalmologist. Sevrin has been the *first* belgian ophthalmologist who completely specialized in strabismus treatment. He applied successively the methods of àBangerter and of àCüppers. He translated Malbran's book in french. Among his own papers, we can cite the *treatment of amblyopia with postimages* (1955). (Verriest)

Sgrosso, P (1856-1900) Italian, Neapolitan opthalmologist. Born at Avellino, Italy, he received his medical degree in 1883 at Naples. For the next three years he was engaged in medico-military service, but in 1887 became an assistant of DeàVincentiis. Five years later he settled in Naples, where he lectured on the eye until his death. Aside from a number of journal articles, he wrote "*A Students' Guide to Ophthalmology*" (1899). American Encyclopedia of Ophthalmology 15,p.11733

Shafer, Donald McKay (1912-2001) American ophthalmologist from New York. Shafer was born in Grove City, Pa., He graduated from Columbia College in 1932 and from Cornell University Medical College in 1936. In World War II he was an Army lieutenant colonel in command of a hospital ophthalmology unit. He joined the staff of Manhattan Eye, Ear and Throat Hospital in 1948 and the faculty of Cornell University Medical College in 1958. He served as chairman of ophthalmology at both in the 1970's and retired as surgeon director emeritus of the hospital in 1979. In the early 1950's Shafer devised a procedure to detect indications of retinal detachments and tears, known as Shafer's sign. His treatment of vitreoretinal disease led to technological advances that allowed ophthalmologists to remove and replace the vitreous for the repair of complex retinal detachments.JPW

Shaikh, Ziauddin Ahmed (1949-) Pakistani Ophthalmologist serving as Professor of Ophthalmology, Dow Medical College Karachi, Pakistan since December 92. He received M.B.B.S. (Sindh) in 1972, DO (London) 1981, FRCS (Edin) 1983, FRC Ophth. (London) 1989, Active Fellow American Academy of Ophthalmology 1991. His career positions are House Officer in Cardiology, LMC Hospital, Hyderabad (1973) Medical Officer Ophthalmology, LMC Eye Hospital, Hyderabad December 73 to October 76, Locum in Ophthalmology, Dublin, Ireland February 77 to July 77, SHO in Rep. of Ireland Sept. 77 to Dec. 78, SHO in Ophthalmology / Registrar in Ophthalmology (in various Hospitals in UK) January 79 to April 84. As a teacher he served as Assistant Professor of Ophthalmology (1984), Associate Professor (1989) and Professor (1992). His current appointment is Professor of Ophthalmology, Dow Medical College and Karachi, Pakistan since Dec. 1992. His professional assignments are examiner final MBBS University of Sindh since 1985, University of Karachi since 1986, Agha Khan University -1991, examiner MCPS , FCPS-I & PMDC Certification Exam., College of Physicians &

Surgeons Pakistan, Karachi -1988. He is a member Executive Committee & life member Ophthalmological Society of Pakistan, Karachi from Dec.86 to date, Past Secretary General and International Liaison Officer from Dec.88 to Dec. 92, President elect Ophthalmological Society of Pakistan Karachi Branch since Dec 98, Life member of Pakistan Medical Association since 1986, life member & currently Secretary Sindh Graduates Association since 1986, honorary Consultant LRBT , Pakistan 1986, secretary & currently Provincial Coordinator, Sindh Provincial Committee for Prevention & Cure of Blindness since April 1993, Organizing Secretary, annual Symposium Dow Medical College, Karachi (1990), founder Organizer & Secretary, organizing committee, Karophth Annual-I 1991, Organizing Secretary, joint international meeting of Karophth-II & 16th annual Congress OSP, November 1992, organizer. facilitator, Postgraduate Training Courses for MCP/FCPS at College of Physicians and Surgeons Pakistan 1989 & 1993, facilitator / surgical faculty member, Microsurgical workshop during 12th Annual Congress of Ophthalmological Society of Pakistan February 1989, guest faculty member, Microsurgical workshop during First annual meeting of OSP, Hyderabad Zone-1993, Guest Faculty Member, Microsurgical workshop during second Chandka Zone annual Symposium Dec.94, Course Conductor, Coordinator, Ophthalmic theatre assistants, Sindh provincial Coordinator, International Council of Ophthalmology, Switzerland since 1991, member Ophthalmic Advisory Board, Pharmacia & Upjohn, Pakistan 1998, member curriculum Advisory Board, Allama Iqbal Open University, Islamabad, member Glaucoma Interest Group, Ophthalmological Society of Pakistan (1998). Member faculty of Ophthalmology, College of Physicians & Surgeons Pakistan (1998), external examiner for MS in Ophthalmology, University of Malaya, Kualalumpur, Malaysia (1999). His editorial assignments are member, editorial board of *Pakistan Journal of Ophthalmology* (1995), and published 13 articles in different Pakistani journals. His research assignments are; attended more than 19 international conferences on Ophthalmology. He received Merit Award (Gold Medal) for services in eye camps from Sindh Graduates Association (1991) and President of Pakistan Ramzan Ali Syed Gold Medal from Ophthalmology Society of Pakistan (1999). (Address: 62-B/3, SMCHS, Karachi- 74400, Pakistan. Phone: Office: +92-21-9215713 ; Clinic: +92-21- 4522910; Fax: +92-21- 4522910) (SM)

Shakespeare, Edward Oram (1846-1900) American surgeon and ophthalmologist. Born in Delaware, he received the degree of A. B. at Dickinson College in 1867 and that of M.D. at the University of Pennsylvania in 1869. At first he settled in Dover, but soon moved to Philadelphia, where he became lecturer on operative surgery at the University of Pennsylvania. In 1873 he was clerk of the Senate in Delaware. A little later he was lecturer on the refraction and accommodation of the eye and on operative ophthalmic surgery at the University of Pennsylvania. He wrote a considerable number of ophthalmologic articles, the chief of which was "*A New Ophthalmoscope and Ophthalmometer*" (*American J.Med. Sciences,* Jan. 1876). American Encyclopedia of Ophthalmology 15,p.11735

Shallo-Hoffmann, Josephine (1946-) American scientist. Josephine Shallo studied 1964-1965 at the Manhattan Medical School in New York and received there her Medical Technician diploma (MTA), 1966 National Standard; American Society of Clinical Pathologists (ASCP), 1972-75 she received her BA at Columbia University, New York and 1978 at Rutgers University her MA. She earned her PhD 1984 at Rutgers University, Institute for Cognitive Studies with the thesis "*Size perception in children; evidence for dual mode processing*". She moved to Germany and received there the title of Dr.Phil. In 1999 she became a Fellow of the American Academy of Optometry. Shallo-Hoffmann received in 1964 the New York State Regents Scholarship Award; in 1965 the Manhattan Medical School Honours Award; from 1972-1975 full tuition scholarship awarded by Columbia University; in 1975 Medaglia d'Oro Prize in Italian Studies, Columbia University; 1975 – 1977 Rutgers University; Graduate Assistantship; 1977 – 1978 Rutgers University; Research Assistantship Institute for Cognitive Studies; 1986 Travel Grant; German Research Foundation (DFG); VIth International Congress on Neuromuscular Diseases, Los Angeles, USA; 1987 Travel Grant; German Research Foundation (DFG); the Annual Meeting of the Association for Research in Vision and Ophthalmology, Sarasota, Florida, USA; 1988 Travel Grant, German Research Foundation (DFG); Third Biennial Conference of the All India Strabismological Society, Madurai, India; 1989

Travel Grant, German Research Foundation (DFG); Annual meeting of the Association for Research in Vision and Ophthalmology, Sarasota, Florida, USA; 1990 and 1992 (same as previous); 1999 Professor of the Year Award, College of Optometry, OD1; Nova Southeastern University. She had the following Academic Appointments: 1975-1977 Teaching assistant, Psychology, Rutgers University; 1978-1984 PhD Fellowship-Histologist, Max Planck Institute for Biophysical Chemistry. Director- Prof. Dr. Otto Creutzfeldt- Goettingen Germany; 1984-1989 Research Assistant- Department of Strabismology and Neuro-Ophthalmology, University of Goettingen, Germany; 1989-1992 Assistant Professor, Institute for Psychology, University of Goettingen, Germany; 1992-1996 Attached Worker Medical Research Council, Human Movement and Balance Unit, Institute of Neurology, National Hospital, Queen Square, London, United Kingdom; 1996-Dec 1998 Senior Scientist Medical Research Council, Human Movement and Balance Unit, Institute of Neurology, National Hospital, Queen Square, London, United Kingdom; 1999 – present Professor College of Optometry Nova Southeastern University, Fort Lauderdale, Florida USA. Shallo-Hoffmann is or was a member of following societies: 1965- 1992 Associate member, American Society of Clinical Pathologists; 1985-1994 Member, Deutscher Akademikerinnenbund (International Federation of University Women); 1988- 1992 Elected to: Advisory Board of the Deutscher Academikerinnenbund; 1984- present Member, Association for Research in Vision and Ophthalmology; 1986-present Member, European Brain and Behaviour Society; 1990- 1992 Member, German Psychological Society; 1988-1992 Member, Gesellschaft für Christlich-Jüdische Zusammenarbeit (Society for Christian-Jewish Cooperation; Fellow, American Academy of Optometry. She was Visiting Professor Department of Strabismology and Neuroophthalmology, University of Goettingen, November 1999, College of Optometry, SUNY State College of Optometry, NYC, Schnurmacher Institute for Vision Research Colloquia, March 2000 "*Congenital asymmetric periodic alternating nystagmus*" Following grants were awarded: 1985-1989 Deutsche Forschungsgemeinshaft - to study the inheritance of congenital nystagmus. Co-Investigator: Prof Dr H. Muehlendyck; 1998 -1999 The Iris Foundation - to investigate pupil perimetry in various optic nerve diseases. Co-Investigator: Prof Steven Smith, Dr Fion Bremner ; Nova Southeastern University, Health Professions Division *Research Grant* for a study entitled: "*Maximum Ocular Excursion in the Elderly*"; 2000 Health Professions Division Research Grant, proposal title: *A prospective study to investigate ocular motility accuracy and attention* with Dr S Coulter (in review). Selection of recently published papers: Acheson JF, Bentley CR, Shallo-Hoffmann J, Gresty MA. Dissociated effects of botulinum toxin chemodenervation on ocular deviation and saccade dynamics in chronic lateral rectus palsy. *British J of Ophthalmol*, 1998, 82: 67-71; Shallo-Hoffmann J, Bronstein AM, Acheson J, Morland AB, Gresty MA. Vertical and horizontal motion perception in congenital nystagmus. *Neuro-Ophthalmology*, 1998,19:171-183; Bremner FD, Shallo-Hoffmann J, Riordan-Eva P, Smith S. Comparing pupil function with visual function in patients with Leber's Hereditary Optic Neuropathy. *Invest Ophthalmol & Vis Sci*, 1999, 40:2528-2534 ; Okada T, Grunfeld E, Shallo-Hoffmann J, Bronstein AM. Vestibular perception of angular velocity in patients with congenital nystagmus. *Brain*: 1999,122:1293-1303; Shallo-Hoffmann J. The identification of periodic alternating nystagmus in congenital nystagmus: A review. *Delhi J Ophthalmol*: 1999, 7(3):11-14; Shallo-Hoffmann J, Faldon M, Tusa RJ. The incidence and waveform characteristics of periodic alternating nystagmus in congenital nystagmus. *Invest Ophthalmol & Vis Sci*, 1999, 40: 2546-2553 ; Shallo-Hoffmann J, Wolsley C, Acheson JF, Bronstein AM. Reduced duration of the motion aftereffect in congenital nystagmus. *Doc Ophthalmol*, 1999, 95: 301–314; Acheson J, Cassidy L, Shallo-Hoffmann, Grunfeld E, Bronstein A, Sensory adaptation to avoid oscillopsia: elevated visual motion detection thresholds in adults with acquired ophthalmoplegia. 2000; Coulter RA, Shallo-Hoffmann J. The influence of attention on ocular motility skills as measured by the developmental eye movement test. *Optometry and Vision Science*, in review; Guerraz M, Shallo-Hoffmann J, Bronstein AM, Gresty MA. Processing of visual Information in the control of stance in congenital nystagmus. *Invest Ophthalmol & Vis Sci*, in review. She has presented countless papers in national and international meetings and congresses. (AB)

Sharif, M. Ahmed (1934- 1991) Bangladesh ophthalmologist. He was born on 1st January 1934 in Madhyam Shakpura, Boalkhali, Chittagong. He passed S.S.C. (Secondary

School Certificate) and H.S.C. (Higher Secondary School Certificate) Examinations in 1950 and 1952 respectively. He became medical Graduate in 1957, and then joined the Government Service in the same year. He went to U.K. for higher study and received D.O. from London University in 1964 and F.R.C.S. from Royal College of Surgeon's Edinburgh in 1970. He came back and joined the Department of Ophthalmology, Rajshahi Medical College Hospital January, 1971. He served in Eye Department of S.S.M.C.H. (Sir Salimullah Medical College Hospital), C.M.C.H. (Chittagong Medical College Hospital), D.M.C.H. (Dhaka Medical College Hospital) and became Professor of Ophthalmology of the Institute of Postgraduate Medicine and Research in July, 1979. He was appointed as Director cum Professor of National Institute of Ophthalmology and Hospital in September, 1985 and held the position until retirement in December, 1990. He served as the Secretary General, Ophthalmological Society of Bangladesh (O.S.B.), Vice-President, O.S.B. and received Alim Memorial Gold Medal in 1988. He was the District Governor, Lions International Dist-315/A 1989-90. He was the Founder President, Sandhani International Eye Donation Society. His son Dr. Ahmed Jamil Sharif is following the father's footstep and specializes in vitreoretinal surgery in Dhaka. (SM)

Sharma, Anil Kumar (1963-) Nepalese ophthalmologist, Eye Surgeon and Vitreo-retinal Specialist at Nepal Eye Hospital, Kathmandu. He graduated from Faculty of Medicine, Patrice Lumumba Friendship University, Moscow, Russia, in 1988, and the studied Ophthalmology at Kasturba Medical College Mangalore University, India, and received his Master of Surgery-Ophthalmology in 1994 (thesis: *Postcataract surgery astigmatism-a comparative study of midlimbal and scleral incisions*). He extended studies of Vitreo-retinal surgery at Sankara Netralaya, Chennai (Madras) India, under Prof. S.S. Badrinath and completed the study in1997. He has worked at various hospitals in Nepal and involved in Eye Camps in remote areas. He has been in the present position as above since 1997. (Mailing address: G.P.O.Box 2073, Annapurna Nursing Home, Baghbazar, Kathmandu, Nepal.)(SM)

Sharma, Basanta Raj (1965-) Nepalese ophthalmologist, Chief Ophthalmologist at Lumbini Rana Ambika Eye Hospital. He graduated from Tribhuwan University, Kathmandu in 1991 with MBBS degree and then received MD. in Ophthalmology from the University in 1996. He has worked at various hospitals including teaching hospital of the university and conducted many Eye Camps in remote areas of Nepal. He has also involved in Eye Care program organized by Association of Medical Doctors of Asia (AMDA) of Nepal. He published a paper *Impression cytology of conjunctiva among Vitamin A deficient patients*. He is in the present position since1998. (Lumini Rana Ambika Eye Hospital, Siddarthnaga-3, Lumbini Zone, Nepal). (SM)

Sharp, Claudius Galen Kay (1886-1970) British ophthalmologist. C. G. Kay Sharp was a well-known ophthalmologist in Leeds; he led a varied life and was best known for his work on contact lenses. Born and educated in Leeds, he held junior hospital appointments there and then came to Moorfields Eye Hospital to study ophthalmology. During the first world war he served in the R.A.M.C. in the Eastern Mounted Field Ambulance, and subsequently went to Natal to become Chief Medical Inspector of Schools. Returning to Great Britain he was appointed consultant ophthalmic surgeon to the West Riding of Yorkshire and during the second world war he served in the Red Cross in that area. Thereafter he came to London to become director of the Contact Lens Unit of King's College Hospital and was twice president of the Contact Lens Society. He practised ophthalmology in Leeds, specializing in contact lens work, until his retirement in 1968. BJO 1970,54:768

Sharp, Samuel (c.1700-1778) British, London surgeon, who devoted much attention to ophthalmology, and who was the first (in 1753) to employ a knife in making the corneal incision of a cataract operation. Born in Jamaica, he began the study of medicine with Cheselden in London in 1724, the fee for his keep and training for seven whole years being 300 Pounds Sterling. In 1731 his apprenticeship with Cheselden came to an end, and, the year following, he received the diploma of Master in Surgery and Anatomy. For a time he was surgeon at Guy's Hospital. In 1749 he became a member of the Royal Society of London and also a Fellow of the Paris Academy of Surgery. He seems to have been a sickly man, suffering especially from asthma. In consequence of this affection he made a

number of journeys to Italy. His most important writings are as follows: 1. *A Treatise on the Operations of Surgery; a Description and Representation of Instruments, etc.* (London, 1739; 10th English ed. in 1782. There were also French (1741), Italian (Sienna 1770) Dutch and Spanish translations. The work was dedicated to his old teacher, Cheselden, to whom he was greatly attached. It contained three chapters on ophthalmologic subjects: Cataract, Iridotomy [which had been invented by Cheselden] and Lacrimal Fistula. While treating of the last-named subject, he attacked, most unfortunately, the syringing treatment of Anel. 2. *A Critical Inquiry into the Present State of Surgery.* (London, 1750; 2nd ed. 1761. There were also French, Spanish and German editions.) 3. *A New Method of Opening the Cornea in order to Extract the Crystalline Humor.* (Philos.Trans. 1755, Abridg. X.) 4. *On the Styptic Powers of the Agaric. (Ibid.)* 5. *Letters from Italy, Describing the Customs and Manners of that Country, etc*. (London, 1766.) 6. *A View of the Customs, Manners of Italy as they are Described in the Frusta Literaria*. (London, 1768.) American Encyclopedia of Ophthalmology 15,p. 11735-11736

Sharpey, William (1802-1880) Scottish anatomist and surgeon, who paid considerable attention to ophthalmology. Born at Arbroath, Scotland, he became in 1821, a member of the Royal College of Surgeons of Edinburgh, and afterward studied in London and Paris. For a number of years he practised in Arbroath. After a number of scientific journeys to the Continent, he settled in Edinburgh, where he became, a Fellow of the Royal College of Surgeons, and professor of anatomy at the Edinburgh School of Medicine and Surgery. In 1836 he was called to London as professor of anatomy and physiology at the University College, as successor to Jones Quain. In this position he remained for thirty-eight years. His only opbthalmologic writing is entitled "*Account of the Discovery byàPurkinje and Valentin of Ciliary Motions in Reptiles and Warm-blooded Animals. With Remarks and Additional Experiments*" (Edinb, 1835).American Encyclopedia of Ophthalmology 15,p.11735

Shaw, Cecil E. (1864-1913) Irish ophthalmologist who studied in London, Vienna and Paris. Became ophthalmic surgeon to the Mater Infirmorum Hospital and assistant surgeon to the Belfast Ophthalmic Hospital. He was lecturer in ophthalmology at Queen´s University. Shaw wrote a Treatise on diseases of the Eyes, published in 1895 and was co-author of Barnett´s “Accidental Injuries to Workmen”. The Ophthalmoscope, 1913, p.321.

Sherman, Harris Gray (1856-1917). American ophthalmologist of Cleveland, Ohio. He was born at Kent, Ohio. Receiving his medical degree at the College of Physicians and Surgeons in the City of New York in 1880, he settled at Cleveland in 1882 as ophthalmologist and otolaryngologist, and soon had a very large practice. He became president of the Cleveland Library Association, president of the Cleveland Academy of Medicine, and a member of the American Ophthalmological Society. He was also one of the organizers of the New England Society and of the Sons of the American Revolution in Cleveland. Sherman was known as the "father" of medical inspection in the public schools of Cleveland. American Encyclopedia of Ophthalmology 15,p. 11739-11740.

Sherrington, Sir Charles Scott (1858-1952) British scientist. Sherrington's scientific life was devoted mainly to the study of the central nervous system, the complexities of which were elucidated for the first time through his recognition that the simple spinal reflex was a unit which could be adequately studied by the experimental method. Advancing in this way from the simple to the complex and applying an experimental ingenuity which was unique with an industry and fertility of thought which were astonishing throughout a laboratory life of over fifty years, he synthesized into an integrated philosophy a subject which he had found in the early eighties of the nineteenth century a chaos of vague generalities. From the ophthalmological point of view, his crucial experiments on the reciprocal innervation of the ocular muscles and the perceptual processes involved in binocular vision will always remain fundamental landmarks in our knowledge. Nor were his life and activity confined to the laboratory: a philosopher and a poet of no mean order, an energetic man of affairs, an eminent public speaker, unspoiled by all the honours that Great Britain and the international world of science were proud to bestow upon him, he remained to the end one of the most endearing and modest of men. BJO 1952,36:280

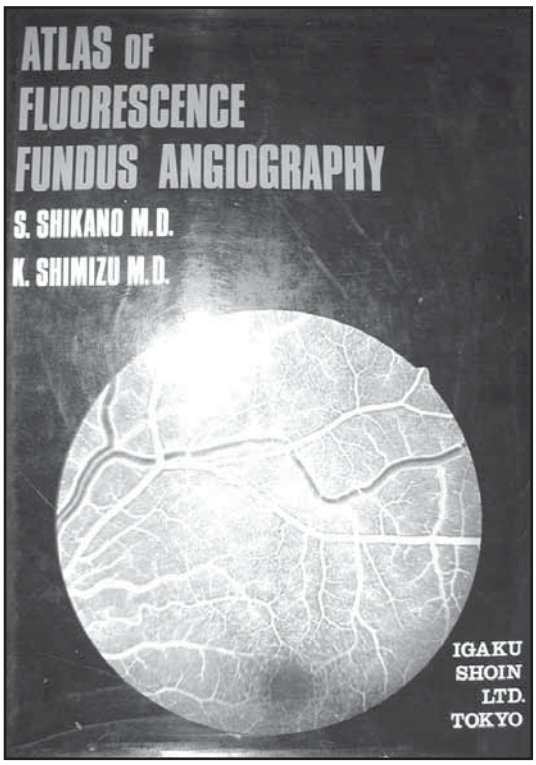
Shi, Shumin (1927-) Chinese ophthalmologist, Professor of Ophthalmology, the First Clinical College, China Medical University. He graduated from China Medical University

in 1951, studied Ophthalmology under Prof. XIA Dezhao. He served as the Chairman of the Department of Ophthalmology in 1983-1989. His main interest is the cornea and he is a member of the Corneal Disease Group of the Ophthalmological Society, China Medical Association. His many publications include "*Special Examination in Ophthalmology*, in *Modern Ophthalmology*, Jiangxi Beijing Science and Technology Press, 1st Ed 1996" and "*Clinical Observation of partial penetrating corneal grafting under autogenous lamina cornea*. Chinese J. Practical Ophthalmol. 2: 218, 1984". He has been Editor of the *Chinese Journal of Practical Ophthalmology* since 1983.(Department of Ophthalmology, China Medical University, Shenyang, China 110001) (SM)

Shichi, Hitoshi (1932-) American biochemist of Japanese origin working on the eye, Professor of Ophthalmology and Director of Research, Kresge Eye Institute, Department of Ophthalmology Wayne State University, School of Medicine, Detroit MI, U. S. A. He graduated from University of Nagoya, Faculty of Agriculture and received his Ph.D. degree in Biochemistry from the University of California, Berkeley. He worked as Assistant Professor of Biochemistry at University of Nagoya (1962-1963), at the University of Tokyo (1963-67) and as a Senior Investigator at National Eye Institute (NIH) (1967-1981). Since 1988 has worked in the present position as above. He served as a Visiting Professor at Kyoto University on US-Japan Vision Researcher Exchange Program. He gave many teaching courses at many American Universities and also abroad. His research interest has been in biochemistry in the eye, and he published many articles and books, that include *Biochemistry of Vision*, Academic Press, New York, 1983î, *Drug metabolism and biotransformation*. Pharmacology of the Eye (Ed. Sears M.L.): 117, Springer Verlag, Berlin, 1983, *Prevention of acetaminophen-induced cataract by a combination of diallyl disulfide and N-acetylcysteine*. J. Ocular Pharmacol. Therapeut. 14, 345, 1998 and *A novel glutathione peroxidase in bovine eye*. J. Biol. Chem. 273: 26171, 1998. Concurrent with his work at the University, he serves as the President of the Association for Ocular Pharmacology and Therapeutics since 1998. (Department of Ophthalmology, Wayne State University, School of Medicine, 3717 St. Antoine, Detroit , MI, 48201, U. S. A.; phone: 1-313-577-1331, fax: 1-313-577-7781, e-mail: hshichi@med.wayne.edu) (SM)

Shichida, Yoshinori (1951-) Japanese molecular biologist, Professor of Biology of the University of Kyoto, Graduate School of Sciences. He graduated from Osaka University Faculty of Science in 1974, studied the molecular physiology of vision, and received his Doctor of Science from Kyoto University in 1979. He has been in the present position as above since1998 and has many publications in the field of photobiology, e.g. "*Formation of photorhodopsin, a precursor of bathorhodopsin, detected by picosecond laser photolysis at room temperature*. Photobiochem. Photobiophys. 7:221, 1984" and "*Single amino acid residue as a functional determinant of rod and cone pigments*. Proc. Natl. Acad. Sci. USA 94: 2322, 1997". He is the Vice-President of the Japanese Society of Biophysics (1999-2000), Councillor of the Japanese Society of Comparative Physiology and Biochemistry (2000-2001) and of the Kinki Region of the Japanese Society of Zoology (1999-2000). (Department of Biophysics, Graduate School of Science, Kyoto University, Kyoto 606-8502 Japan; phone: 81-7-5753-4213, fax: 81-7-5753-4210, e-mail: shichida@photo2.biophys.kyoto-u.ac.jp)(SM)

Shikano, Shinichi (1911-) Japanese ophthalmologist, former Professor and Chairman of the Department of Ophthalmology at Tokyo University. Born as a son of the famous Ophthalmologist, àSHIKANO Bujyu (Chief Editor of the *Jpn. Rev. Clin. Ophthalmol*. 1932-1947), he graduated from Tokyo University in 1935. He studied Ophthalmology under Prof. àISHIHARA Sinobu, but he was drafted in World War II in 1937 and returned to the Department in 1941. He worked as the Professor of Ophthalmology of Tokyo Women's Medical School (now Tokyo Women's Medical College) in 1945-1948, as the Lecturer at Tokyo University in 1948-1955, as the Assistant Professor in 1955-1964 and the Professor and Chairman of the Department in 1964-1971. He received the degree Doctor of Medical Sciences in 1945 (thesis: *Serological modification of the aqueous humor in intraocular inflammation*). He worked as the Chief Editor of the Jpn. Rev. Clin. Ophthalmol. in 1947-1964, and of the Jpn. J. Ophthalmol. in 1964-1971. During the tenure of the Professorship, he served as the Director of the University Hospital. His professional activities are numerous and they are the President of the Japanese



Ophthalmological Society (1967-1971), the President of the 75th Congress of the Society (1971) and President of the International Symposium on Fluorescein Angiography (1972). He served the Royal Family as their Ophthalmologist. His research covered many areas. In the early period, he published many articles in J. Jpn. Ophthalmol. Soc. (Vol. 51,1947-Vol.59, 1955) *on the color sense and dark adaptation*. He reported the first case of Behcet's disease in Japan in 1959 and delivered a special lecture "*Pathology of Behcet's disease*, J. Jpn. Ophthalmol. Soc. 54: 2348, 1960" at the 64th Congress of the Society (*Histopathological study on Behcet's disease*, Jpn. J. Ophthalmol.4: 5,1961). With the addition of many more cases, he reported the findings in "*Ocular pathology of Behcet's disease*, Int. Symp. Behcet's Disease: p111, Karger 1966. He also studied the structure and pathology of the chamber angle and fluorescein fundus angiography (*Atlas of the Anterior Chamber Angle*, Nanzando Publ. Tokyo 1965 and *Atlas of fluorescence fundus angiography*, Igakushoin & Saunders, 1968. He gave the Special Lecture " *The eye and autonomic nervous system*" at the 73rd Congress of the Jpn Ophthalmol Soc. (J. of the Society 73: 2325, 1969). After retirement from the University, he served as the visiting Professor at Kitasato University and the Consultant to the Behcet's Disease Research Project of the Ministry of Health and Welfare and contributed to the establishment of the *Diagnostic Criteria* of this Disease (Jpn. J. Ophthalmol. 18: 291-294, 1974). In recognition of his distinguished service, the Government conferred on him the Second Order of the Sacred Treasures.(SM)

Shimizu Yoshinori (1929) Japanese ophthalmologist, Professor Emeritus of Nippon Medical School. He graduated from Nippon Medical School in 1955, studied Ophthalmology under Prof. OGUCHI Masami and received his Doctor of Medical Sciences in 1960 (thesis: *Distribution of glutathione in the eye*. J. Jpn. Ophthalmol. Soc. 66: 1498, 1962). He served as the Professor and Chairman of the Department of Ophthalmology of Nippon Medical School from 1974 to his retirement in 1995. He served the Japanese Ophthalmological Society (JOS) as a Councillor (1977-1995), President of the 8th Kanto Regional Congress of the JOS (1991), President of the 46th Congress of the Japanese Society of Clinical Ophthalmology (1992) and Committee member of the Ophthalmology Board of the JOS (1985, 1987-1989, 1993-1993). He also worked as a member of the National Medical Examination Board (1977-1987), Chairman of the JIS standardization Committee (1986) and many other Government Councils and Committees. He worked extensively on cataract, ocular histochemistry and glaucoma, and some examples of his publications are "*Distribution of glutathione in the eyeball*. Functional examination in Ophthalmologica, p. 619, Karger, Basel 1974" and "*Glaucoma and constitution*. J. Jpn. Ophthalmol. Soc. 77: 2021, 1973".(SM)

Shimizu, Kimiya (1950-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Kitasato University. He graduated from Kitasato University in 1976, studied Ophthalmology at the University under Prof. ISHIKAWA Satoshi, and then at the Department of Ophthalmology of Tokyo University with Dr. MINODA Kensei (Preoperative evaluation of vitreous surgery by combined study of ultrasonography and electroretinogaphy. Jpn. J. Ophthalmol. 25: 202, 1981). He conducted research under Prof. àMISHIMA Saiichi and received his Doctor of Medical Sciences in 1984 (thesis: *Water flow in Tenon's capsule and subconjunctival tissue of the rabbit*. Jpn. J. Ophthalmol. 28: 274, 1984). He served as the Head of the Eye Clinic of Musashino Red Cross Hospital from 1984 to 1998 when he was invited to his Alma Mater and holds the present position as above. He is a leading expert in cataract and refractive surgery and examples of his publications are "*The first PRK (photorefractive keratoplasty) by excimer laser in Japan*. Ophthalmic Surgery 5: 7, 1992" and "*Toric intraocular lenses: correcting astigmatism while controlling axis shift*. J. Cat. Refr. Surg. 20: 523, 1994". He received the First Prize Award in cataract surgery at the American Society of Cataract and Refractive Surgery (1989) and in the European Society of Cataract and Refractive Surgery (1990). He gave a lecture as a symposist at the Centennial Congress of the Japanese Ophthalmological Society (JOS) in 1996 (*"Expectations and Limitations of Refractive*

Surgery. Proceedings of the 1st International Ophthalmic Congress of the Centennial Congress of the Japanese Ophthalmological Society, 1996) and at the Centennial Congress of the American Academy of Ophthalmology in 1996 (*"Correcting Astigmatism in the Cataract Patient, Intraocular Lenses Compared to Astigmatic Keratotomy Techniques*."). He serves as a Councillor to the JOS(1995-), Executive Director to Japanese Society of Cataract Research (1989-), Executive Director to the Japanese Society of Ophthalmic Surgeons (1998-) and of International Intraocular Implant Club(1992-). He represents Japan at the International Society of Refractive Surgery (1994-). He is also a volunteer to a Social Welfare Organization, Nemunoki Gakuen and Aimeito Association and has worked on the Board of Trustees since 1996. (Department of Ophthalmology, Kitasato University, Kitasato 1-5-1, Sagamihara, Kanagawa-ken, 228-8555, Japan. phone: +81-4-2778-9012, fax: +81-4-2778-9920, e-mail: kimiyas@med.kitasato-u.ac.jp)(SM)

Shimizu, Koichi (1933-) Japanese ophthalmologist, Professor Emeritus of Gunma University. He graduated from Tokyo University in 1957, studied Ophthalmology at the Department of Ophthalmology of the University under Prof. àHAGIWARA Hogara and received his Doctor of Medical Sciences in 1964 (thesis: *Dynamics of the aqueous by suction cup method. Report* I. J. Jpn. Ophthalmol. Soc. 68: 642, 1964; Report II. ibid. 68: 1083, 1964). He was granted the Scholarship of the Ministry of Education and studied during 1960-1961 at the University of Bonn under Prof. Mueller. On his return, he was promoted Lecturer of the University in 1964, and to Assistant Professor in 1971. He was then appointed the Professor and Chairman of the Department of Ophthalmology of Gunma University in 1972 and served until retirement in 1998. He worked extensively on vitreoretinal diseases, diabetic retinopathy, laser ophthalmology and published 132 original papers and wrote 22 books. His book of *Fluorescein Fundus Angiography* (Igaku-shoin 1968) (with Prof. àSHIKANO Shinichi) is a pioneering book in the field (original in English) and was translated into other languages and referred to worldwide. In 1974, he edited the proceedings of the International Symposium on Fluorescein Angiography (ISFA) Tokyo 1972 under the title *Fluorescein Angiography* Igaku Shoin, Tokyo 1974. About the same subject, he authored *Fluorescein Microangiography of the Ocular Fundus*, Tokyo, Iagaku Shoin 1973. This atlas is to be considered as a supplement to the atlas he wrote with S. Shikano and was translated into Spanish, edited by José Simón and published by Jims in Barcelona 1975. He is also a pioneer in photocoagulation in Japan. He made a Special Report on *Laser Photocoagulation* to the 81st Congress of the Japanese Ophthalmological Society (JOS) (J. Jpn. Ophthalmol. Soc. 81,1666, 1977). He received the JOS Award in 1988 and delivered the Award Lecture to the 92nd Congress of the JOS (Malignant diabetic retinopathy. J. Jpn. Ophthalmol. Soc. 92: 1723, 1988). Some examples of his books are "*Atlas of gonioscopy*, Nanzando, 1965 (co-author:àSHIKANO Shinichi) (This is the first comprehensive textbook dealing with the chamber angle of the Japanese in health and disease)", "*Structure of ocular vessels*, Igaku-shoin 1978 (A three-dimensonal study of microangioarchitecture of the eye and adnexa using a corrosion-cast technique and scanning electron microscopy and is a *pioneer work* in this field)", "*Laser photocoagulation*, Igaku-shoin, Tokyo 1982", "*Diabetic Retinopathy*, Igaku-shoin, Tokyo 1984" and many others. He served the Japanese Ophthalmological Society (JOS) as a Councillor (1972-1998), Executive Director (1973-1999) and Chief-Editor of the Journal of the JOS (1997-1999). He also served as the Editor of the *Jpn. J. Clin. Ophthalmol*. (1972-1998), Jpn. J. Ophthalmol. (1972-1998) and of the Proceedings of the 23rd International Congress of Ophthalmology (Kyoto, 1978) and of the 13th Congress of the Asia-Pacific Academy of Ophthalmology (Current Aspects of Ophthalmology, Elsevier Publ.) (1983). He is a member of the American Academy of Ophthalmology, Deutsche Akademie der Naturforscher Leopoldina, Macula Society (U.S.A.), Club Jules Gonin and Vice-President of the Academia Ophthalmologica Internationalis (Chair XVII). He represented Asia at the 25th International Congress of Ophthalmology in Rome and delivered the Inaugural Address (in Italian) at the Opening Ceremony of the Congress. He is an Honorary Member of the JOS and serves as visiting Professor to Teikyo University. He also published 1982: *Ganka no Hon no Hon* (a Book on Books in Ophthalmology) which is fully illustrated with caricatures by PaulàHenkind. He wrote volume 7 of the *History of Ophthalmology in Japan* published for the centennal Anniversary of this society. (SM) JPW

Shinichi Shimizu

Shimizu, Shinichi (1906-1975) Japanese ophthalmologist, Professor Emeritus of Gifu University. He graduated from Kyoto University in 1933, studied Ophthalmology from Prof. àMORI Shinnosuke and received the degree Doctor of Medical Sciences in 1944. He was the Professor and Chairman of the Ophthalmology Department of Gifu University from 1945 until retirement in 1970. He organized in 1957 the 61st Congress of the Japanese Ophthalmological Society as the President. After retirement from the University, he served as the Director of Gifu Prefectural Hospital of Gero Hot Spring until his death. The Government conferred on him the posthumous Decoration of the Third Order of the Rising Sun. (SM)

Shimomura, Yoshikazu (1951-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology of Kinki University in Osaka. He graduated from Osaka University in 1977, studied under Prof.àMANABE Reizo and received his Doctor of Medical Sciences in 1984. He has been in the present position as above since 1999. His major interest is in the cornea and infectious diseases: his many publications include "*HSV-1 shedding by iontophoresis of 6-hydroxydopamine followed by topical epinephrine*. Invest. Ophthalmol. Vis. Sci. 24: 1588, 1983"and "*Identification of gene responsible for gelatinous drop-like corneal dystrophy*. Nature Genet. 21:420, 1999". His is a Councillor of the Jpn. Ophthalmol. Soc. and Jpn. Assoc. for Ocular Infection: he received the Mitsui Award at the 31st Congress of the latter Society in 1994. He is also on the Board of Trustees of the Japan Cornea Society. He is a member of the Association for Research in Vision and Ophthalmology, American Academy of Ophthalmology and Contact Lens Association of Ophthalmologists. (Department of Ophthalmology, Kinki University School of Medicine, Ohno-Higashi, Sayama, Osaka, 589-8511, Japan. phone:+81-723-66-0221, fax: +81-723-68-2559, e-mail: yoshis@med.kindai.ac.jp) (SM)

Shimo-Oku Masashi (1930) Japanese ophthalmologist, Professor Emeritus of Hyogo College of Medicine. He graduated from Kobe University in 1954 and studied under Prof.àIMACHI Jo, and received his Doctor of Medical Sciences in 1959. He served as the Professor and Chairman of the Department of Ophthalmology of Hyogo College of Medicine from 1977 to his retirement in 1998. His research interest is in Neuro-ophthalmology and he is a founding member and Director of Neuro-ophthalmology Japan. His many publications include *Analysis of Wallace mutation in patients with Leber's hereditary optic nerve neuropathy: familial study and tissue distribution.* Neuro-Ophthalmol. 16:85, 1996 and *Detection of mitochondrial DNA nucleotide 11778 point mutation of Leber hereditary optic neuropathy from archival stained histopathological preparations*. Acta Ophthalmol. Scand. 76: 14, 1998. (SM)

Hiroyuki Shimzu

Shimzu, Hiroyuki (1932-1998) Japanese ophthalmologist, Professor Emeritus of Jichi Medical College. He graduated from Tokyo University in 1957, studied Ophthalmology from Prof. HAGIWARA Hogara and received the degree Doctor of Medical Sciences from the University in 1964 (thesis: *Uptake and distribution of ascorbic acid in the eye*, J. Jpn. Ophthalmol. Soc. 78: 1065; 1070; 1470, 1964). He carried out research at the Institute of Ophthalmology in London in 1965-1966 and at Columbia University, College of Physicians and Surgeons in1966-1968: he published the work "*The isolation of whole cells from the ciliary epithelium together with some observations of the metabolism of the two cell types*. Exp. Eye Res. 6:141,1967. He served as the Professor and Chairman of the Ophthalmology Department of Jichi Medical College from 1974 until retirement in 1998. He was a pioneer in Microsurgery and Retinal Detachment Surgery in Japan and wrote many articles on this subject. He is the author of 8-volume book "*Ocular Surgery*" Kanehara Publ. Co. Tokyo 1996. He was a member of Jules Gonin Club and council member and Emeritus Member of the Japanese Ophthalmological Society and many other domestic Societies. (SM)

Shin, Sung Woo (1902-?) Korean Ophthalmologist. He graduated from Kyongsong Medical College in 1924 and was appointed as a Lecturer at the Department of Pathology of the same University in 1926. He was the Chairman of the Department of Ophthalmology of Seoul National University College of Medicine from 1949 to 1950. News of him has not been heard since the Korean War. (SM)

Shiose Yoshihiko (1933) Japanese ophthalmologist, a leading Glaucoma Specialist in Japan and Director of the Shiose Ophthalmic Clinic. He graduated from Nagoya City University in 1959 and spent 3 years as a Research Associate at the Yale University, CT, U.S.A. in 1963-1966 and carried out research with Prof. M. E. Sears. He published "*A fine structural localization of nucleoside phosphatase activities in the ciliary epithelium of albino rabbits*, Invest. Ophthalmol. 5: 152, 1966" and made the first demonstration of the blood-retinal and blood-aqueous barriers using horse raddish peroxidase "*Electron microscopic studies of blood-retinal and blood-aqueous barriers*. Jpn. J. Ophthalmol. 14: 73, 1970". He later devoted himself to conduct a comprehensive Glaucoma Survey in Japan supported by the Japan National Society for the Prevention of Blindness: "*Epidemiology of glaucoma in Japan: A nationwide glaucoma survey*. Jpn. J. Ophthalmol. 35: 133, 1991. He wrote a "*Major review: intraocular pressure – new perspectives*" in Surv. Ophthalmol. 34: 413, 1990: this article gave rise to extensive discussions on the race-specificity of intraocular pressure worldwide. He served as the President for the 7th Congress of the Japan Glaucoma Society in 1996: he organized a round table discussion on normal tension glaucoma with guest speakers Prof. S.M. Drance, J. Flammer and C. Migdal. He delivered the Suda Award Lecture "*Intraocular pressure and glaucoma: as viewed from automated multiphasic health testing data*" at the 10th Congress of the Society in 1999. (Shiose Eye Clinic. Nichimaru Nagoya Building 8F, Shin-Sakae, Naka-ku, Nagoya 460-0004, Japan, e-mail: yshiose@email.msn.com)(SM)

Shiota Hiroshi (1943-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology of Tokushima University. He graduated from Tokushima University in 1968, studied under Prof.àMITSUI Yukihiko and received his Doctor of Medical Sciences in 1977. He has been in the present position as above since 1997. His research interest is in viral infections, and he has many publications in the field, e.g. "*Clinical evaluation of carbocyclic oxetanocin G (C.OXT-G) eyedrops in the treatment of herpes simplex corneal ulcers*. Br. J. Ophthalmol. 80: 413, 1996" and "*Herpesvirus – Clinical, Pharmacological and Basic Aspects*. Excerpta Medica, Amsterdam-Oxford-Princeton, 1982": the latter book is the Proceedings of the "*International Symposium on Herpes virus*" that he organized in 1981. He is a Councillor of the Japanese Ophthalmological Society, Japanese Association of Ocular Infection and many other domestic Societies. He is also a member of many international societies including the Oxford Ophthalmological Congress. (Department of Ophthalmology, Tokushima University, 3-18-15, Kuramoto-cho, Tokushima, 770-0042, Japan. phone: +81-8-8631-3261, fax: +81-8-8631-4848, e-mail: shiota@clin.med.tokushima-u.ac.jp)(SM)

Shirato Shiroaki (1949-) Japanese ophthalmologist, Professor and Head of the Department of Ophthalmology, Hachioji Hospital of Tokyo Medical University. He graduated from Jikei Medical College in 1975 and studied Ophthalmology at Tokyo University under Prof.àMISHIMA Saiichi and received his Doctor of Medical Sciences in 1983 (thesis: *Argon laser trabeculoplasty in open-angle glaucoma*. Jpn. J. Ophthalmol. 26: 374, 1982; *A critical analysis of the trabeculectomy results by a prospective follow-up design*. Jpn. J. Ophthalmol. 26: 468, 1982). He was promoted to Lecturer at Tokyo University in 1983 and to the Assistant Professor in 1994. He extended his study at the Foundation for Glaucoma Research, University of California, San Francisco (1986-1987) and carried out research with Prof. Jorge A.àAlvarado (Publication : *Kinetics of phagocytosis in trabecular meshwork cells. Flow cytometry and morphometry*. Invest. Ophthalmol. Vis. Sci. 30: 2499-2511, 1989). He was invited to the present position in 1998. His special interest is glaucoma and he is a Councillor of the Japanese Ophthalmological Society and of the Japanese Glaucoma Society. He is also a member of the International Society of Glaucoma of the International Congress of Ophthalmology (1994) and of the International Society of the Visual Field (1994-). For the excellence of his research, he received the Suda Award from the Suda Glaucoma Research Fund at the 7th Congress of the Japanese Glaucoma Society (*The usefulness of the noise-field test as a screening method for visual field defects. Glaucoma Update V*. Ed. by Krieglstein GK, p174-182, Kaden Verlag, Heidelberg 1995). Some examples of his recent publications are " *Mutation in the TIGR gene in familial primary open-angle glaucoma in Japan*. Am. J. Hum. Genet. 61: 1202-1204, 1997", "*Risk factors for the progression of treated primary open-angle glaucoma: a multivariate analysis*. Graefe's Arch. Clin. exp. Ophthalmol.

237: 463-467, 1999". (Department of Ophthalmology, Hachioji Medical Center of Tokyo Medical University. 116 Tatemachi, Hachioji Tokyo 193-8639 Japan phone:+81-426-65-5611 Fax: +81-426-65-1796. e-mail: shirato-tky@umin.ac.jp)(SM)

Shoch, David (1918-1990) American ophthalmologist, President of the Ophthalmic Publishing Company. Shoch was born in Warsaw, Poland. His parents, his sister, and he came to the United States in 1920. He attended the public schools in New York City, and received a bachelor of science degree from the College of the City of New York in 1938. In 1939, he received a master of science degree from Northwestern University and in 1943 a doctor of philosophy degree in biochemistry. His doctoral thesis received the Sigma Xi thesis prize. In 1945, he received the doctor of medicine degree from Northwestern. He entered the United States Army Medical Corps immediately after his internship at Cook County Hospital and was assigned to the School of Aviation Medicine at Randolph Field, Texas . He returned to Northwestern for a research fellowship in ophthalmology and then a residency at Cook County Hospital. In 1953, he joined DerrickàVail in partnership. Vail was then editor of THE JOURNAL and chairman of the Department of Ophthalmology at Northwestern University. Vail had stopped operating that year and Dr. Shoch plunged into a major surgical and consultative practice. He succeeded Vail as professor and chairman of the Department of Ophthalmology in 1966 and served until 1983. He continued as professor at Northwestern until his death. He was chairman of the Department of Ophthalmology at Northwestern Memorial Hospital, the Veterans Administration Lakeside Hospital, and a consultant at Children's Memorial Hospital . He was president of the medical council of Northwestern Memorial Hospital and a member of the executive committee of the board of trustees of the Hospital. He edited the alumni bulletin of Northwestern University Medical School for ten years. Shoch gave broadly of his talents to organized medicine. He was secretary for instruction and served on the committee for reorganization of the American Academy of Ophthalmology and Otolaryngology and, subsequently, on the committee on recertification. In 1963 he was president of the Chicago Ophthalmological Society and was president of the American Academy of Ophthalmology in 1981, when it became an entirely independent organization. In 1989, he was president of the American Ophthalmological Society when the Society celebrated the 125th year of its founding. He was certified by the American Board of ophthalmology in 1953 and was chairman of the Board in 1979. He served on the advisory council for ophthalmology of the American College of Surgeons and was chairman of the Association of University Professors of Ophthalmology (1972-1973). He represented the Academy on the Council of American Board of Medical Specialty Societies and was a delegate from the United States to the French Ophthalmological Society. He served as vice president of the National Society for the Prevention of Blindness and was a director of the Illinois Society for the Prevention of Blindness. Before entering ophthalmology, Shoch published widely about the gastrointestinal system. He was an expert on the enzymology of the lens and radiation cataract. The committee on prizes of the American Ophthalmological Society voted earlier in this year to award Dr. Shoch the Society's highest honor, the Lucien Howe Medal. The chairman of the Award Committee of the Society, Robert Burns, noted that death had not diminished Shoch's contribution to ophthalmology, and the Committee and Society approved posthumous award of the medal May 21, 1990. In April 1990 Shoch received the Alumni Medal of Northwestern University as its most distinguished graduate. This is the highest honor Northwestern awards to a graduate. He had received the Merit Award from the alumni association 15 years earlier. He was an inspirational teacher and his residents donated an oil portrait of him that now hangs in the Northwestern University Medical Library. AJO 1990,110:103-105

Yoshiharu Shoji

Shoji Yoshiharu (1889-1981) Japanese ophthalmologist, Professor Emeritus of Kyushu University and Professor of Tokyo University (1940-1950). He was a graduate of Tokyo University in 1914 and he studied Ophthalmology under Prof. àKOMOTO Jujiro. He received the degree Doctor of Medical Sciences from Tokyo University in 1922 (thesis: *Studies of ultraviolet absorption by the crystalline lens*. J. Jpn. Ophthalmol. Soc. 23:503, 1919, Photobiochemical studies of lens protein. Ibid. 26:43, 1922). He served as the Professor and Chairman of the Ophthalmology Department of Kyushu University in 1926-1940 and the Director of the University Hospital in 1938-1940. He was also the Director of the Tokyo University Hospital in 1947-1949. He gave a special lecture "*Cataract, diagnosis*

and treatment" at the 39th Congress of the Japanese Ophthalmological Society and was the 46th Congress President of the Society in 1942. He also was the President of the Society in 1949-1951. He studied in France in 1921, and he has more than 15 articles in French journals, e.g. *Cysteine du cristallin.* Ann. Ocul. 1928, *La cinematographie des operations ophtalmologiques*, ibid. 1933, etc. In recognition of his contribution to the Japan-France cultural exchange, the Government of France granted him *La Legion d'Honneur* in 1933. He published 242 scientific papers and wrote many books; in particular "*Practice of Ophthalmology Clinics*" Kanehara Publ. Co. which was revised many times since 1931 and widely read by Japanese ophthalmologists. He maintained the Department of Ophthalmology of Tokyo University during the hard time of World War II. In recognition of his service, the Government conferred on him the Second Order of the Sacred Treasures in 1965. (SM)

Shorter, James H. (1842-1920) American eye and ear specialist of Macon, Ga. He was born near Seale, in Russell Co., Ala. During the War he served in the Confederate army, and afterwards managed his mother's farms in Alabama. Having received his medical degree at the Long Island College Hospital in 1875, he studied the eye, ear, nose and throat with Dr. Hermann Knapp. and, for a time, practised as specialist in New York City. In 1890 he moved to Macon, Ga., where he practised as ophthalmologist and otolaryngologist until nearly the time of his death. He was a member of the American Academy of Ophthalmology and Otolaryngology, and of the American Laryngological, Rhinological and Otological Society.AJO 1920, 3:634

Shortt, Thomas (first half 19th century). Scottish physician, who devoted considerable attention to ophthalmology. Born in Scotland, he studied in Edinburgh where he graduated in 1815. He was physician extraordinary to the King for Scotland, physician to the Royal Infirmary and to the Fever Hospital, Fellow of the Royal Society and of the Royal College of Physicians in Edinburgh, as well as professor of clinical medicine at the School of Medicine and Surgery. His only ophthalmic writing was "*Remarks on the Treatment of Amaurosis by Strychnine*." (Edinburgh M. & S. Jour., XXXIV, 1830). American Encyclopedia of Ophthalmology 15,p. 11747-11748

Shrestha Sachet Prabhat (1957-) Nepalese Ophthalmologist, Medical Director of Himalaya Eye Hospital and Professor and Chairman of the Department of Ophthalmology, Manipal College of Medical Sciences, Pokhara, Nepal. He graduated from Government Medical College, Jabalpur, MP, India in 1981 with MBBS degree and completed course with Certificate of Merit in Anatomy, Pathology and Forensic Medicine in1982 under Colombo Plan Scholarship. He then received MS degree in Ophthalmology in 1986 from Kasturba Medical College, Manipal, Karnataka, South India, and extended his studies at the Institute of Clinical Ophthalmology, Kiryu Gunma Japan under Momose Afro-Asian Fellowship (1990) and at the Center for Medical Education, Nine Wells Medical College, Dundee, Scotland, under WHO Scholarship (1994). After having work experience at many hospitals in Nepal that include Founder Program Director of Eye Care Service at Scheer Memorial Hospital, Banepa (1991-1994), he has been in the present position as above since 1997. He has also joint appointment as Associate Professor and Founder Head of the Department of Ophthalmology at B.P.Koirala Institute of Health Sciences, Dharan, Nepal since 1994. His publications include *Augenärztliche Tägigkeit in Nepal*. Klin. Mbl. Augenheilkd. 197: 444, 1990, *Results and evaluation of high volume intracapsular cataract surgery in Nepal*. Acta Ophthalmol. 70: 402, 1992 and *Prevalence of rhinsporidiosis of the eye and its adnexa in Nepal*. Am. J. Trop. Med. Hyg. 59 (2), 1998. He is a recipient of Distinguished Service Award of the Asia-Pacific Academy of Ophthalmology (1997). (Himalaya Eye Hospital, P.O.Box 78, Pkhara Nepal. Phone/Fax: +977-61-20352, e-mail: heh@fech.cnet.wlink.com.np). (SM)

Shrestha, Sanat Kumar (1947-) Nepalese ophthalmologist, Chief Ophthalmologist at Lumbini Rana Ambika Eye Hospital, Bhairahawa. He graduated from V.S.S. Medical College, Burle, India in 1971 and then received MD degree from the All India Institute of Medical Sciences, New Delhi, in 1985. After having worked at various hospitals in Nepal, he is in the present position since 1992. (SM)

Shroff, Cyrus M. (1955-) Indian ophthalmologist, Director of Shroff Eye Centre, New Delhi. He graduated from All India Institute of Medical Sciences, New Delhi in 1980 and after completing postgraduate studies he received M.D. degree from the Institute in 1982.

He received special training in Retinal Surgery at Sankara Nethralaya, Chennai, and he has been in the present position as above since 1984. He specializes in medical and surgical treatment of the diseases of the Retina and Vitreous. He has been appointed the Honorary Ophthalmic Surgeon to the President of India. In the professional societies, he served as the Joint Secretary of Delhi Ophthalmological Society (1990-1991), Joint Treasurer for the 50th All India Ophthalmological Conference (1992) and Joint Secretary of the Vitreo-retinal Society of India (1999-). He is an expert in the Vitreo-retinal surgery and gave many guest lectures and instruction courses at National and International Meetings. In 1998, he received the Delhi Ophthalmological Society Award of the Best Video Demonstration for his video film on Vitrectomy for Proliferative Diabetic Retinopathy and also Award from the Federation of Parsi Zoroastrian Anjumans of India for his excellence in professional works. (Shroff Eye Centre, A-9, Kailash Colony, New Delhi-110-048. phone: +91-11-643-1296, fax: +91-11-648-4736) (SM)

Sichel, Alan William (1887-1966) South African ophthalmologist. Sichel was one of the greatest medical personalities that South Africa has produced and his interests were wider than ophthalmology: he was President of the Medical Association of South Africa (1945-51) and of the British Medical Association (1951-52). Born in South Africa he studied medicine at the University of Edinburgh. One of his earliest tasks was to investigate trachoma on Christmas Island in the Indian Ocean and on his way there he met and married his wife at Singapore. He then travelled to England and served in France with the R.A.M.C. during the first world war and, having afterwards pursued postgraduate studies in ophthalmology, returned to Cape Town in 1921, where he remained as one of the leaders in his profession both in an active practice and as a teacher in the University for the remainder of his life. He received the degrees of Honorary LL.D. from the National University of Ireland and the University of Witwatersrand in Johannesburg, as well as the Gold Medal of the Medical Association of South Africa for distinguished services to his profession.Brit.J.Ophthal.1966,50:680

Julius Sichel

Sichel, Julius (1802-1868). French ophthalmologist, founder of the first ophthalmic hospital in Paris. Born at Frankfort-on-the-Main, Germany, the son of a Jewish merchant, he studied medicine at Tübingen (or Würzburg , according to J. Hirschberg) and Berlin, at the latter institution receiving his degree in 1825. His dissertation on this occasion was entitled "*Historiae Phtheiriasis Internae Fragmentum.*" From 1825-29 he was assistant at àJaeger's Ophthalmic Hospital in Vienna, and, the year following, at àSchoenlein's Hospital in Würzburg. In 1830, on the advice of Jaeger, however, he settled in Paris. Two years later he founded the first ophthalmic hospital (a private one) in that city, and this institution he directed until his death. He became in succession Lecturer on Ophthalmology at the Hôpital St. Antoine (by the kindness of AugusteàBérard), oculist to the educational institutions of the legion of honor, permanent honorary president of the International Ophthalmological Congress, and honorary president of the German Medical Union at Paris. As an operator he was unexcelled, if equalled, and his reputation was world-wide. Sichel was also active in other fields than medicine: in history, philology, archeology, and entomology. And in all these fields he conquered a more or less lasting renown. Preeminently a man of sorrows (for he lost his wife, his fortune, and undeservedly very many friends) he seemed to find, as was often pointed out, his chief solace in the unremitting activity of his intellect. A trifle vain, a trifle over-positive in manner and opinion, a trifle punctilious in matters of priority, he was, as even his greatest foes were obliged to admit, a true, warm-hearted man, a well-wisher of his kind. He made a large collection of ancient oculistic seals, and for some of these he gave large sums, even when financially embarrassed. He also made an immense collection of hymenoptera. For this the British Museum offered him a large sum, but Sichel, like a true Jew (the man so often supposed to be "without a country") contributed his collection gratis to his adopted city. Many other instances of Sichel's patriotism could be adduced. Then, too, he was very friendly to the poor. To these he gave not only of skill and time and strength, but also of his money -whenever he had that winged article at command. And the man himself died poor! He suffered for a long time from a painful disease of the bladder. Worn out at last, he submitted to an operation-and succumbed. One of his latest expressions was (and it is wholly characteristic of the man) "*So long as the head is clear, I am well enough*." The *Iconographie ophthalmologique* was brought to Nagasaki Japan by Pompe van

Meerdervoort as a teaching text during 1857-1860. When Pompe left Japan, he gave the Iconographie to one of his students and the Book in its almost complete form is now in possession of Chiba University Library.(SM). Sichel authored following books: *Propositions générales sur l'ophthalmologie, suivies de l'histoire de l'ophthalmie rheumatismale*. Paris 1833 (German edition: *Allgemeine Grundsätze die Augenheilkunde betreffend, nebst einer Geschichte der rheumatischen Augenentzündung* Berlin 1834); *Traité de l´ophthalmie, la cataracte et I'amaurose* Paris 1837. *Revue trimestrielle de la clinique ophthalmologique de M. Sichel (octobre, novembre et décembre 1836)* Paris 1837; *Cinq cachets inédits de médecin-oculistes romains* Paris 1845 ; *Poème grec, inédit attribué au médecin Aglaias, publié d'après un manuscrit de la Bibliothèque Royale de Paris* Paris 1846 ; *Leçons cliniques sur les lunettes et les états pathologiques consécutifs a leur usage irrationnel* Bruxelles 1848 (American edition *Spectacles, their uses and abuses in long and short sightedness; and the pathological conditions resulting from their irrational employment* Boston 1850, translated by Henry W. Williams); *Iconographie ophthalmologique ou description, avec figures coloriées, des maladies de l'organe de la vue, comprenant l'anatomie pathologique, la pathologie et la thérapeutique médico-chirurgicales*. 2 vols. Paris 1852-1859; *Hippocrate de la vision* Paris 1860; *Nouveau recueil de pierres sigillaires d'oculistes romains* Paris 1866. American Encyclopedia of Ophthalmology 15,p.11748-11749.JPW

Siebold, Barthel von. Son of Karl Kaspar Siebold, and himself a surgeon and ophthalmologist of some importance. From 1802 till 1814 he lectured on ophthalmology at Würzburg. American Encyclopedia of Ophthalmology 15,p.11759

Siebold, Karl Kaspar von (1736-1807) German surgeon and obstetrician, father of Barthel von S., and an ophthalmologist of some importance. Born at Nideggen, Germany, the son of the celebrated obstetrician Adam Elias von Siebold, he became in 1769 professor of anatomy, surgery, and obstetrics at the University of Würzburg, and, while acting in this capacity, gave regular courses of lectures on ophthalmology for a number of years. He wrote: "*Chirurgisches Tagebuch*" Nürnberg 1792. American Encyclopedia of Ophthalmology 15,p.11760 [n.b.: The American Encyclopedia, in this case put it completely wrong mixing live dates obviously with those of Barthel vonàSiebold-JPW].

Philipp Franz von Siebold

Siebold, Philipp Franz von (1796-1866) German Surgeon, a graduate of Wuerzburg University in 1820. He came to Japan in 1823 as a Doctor for the Dutch Trade Post in Nagasaki and left Japan in 1829. During his 6-year stay in Nagasaki, he taught many Japanese physicians and surgeons at NARUTAKI School in the city of Nagasaki. He taught Optic Iridectomy of Joseph Beer to KO Ryosai and the method of producing mydriatics to HABU Genseki. He also taught Pharmacology, Gynaecology and Obstetrics to many Japanese doctors: he had a great impact on Japanese Medicine by introducing the most updated knowledge of European Medicine of that time. He served not only as a teacher of medicine, but he made a survey of Japanese flora and culture, in particular during his travel to Edo (presently Tokyo) in 1826. He wrote " *Fauna Japonica*", "*Flora Japonica*" and "*Nippon* ": these books are classics that introduce Japan of the early 19th Century. For the memory of his contribution to the Japan-Germany Cultural Exchange, the Government of Germany established the "*Philipp Franz von Siebold Preis*" to be granted to those who made significant service to the cultural exchange between the two Countries.(SM)

Sigwart, Georg (1711-1795) German, Tübinger ophthalmologist, who was born at Gross-Bettlingen, Würtemberg, and died at Tübingen. He studied at first theology, passed his theological examinations, and taught theology for four years. Turning his attention to medicine, he studied at Leipsic and Halle, at the latter institution receiving his degree in 1742. He soon became professor of anatomy and surgery at Tübingen, and also an ophthalmologist of international reputation. He never wrote a book, but published a large number of dissertations. According to Hirsch 55 dissertations and according to Hirschberg 77. His most important work, in the view of the latter authority, is "*Novum Problema Chirurgicum de Extractione Cataractae ultra Perficienda*." American Encyclopedia of Ophthalmology 15,p.11770-11771

Silcock, Arthur Quarry (1855-1904) English, London general practitioner and ophthalmologist, one of the last of distinguished physicians to adhere to the combination of a specialty with general practice. He became surgeon both at St. Mary's Hospital and at Moorfields, and died of appendicitis . American Encyclopedia of Ophthalmology 15,p.11771

Hudson Silva

Silva, Hudson (1929-1999) Sri Lankan ophthalmologist, Founder and Director of Sri Lanka International Eye Bank and Tissue Bank. He was born in a family of devoted Buddhist furniture-makers; his ability having been recognized by his teacher who helped him study medicine at the University of Ceylon (present University of Sri Lanka), and he graduated from the University in 1959, with M.B.B.S. granted. He then received postgraduate training at the Wayne State University, College of Medicine. While he was a medical student in Ceylon, he had got the idea of creating an eye bank and wrote an article in a newspaper Colombo's Sunday Lankadipa, which received great response from wide circles of the Society. In 1961, he was appointed a house surgeon at Colombo Eye Hospital, and in June of this year he founded Ceylon Eye Donation Society with assistance of his wife Irangani: they started the activities from a small room at their home. After untiring effort, in 1965 he received the pledge of the Prime Minister Dudley Senanayake who presided at the official Opening of the Ceylon International Eye Bank. Dr. Silva converted the top floor of his office-home building to the Eye Bank Office in 1967. His call for eye donations slowly spread throughout the Asian Countries, and a doctor in Singapore was the first to respond and Dr. Silva dispatched the first cornea abroad in 1964. Since then the Sri Lanka International Eye Bank has shipped more than 40,000 corneas to 64 countries throughout the World. In 1996, the President of Sri Lanka, J. R. Jayawardene passed away, and his eyes were enucleated and the cornea of one eye was transplanted in Sri Lanka and the other eye was donated for transplantation in Japan. Untiring and selfless efforts of Dr. Silva received responses and support from many national and international organizations, and in 1978 a new building of the Eye Bank was constructed on the land donated by the Government of Sri Lanka. In 1993 the Foundation was laid with donations of equipment for the Eye Bank activities. With his unique success of the Eye Donation campaign, he ventured into other tissues of the body by opening a Model Tissue bank in 1996. His outstanding contribution to humanity has been recognized by the Government of Sri Lanka, who conferred on him Deshabandu Award from his Excellency J. R. Jayawardene, President of Sri Lanka. He received many awards and honors, and some examples embrace the Third Order of the Sacred Treasures conferred by the Government of Japan, Melvin Jones Fellowship of Lions International (1978), Social Service Medal of the Government of Taiwan (1980), Golden Key to City of Taipei (1980), to City of Taichung (1980), to City of Kaoshiung (1980), Social Service Medal from King Hussein of Jordan (1980), Knighthood of Torpar Riddar Order of Sweden (1980), Appreciation Award of Lions International President (1980, 1981), Prakash Award of Eye Research Institute of Tamil Nadu (1981), Batan Utam Jasa Award from the President of Indonesia(1981), Dag Hammaskjoerd Award for Science (Belgium, 1981), Sitara-E-Imtiaz (Star of Distinction) from President of Pakistan (1982), Eiji Yoshikawa Award of enriching Japanese Culture (1984), Appreciation Certificate from All India Medical Association (1987), Permanent Council Membership of the Afro-Asian Congress of Ophthalmology (1988), Doctorate Honoris Causa of University of Groningen (Netherland, 1989), SAARC Award from Bangladesh (1989), Award from Pakistan Navy and Fellow of International College of Surgeons in Ophthalmology (USA, 1991). The Sri Lanka Eye Donation Society continues its activity through his wife, Irangani Silva. (SM)

Silva, Manoel Alanoel da (?-1950) Brazilian ophthalmologist. Born in Sao Paulo he attended grade school and high school in his native city. Registering in 1933 at the Escola Paulista de Medicina, he graduated with first class from that school in 1938. His spirit and capacity for work and organization helped him to make friends among his colleagues and it was these same qualities which aided his advancement in his professional career. During his last year at school, he worked as monitor in the Ophthalmological Clinic of the Escola Paulista de Medicina and was afterward appointed assistant and instructor, helping not only with the teaching of undergraduates but also with graduate and post-graduate training in ophthalmology. When the Kellogg Foundation scholarships of the Pan-American Association of Ophthalmology was established, Silva was classified in first place among

the Brazilian candidates and spent a year at the Illinois Eye and Ear Infirmary at the time when HarryàGradle and PeteràKronfeld were teaching there. Later he visited several other clinics in the United States. When the Society of "Kellogg Fellows" was founded, Manoel Silva was elected president. He was also president of the Centro de Estudos de Oftalmologia de Sao Paulo and vice-president of the Sociedade de Oftalmologia de Sao Paulo. He read the official paper at the 4th Jornadas Brasileiras de Oftalmologia in Porto Alegre and had been chosen by the Sociedade de Oftalmologia de Sao Paulo and by the Centro de Estudos, Oftalmologia to present the official paper of these societies at the Pan-American Congress of Ophthalmology. He was one of the assistant editors of Ophthalmologia Ibero Americana, which owes a great deal to Manoel Silva for his tireless labor. He co-operated enthusiastically in the organization of the Bulletin of the Centro de Estudos de Oftalmologia and always entered heartedly into all the activities of the Ophthalomological Clinic of the Escola Paulista de Medicina. A member of the modern Brazilian ophthalmological generation, Manoel A. da Silva, although still a young man, was well known not only in Sao Paulo, but in Brazil and the Americas.

Silva, W. H. de (1868-1908) A Cingalese ophthalmologist. Born a descendant of one of the older houses of the historic Lindamullaga clan, he studied at the Prince of Wales College in Moratuwa and at St. Thomas' College, Columbo. He next proceeded to England, where he completed his medical studies at Mareschal College, Aberdeen, and, in ophthalmology, at the Royal Eye Hospital, in London, and withàGalezowski, in Paris. Returning to his native country, he became prominent as an ophthalmologist and as a public spirited citizen, and was one of the founders of the Queen Victoria Eye Hospital. American Encyclopedia of Ophthalmology 15,p.11772

Silverstein, Arthur M. (1928-) American ophthalmic scientist, currently Independent Order of Odd fellows Professor Emeritus of Ophthalmic Immunology, working in the Johns Hopkins Institute of the History of Medicine. His research interests have included the ontogeny of the immune response and congenital infections, the immunopathology of uveitis, and the mechanisms of corneal graft rejection. He received the A.B. and M.Sc. degrees in chemistry from the Ohio State University, the Ph.D. in physical chemistry from Renssalaer Polytechnic Institute, and the D.Sc. (honoris causa) from the University of Granada, Spain. He was introduced to immunology at the Sloan-Kettering Institute for Cancer Research, spent four years working in serology at the New York State Department of Health, and ten years learning immunobiology and immunopathology at the Armed Forces Institute of Pathology where he developed a collaboration with ophthalmic pathologist Lorenz→Zimmerman. In 1964 he was hired by A.E.→Maumenee to organize the Wilmer Institute Ocular Immunology Laboratory as Associate Professor, and was promoted as Odd fellows Professor in 1967. He has published almost 200 scientific papers, edited several symposium volumes, and is the author of "*Pure Politics and Impure Science*" (Baltimore, Johns Hopkins Press, 1981) and "*A History of Immunology*" (New York, Academic Press, 1989). He received the Doyne Medal of the Oxford Ophthalmological Congress in 1974 and the Friedenwald Award of the Association for Research in Vision and Ophthalmology in 1973 and its Special Recognition Award in 2000. He was ARVO's first Chairman of the Section on Microbiology and Immunology. He served on its Board of Trustees from 1983 to1988, and was the President of ARVO in 1988. From 1982 to 1999, he served as Director of the Fight For Sight grants-in-aid and fellowship program. He helped found the International Symposia on the Immunology and Immunopathology of the the Eye, and was President of its second meeting in 1978. He has served on numerous editorial boards of both ophthalmic and immunological journals. He served on numerous NIH Study Sections, advisory groups, and committees. He is now happily occupied in researching and writing books and papers on the history of immunology.e-mail: arts@jhmi.edu (SM)

Simon, Gustav (1824-1876). German surgeon who seems to have written nothing on the eye, but who performed a very large number of ophthalmic operations. Owing to his insistence it was that, while he was a professor at Rostock, the professorate of surgery and ophthalmology was divided, the first thereafter to teach the latter branch being Carl WilhelmàZehender. The most of Simon's life was passed at Heidelberg. American Encyclopedia of Ophthalmology 15,p. 11784

Sinclair, Alexander Grant (1842-1915). American ophthalmologist of Memphis, Tenn. Born at Charlottenburgh, Ont., Canada, he received the medical degree at the College of Physicians and Surgeons in the City of New York in 1869. For a year or more he studied ophthalmology and oto-laryngology in Vienna. For a time he practised as ophthalmologist and oto-laryngologist in Detroit, but, moving about 1880 to Memphis, he was made ophthalmic and aural surgeon and laryngologist to St. Joseph's Hospital and St. Peter's Orphan Asylum, and ophthalmic surgeon to the Old Ladies' Home and City Hospital, as well as Dean and professor (afterwards emeritus professor) of ophthalmology, otology, laryngology and hygiene in the Hospital Medical College in Memphis, Tenn.,. He was also for a time vice president of the American Medical Editors' Association. He had extensive business interests in Memphis, being a member of the boards of directors of several banks and other business institutions. American Encyclopedia of Ophthalmology 15,p. 11788-11789

Sinclair, Arthur Henry Havens (1868-1962) Scottish ophthalmologist, born at Kenmore, Perthshire. Arthur Sinclair was the youngest son of the Reverend Alan Sinclair and Sarah Fraser. Graduating at Edinburgh University, M.B., CM, in 1893 and M.D. in 1899, Sinclair became a Fellow of the Royal Society of Edinburgh in 1899 and a Fellow of the Royal College of Surgeons of Edinburgh in 1900. Deciding to specialize in ophthalmology at an early stage in his career, he studied in London and Utrecht and travelled widely, visiting many clinics in Europe and in Scandinavia. In 1899 he became clinical assistant to Sir George Berry at the Royal Infirmary, Edinburgh; in 1905 he was appointed Assistant Ophthalmic Surgeon and, from 1922 until his retirement in 1932, he was Surgeon in charge of wards. This period of 33 years was interrupted only by service in the R.A.M.C. with the Salonika Expeditionary Force during the first world war. Arthur Sinclair was the pioneer in Great Britain of two major advances in ophthalmology. He introduced quantitative perimetry, a subject upon which he read a paper entitled "*Bjerrum's method of testing the field of vision, the advantages of the method in clinical work and its special value in the diagnosis of glaucoma*", before the Ophthalmological Society of the United Kingdom in 1905. His great and lasting interest was, however, in the field of operative surgery. He introduced the operation of intracapsular extraction of the lens to Edinburgh in 1922, and in 1932, in his Presidential Address to the Ophthalmological Society of the United Kingdom, he reported on a series of 257 cases with results which have never been surpassed. These two great contributions to British Ophthalmology were recognised by his election to Honorary Membership of the Society. Sinclair also held, at various stages in his career, appointments as Surgeon to Leith Hospital and to the Royal Hospital for Sick Children, and he was also Consultant Ophthalmic Surgeon to the Department of Health for Scotland. In 1927 he was elected President of the Ophthalmological Section of the British Medical Association, from 1931to 1933 he was President of the Ophthalmological Society of the United Kingdom, and in 1933 he was elected President of the Royal College of Surgeons of Edinburgh, a position which he occupied with dignity and authority. In 1928 he was appointed Honorary Surgeon Oculist to His Majesty the King in Scotland, an appointment which he was to hold for 24 years. In 1935 the W. H. Ross Foundation for the Study of Prevention of Blindness was founded through the generosity of Mr. W. H. Ross, and it was on the advice of Dr. Sinclair that this munificent gift was used for research purposes. He became the first Chairman of the Medical Advisory Committee of the Foundation and he devoted the next 16 years of his life to this work. BJO 1962,46:639

Sinclair, Walter William (1868-1923) Scottish ophthalmologist, born at Aberdeen in 1868. He was the son of Thomas S. Sinclair-Spark, Advocate, of Aberdeen and Banchory. His medical education was at Aberdeen University, where he graduated M.B., C.M., in 1891. Deciding to specialize in ophthalmology, he held the posts of clinical assistant at the Royal Ophthalmic Hospital, Moorfields and of Senior House Surgeon at the Birmingham and Midland Eye Hospital. He began to practise in Ipswich as an ophthalmic surgeon in 1896 and was very quickly invited to join the staff of the East Suffolk and Ipswich Hospital as ophthalmic surgeon, an appointment which he held until obliged by failing health to relinquish it in 1920. Although so much of his life was spent in England, he remained a thorough Scotsman. Despite practising in Ipswich, he was a regular attendant at the meetings of the Ophthalmological Society. He had been a Member of the Council and contributed. several papers to the *Transactions of the Ophthalmological Societies of*

the U.K. He had established a great reputation as an ophthalmic surgeon, not only in Ipswich, but throughout the whole of East Anglia, a reputation which was thoroughly deserved. His work at the East Suffolk Hospital did very much to enhance the reputation of that Institution, and was fully recognized by the Board of Management , who named the established ophthalmic wards the " Sinclair Wards " to perpetuate his memory. BJO 1923,7:205

Singh, Kashmahinder, Dato (1921-) Malaysian ophthalmologist, Former Honorary Consultant of the University of Malaysia, 11th Congress President of the Asia-Pacific Academy of Ophthalmology (APAO), Founder Fellow of the National Academy of Science, Malaysia. He graduated from King Edward II College of Medicine, Singapore in 1949, and received postgraduate training at the Royal College of Surgeons of Edinburgh, Institute of Ophthalmology and Moorfields Eye Hospital, London and further at Massachusetts Eye and Ear Infirmary, Boston: he received many qualifications including FRCS, FRCOphth. and many others. On return to his homeland in 1960, he served as Consultant Ophthalmologist in Kuala Lumpur and Senior Partner in the largest group eye practice in Malaysia, serving all sections of the Malaysian community (1960-1986). Subsequently, he served as the Honorary Director of Tun Hussein Onn Eye Hospital (1984-1994) and as the Honorary Consultant of the University of Malaysia. In National Organizations he served as Founder-Secretary of the Ophthalmological Society of the Malaysian Medical Association since 1964 and as the President 3 times, (1968-1971,1978-1982,1988-1989). He contributed greatly to the foundation of the postgraduate training program In Ophthalmology. In International Organizations, he served as the Councillor (1974-1981), Vice-President (1981-1986) and 11th Congress President of the APAO: he received a Distinguished Service Award in 1981 and the Jose Rizal Medal (the highest honor in APAO) in 1989. He established the Prevention of Blindness Committee of the Malaysian Association for the Blind in 1968 and served as the Chairman for 23 years: he initiated mobile Eye Camps in the rural areas for the treatment of eye diseases and cataract operations, and further for public education. He worked as the National Representative to the International Agency for Prevention of Blindness until 1985. He is the recipient of many Awards, including Takeo Iwahashi Prize for the Prevention of Blindness (1977), Merit Award by the Confederation of Medical Association in Asia-Oceania (1991) and Tan Sri Ismail Orator, College of Surgeons Malaysia (Prevention of Blindness in Malaysia, 1991). In recognition of his meritorious service, he received many National Decorations, including Dato Sultan Salahuddin Abdul Aziz Shah. He has been elected to the Foundation Fellow of the National Academy of Science, Malaysia. (SM)

Singh, Pall (1946-) Malaysian ophthalmologist, Senior Consultant Ophthalmologist at The Tun Hussein Onn National Eye Hospital, Petaling Jaya. He graduated from the Medical College, Guru Nanak University Amritsar in 1972. He worked at the General Hospital of Ipoh and received Ophthalmology training. In 1977, he was posted as a Registrar to the Eye Clinic of the General Hospital, Kuala Lumpur. He then went to England for further studies and received his FRCS, Glasgow and Edinburgh, in 1982. On his homecoming, he was appointed the Lecturer at the National University of Malaysia, promoted to Associate Professor and Head of the Department of Ophthalmology in 1988. He left the University in 1990 and joined the Tun Hussein Onn Eye Hospital as a Consultant Ophthalmologist and served as the Deputy Director in 1992-1994. He served the Ophthalmological Society as a Committee Member (1983), Secretary-Treasurer (1984-1986, 1987-1990), and Chairman of the Society (1991-1997). He served as the Co-Chairman of the Scientific Committee to the 11th Congress of the Asia-Pacific Academy of Ophthalmology (APAO) in 1987, and as the Editor of its Proceedings, and also as the Chairman of the 7th International Cataract, Implant Microsurgical and Refractive Keratoplasty Meeting in 1994. He is a recipient of the Distinguished Service Award of the APAO (1987). At present, he is the Chairman of the Ophthalmology Division of the College of Surgeons (1999-2001). He is also the Treasurer of the College of Surgeons, Academy of Medicine. He was elected to the Council of the Asia-Pacific Academy of Ophthalmology in March l999. (SM)

Singh, Sanjay Kumar (1963-) Nepalese ophthalmologist, Chief Ophthalmologist at Mechi Eye Care Centre, Birtamod, Jhapa, Nepal. He is a graduate of Tribhuvan University, Kathmandu, and received MBBS in 1991 and MD (Ophthalmology) in 1996.

He worked at Tribhhuvan University Teaching Hospital (1992-1993), United Mission to Nepal Hospital, Lalitpur (1993), B.P. Koirala Lions Centre for Ophthalmic Studies of Tribhuvan University (1996) and he is in the present position as above since 1996. He conducted Eye Camps in remote areas and wrote articles on Pattern of glaucoma in Nepal, Ocular dimensions and visual status in Nepalese Children of Tibetan origin, Blindness in girls, ocular disease and road traffic accidents, Eye care and its cleanliness, benefits of Eye Camps and eye donation. (Address in Kathmandu: P.O.Box 2389, phone/fax: +977-1-227505, e-mail: dl@fech.wlink.com.np ; Address in Mechi, P.O.Box 3, BirtamodJhapa, Nepal. Phone: +977-23-40153, e-mail: mechieye@vishnu.ccsl.com.np). (SM)

Sivasubramaniam, P. (1916-) Sri Lankan ophthalmologist. He served as Visiting lecturer in Ophthalmology, University of Ceylon (1955-1963), Lecturer in Ophthalmology for the Diplomas in Child Health and Tuberculous Diseases of the University of Ceylon, Lecturer, School of Optometry, Colombo (1984-1988), Lecturer/Tutor in Ophthalmology for the D.O and M.S degree of the University of Colombo (1986-1996) and Examiner for the D.O and M.S. Examinations of the Colombo University (1987-1994), Visiting Lecturer to the North Colombo Medical College 1981-1985. His service further embraces Chairman, Board of Study in Ophthalmology (1986-1989), PGIM University of Colombo, Lectures and Tutorials to Postgraduate students (1986-1996). He has been active on Preventive Ophthalmology as the President, EYECARE Sri Lanka engaged in field eye service (1978-1980). In recognition of his services, he received the Koch Memorial Oration Gold Medal "*Physiology and the Clinician*", Pasupathy Memorial Oration Gold Medal Jaffna Medical Association. He also received "*Men of Achievement Cambridge*" certificate in 1994. He has been working in editorial services, as Editor, *J.Jaffna clinical Society* (1951-55), *Ceylon Medical Journal* (1963—1965), *Transactions of the Ophthalmological Society of Ceylon* (1958-1982), Regional Editor, *Ophthalmic Literature* (London) (1965-1970), *Transactions of the Ophthalmological Society of Ceylon* (1958-1982) and Regional Editor, *Ophthalmic Literature* (London) (1965-1970). He holds many fellowships and they are Fellow of the Royal College of Surgeons of England, Fellow of the Royal College of Ophthalmologists (U.K.) 1986. Fellow of the College of Surgeons of Sri Lanka (1990) and Fellow of the College of Ophthalmologists of Sri Lanka (1996). He served as officer of many professional societies, e.g. Inaugural President of the College of Ophthalmologists of Sri Lanka (1992), President, EYECARE Sri Lanka 1978, President, Ophthalmological Society of Ceylon, (1962-63), President, Ceylon Academy of Postgraduate Medicine (1974-76), President, Section A, Ceylon Association for the Advancement of Science (1956), Chairman, Board of Study in Ophthalmology, Postgraduate Institute of Medicine University of Colombo 1982, President, Ceylon Medical Association,1975. He is a founding member of the Asia-Pacific Academy of Ophthalmology (APAO) and its Vice-President (1968-1974), then he served as the President, Vth. Congress of the APAO,1974 'Colombo where the Jose Rizal Medal was awarded by Prime Minister, Srimavo Bandaranaike for outstanding service in Ophthalmology in the Asia-Pacific Region .He has been the delegate of the Country to many international conferences. His scientific publications include 86 articles of which fourteen were in the British Journal of Ophthalmology and the American Journal of Ophthalmology. The others were in the Journal of the Clinical Society of Jaffna, Ceylon Medical Journal, Transactions of the Ophthalmological Society of Ceylon, The Antiseptic, Transactions of the APAO Congresses of 1964,1968 and 1974 and 1978. Also in the *Oriental Archives of Ophthalmology and Soubradia*. The books embrace *Student's Companion in Ophthalmology*. Colombo Apothecaries Ltd., Chapter on *Tropical Ophthalmology* in Sorsby' *Systemic Ophthalmology*, Butterworth London, 1976, *Paediatric Ophthalmology*, Rajapoopathy Memorial Galucoma Centre, Jt. Author with Dr,S.Anandarajan ,2000, *Neuro-Ophthalmology* ,Rajapoopathy memorial Glaucoma Centre, Jt.Author with Dr. S. Anandarajan, 2000. (SM)

Slawikowski Anton (1796-1870). Polish physician, who devoted the greater portion of his time to ophthalmology. Born at Lemberg, he received his medical degree in 1819 at Vienna. In about 1825 he was made extraordinarius in ophthalmology at the Lemberg School of Surgery, a position, which he held till 1851. From 1838 till 1851 he was National Oculist to Galicia, as well as ophthalmic surgeon to the General Hospital. In 1851 he was called to the full professorship of ophthalmology at Cracow, a position,

which he resigned in 1869. His chief ophthalmologic writing was in German. Its title ran: "*Ueber die Epidemische Contagiöse Augenentzündung in Galizien*" (Österr.Med.Jahrb., 1845). American Encyclopedia of Ophthalmology 15,p.11967-11968

Sloan, Louise L. (1898-1982) American ophthalmologist. She was born and reared in Baltimore, Maryland. She graduated from Bryn Mawr College in Pennsylvania in 1921, and she received her doctorate from that institution in 1926 after having pursued graduate studies in physics at the Johns Hopkins University. She became a lecturer in experimental Psychology at Bryn Mawr College, and she worked in the Department of Ophthalmology at the Harvard Medical School before joining the staff of the Wilmer Institute, Johns Hopkins Medical Institutions, as an instructor in Physiological optics and in ophthalmology, in 1929. Her association with the Johns Hopkins Hospital was interrupted in 1942, when she joined the School of Aviation Medicine at Randolph Field in Texas as an ophthalmologist and investigator in vision research. She returned to the Johns Hopkins Medical School and Hospital in 1945, where she became an associate professor of ophthalmology in 1947 and an associate professor emeritus in 1963. One of her most important articles dealt with idiopathic flat detachment of the macula, the condition known call serous detachment of the macula or central serous retinopathy. This paper described the application's of newly devised visual function tests to clinical disease. These tests included color perimetry with red and blue test objects on a matching background, the test now known as static perimetry, and tests of visual function for macropsia, micropsia, and metamorphopsia. The detection of transitory hyperopia not disclosed by retinoscopy was emphasized. Other articles stressed the importance of studying regional differences in light sense thresholds in the dark-adapted eye at various retinal locations compared to the rate of dark adaptation. Sloan also devised various tests for congenital red-green color blindness, especially in connection with the needs of military personnel. Louise Sloan was probably best known for the development and standardization of equipment for visual acuity testing and improvement. She published several articles on reading aids, and she developed the first Low Vision clinic at the Wilmer Institute. Thus, her work was characterized by the application of research findings on basic optics and testing methods to clinical situations. Many of her articles were written in collaboration with senior clinical investigators, but most were written with residents and research fellows at the Wilmer Institute. In this way she significantly stimulated the research endeavors of many young clinicians and investigators who later studied such diseases as retinitis pigmentosa, various forms of color blindness, total achromatopsia, and incomplete achromatopsia. AJO 1982, 93:796-797; Arch Ophthalmol 1982,100:1347

Sloane, Sir Hans (1660-1753). A London physician and naturalist of the 18th century, who founded the British Museum and wrote a wretched work about an ophthalmic ointment. He was born of Scotch ancestry at Killeleagh, Co. Downs, North Ireland, April 16, 1660. He studied at Dublin, Paris and Montpellier, at last receiving his medical degree at the University of Orange. He became Sydenham's first assistant and a Fellow of the Royal Society. His ophthalmologic writing was entitled *"An Account of a Most Efficacious Medicine for Soreness, Weakness and Several Other Distempers of the Eye"* (London 1745, French ed.1767). This "efficacious medicine" consisted of viper-fat, aloes, oxide of zinc, and hematite. American Encyclopedia of Ophthalmology 15,p.11970-11971

Smee, Alfred (1818-1878). English electrologist, surgeon and ophthalmologist. Born at Camberwell, near London, he studied at King's College and St. Bartholomew's Hospital, both in London, and soon was surgeon at the Royal General Dispensary. Shortly afterward, he was surgeon to the Bank of England and at the Central London Ophthalmic Hospital. In 1840 he became a member of the R. C. of S., in 1841 a Fellow of the Royal Society, and twelve years later a Fellow of the Royal College of Surgeons. He it was who invented Smee's battery (an improvement on the voltaic pile) pantoscopic spectacles and the visuometer. He wrote *Vision in health and disease; the value of glasses for its restoration, and the mischief caused by their abuse* London 1847, 2nd edition expanded "*with an account of the optometer, for the adaptation of glasses, for impaired, aged, or defective sight to which is appended, a paper on the stereoscope and binocular*" London 1854 (German edition *Das Sehvermögen in seinem gesunden und krankhaften Zustande* Weimar 1853). American Encyclopedia of Ophthalmology 15,p.11972-11973.JPW

Smelser George K.(1908-1973) American biologist and physiologist. Smelser came to the Columbia-Presbyterian Medical Center in 1934 after preliminary training as a biologist. His early work had been largely in the field of endocrine anatomy and physiology. John M. àWheeler, then Director of the Eye Institute, recognized his interests and arranged for him to be assigned to the Department of Ophthalmology from the Department of Anatomy for full-time work in basic studies related to the cause of endocrine exophthalmos. His work in this field was summed up in the XVIII Jackson Memorial Lecture, "*Experimental studies on exophthalmos*," given before the American Academy of Ophthalmology and Otolaryngology in 1961, and later published in the *Am. J. Ophthalmol. 54:929, 1962*. In the early 1940s. Smelser's interests shifted towards the physiology and fine structure of the cornea, a field of study he was still pursuing at the time of his death. He was awarded the Proctor Medal 1961, the subject being, "*Corneal hydraction*." In 1956 after the departure of Ludwig vonàSallmann to become Director of the Eye Services at the National Institute of Health, Smelser assumed the vacant post of Director of Research Activities in the Department of Ophthalmology at the College of Physicians and Surgeons. In 1969, this position was dignified by the title of Malcolm P. Aldrich Research Professor of Ophthalmology, a position he held until his death. In collaboration with his long-time associate, Aliss Victoria Ozanics, he initiated a two-day course to the first year medical students that invariably aroused extraordinary enthusiasm. Doubtless a number of medical students were stimulated towards ophthalmology by these annual courses alone. His ophthalmic interests were wide ranging and not limited to his own special hobbies. He could talk authoritatively on fluid transport in glaucoma, retinal physiology, or electron microscopic changes of various corneal diseases. His ability to relate basic facts to clinical disorders made him extremely valuable to the American Academy of Ophthalmology and Otolaryngology with such good effect that he became one of the relatively few non-ophthalmologists invited to join that Society. At the Edward S. Harkness Eye Institute he served on the Board of Surgeons, as well as the Residency Review Committee. AJO 1974,77:416-418.

Smets *see also* **De Smets**

Smith, Daniel Buttrick (1840-1922) American teacher of ophthalmology at several medical schools, born at Middlebury, near Akron, 0. When he was fourteen years of age his family moved to Oberlin. After graduating from college there in 1860, he became principal of a school at Wabash. Ind. His medical degree was received at the Charity Hospital Medical College, Cleveland, in 1867. For a time he studied the eye, ear, throat and skin at Berlin and Vienna. Returning to Cleveland, he practiced general medicine from 1867 to 1880, for the first few years of this time in association with Dr. G. C. E. Weber. During nearly the whole period of his general practice, he was personal physician to Amasa Stone, founder of Adelbert College of Western Reserve University. He was for a long time ophthalmic surgeon to the Big Four Railroad. For fifty years he was on the staffs of the Lakeside, Charity, City, Cleveland General and St. Luke's Hospitals. During forty-five years he taught at medical colleges including the Charity Hospital Medical School, the Cleveland College of Physicians and Surgeons, and the Western Reserve School. It is said that he aided in the education of more than 10000 doctors. Though he taught so long, he wrote little. AJO 5:844

Smith, J. W. (? - ?) An American who devised, about 1878, the raised-dot alphabet for the blind, known as American or modified Braille. American Encyclopedia of Ophthalmology 15,p.11973

Smith, Jack Lindley Stewart (1915-1997) British ophthalmologist. Smith was educated at Marborough College and Westminster Hospital Medical School where he qualified in 1940. Serving in the Royal Army Medical Corps as an ophthalmologist in Normandy and India he attained the rank of major. Smith took his DOMS in 1947 and in 1950 became lecturer of ophthalmic pathology in Manchester University. He had a keen interest and considerable expertise in skin tumours and was awarded his MD (Cantab) in 1954 for a thesis on sweat gland tumours. He developed an ocular pathology service based in the Manchester Royal Eye Hospital which soon attracted specimens from many other hospitals in the region. Smith´s major interest was in retinoblastoma. He wa elected President of the North of England Ophthalmological Society in 1973.BJO 1997; 81:614.

Smith, Joseph Priestley (1845-1933), British ophthalmologist born in Birmingham, England. Smith was trained at Queen's Hospital at Birmingham, at the London Hospital, and at Moorfields. Made M.R.C.S. in 1871, he became ophthalmologic surgeon to Queen's Hospital, Birmingham (1874-1916), and was lecturer (1895-1900) and professor of ophthalmology (1900-1916) at the University of Birmingham. A world-renowned investigator of glaucoma, Smith was also the inventor of a perimeter and a tonometer. In 1881 he founded the *Ophthalmic Review*, of which he was co-editor until 1909. Smith authored: *Glaucoma: its causes, symptoms, pathology, and treatment* London 1879 (for which he earned the Jackson Prize of the R.C.S. 1878); *On the pathology and treatment of glaucoma* London 1891 and also contributed chapters on cataract, strabismus and on other affections of the muscles of the eye in Heafth´s *Dictionary of Surgery* 1886. Albert.JPW

Smith, Morton E. (1934-) American ophthalmologist born in Maryland, in 1996 appointed Professor of ophthalmology and Visual Sciences at the University of Wisconsin-Madison Medical School, teaching ophthalmic pathology. 1960 he received his M.D. from University of Maryland, was resident at Washington University St.Louis, Mo., and later specialised in ophthalmic pathology. He received his Professor Emeritus from the same university and is director of the American Board of Ophthalmology. He also is Chairman of Residency Review Committee of the Accreditation Council for Graduate Medical Education.

Smith, Nathan Ryno (1797-1887) American, Baltimorean surgeon and ophthalmologist. Born at Concord, N. H., in 1797, he received both his classical and his medical education at Yale University, in which institution his father was a professor. His medical degree was received in 1823. He taught for a time in medical schools at Philadelphia and Lexington, Ky., but spent the greater portion of his life as teacher and practitioner at Baltimore. He was widely known as an operator on the eye, and invented a number of useful ophthalmologic instruments. The most important of these is his knife for dividing strictures of the nasal duct. American Encyclopedia of Ophthalmology 15,p.11973

Smith, Robert (1689-1768) British physicist, born near Gainsborough, England. Smith was educated at Trinity College in Cambridge (M.A., 1715), and spent the rest of his life there, holding the Plumian professorship in astronomy from 1716 to 1760. Smith wrote on optics and harmonics; his major work is the Compleat System of Opticks: *A complete system of opticks, in four books, viz. a popular, a mathematical, a mechanical, and a philosophical treatise. To which are added remarks upon the whole*. 2 vols. Cambridge 1738 (Dutch edition *Volkomen samenstel der optica of gezigkunde* 2 vols. Amsterdam 1753. Albert

Smith, William F (1845-1901) A well-known ophthalmologist of San Francisco, California. Born at Urbana, Ohio, April 1, 1845, he served in the Army of the North throughout the greater portion of the Civil War. His medical degree was received at the Miami Medical College, Cincinnati, in 1867. He then was sent to Heidelberg, Germany, for a number of years by Larz Anderson, of Cincinnati, in company with Fred Anderson, Anderson's son. Returning to America, he settled as ophthalmologist at San Francisco in '69 or '70, and soon gained a wide reputation as an ophthalmic and aural operator. In 1884 he moved to Chicago, where, also, he was very successful. He succeeded Dr. Sigismund D.Jacobson as ophthalmologist to Cook County Hospital in 1885, a position in which he was himself succeeded by Dr. Boerne Rettman in 1890. In 1890, be was appointed as ophthalmologist to the Alexian Brothers Hospital in succession to Dr. F.C.Hotz. In 1891 he was himself succeeded in this position by Casey A.àWood. American Encyclopedia of Ophthalmology 15,p.11973-11974

Snabilié, Louis Philip Jacob (1797-1865) Dutch physician born in Arnheim, the Netherlands. He began a long career as a military physician in 1814. He received the M.D. at Groningen in 1820, became inspector general of the Dutch military medical service in 1853, and was made major general in 1860. Snabilié published papers on Egyptian and gonorrheal ophthalmias, iritis, and other eye diseases: *Bijdrage tot de kennis der heerschende oogziekte in het Nederlandsche leger, en de behandeling er van in het militaire hospitaal te Breda, van Julij 1836 tot Julij 1839*. Breda 1840.

Snell, Simeon (1851-1909) English ophthalmologist, an authority especially on miner's nystagmus, the prevention of industrial eye injuries, and the extraction of foreign bodies from the ocular interior by means of the electro-magnet. Born the son of a West Country, surgeon, near Launceston, England, his early education was received at Mannamead School, Plymouth, his medical training at Leeds, Guy's Hospital, and the Royal London Ophthalmic Hospital. In 1872 he became M. R. C. S., and, the following year L.R.C.P. Settling in Sheffield as ophthalmologist, he there remained until his death. For a time he lectured on anatomy at the Sheffield Medical School. In 1874, however, he was appointed ophthalmic surgeon to the Sheffield Royal Infirmary, a position which he never resigned. Snell was one of the founders of Sheffield University, and its first professor of ophthalmology. In 1892 he was made a Fellow of the Royal College of Surgeons of Edinburgh. In 1908 he was awarded the Middlemore Prize, consisting of a check for 50 Pound Sterling and an illuminated scroll, by the Council of the British Medical Association, for the general excellence of his work in ophthalmology. At the time of his death he was president of the British Medical Association. He was also ophthalmic surgeon to the Sheffield School for the Blind, and consulting ophthalmic surgeon to the Mexborough Hospital. His most important ophthalmologic writings are as follows: 1. *On a Peculiar Appearance of the Conjunctiva in Some Cases of Night Blindness. (Lancet,* 1876; Trans. of the Oph. Soc.U.K., 1881.*) 2. A Case of Acute Glaucoma, caused by Atropine and Cured by Eserine. (Trans. of the Ophth,. Soc. U.* K., 1882.) 3. *Extraction of Cataract by a Shallow Lower Flap, with a Record and Analysis of 121 Operations. (Brit. Med. Jour.,* 1883.) 4. *The Electro-Magnet and Its Employment in Ophthalmic Surgery, with Special Reference to the Detection and Removal of Fragments of Steel or Iron from the Interior of the Eye.* (1883.); *Miner´s Nystagmus and its relation to position at work and the manner of illumination*, Bristol 1892; *Eyesight and school life* Bristol 1895; with J.D.Leader *„History of the Sheffield Royal Infirmary“* Bristol 1895. American Encyclopedia of Ophthalmology 15,p.11977-11978 The Ophthalmoscope 1909,p.374.JPW

Herman Snellen

Snellen, Herman (sen.) (1834-1908). Dutch ophthalmologist, inventor of the well-known "*Test-Types for the Determination of the Acuteness of Vision*" and of a number of other devices in almost universal employment. Born at Zeist (near Utrecht) the son of a well-known physician, he received his medical degree at Utrecht in 1857, his dissertation being "*Experimentelle Untersuchungen über den Einfluss der Nerven auf die Entzündung.*" Devoting himself to ophthalmology (he had already been a pupil ofàDonders) he settled in Utrecht, and in 1862 was first physician and docent for ophthalmology in the Netherlands Hospital for Eye Patients at Utrecht. In 1877 he became Professor Ordinarius. Snellen invented, in addition to the wellknown test-types, the celebrated test for simulated one-sided blindness by means of green and red letters viewed through red and green glasses; operations for trichiasis, entropion, and ectropion; the "Snellen reformed" artificial eye; the aluminum shield as a substitute for bandages in the after-treatment of cataract, and various improvements in the desks and seats of schools. In 1894 he founded the Nederlandsch Gasthuis voor Ooglijders at Utrecht[this is wrong! The “Gasthuis” was founded by F.C. Donders in 1858, but it was Snellen it was who build the new Gasthuis, the old one being far too small-JPW]. Numerous honors flowed to him, of course, among them the honorary fellowship of the Royal College of Surgeons at Ireland in 1892. His son, Hermann Snellen, Jr., became also a famous professor of ophthalmology at Utrecht. He spoke to his patients freely in Dutch, German, French and English, and was equally kind and considerate in all these languages. He was a man of strong predilection for English people and English institutions, and nearly all his children were given English names. The hospitality of his home is a matter of kindly recollection to hundreds of foreign students and physicians. Snellen's most important ophthalmologic writings are as follows: 1.*Over de Methode der 0ogheelkundige Klinik.* (Inaugural address; 1877.) 2. *De Aandoeningen van Cornea en Conjunctiva*. (Verslagen Gasth. voor Ooglijders, 1860.) 3. *Iridesis, Entropion-Naad. (Ibid.,* 1862.) 4. *Optotypi ad Visum Determinandum.* (Utrecht, 1862; Dutch, English, French, German, Italian Translations; several polyglot editions.) 5. *Die Richtung der Hauptmeridiane des Astigmatischen Auges*. (v.Graefe's *Archiv f. Ophthalm.,* 1874.) 6. *Die Stokes'sche Linse mit Constanter Axe. (Ibid.,* 1874.) 7. *Ueber die Durchschneidung der Ciliarnerven bei Anhaltender Neuralgie eines Amaurotischen Auges. (Ibid.,* 1874.) 8. *Ophthalmometrie. Die Functionsprüfungen des Auges*. (In collaboration with E. Landolt. Graefe-Saemisch, *Handbuch der Gesammten Augenheilkunde*, 3. Thl.,

1874.) 9. *Das Phakometer zur Bestimmung von Focus and Centrum der Brillengläser*. (Zehender's Klin. Monatsbl., 1876.) 10. *Gleichseitige Monoculäre Prüfung bei den Augen mittelst Farbiger Sehproben. (Ibid.,* 1877.) 11. Sympathische Ophthalmie. *(Nederl. Tijdschr. v. Geneesk.,* 1881.) 12. *Progressive Schoolbanken. (Versl. van de Vereen. tot Verbetering der Volksgezondheid,* 1883.) 13. *Over den aard en omvang der nieuwere oogheelkunde Utrecht* 1892; 14. *Over het waarnemen van Licht en Kleuren* Utrecht 1899. 15. *Bijdrage tot de Geschiedenis der oogziekte heerschende in de rijksgestichten Veenhuizen en Ommerschans* Utrecht 1865. American Encyclopedia of Ophthalmology 15,p.11979-11980; Driekwart Eeuw Nederlandsch Gasthuis voor Behoeftige en Minvermogende Ooglijders te Utrecht 1858-1933 (Utrecht 1933). The Ophthalmoscope, London 1908,p.219-222, Albert Source Book of Ophthalmology,p.319

Snowball, Thomas (1873-1940) Scottish ophthalmologist born in Huntly, Aberdeenshire. He received his early education in that place. From there he proceeded to Aberdeen University where he graduated M.A. in 1892 and M.B., Ch.B. in 1897. Eventually deciding to study ophthalmology, he held the appointment of clinical assistant at " Moorfields " and subsequently went to Germany for further experience. He settled in practice in Burnley at the turn of the century, and had a long association with the Burnley Victoria Hospital, to which he was appointed Honorary Ophthalmic and Aural Surgeon in 1926 on the death of his partner Mr. Herbert Edmondson. He always took the greatest interest in this Hospital which has just completed a new block to house the eye and ear, nose and throat department. Apart from this main ophthalmic appointment he held many subsidiary posts in the district. Snowball was a very good German scholar and frequently made précis of articles in that language for the British Journal of Ophthalmology. He translated Oeller's " *Atlas of rare Ophthalmoscopic conditions*" and collaborated in the translation of "Weckebach's Arhythmia of the Heart" which comprised much of the work of the late Sir James Mackenzie whom he knew well as a fellow practitioner in Burnley. He was also joint author of the work "*On the relations between intraocular tension and the general blood pressure*," which was published in the Royal London Ophthalmic Hospital Reports. For many years he was a regular attendant at scientific meetings in London, Oxford and at the North of England Ophthalmological Society, of which he was President in 1929. BJO 24,418-419

Snyder, Charles Joe (1914-1996) American Librarian and Archivist of the Howe Library, Massachusetts Eye and Ear Infirmary in Boston from 1951 to 1982 and medical historian in the fields of ophthalmology and otolaryngology. Mr Snyder was born at Coraopolis, Pa. He attended Carnegie Institute of Technology and had no formal library training but a keen interest in literary works. A friend of a friend suggested that he apply for the open position of librarian at the Infirmary, and, as he walked past the gloomy Charles Street jail Charles Joe Snyder, on the way to the interview, decided that the atmosphere was too dismal and started to turn back. A sudden shower erupted so he decided to get out of the rain and keep the appointment. He was interviewed by DavidàCogan, an ophthalmologist who headed the Howe Laboratory. There was such instant rapport that Mr. Snyder was hired on the spot, thus launching his career as librarian and archivist. The staff of the Countway Library soon taught him how to run a medical library, and by the mid-1950s he had begun to write about the history of medicine, an endeavor that became his real passion. He often told his assistants that to make one's place in the library field, one could go the route of either writing and presenting or being active in professional organizations. He was utterly bored by the latter and chose the former. By the 1960s, he was writing a monthly section of the Archives of Ophthalmology titled "*Our Ophthalmic Heritage*." He wrote a total of 50 papers for "Our Ophthalmic Heritage and served on the editorial board of the Archives for this section for many years. Many of these papers were compiled in a book titled *Our Ophthalmic Heritage*, which was published in 1967. After 1966, he published a few more papers in the "Our Ophthalmic Heritage" series and began writing occasionally in other journals and also in the field of oto-laryngology. He then started working on a series of topics about the history of the Infirmary, which were compiled into a book titled *Massachusetts Eye and Ear Infirmary-Studies on Its History* and published after his retirement. During these years, beginning in 1957, he was writing papers, and presenting them at the New England Ophthalmological Society meetings, the Massachusetts Eye and Ear Infirmary in-house meetings, resident and fellow graduations,

and the Harvard Post-Graduate Course in Ophthalmology. As his reputation grew, he was asked to speak throughout the Boston area at Boston University and Tufts, Harvard and Radcliffe, and other learned places. He was invited to national and international meetings such as the 20th International Congress for the History of Medicine in Berlin, Germany, 1966, the dedication of the Cecil S. O'Brien Ophthalmic Library in Iowa City, 1973, and the 25th International Congress for the History of Medicine in Quebec City, Quebec, in 1976. He was made an honorary member of both the New England Ophthalmological Society and New England Otolaryngological Society. In recognition of his many contributions to the profession, the *Cogan History of Ophthalmology Society* honored him by establishing the Charles J. Snyder Lectureship that is presented annually. Arch Ophthalmol 1997,115:689

Soemmering, Detmar Wilhelm (1793-1871) German ophthalmologist, son of the still more famous Samuel Thomas vonàSoemmering. Born at Frankfort-on-the-Main, he received his medical degree at Göttingen, in 1816, presenting as dissertation "*De Oculorum Hominis Animaliumque Sectione Horizontali*. " He practised for many years in Frankfort , where, on June 8, 1866, his " doctor-jubilee " was celebrated. He died in the same city. He wrote: *Beobachtungen über die organischen Veränderungen im Auge nach Staaroperationen* Frankfurt/M. 1828. American Encyclopedia of Ophthalmology 15,p. 12001.JPW

Soemmering, Samuel Thomas von (1755-1830). German ophthalmologist, son of Dr. Johann Thomas, and father of Dr. Detmar Wilhelm Soemmering, the latter also an ophthalmologist of extraordinary ability. Born at Thorn, in West Prussia, he received his medical degree at Göttingen in 1778, presenting as dissertation "*De Basi Encephali et Originibus Nervorum Cranio Egredientium Libri V*." The next two years he spent in travel. In 1779 he was appointed instructor in anatomy and surgery at the Carolinum in Cassel, but in 1784 moved to Mayence in order to accept the chair of anatomy and physiology in the University at that place. Here he received in 1787 the title of "Hofrath." In 1796, however, he resigned his position on the faculty, and entered into private practice, still in Mayence. In 1804, he moved (because of the death of his wife) to Munich, and here he became Bavarian Privy Councillor and Fellow of the Academy of Sciences. Here, too, it is claimed by the Germans, that he invented the electric telegraph. In 1820 he returned to Frankfort, where he remained until his death. His fifty-year "doctor-jubilee" was celebrated April 7, 1828, on which occasion a memorial medal was struck. From the surplus of the funds which had been contributed for this medal, a prize was founded, "the Soemmering prize." This was awarded, quadrennially, for the best performances in physiology, during the past four years, an account of which should be contributed to the Senckenberger (Frankfort) Society for Natural Investigations. His most important ophthalmologic writings are as follows: 1. *Adams, Buesch und Lichtenberg, über einige Wichtige Pflichten gegen die Augen, mit Anmerkungen von S.* (Frankfort, 1794; 5 ed., 1819.) 2. *Abbildungen der Menschlichen Sinnesorgane, mit Deutsch und Latein. Text.* (4 Lief. FrankL, 1801-10. *"Auge" 1801-4; "Gehörorgan"1805; "Geschmack und Stimme"1806;"Geruch"1809-10*). *"Das Auge" is* undoubtedly his masterpiece.) 3. *Icones Oculi Humani* Franfurt/M. 1804; 4. *Über das feinste Gefässnetz der Aderhaut im Augapfel* 1818. American Encyclopedia of Ophthalmology 15,p.12001-12002.JPW

Chung Kyoon Sohn

Sohn, Chung Kyoon (1915-1984) Korean ophthalmologist. In 1938, he graduated from the Kyung-Sung (Seoul) Medical School (The School was absorbed into the Seoul National University Medical College after World War II in 1945), and then received training in Pathology (3 years) and Ophthalmology (2 years) at the Department of Pathology and of Ophthalmology, Kyung-Sung (Seoul) Imperial University Faculty of Medicine. Two years later, he was granted the Doctor of Medical Sciences from Kyung-Sung Imperial University Faculty of Medicine. After the end of World War II in 1945 he was appointed the Associated Professor of Ophthalmology at the Seoul Medical School and thereafter he moved to the Seoul Women Medical College. During the Korean War in 1950-1956, he served as a section chief, lieutenant colonel (final rank) of the medical corps of the Korean Military Army at the Korean Army Hospital Ophthalmological Section. During his army service, he also worked and trained at the Letterman US Army Hospital (Department of Ophthalmology) from 1952 to 1953. He was then appointed the Professor and Chairman at the Department of Ophthalmology, Catholic University of

Korea in 1958. This position he held until 1961, and subsequently, he was granted the title Professor Emeritus of the Catholic University of Korea. He served the Korean Ophthalmological Society as the President during 1966 - 1968, and subsequently Board Member of the Society during 1968 -1970. His academic interests were in ocular pathology: he delivered a Special Lecture on ocular pathology and surgical removal of cysticercus cellulosae in the anterior chamber, subconjunctival and subretinal spaces at the 9th Annual Meeting of Korean Ophthalmological Society in 1957. Furthermore, he reported on his studies on Korean terminology of all ophthalmic diseases and techniques. (SM)

Solomon, James Vose (1817-1899) English surgeon, of special renown in diseases of the eye. Born at Birmingham, England, the son of a physician, he studied at St. Bartholomew's Hospital, London, and became, in 1833, M.R.C.S., and F. R. C. S. in 1854. For a number of years he was surgeon to the Birmingham Eye Infirmary, and professor of ophthalmology at Queen's College. He wrote no book, but a number of articles on glaucoma, intra-ocular myotomy in myopia, etc. He died on his estate, Villafranca, near Birmingham. He wrote: *Tension of the Eyeball* London 1865 American Encyclopedia of Ophthalmology 15,p.12005. JPW

Somerville-Large, Lionel Beecher (1901-1966) Irish ophthalmologist. Somerville-Large´s popularity in Great Britain dated back to his time as House Surgeon at Moorfields and increased as the years progressed, culminating in his election as President of the Ophthalmologic Society of the United Kingdom in 1962. His four years of self-sacrificing war service in India were for him a period of mixed experiences. However highly he may have been esteemed outside Ireland, it was only in his own country that his true worth could be fully appreciated. He was a Fellow of the Royal Irish Academy, a member of the Society of Irish Military History, and had many other literary, archaeological, and artistic associations. In 1966 he was elected an Honorary Fellow of the Royal College of Surgeons in Ireland, the first ophthalmologist to be thus honoured. He endowed an Award, called by his name, to enable younger Irish ophthalmologists to spend some weeks abroad every year, reporting their experiences on their return. He reorganised, and indeed virtually refounded, the library in the Eye and Ear Hospital in Dublin, and founded the Irish Faculty of Ophthalmology.Brit.J.ophthalm.1966,50:616; AJO 1966,62:586-587

Sommer, Alfred (1942-) American ophthalmologist and epidemiologist, professor and Dean School of Hygiene and Public Health, Baltimore. Alfred Sommer received BA, MHS degrees and the MD degree 1967 at Harvard Medical School. He was Medical Intern and resident, Beth Israel Hospital, Harvard University, Boston, Massachusetts, 1967-69. Fellow in Epidemiology, Johns Hopkins School of Hygiene & Public Health, Baltimore, Maryland, 1972-73; his residency, followed by the fellowship in ophthalmology was at Wilmer Eye Institute 1973-76. A. Sommer´s teachers in ophthalmology were mainly A.Edward àMaumenee and ArnallàPatz. A.Sommer wrote the following books: 1.a. Sommer A. *Field Guide to the Detection and Control of Xerophthalmia*. Geneva, World Health Organization, 1978. (Published in English, French, Spanish, Russian, Portuguese and Arabic.) 1.b. Sommer A. *Field Guide to the Detection and Control of Xerophthalmia*. Second Edition. Geneva: World Health Organization, 1982. (Published in English, French, Spanish, Russian, Portuguese and Arabic.) 1.c. Sommer A. *Vitamin A Deficiency and Its Consequences: A Field Guide to Detection and Control*. Third Edition. Geneva: World Health Organization, 1995. (Published in English, French, Spanish, Bengali, Chinese) 2. Sommer A. *Epidemiology and Statistics for the Ophthalmologist*. New York: Oxford University Press, 1980. 3. Sommer A. *Nutritional Blindness: Xerophthalmia and Keratomalacia*. New York: Oxford University Press, 1982. 4. West KP, Sommer A. *Periodic, Large Oral Doses of Vitamin A for the Prevention of Vitamin A Deficiency and Xerophthalmia*. International Vitamin A Consultative Group. Washington: Nutrition Foundation, 1984. 5. Sommer A, West KP Jr. *Vitamin A Deficiency: Health, Survival, and Vision*. New York and Oxford: Oxford University Press, 1996. He published countless papers in international reviews. Alfred Sommer is a member of the American Ophthalmological Society, the American Association of Ophthalmologists, ARVO, Academia Internationalis and the Institute of Medicine. Phone ++1(410)-955-3540 Fax: 410-955-0121 email asommer@jhsph.edu (AB)

Song, Guoxiang (1928-) Chinese ophthalmologist, Professor of Ophthalmology, Second Hospital of Tianjin Medical University. He graduated from Beijing Medical University in 1955, and studied Ophthalmology at the Beijing Medical University under Profs. Liu Jiaqi and Li Fengming. He is on the Standing Committee of Chinese Society of Ophthalmology and on the Editorial Board of many Chinese Journals of Ophthalmology. His an expert in Orbital tumors and Ophthalmic Imaging, and has published over 90 papers. He received the Golden Apple Award by the Chinese American Society of Ophthalmology in 1996 (Award Lecture: The diagnosis and less traumatic removal of orbital cavernous hemangioma. Hangzhou, China, 1996). He also received a Medical Award by the Chinese Society of Ophthalmology, 1996 and National 2nd Award of the scientific and technological advance in 1999. He has written many books that embrace "*Eye and General Diseases*", " *System of Ophthalmology*, Vol III. 1996" and "*Orbital diseases* 1999". (Department of Ophthalmology, 2nd Hospital, Tianjin Medical University, P.R. China, 300211) (SM)

Soper, Joseph William (1925-1999) American contact lens specialist, inventor and industrialist, born Eldora, Iowa. He was an international leading figure in Contact Lens development and the founder and CEO of Soper Brothers, Inc.and Soper Inernational Ophthalmics. He published numerous scientific papers and wrote books related to the ophthalmic industry. He was a clinical Professor at Baylor College of Medicine, Department Ophthalmology and voluntered decades of service to the eye clinics of Ben Taub General Hospital and Veterans Administration Hospital. For over thirty years he co-founded and taught at the Baylor Contact Lens Course for continuing education. He was a founding member of the Contact Lens Society of America, American Society of Ocularists and National Contact Lens Examining Board. Soper was a Associate Fellow Member of the American Academy of Ophthalmology and received numerous awards from ophthalmic and industrial societies, among those the Joseph Dallos Award, Otto Wichterle Honor Medal and Hall of Fame Award.(RK)

Soranus of Ephesus. Ancient physician, obstetrician and ophthalmologist, accounted of all the Methodists the very best. He was born at Ephesus in Asia Minor, a son of Phoebe and Menarider, and practised medicine in Rome in the reign of Trajan (A.D.98-117) and Hadrian (A.D.117-138). He seems to have written fourteen books, of which the greatest, *"On Diseases of Women,"* another *"On Chronic Diseases,"* and one on anatomic nomenclature have come down to our day. His book, "*On the Eye,"* not now extant, is mentioned by Cassius Iatrosophistus. Soranus recommended the use oil for ophthalmia neonatorum.-American Encyclopedia of Ophthalmology 16,p.12011

Sourdille, Gabriel P. (1901-1956) French ophthalmologist. Sourdille first studied medicine under his father. After his medical studies in Paris, he returned to his native province, the Bretagne. He was named interne at the Hopitaux de Paris in 1925 under Nageotte, after having been as externe a pupil of Rist, de Vaquez and Poulard. He worked there successively under Morax and Terrien. In 1930 he became adjunct chief of the clinic. After having sustained his thesis (*Succès opératoires dans le traitement du décollement rétinien. Est-il indispendable d'obturer la déchirure?* Paris 1930), he went back to Nantes where he became ophthalmologist to the Hopitaux de Nantes, professor in 1937 at the medical school, and in 1955 at the medical faculty. He edited , with Offret and Paufique an important *Rapport* of the French Ophthalmological Society about *corneal transplantation*. JPW

Spaeth, Edmund Benjamin (1890-1976) American ophthalmologist. Spaeth graduated in medicine from the University of Buffalo in 1916. After internship he spent some time in the United States Army Medical Service. In 1927 he started private practice in Philadelphia. In 1934 he was appointed Professor of Ophthalmology at the Graduate School of the University of Pennsylvania and served as chairman from 1934 until 1955. During this period of time most of his surgical practice was conducted at the Graduate Hospital. He had the largest surgical practice of this era, thinking nothing of posting 15 or 20 cases in a day and having 40 to 50 patients in the hospital. His lectures on muscles and plastic surgery left his students breathless. Spaeth's major interest was in plastic surgery and he was one of the founders of the American Board of Plastic Surgery. Spaeth received numerous awards and special citations. He was also consultant to numerous hospitals and

his services and opinions were the basis for forming a Plastic Service at the Wills Eye Hospital where he was active until the last four or five years of his life. He wrote "Principles and Practice of Ophthalmic Surgery." AJO 1976,82:801-802

Spangenberg, George August (1779-1837) German physician, who devoted considerable attention to diseases of the eye. Born at Butzow, Germany, the oldest son of the well-known doctor, Peter Ludolph Spangenberg, he received his medical degree in 1801 at Würzburg, practised first at Braunschweig, later at Hamburg, held numerous official positions, moved to Albano, near Rome, on account of ill health, and there died. His only ophthalmologic writing was entitled "*Ueber die Entstehung der Form des Hornhautstaphyloms*" (Horn's *Archiv f. Med. Erf.,* V, 1804).American Encyclopedia of Ophthalmology 16,p.12013

Spark, Henry Langlands (1886-1909) An English ophthalmologist. Born in 1886, he graduated at the University of Edinburg in 1901, and practised at Bradford, England, about five years. He was for a time surgeon to the Royal Eye and Ear Hospital at Bradford. He died of pericarditis..American Encyclopedia of Ophthalmology 16,p.12013

Speleers, Reimond (1876-1951) Belgian ophthalmologist. Speleers was born in Waasmunster and died in Aalst. He obtained the M.D. degree in Leuven in 1900 and specialized in ophthalmology in Leuven and in Berlin (under Hirschberg). He worked as an ophthalmologist and Otorhinolaryngologist in St.Niklaas from 1903 to 1906, year in which he became the director of the Ophtalmic Institute in Ghent. During the first World war he became owing to his "activism" (open collaboration with the german occupying forces for obtaining Flemish autonomy) professor of ophthalmology (from 1916) and rector (from 1917) of the so-called von Bissing-University in Ghent. He left in 1918 for the Netherlands where he again worked as an ophthalmologist and otorhinolaryngologist. During the second War he was again appointed as professor of ophthalmology from end 1940 in replacement of Van Duyse. After the war he was sent to jail. (Verriest)

Sperino, Casimiro (1812-1894) Italian ophthalmologist, founder of. the first polyclinic and hospital for eye diseases at Turin. Born at Scarfanigi, Province of Cuneo, he practised first at Genoa, where he specially distinguished himself in the cholera epidemic. After a year or two of ophthalmic study at Paris, underàSichel, he settled in Turin. There he founded the Polyclinic in 1838, the Eye Hospital in 1853. From 1859 to 1873 he was professor of syphilis, dermatology and ophthalmology at the Turin University. He was also president of the medical faculty, and Rector of the University. He wrote no books, but a number of excellent articles, and was an ardent advocate of the repeated evacuation of the aqueous humor as a remedy for many eye diseases. He wrote: *Études cliniques sur l´évacuation répétée de l´humeur aqueuse dans les maladies de l´œil* Turin & Paris 1862. American Encyclopedia of Ophthalmology 16,p.12063. JPW

Spicer, William Thomas Holmes (1860-1935) British ophthalmologist. Spicer was born at Saffron Walden and was educated at Saffron Walden School, at Queen Elizabeth's School, Barnet, and entered Gonville and Caius, Cambridge, in 1879, obtaining a First Class in the Natural Science Tripos. From Cambridge he went to St. Bartholomew's Hospital where he was at once conspicuous among his contemporaries; he obtained the Brackenbury Scholarship in Surgery, the chief prize of its kind, and was elected President of the Abernethian Society. In 1884 he qualified as M.R.C.S., in 1886 as M.B., and in 1888 he became F.R.C.S. Eng. For a short time he engaged in general practice in London but soon gave it up for ophthalmology for which he had always had a great liking. He began working at Moorfields and in Vienna. He was appointed to the Moorfields staff in 1898, and on the death of Vernon was elected Ophthalmic Surgeon to St.Bartholomew's with àJessop as his senior colleague. He became Dean of the Medical School at Moorfields in 1899. Much of the popularity and high standing of the Royal London Ophthalmic Hospital as the teaching centre for ophthalmology in the Empire was due to the unostentatious but thorough work of Holmes Spicer as Dean. Quiet and dignified in manner he was possessed of great powers of organization and the wisdom of the measures which he proposed was rarely questioned by his colleagues. These two hospitals took up the greater part of his spare time and he continued his work at each till he attained the age limit; he was consulting surgeon to both at the time of his death; as well as to the Metropolitan and Victoria Hospital for Children. He joined the Ophthalmological Society

of the United Kingdom in 1889, on the Council 1900-1902, was Librarian from 1907-1912 and Vice-President, 1910-12. He was also President of the Ophthalmological Section of the Royal Society of Medicine. Late in life he was the first of the Gifford Edmonds Memorial prizewinners, and his essay on "*Parenchymatous Keratitis: Interstitial Keratitis: Uveitis Anterior*" was the first of the monograph supplements to be published by the British Journal of Ophthalmology. He was also Ophthalmic Surgeon to the Queen Alexandra War Hospital and for nine years served on the War Office Appeal Board. BJO 1935,19:538-540

Spina, Alexander *see* **Alexander de Spina**

Spindler, Johann (1777-1840) German medical historian and ophthalmologist. Born Sept. 8, 1777, at Müsbach, he received his medical degree at Würzburg, and in 1807 was made extraordinary professor of encyclopedia, methodology and medical history at his alma mater. He became in 1913 full professor of the same branches in the same institution. He wrote a treatise entitled " *Ueber Entzündungen des Auges und Ihre Behandlung"* (Würzburg, 1807), and lectured for a time on ophthalmology. In 1818 he received the "Ehrengrad" of Doctor of Philosophy.American Encyclopedia of Ophthalmology 16,p.12077

Spinoza, Benedict. (l623-1677) Dutch, born in Amsterdam, Holland. His parents were rich Spanish or Portugese Jews, but be was formally excommunicated (1656), as a heretic by the church.His life was entirely uneventful. He earned his living by grinding lenses at the Hague and devoted his leisure to philosophy. American Encyclopedia of Ophthalmology 16,p.12077

Spivey, Bruce (1934-) American ophthalmologist of mid-west origin. Born in Cedar Rapids, Iowa. B.A., Coe College, 1952 – 1955; M.D., University of Iowa, 1959; Master of Science Degree, University of Iowa, 1964; M.E.d. Degree (Medical Education), University of Illinois, 1969. Dr. Spivey was a pupil of Hermann M.àBurian, Alson E.àBraley, Frederick C.àBlodi, Placidus J.àLeinfelder, Robert C. àWatzke, Edward àFerguson and LeeàAllen. He became an instructor in ophthalmology in 1964. He was the first U.S. ophthalmologist in Vietnam, 1965-1966, Assistant Professor, University of Iowa, Department of Ophthalmology, 1966-1970, Associate Professor, 1970-1971, Chairman of Ophthalmology and Dean of the School of Medical Sciences, University Pacific at California Pacific Medical Center, San Francisco, CA, 1971-1987. He was President and CEO of Pacific Presbyterian/California Pacific Medical Center, 1976-1991. President and CEO of Hospital System (California Healthcare System), 1986-1992. Executive Vice President, American Academy of Ophthalmology, 1976-1992, all in San Francisco. He became President and CEO, Northwestern Healthcare Network (Hospital System), Chicago, IL, 1992-1997. Clinical Professor of Ophthalmology, Northwestern University, 1992-1997, President and CEO, Columbia Cornell Care (Physician Organization), New York City, 1997 to present, and Clinical Professor of Ophthalmology, Cornell and Columbia Universities, 1997 to present. He is a Member of the Academia Ophthalmologica Internationalis, 1982 to present, the International Council of Ophthalmology (ICO), 1985 to present. Chairman of the Advisory Committee of the ICO, 1985-1994 and Secretary-General, ICO, 1994 to present. He has had 24 named lectures, including the Jackson Lecture, American Academy of Ophthalmology, 1985. He is a Member of the American Ophthalmological Society, 1976, President, American Ophthalmological Society, 1995, member of the Society of Medical Administrators, 1985, President, Society of Medical Administrators, 1999-2001, President, American Board of Medical Specialties, 1980-1982. President, Council of Medical Specialty Societies, 2001-2002. Spivey wrote the following monographs: *Congenital achromatopsia: a clinical and functional report of a pedigree exhibiting X-linked recessive inheritance*. Thesis for Master of Science, University of Iowa, 1964; *Determination of curriculum content in ophthalmology for medical students*. Thesis of Master of Education, University of Illinois, June 1969; *Quantitative genetics and clinical medicine*. Trans American Ophthalmological Society, 74:661-707, 1976. (Thesis). He is a member of the following Limited Membership Societies: American Ophthalmological Society, Academia Ophthalmologica Internationalis, Society of Medical Administrators, Cogan Ophthalmic History Society. Spivey received the following medals and awards: ICLSO Gold Medal,

The International Contact Lens Society of Ophthalmologists, International Medical Contact Lens Symposium (First Recipient); Special Guest, American Academy of Ophthalmology, Centennial Annual Meeting; George L. Tabor, M.D. Award, San Diego, California; Howe Medal, Highest Award in American Ophthalmology, American Ophthalmological Society Special Guest, Association of University Professors of Ophthalmology, Annual Meeting, Honorary Member (1993 – present); Special guest, American Academy of Ophthalmology, Annual Meeting; Distinguished Service Award, American Academy of Ophthalmology; Lee Allen Award, American Society of Ocularists; Senior Honor Award, American Academy of Ophthalmology; Special (Inaugural) Award for Excellence, American Board of Medical Specialties; XLII Edward Jackson Memorial Lecturer, "*Survival With Excellence: Education and the Future of Ophthalmology*", American Academy of Ophthalmology Annual Meeting, San Francisco, California; Harry S. Gradle Teaching Medal, Pan American Association of Ophthalmology; Statesmanship Award, Joint Commission on Allied Health Professionals in Ophthalmology; Emile Javal Gold Medal, International Contact Lens Council of Ophthalmology; Doctor of Science (Honorary), Coe College, Cedar Rapids, Iowa; National Society for Performance and Instruction Award for Outstanding Application of Human Performance Technology to an Instructional Situation (developer of Objectives, co-developer of Ophthalmoscopy Unit, general consultant to other self-instructional units, and co-chairman, Joint Committee, American Academy of Ophthalmology and Otolaryngology/Association of University Professors of Ophthalmology Study Guide for Medical Students); Distinguished Service Award, American Academy of Ophthalmology; The Bronze Star Medal, United States Army; Cum Laude, Coe College, Cedar Rapids, Iowa. Bruce Spivey held the following named lectures: Ruedemann Lecture. *Education and the Role of Ocularists: Present and Future*. American Academy of Ophthalmology Annual Meeting, Chicago, Illinois, 1980; IX Edmund B. Spaeth Lecture. Ophthalmology: *What Do We Need to Know*? Wills Eye Hospital, Philadelphia, Pennsylvania, 1986; VIII Alson Braley Lecture. *Ophthalmology: Self-assessment and Evaluation*. Department of Ophthalmology, University of Iowa College of Medicine, Iowa City, Iowa, 1986; XL Mark Schoenberg Lecture. *Ophthalmology's Mega Concerns: 1987*. New York Society of Clinical Ophthalmology, New York, New York, 1987; David Worthen Lecture. Twenty-Seventh Annual Residents and Alumni Conference. Center for Sight, Georgetown University, Washington, DC, 1989; Dr. Arthur Linksz Lecture. *The Future of American Ophthalmology*. Semmelweis Scientific Society, The New York Academy of Medicine, New York, New York, 1989; The Harvard Lecture in Ophthalmology. Inaugural lecture in series. *Professionalism, Specialization and Competition*. Harvard University, Boston, Massachusetts, 1989; Claude Cowan, Sr. Lecture. Ophthalmology in the 90s. National Medical Association, Las Vegas, Nevada, 1990; Jules Stein Lecture in Ophthalmology. *An Ophthalmologist's Definition of Ophthalmology*. University of California, Los Angeles, California, 1991; Senator Ezzell Memorial Lecture. Medicine: A Business or a Profession? North Carolina and South Carolina Ophthalmology Society, 1992; Fralick Lecture. *After We Circle the Wagons, Which Way Do We Shoot?* University of Michigan, Ann Arbor, Michigan, 1992; M.G. Schulhof Memorial Lecture. *Healthcare Challenges in Middle America*. Ball Memorial Hospital, Muncie, Indiana, 1992; Ruth Gray Lectureship. The Evanston Hospital, Evanston, Illinois, 1993; George Tabor Lecture, San Diego, California, 1994; Distinguished Lecturer, John A Buesseler Distinguished Lecture Series. Texas Tech University, Lubbock, Texas, 1995; The 51st Gifford Memorial Lecture. Chicago Ophthalmological Society, Chicago, Illinois, 1995; Noback Visiting Lectureship. *The Challenges in Restructuring Our Healthcare System*. Kansas City, Missouri, 1995; The Li Shu Pui Lecture. *The Developmental Trends of Eye Care Systems in the Developed and Developing Countries in the Next Millenium*. The International Symposium on Challenges and Controversies of Ophthalmology & Visual Sciences in the Next Millenium, Hong Kong, 1998; Hogan-Ferguson Ethics Lecture. *Situational Ethics and Professionalism in Ophthalmology*. The University of Texas Health Science Center at San Antonio, San Antonio, Texas, 1999; Bajandas Lecture. *Challenges for Medicine and Ophthalmology in the Coming Decade*. Nineteenth Annual Alamo City Ophthalmology Clinical Conference, San Antonio, Texas, 1999; The Robert E. Mack, M.D. Lecture. *Faculty Practice: Basics For Survival and Factors For Success*. Wayne State University School of Medicine, Detroit, Michigan, 1999; Eugene Chan Memorial Lecture,

Guangzhou, China, 2000. (Bruce E. Spivey, M.D. Columbia-Cornell Care, 900 3rd Avenue, Suite 500, New York, N.Y.10022, U. S. A. Phone: +1-212-588-7301, fax: +1-212-588-7307, e-mail: bspivey@cccare.org) (AB)

Srinivasan, E. V. (1883-1963) Indian ophthalmologist, a pupil of Colonel Smith. Srinivasan was one of the earliest to practise the technique of intracapsular extraction, and earned for himself a considerable reputation as an ophthalmologist in India. Even at the age of 80 he was doing active hospital work and, indeed, became ill at his clinic and died the same evening. As a tribute to his long career of professional work, he was presented with a gold medal given by the All-India Ophthalmological Society at the International Congress in New Delhi. BJO 1963,47:768

St. John, Samuel Benedict (1845-1909). American ophthalmologist of Hartford, Conn. Born at Hudson, Ohio, the son of Samuel St. John, a professor in Western Reserve College of Ohio, he received the degree of A.B. at Yale University in 1866, and that of M.A at the College of Physicians and Surgeons in the City of New York in 1870. For a year, he served on the house staff at the Bellevue Hospital, and then became first house surgeon at the Manhattan Eye and Ear Hospital. For a time he was assistant demonstrator of anatomy and instructor in chemistry at the College of Physicians and Surgeons. From 1872-1874 he studied ophthalmology in Berlin, Vienna, Paris and London. In 1876 he became assistant surgeon in the Ophthalmic Department of the New York Eye and Ear Infirmary. In 1878 he settled as ophthalmologist and otologist at Hartford, Conn., where he practised for thirty-one years, i.e., until his death. In 1882 he was made instructor in ophthalmology at the Yale Medical School, a position which he held for twenty-three years. He was secretary of the American Ophthalmological Society from 1888 till 1908, and its president in 1908 and 1909. In 1909 he was elected a delegate to the International Ophthalmological Congress, which met at Naples. American Encyclopedia of Ophthalmology 16,p.12261-12262

St.Clair Roberts, Bernard Hamilton (? – 1943) British Ophthalmologist. St.Clair Roberts studied medicine at Birmingham University, qualifying in 1900. He became house surgeon to the Wolverhampton Eye Infirmary and then to the Birmingham Eye Hospital. He started practice in Dudley and opened an eye department at the Dudley Dispensary. This was moved to the Dudley Guest Hospital where Roberts became ophthalmic surgeon till 1940. In 1941 he was appointed surgeon to the Worcester City and County Eye Hospital where he worked until he died. In 1937 he had started an orthoptic clinic which had so much success that a new building was needed for the squint work. BJO 1944;28:154-155.

St.John, Samuel B. (? –1909) American ophthalmologist from Hartford,Conn. He was Secretary of the American Ophthalmological Society from 1888 to 1908 and occupied the presidential chair in 1909. St.John was lecturer in ophthalmology at Yale University from 1881-1905. The Ophthalmoscope, 1910,p.315-316.

St.Yves *see* **Saint-Yves**

Stack, E. H. E. (1866-1922) British ophthalmologist of Clifton. Stack was born at Langfield, Co. Tyrone, when his father, Canon Stack, of Londonderry Cathedral, was rector. He was educated at Haileybury, Cambridge and St. Bartholomew´s Hospital, and won in that hospital the Brackenbury Medical Scholarship and held more resident appointments than anyone before. In 1897, Stack went to Bristol as House Physician to the Royal Infirmary, after taking the diploma of F.R.C.S. In 1902 he became House Surgeon, and in 1906 was elected Assistant Surgeon. On àOgilvy's death he decided to specialize in eye work and was appointed Ophthalmic Surgeon to the Royal Infirmary in which post he continued until his death. Later, he succeeded to a vacancy as Surgeon to the Bristol Eye Hospital. Stack spent several years abroad in Paris and Vienna studying surgery. In 1920 he started the South Western Ophthalmological Society and arranged their quarterly meetings in Bristol. His was a familiar face at the Oxford Ophthalmological Congress where he invariably exhibited optical and other instruments; he was also a member of the Council and represented the Congress on the Council of British Ophthalmologists. His powers of teaching were remarkable and he was very keen on the welfare of the medical students, both at work and socially. During the war he did much

fine work at the 2nd Southern General Hospital at Bristol and at No. 56 General Hospital in France. He did not make many contributions to the literature of ophthalmology, his inclination being rather to the clinical side of the work. BJO 1922,6:479-480

Stahl, Georg Ernst (1660-1734) medical and chemical theorist, was born in Ansbach, Germany, and received his M,D, in 1684 at Jena, where he remained for three years as a lecturer on chemistry, From 1687 to 1694 he was court physician at Weimar; he then joined the medical faculty of the new University of Halle, where he lectured chiefly on the theory of medicine and on chemistry. Invited by Frederick William I of Prussia to be court physician, Stahl settled in Berlin in 1715, and there he remained until his death. Eighteenth-century medicine was considerably and in the main retrogressively influenced, by Stahl's doctrine of vitalism or animism, according to which the body, a passive mechanism, is permeated and guided by the anima, the soul or life force; this anima, when disturbed or misdirected, is the cause of bodily disease. His other influential doctrine, the "phlogiston" theory of combustion, had a similarly reactionary effect on the science of chemistry. He wrote: Propempticon inaugurale, de fistula lacrimali. Halle 1702, but his main work was *Theoria medica vera etc.* Halle 1707. Albert. JPW

Stahly, Georg von (1755-1802) Hungarian ophthalmologist. Born at Pesth in 1755, he was made professor of surgery, obstetrics and ophthalmology in his native town in 1792. He was ophthalmologist to the King of Hungary and was ennobled in 1797, and there died aged only 47. He left no writings of an ophthalmologic nature. American Encyclopedia of Ophthalmology 16,p.12139

Stanculeanu, George (1874-1917). Rumanian ophthalmologist, renowned especially for his researches on the anatomy and comparative anatomy of the eye. Born in Rumania, June, 1874, he received the medical degree at Paris. In 1908 be was appointed professor of ophthalmology in the University of Bucharest, Rumania, succeeding in this position his father-in-law, Manolesco. Early in the War, he moved to Jassy, France, where, for a time, he practised ophthalmology. In 1917, he came to America with Madame Stanculeanu for the purpose of arousing sympathy for Rumania. Soon after his arrival he became ill, but nevertheless set out on his lecturing tour and worked till work was for him no longer possible. His hobbies were photography and the collection of rare books. American Encyclopedia of Ophthalmology 16,p.12139-12140 AJO,1:380-381;Ophthalmic Record,26:598; Annales d´Oculistque 1917, vol.154. JPW

Stark, Walter J. (1942-) Professor of ophthalmology and Director of the Corneal and Cataract Services of The Wilmer Institute, The Johns Hopkins School of Medicine, Baltimore, Maryland. He was born in Oklahoma City, Oklahoma. He attended Davidson College and the University of Oklahoma, and obtained his MD. in 1967 from the University of Oklahoma School of Medicine. After completing internship at The Duke University Hospital. Durham, North Carolina, in 1968, Dr. Stark did his residency training in Ophthalmology at The Wilmer Institute, finishing in 1971. For two years he conducted research as a Clinical Associate at the National Eye Institute, The National Institutes of Health, Bethesda, Maryland. In addition to his position as Professor of Ophthalmology at Johns Hopkins, Dr. Stark is a consultant to, and former Chairman of the Ophthalmic Devices Panel of the U.S. Food and Drug Administration (FDA). He also serves as a consultant to the National Eye Institute and the National Naval Medical Center and is a member of the Board of Trustees of the Oklahoma Eye Foundation at the Dean A. McGee Eye Institute. Dr. Stark has served on the editorial board of numerous ophthalmology journals and was the associate editor of *Archives of Ophthalmology*, an American Medical Association publication. Dr. Stark has received numerous honors. He is a Senior Honor Award Recipient of the American Academy of Ophthalmology and an Honor Award Recipient of the American Academy of Ophthalmology. He received a Special Citation from the U.S. Food and Drug Administration Commissioner for his "*Expert and Precedent-Setting Medical and Scientific Ophthalmic Device Advice*" to the FDA. He has served as Visiting Professor at numerous universities throughout the United States and abroad, including universities in China, Russia, Australia, Egypt, Brazil, Argentina, Columbia, Saudi Arabia, England, France, and Italy. Dr. Stark was awarded the First Visiting Professorship at Zhongshan Ophthalmic Center, Sun Yat-Sen University of Medical Sciences, Guangzhou, The People's Republic of China. Continuing medical

education is another area in which he has been very active. For example, he is in charge of the Current Concepts in Ophthalmology program at Johns Hopkins, and the Wilmer Residents Association.. He has contributed significantly to the ophthalmic literature, co-authoring over 400 publications, including five textbooks on ophthalmic surgery. Dr. Stark has been a national leader in the area of corneal transplantation, the use of the excimer laser, and intraocular lens implantation for rehabilitation of patients with visual disability. He has trained numerous ophthalmologists who have subsequently become leaders in this field, holding academic positions in prestigious universities throughout the world. Dr. Stark was instrumental in the development of the Medical Eye Bank of Maryland and Tissue Banks International, both of which have the goal of alleviating blindness caused by corneal disease. He is currently Medical Director of the Medical Eye Bank of Maryland and Director of the Medical Board of Directors at Tissue Banks International. In 1991, Dr. Stark's patients endowed the Walter J. Stark Distinguished Professorship at The Johns Hopkins University School of Medicine. Dr. Stark holds one of thc few endowed Distinguished Professorships at the University. (Walter J. Stark, MD, The Wilmer Ophthalmological Institute, the Johns Hopkins University School of Medicine, 727 Maurmenee Building, 600 North Wolfe Street, Baltimorre, Maryland 21287-9278, U. S. A. phone: +1-410-955-5490; Fax: +1-410-955-2798; e-mail: wstark@jhmi.edu)(SM)

Steele, Newton C. (1850-1919) American ophthalmologist, professor of diseases of the eye, ear, nose & throat in Chattanooga Medical College. Born at Athens, Ala., he received the medical degree at the University of Nashville, Nashville, Tenn., in 1873. For a time he practised at Corinth, Miss., but soon moved to Chattanooga. Here he practised as ophthalmologist and oto-laryngologist until his death, a period of more than thirty years. His only son, Willard Steele, was a partner with him for the last few years of his practice. American Encyclopedia of Ophthalmology 16,p.12162-12163 AJO 1919,2:705-706

Steffan, Philip (1838-1913) German ophthalmologist from Marburg, studied in Erlangen, Berlin and became in Vienna a pupil of v.®Arlt. Back in Frankfurt, Germany he founded a large practice as ophthalmic surgeon. He wrote a few booklets of minor importance: "*Das Auge im gesunden und kranken Zustande*." Erlangen 1862; "*Erfahrungen und Studien über die Staaroperation im Zeitraum der Jahre 1861-1867*" Erlangen 1867; "*Klinische Erfahrungen und Studien [über die Staaroperation] im Zeitraume der Jahre 1867-1869...*" Erlangen 1869; "*Dr.Steffan´sche Augen-Heilanstalt*", in 4 parts, Frankfurt 1872-75.Albert: Source Book of Ophthalmology. The Ophthalmoscope, 1913, p. 130.

Stein, Doris Jules (1902-1984) widow of Dr. Jules Stein. Mrs.Stein and her husband, for whom the Jules Stein Eye Institute at UCLA is named, were the leading, philanthropists in eye research and blindness prevention. For more than half a century Mrs. Stein shared with her husband the warmth and enjoyment of their talented family and a vast circle of friends throughout the world. She participated in the accomplishments of his business career, which included the founding of MCA, Inc., in 1923 while he was a practicing ophthalmology and leadership of this corporation to a position of preeminence in the entertainment field, and added her distinctive attributes as an authority on the decorative arts. Most significantly for vision science, she guided his resurgence of interest in ophthalmology and blindness prevention. In the late 1950s during a visit to the New York Lighthouse for the Blind, Doris Stein, deeply affected by the experience, said, "Jules you must do something". From that beginning came Research to Prevent Blindness. Inc., the nationwide organization founded by Dr. Stein in 1960, which has catalyzed eye research and currently provides annual research awards to more than 50 universities and research centers throughout the United States. In 1961, when there were initial efforts to develop an Eye Institute at UCLA, Doris Stein suggested that her husband assume the principal role. Her enthusiasm and encouragement were irresistible and, after five years of planning and construction, the Jules Stein Eye Institute commenced scientific activities. AJO 1984,98:127

Stein, Jules (1896-1981) American ophthalmologist. Born in South Bend, Indiana, Jules Stein graduated from the University of Chicago at the age of 18 and received his M.D. degree from Rush Medical College. After postgraduate studies under Professor ErnstàFuchs at the University of Vienna, he completed residency training in ophthalmology at Cook County Hospital in Chicago, commenced medical practice, and

was certified by the American Board of Ophthalmology. A musician from an early age, Jules Stein financed his education by playing in and leading his own band, and by booking other musicians for engagements that he could not personally fill. In 1924, the year in which his scientific treatise on telescopic lenses was published, he founded Music Corporation of America (MCA) and, shortly thereafter, gave up the practice of medicine to concentrate on this enterprise. He originated the concept of the "one-night stand" for major dance bands, and within ten years MCA represented most of the great name bands of the era. Activities extended to include worldwide representation for the leading film stars, directors, writers, and musical artists. With the advent of television, MCA rapidly entered this field, and acquired Universal Pictures, the Universal City property, and Decca records, as well as other enterprises, to become the world's largest producer of film entertainment and preeminent in the entertainment industry. But medicine was always in his heart and in the late 1950s, urged by his wife DorisàStein, he visited the New York Light house for the Blind, an organization highly regarded for its programs to aid the partially sighted and blind. During that visit, Mrs. Stein turned to him and said, "you must do something , " From this came the questions: Why are these people blind? What can be done to prevent blindness? The response was monumental. First, in 1960 he founded, with Robert E. McCormick, and donated millions of dollars to Research to Prevent Blindness (RPB). With distinguished trustees and a highly competent staff, this national health organization became a catalyst for eye research in the United States. Among its major actions, RPB aided the construction of eye research facilities, channeled $40 million into vision, and developed a program of unrestricted research grants. Currently, RPB provides annual eye research grants to more than 50 universities throughout the United States. Second, he founded the Jules Stein Eye Institute at UCLA School of Medicine in Los Angeles. Dedicated in 1966, this center has become internationally recognized for its coordinated programs of eye research, education, and patient care. Third, Jules Stein heightened public awareness of eye disease and called attention to the need for increased public support of eye research. With a determined eight year campaign, he was mainly responsible for the passage of legislation to establish the National Eye Institute as a separate entity in the National Institutes of Health. He served on the first National Advisory Eye Council in 1969 and was instrumental in directing vastly increased federal funds to this national resource for the planning, conduct, and support of eye research. Dr. Stein received honorary doctoral degrees from the University of California, the University of Louisville (Kentucky), the Medical College of Wisconsin, and the Johns Hopkins University. Additional honors included the Humanitarian Award of Variety Clubs International (1968), Honorary Fellowship in the American Academy of Ophthalmology (1972), Albert Lasker Public Service Award (1976), Lions International Humanitarian Award (1976), Jean Hersbolt Humanitarian Award of the Academy of Motion Picture Arts and Sciences (1976), Walt Disney Humanitarian Award of the National Association of Theatre Owners (1976.), Pioneer of the Year Award of the Foundation of Motion Picture Pioneers (1976), and Leslie Dana Gold Medal of the St. Louis Society for the Blind (1981). A posthumous citation read by Frank W.àNewell conferred the First Humanitarian/Civic Award of the University of Chicago Alumni Association, which was to have been presented to Dr. Stein May 14, 1981. Jules Stein brought about a surge of progress, a renaissance, in eye research and the medical means for preserving and restoring sight. AJO 1981,92:127-129; Arch Ophthalmol 1981,99:1653

Steinberg, Roy H. (? – 1997) American Ophthalmologist . Steinberg was brought up in New York and went to college in New York and Michigan, before going to medical school in New York Medical College. Following an intership in Massachusetts Memorial Hospital, he acquired a formal medical training in research with Herbert Jasper at the Montreal Neurological Institute. However he decided to specialise in the visual system, continuing his research during military service at the Naval Aerospace Medical Institute in Pensacola,Florida. He wa subsequently appointed to the University of California, San Francisco, where he spent the remainder of his working life. He won the highest respect and reputation, receiving the Friedenwald award in 1987, and, shortly before he died, jointly with Matt LaVail the Moran Prize from the University of Utah.BJO 1997;81:1117.

Steinman, Robert Martin (?-) American vision scientist. Steinman received his medical education at St. Louis University, School of Dentistry D.D.S. 1948;Graduate Faculty, New

School for Social Research M.A.1962; Graduate Faculty, New School for Social Research Ph.D. 1964; N.I.H. Postdoctoral Fellow (UPENN: Prof. J. Nachmias, Sponsor) 1962-64; Teaching Fellow, Graduate Faculty, New School 1959-61 Research Associate, University of Pennsylvania 1961-64; Assistant Professor, University of Maryland at College Park 1964-67; Associate Professor 1967-72; Professor 1972- ; Private Dental Practice (N.Y.C., N.Y.) 1948-59 Military Service, US ARMY DC (France) 1950-52. Steinman received the following awards:Teaching Excellence Award, UMCP (Lindback Award) 1967 Contribution to Science Award, UMCP Sigma Xi 1996. He is a member of the Society for Neuroscience, Psychonomic Society, Association for Research in Vision and Ophthalmology, Optical Society of America (Fellow 1981), American Association for Advancement of Science (Fellow 1980), American Psychological Society (Fellow 1994), Cognitive Science Society. BOOK CHAPTERS:Steinman, R. M. (1975) *Oculomotor effects on vision*. In: *Ocular Motility and Its Clinical Implications*. Edited by Bach y Rita and Lennerstrand,Wenner-Gren Symposium Series, Pergamon, Oxford, pp. 395-415. Steinman, R. M. (1976) *The role of eye movements in maintaining a phenomenally clear and stable visual world*. In: *Eye Movements and Psychological Processes*. Edited by Monty and Senders, Hillsdale, N.J.: Lawrence Erlbaum Associates, pp.121-154. Collewijn, H., Martins, A. J. & Steinman, R. M. (1981) *Natural retinal image motion: Origin and change*, Annals of the New York Academy of Science, 374, 312-329. Steinman, R. M. & Levinson, J. Z. (1990) *The role of eye movement in the detection of contrast and detail*. In: *Eye Movements and their Role in Visual and Cognitive Processes*. Edited by E. Kowler, Elsevier Science (Biomedical Division), Amsterdam. pp. 115-212. Collewijn, H., Steinman, R. M., Erkelens, C. J. & Regan, D. (1991) *Binocular fusion, stereopsis and stereoacuity with a moving head*. In: *Vision and Visual Dysfunction*, vol. 10A: Binocular Vision. (Edited by D. Regan), MacMillan, London, pp. 121-136. Kowler, E., Pizlo, Z., Zhur, G. J. Erkelens, C. Steinman, R. M. &Collewijn, H. (1992) *Coordination of head and eyes during the performanceof natural (and unnatural) visual tasks*. In: *The Head-Neck Sensory Motor System*. Edited by Berthoz, A., Vidal, P. P. and Graf, W., Oxford University Press, London, pp. 419-426. Collewijn, H., Steinman, R. M., Erkelens, C.J., Pizlo, Z. & Van der Steen (1992) *The effect of freeing the head on eye movement characteristics during 3-D shifts of gaze and tracking*. In: *The Head-Neck Sensory MotorSystem*. Edited by Berthoz, A., Vidal, P.P. and Graf, W., Oxford University Press, London, pp. 412-418 Collewijn, H., Steinman, R. M. Erkelens, C.J., Kowler E. & J. Van der Steen (1992) *Binocular gaze control under free-head conditions*. In:*Vestibular and Brain Stem Control of Eye, Head and Body Movements*, Edited by Shimazu, H. and Shinoda, Y. Karger, Basel, pp. 203-220. Collewijn, H., Erkelens, C. J., Pizlo, Z. & Steinman, R. M. (1994) *Binocular gaze movements: coordination of vergence and version*.In: *Eye Movements in Reading*, Edited by Ygge, J. & Lennerstrand, G., (Wenner-Gren International Science Series: Vol. 64), Pergamon, Oxford,pp. 97-115. Steinman, R. M. (1995) *Moveo ergo video: Natural retinal image motion and its effect on vision*. In: *Exploratory Vision: The ActiveEye*, Edited by Landy, M. S., Maloney, L. T. and Pavel, M., Springer-Verlag,New York, pp. 3-50.PUBLICATIONS IN REFEREED JOURNALS:Nachmias, J. & Steinman, R. M. (1963). Study of absolute visual detection by the rating-scale method. Journal of the Optical Society of America, 53, 1206-1213. Nachmias, J. & Steinman, R. M. (1965). An experimental comparison of the method of limits and the staircase method. American Journal of Psychology, 78, 112-115. Nachmias, J. & Steinman, R. M. (1965). Brightness and discriminability of light flashes. Vision Research, 5, 545-558. Steinman, R. M. (1965) Effect of target size, luminance and color on monocular fixation. Journal of the Optical Society of America, 55,1158-1165. Steinman, R. M., Cunitz, R. J., Timberlake, G.T.. & Herman, M. (1967) Voluntary control of microsaccades during maintained monocular fixation. Science, 155, 1577-1579. Steinman, R. M. & Cunitz, R. J. (1968) Fixation of targets near the absolute foveal threshold. Vision Research, 8, 277-286. Puckett, Jane deWeese & Steinman, R. M. (1969) Tracking eye movements with and without saccadic correction. Vision Research, 9, 695-703. Cunitz, R. J.. & Steinman, R. M. (1969) Comparison of saccadic eye movements during fixation and reading. Vision Research, 9, 683-693. Steinman, R. M., Skavenski, A. A. & Sansbury, R.V. (1969) Effect of lens accommodation on holding the eye in place without saccades. Vision Research, 9, 629-631. Steinman, R. M., Skavenski, A. A. & Sansbury, R.V. (1969) Voluntary control of smooth pursuit velocity. Vision Research, 9,

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C., Van der Steen, J., Steinman, R. M., & Collewijn, H. (1989 a) Ocular vergence under natural conditions. I. Continuous changes of target distance along the median plane. Proceedings of the Royal Society of London B, 236, 417-440. Erkelens, C. Steinman, C. & Collewijn, H. (1989 b) Ocular vergence under natural conditions. II. Gaze-shifts between real targets differing in distance and direction. Proceedings of the Royal Society of London B, 236, 441-465. Erkelens, C., Collewijn, H. & Steinman, R. M. (1989 c). Asymmetrical adaptation of human saccades to anisometropic spectacles. Investigative Ophthalmology and Visual Science, 30, 1132-1145. Steinman, R. M., Kowler, E. & Collewijn, H. (1990) New directions for oculomotor research. Vision Research, 30, 1845-1864. Dell' Osso, L. F., Van der Steen, Steinman, R. M. and Collewijn, H.(1992) Foveation dynamics in congenital nystagmus: I. Fixation. Documenta Ophthalmologia, 79, 1-24. Dell' Osso, L. F., Van der Steen, Steinman, R. M. & Collewijn,H. (1992) Foveation dynamics in congenital nystagmus: II. Smooth Pursuit. Documenta Ophthalmologia, 79, 25-50. Dell' Osso, L. F., Van der Steen, Steinman, R. M. & Collewijn, H. (1992). Foveation dynamics in congenital nystagmus: III. VOR. Documenta Ophthalmologia, 79, 51-70. Epelboim, J., Booth, J. & Steinman, R. M. (1994) Reading unspaced text: implications for theories of reading eye movements. Vision Research, 34, 1735-1766. Collewijn, H., Erkelens, C. J. & Steinman, R. M. (1995) Voluntary binocular gaze-shifts in the plane of regard: Dynamics of version and vergence. Vision Research, 35, 3335-3358. Epelboim, J., Kowler, E., Steinman, R. M., Collewijn, H. Erkelens,C. J. & Pizlo, Z. (1995) When push comes to shove: Compensation for passive perturbations of the head during natural gaze shifts. Journal of Vestibular Research, 5, 421-442.Epelboim. J., Steinman, R. M., Kowler, E., Edwards, M., Pizlo, Z., Erkelens, C. J. & Collewijn, H. (1995) Visual search and memory in sequential looking tasks. Vision Research, 35, 3401-3422. Epelboim, J., Booth, J. & Steinman, R. M. (1996) Much ado about nothing: the place of space in text. Vision Research, 36, 461-470. Collewijn, H., Erkelens, C. J. & Steinman, R. M. (1997) Trajectories of the human binocular fixation point during conjugate and non-conjugate gaze-shifts. Vision Research, 37, 1049-1069. Epelboim. J., Steinman, R. M., Kowler, E., Edwards, M., Pizlo, Z., Erkelens, C. J.& Collewijn, H. (1997) Gaze-shift dynamics in two kinds of sequential looking tasks. Vision Research, 37, 2597-2607. Epelboim, J., Booth, J. R., Ashkenazy, R., Taleghani, A. & Steinman, R. M. (1997) Fillers and spaces in text: The importance of word recognition during reading. Vision Research, 37, 2899-2914. Robert M. Steinman, Department of Psychology, University of Maryland at College Park, Maryland, 20742-4411, U.S.A. Tel. 301-405-5877 Email: steinman@brissio.umd.edu (JPW)

Stellwag von Carion, Carl (1823-1904) Austrian ophthalmologist born in Satulung, Rumania. He received his M.D. in 1847 at the University of Vienna, where, after several years of clinical and experimental work on the pathology of the eye, he became lecturer (1854-1857) and then professor of ophthalmology (1857-1894); he also taught for many years at the Josephs Academy in Vienna. A prolific author, von Carion investigated many aspects of ophthalmology but was particularly successful in advancing the understanding of refractive errors. He wrote: *Die Ophthalmologie vom naturwissenschaftlichen Standpunkte* Erlangen (2 vols. in 3) 1853-1858 (On which publication he became lecturer);. *Theorie der Augenspiegel auf elementarem Wege aus den Grundsätzen der Optik entwickelt*. Wien 1854. *Atlas der pathologischen Histologie des Auges* Leipzig 1860-1861(edited by C. Wedl); *Lehrbuch der praktischen Augenheilkunde* Wien 1861 (American edition *Treatise on the diseases of the eye, including the anatomy of the organ*. New York 1868, Italian ed. 1863 Hungarian Pest 1868); *Der intraoculare Druck und die Innervations-verhältnisse der Iris vom augenärztlichen Standpunkte aus betrachtet*. Wien 1868; *Abhandlungen aus dem Gebiete der praktischen Augenheilkunde ... unter Mitwirkung der ... Dr. C. Wedl und Dr. E. Hampel* Wien 1882 and *Neue Abhandlungen aus dem Gebiete der prakt. Augenheilkunde. Ergänzungen zum Lehrbuche, unter Mitwirkung von E. Bock und L. Herz* Wien 1886. He was also the designer of an ophthalmoscope named after him. Schett/Keeler *The Ophthalmoscope*. Albert. JPW

Stensen, Niels (1638-1686) Danish anatomist and geologist (also known as Nicolaus Steno), born in Copenhagen. Steno studied medicine at the University of Copenhagen under Simon Paulli and Thomas Bartholin (1656-1660) and at the University of Leiden, where he received his M.D. in 1664. During the ensuing decade, he conducted anatomical

and geological research in France and Italy, living mainly in Florence. He underwent a conversion to Catholicism in 1667, entered the priesthood in 1675, and spent his last years in apostolic activity in various cities of Scandinavia and northern Germany; he died in Schwerin, Germany. Steno made important discoveries of the anatomy of the human lymphatic system, muscles, and brain, described in *De musculis et glandulis* (1664), *Elementorum myologiae specimen* (1666/67), and *Discours sur I'anatomie du cerveau* (1669); and in comparative anatomy and embryology. At least as significant was his contribution to geology: in the *De solido intra solidum naturaliter contento dissertationis prodromus* (1669), a work filled with new insights, he outlined the principles of modern geology. He also wrote: *Observationes anatomicae, quibus varia oris, oculorum, & narium vasa describuntur, novique salivae, lacrymarum & muci fontes deteguntur* Leiden 1662.

Sterling, Peter Ph.D (?-) American scientist, professor of Neuroscience in ophthalmology in Philadelphia. Sterling received his Ph.D.(Biology) in 1966 at Western Reserve University, became 1967-69 Instructor in Physiology, Harvard University Medical School, in 1969 he was named Assistant Professor of Anatomy, and remained in that position until 1974 at the University of Pennsylvania School of Medicine. Sterling was 1974-80 Assistant Professor of Anatomy, University of Pennsylvania School of Medicine and from 1980 Professor of Neuroscience, University of Pennsylvania School of Medicine. Since 1995 Professor of Neuroscience in Opthalmology, U. of P. School of Medicine. Present address: Department of Neuroscience
School of Medicine, 123 Anatomy/Chemistry Bldg.,Philadelphia, PA 19104-6058 tel: (215) 898-9228, FAX (215) 898-9871 email: peter@retina.anatomy.upenn.edu (JPW)

Stevens, Edmund W. (1864-1910). Canadian-American ophthalmologist, of much promise, who died in middle life. Born at Woodstock, N. B., he received his medical degree from Jefferson Medical College in 1884. At first he practised general medicine in New Brunswick, but, being in feeble health, and unable to stand the rigors of the Canadian climate, he moved to Philadelphia. He was there for a time demonstrator of anatomy in the Pennsylvania College of Dental Surgery, but, acquiring soon an interest in ophthalmology, he took up the study of that specialty at the Philadelphia Polyclinic, Jefferson Medical College, and Wills Eye Hospital. In 1898 he was obliged to move to Colorado because of a continually increasing pulmonary disease. One year later, he began to practise ophthalmology at Denver, and he kept at work, with now and then a brief interval of rest, until his death. Stevens' ophthalmologic writings are as follows: 1. Section on the *Use of the Ophthalmometer*, in de Schweinitz's *Diseases of the Eye*. 2. *Extirpation of the Lacrimal Sac for Dacryocystitis*. (Colorado Medicine, 1904, p. 261.) 3. *Fatal Septicemia Due to Ophthalmia Neonatorum*. (Ophthalmic Record, 1905, p. 519.) 4. *Retinal Hemorrhage in Apparently Healthy Eyes*. (Colorado Medicine, 1906, p. 176.) 5. *Emphysema of Orbit and Lids Following Removal of Middle Turbinate*. (Denver Medical Times, Nov., 1907, p. 157.) 6. *Direct Injury to Optic Nerve*. (Colorado Medicine, 1908, p. 269.)American Encyclopedia of Ophthalmology 16,p.12256-12257

Stevens, George Thomas (1832-1921) American ophthalmologist. To begin with he was in general practice, but at the outbreak of the Civil War in 1861 he was commissioned an assistant surgeon in the 77th regiment New York State Volunteers. He was later made surgeon, and for two and a half years was the operating surgeon of his division. At the end of the war he resumed the general practice in Albany. In 1870 he was appointed Professor of Physiology and of Diseases of the Eye in the Albany Medical College, the Medical Department of Union University. In 1880 he moved to New York and confined his Practice to eye work. He retained his ability to perform delicate operations into his eighty-sixth year. He was a prolific writer, taking up his army experiences, functional nervous diseases, and botany. His principal contribution to medical science was to be found in his contributions and investigations into anomalies of the muscles of the eye.. He introduced a terminology which has been usually adopted, namely: orthophoria, heterophoria, esophoria, heterotropia, esotropia, exotropia, hypertropia, anophoria catophoria and declination. Stevens introduced the phorometer, the tropometer and the clinoscope. BJO 1921,5:432

Stevenson, John (1778-1846) English ophthalmologist of no very great ability. He studied with àSaunders and settled in London. He became an M. R. C. S., as well as surgeon and ophthalmologist to the Duke of York. He founded in London a "Dispensary for Cataractous Patients," whose name, in 1823, was changed to "Ophthalmic Institute for the Cure of Cataract." In 1841 he became ophthalmologist and aural physician to the King of Belgium. He was for a time instructor in the anatomy, physiology and pathology of the eye and ear. He lived in Margaret Street, Cavendish Square, but nothing is known concerning his life subsequent to 1844. Stevenson's ophthalmological writings are as follows: 1. *On the Morbid Sensibility of the Eye, Commonly Called Weakness of Sight.* (London, 1810.) 2. *Letter (on Cataract) to the Editors of the Medical and Physical Journal.* (Vol. XXVIII, pp. 257-265, and 357-367.) 3. *A Practical Treatise on Cataract.* (London, 1813.) 4. *On the Nature and Symptoms of Cataract and on the Cure of that Disease in its Early Stages.* (London, 1824.) 5. *On the Nature, Symptoms and Treatment of the Different Species of Amaurosis or Gutta Serena.* (London, 1821.) 6. *On the Advantage of an Early Operation for the Different Forms of Cataract.* (Edinburgh Jour., XIX, pp. 513-524, 1823.) 7. *Deafness, its causes, prevention and cure* London 1828; 8. *Cataract, a Familiar Description of its Nature, Symptoms and Ordinary Modes of Treatment.* (London, 1834.) American Encyclopedia of Ophthalmology 16,p.12257

Stevenson, Mark Delimon (1876-1915) Canadian ophthalmologist of great promise, who died before he had reached his prime. Born at Trafalgar, Ontario, Canada, in 1876, he received his medical degree at Rush Medical College, Chicago, in 1897. After a course at the Royal London Ophthalmic Hospital, he settled, in 1900, at Akron, Ohio, where he practised until his death. For ten years he was associated in practice with E. K Weaver. Mark Stevenson was ophthalmic surgeon to the Akron City Hospital, and to the People's Hospital; also oculist and aurist to the Children's Hospital. In 1911 he established, on East Market Street, Akron, a private hospital, which he conducted with great success until his death. He was a member of the American Medical Association, and a Fellow of the American College of Surgeons. A frequent contributor to medical journals and the inventor of several useful ophthalmic instruments, he was also one of the collaborators on *"Ophthalmology"*. Stevenson came to his death very unexpectedly. While he was preparing to perform an operation, he sent the nail file too deeply beneath his left thumb nail. During the subsequent operation the tiny scratch became infected, and, though all was done that lay in human power to save his life he died of septicemia, aged only 39. American Encyclopedia of Ophthalmology 16,p.12257-12258

Stewart, Andrew J (1873-1919) American ophthalmologist. He was born at Provo City, Utah. For a time he was a government surveyor, then school-teacher, and, at length, a missionary to Germany from the church of Jesus Christ of Latter-day Saints. He graduated from the business department of Brigham Young University in 1895, and, in 1900, from the normal department. Entering at once the College of Physicians and Surgeons at Baltimore, he there received his medical degree in 1904. For a time he practised in Mt. Pleasant, Utah, but later moved to Provo, where he remained until his death. At just what time he began to devote himself to ophthalmology could not be learned. At the time of his death he was president of the Utah County Medical Association. American Encyclopedia of Ophthalmology 16,p.12258 AJO 2, 1919, p.770

Stewart, John S (1864-1892) American ophthalmologist of much promise who died young. Born in Allegheny County, Pennsylvania, he received his liberal education at the Western University, and his medical training at the Medico-Chirurgical College of Philadelphia. At the latter institution he was graduated in 1885 with the highest honors. He settled as ophthalmologist in Philadelphia, wrote a number of ophthalmologic articles, and died of tuberculosis, having been a practitioner only about seven years. American Encyclopedia of Ophthalmology 16,p.12259

Stievenart, François-Antoine (1796-1879) Belgian ophthalmologist. Stievenart received his M.D. degree in 1820. He operated on about 50 cataracts every year, first by lowering and later by extraction. For his services in the Ophthalmic Institute he received in 1840 from the Provincial Government a superb gilt vase made by Charles Deluisseaux (since 1981 in the museum of the city of Mons). (Verriest)

Stillerman, Manuel L. (1916-1994) American ophthalmologist. A graduate of the University of Chicago, he did his medical training at the University of Chicago and at Rush Medical College. He interned at Cook County Hospital and then served in World War II. He was a medical officer with the Fifth Army's 16th Evacuation Hospital. On his return home in 1946, he became a resident at Michael Reese Hospital in Chicago and at the Illinois Eye and Ear Infirmary. On completing his residency, he was a Heed Fellow for a year, studying ophthalmology at various institutes of ophthalmology throughout the United States. Stillerman was a general ophthalmologist who had an interest in pediatric neuro-ophthalmology and was the author of a number of journal articles, including articles that were part of the *Archives of Ophthalmology*. He was also editor of the ophthalmology section of *Eye, Ear, Nose, and Throat Monthly* during the 1970s. From 1961 until 1985, Stillerman was the chair of the department of ophthalmology at Michael Reese Hospital. He headed the department's residency training program and was responsible for training scores of residents, many of whom are still in active practice throughout the United States. Arch Ophthalmol 1995,113:550

Stilling, Benedict (1810-1879) German anatomist and surgeon, born in Kirchhain, Germany. Stilling received his M.D. at Marburg in 1832 with the thesis *De Pupilla artificialis in sclerotica conformanda*. He was (1833) assistant to Ullmann at the surgical clinic and became at the end of 1833, Landesgerichtwundtarzt (Physician to the district court) in Kassel. An academic career for religious reasons was not possible for him. This caused his dismissal from his position after he refused to be sent to Eiterfeld. He made several trips abroad to study under the leading figures in physiology, especially Bernard, Brown-Séquard, and particularly Magendie and Amussat in Paris, with whom he had a long lasting friendship. Stilling's major contributions are his investigations of the anatomy and physiology of the central nervous system. Also a surgical innovator, he introduced ovariotomy by the extraperitoneal route in 1837. Of his many publications, a small number concern ophthalmologic matters. Stilling´s thesis is quite important to the history of corneal transplantation. It was translated into German the following year: *Die künstliche Pupillenbildung in der Sclerotica. Nebst einem Anhange über die Verpflanzung der Hornhaut, Keratoplastik* Marburg 1833. Stilling wrote a number of books of which four received prizes, amongst these the famous Monthyon prize: *Untersuchungen über die Textur des Rückenmarks* Leipzig 1842; *Über den Bau und die Verrichtungen des Gehirns* Jena 1840; *Beiträge zur Natur und Heilkunde* (7 issues) Frankfurt 1856; *Neue Untersuchungen über den Bau des Rückenmarks mit einem Atlas etc.* Cassel 1857-1859; *Untersuchungen über den kleinen Gehirns des Menschen* (3 volumes) Cassel 1864-1878. He also wrote surgical books, most of them about urological matters. American Encyclopedia of Ophthalmology 16, p. 12260-12261. Albert. See: Mannis/*Corneal Transplantation*, Ostend, Wayenborgh 1999) JPW

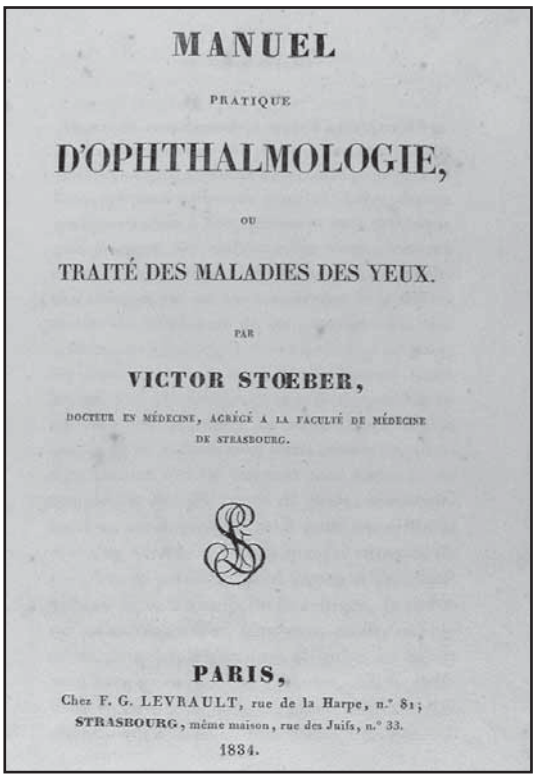
Stilling, Jakob (1842-1915) German ophthalmologist, son of Benedict Stilling. He studied medicine at various German universities, receiving his M.D. in 1865. He adopted ophthalmology as his specialty and practiced for many years in Kassel, making scientific journeys abroad, especially to Turin, where he studied under Carlo Reymond. In 1880 he settled in Strasbourg, as lecturer (1880-1884) and then professor of ophthalmology (1884-1915). Stilling introduced a system of pseudoisochromatic plates for testing color vision (1877); he published a number of important studies of color vision, myopia, and perimetry. Stilling wrote: *Ueber die Heilung der Verengerungen der Thraenenwege mittelst der inneren Incision. Ein neues Operationsverfahren*. Cassel 1868. *Ueber Farbensinn und Farbenblindheit: Rede, gehalten auf 51. Versammlung deutscher Naturforscher und Aerzte*. Cassel 1878. *Ueber des Sehen der Farbenblinden*. Cassel 1880. *Untersuchungen über den Bau der optischen Centralorgane Erster Theil: Chiasma und Tractus opticus*. Kassel & Berlin 1882. *Pseudo-isochromatische Tafeln für die Prüfung des Farbensinnes*. Kassel & Berlin 1883. *Untersuchungen ueber die Enstehung der Kurzsichtigkeit*. Cassel 1887. *Schädelbau und Kurzsichtigkeit; eine anthropologische Untersuchung*. Wiesbaden 1888. *Anilin-Farbstoffe als Antiseptica und ihre Anwendung in der Praxis*. Strassburg 1890. *Grundzüge der Augenheilkunde*. Wien & Leipzig 1897.

Stjernschantz, Johan, W. (1947-) Finnish pharmacologist. Professor of Pharmacology and Drug Development, University of Uppsala. He qualified in medicine at the University

of Helsinki, Finland 1974, and was awarded the Doctorate of Science in 1976. He spent his postdoctoral fellowships with AndersàBill at Uppsala University and Marvin Sears at Yale University. He was an assistant Professor of Ophthalmology and Visual Science at Yale University 1981-1982. He worked at Pharmacia (later Pharmacia & Upjohn) in Uppsala, Sweden 1986-1997, and was in charge of prostaglandin research and the development of latanoprost (Xalatan). He held an adjunct professorship of Experimental Ophthalmology at Uppsala University 1996-1998, and was appointed Professor of Pharmacology and Drug Development at Uppsala University in 1999. He is a member of the Editorial Board of Experimental Eye Research, and Journal of Ocular Pharmacology. His main research interests are prostanoids, neuropeptides, microcirculation and fluid dynamics in the eye. He has published more than 100 original papers in this field and edited "*Beta-adrenergic blockade and intraocular pressure - theoretical and clinical aspects. Pharmaceutical Co. Star*, Tampere, Finland, 1986" and "*The ocular effects of prostaglandins and other eicosanoids*. Progress in clinical and biological research, Vol 312, Alan R. Liss, Inc. New York. 1989 (with L. Z. Bito)". Some examples of recent publications are "*Structure-activity relationships and receptor profiles of some ocular hypotensive prostanoids*. Surv. Opthalmol. 41: Suppl. 2: 47, 1997", "*Effect of latanoprost on regional blood flow and capillary permeability in the monkey eye*. Arch. Ophthalmol. 117: 1363, 1999" and "*Increased pigmentation of iridial melanocytes in primates induced by a prostaglandin analogue*. Exp. Eye Res. 68:431, 1999". For the excellence of his research, he received the Pharmacia &Upjohn Achievement in Science and Medicine Award 1997, and the Proctor Medal 2000 from the Association for Research in Vision and Ophthalmology (ARVO). On the basis of his expertise, he has been invited lecturer at many international congresses and served as an organizer of many symposia. He also served as a peer reviewer for many Ophthalmological, Pharmacological and Biological Journals. He is a member of ARVO, International Society for Eye Research, European Association for Vision and Eye Research, European society for Pigment Cell Research, Nordic Society of Physiology, Finnish Society of Brain Research and Medical Association of Finland. (Department of Neuroscience and Pharmacology, University of Uppsala, Uppsala Sweden. phone: +46-18-471-4602; fax: +46-18-504595; e-mail: johan.stjernschantz@neuro.uu.se)

Stocker, Frederick William (1893-1974) American ophthalmologist of Swiss origin, born in Lucerne, Switzerland, the son of a Swiss ophthalmologist, he attended the public schools of Lucerne, the University of Geneva, and received the M.D. degree from the University of Bern in 1917. The years of his ophthalmic training were spent at the University Eye Clinic in Munich with Professor CarlàHess and the University Eye Clinic in Bern with Professor àSiegrist. He practiced many years in Lucerne and became president of the Swiss Ophthalmological Society. In 1941, Stocker emigrated to the United States and worked at the Institute of Ophthalmology, Presbyterian Hospital, Columbia University and the Wilmer Ophthalmological Institute, Johns Hopkins Hospital, Baltimore. In 1942, he joined the staff of McPherson Hospital where he practiced for 32 years. He also served as professor of ophthalmology at Duke University and associate clinical professor of ophthalmology at the University of North Carolina. During World War II he was chairman of the International Medical Commission for examination of prisoners of war in the United States and Canada under the Geneva Convention. In addition to memberships in local and state societies, Stocker was a diplomate of the American Board of Ophthalmology and a member of the American Ophthalmological Society, the American Academy of Ophthalmology and Otolaryngology, Societé Francaise d'Ophthalmologie, Ophthalmological Society of Panama (honorary member), Columbian Society of Ophthalmology and Otolaryngology (corresponding member), and a Fellow of the American College of Surgeons. Stocker first reported successful penetrating keratoplasty for Fuchs' dystrophy and developed a large practice in corneal surgery. His primary interest remained in anterior segment surgery and is reflected in his publications which number over 100. His thesis for the American Ophthalmological Society, "*The Corneal Endothelium and its Clinical Implications*," was published as a monograph and has been a popular reference work for many years. AJO 1974,78:1043-1044

Stoeber, Victor (1803-1871) French professor of ophthalmology, founder of the first ophthalmic hospital in France. Born at Strasbourg, in Alsace, he received his medical



MANUEL

PRATIQUE

D'OPHTHALMOLOGIE,

OU

TRAITÉ DES MALADIES DES YEUX.

PAR

VICTOR STŒBER,

DOCTEUR EN MÉDECINE, AGRÉGÉ A LA FACULTÉ DE MÉDECINE DE STRASBOURG.

PARIS,

Chez F. G. LEVRAULT, rue de la Harpe, n.° 81;

STRASBOURG, même maison, rue des Juifs, n.° 33.

1834.

degree in the same city in 1824. He then pursued the study of ophthalmology in Paris, London, Dublin, Glasgow, Edinburgh, and in Holland, Belgium, Berlin (many months) Italy and Vienna where he worked under Rosas and Jaeger. In 1829 he was made adjunct professor at the University of Strasbourg, and in 1830 he began to lecture on ophthalmology, also publishing his *"Manuel Pratique d´Ophtalmologie ou Traité des Maladies des Yeux"* (Paris and Strasbourg, 1830; 2nd ed., Brussels, 1837). In 1845 he founded the above-mentioned eye hospital, and was named professor of ophthalmology at the Medical Faculty. At its beginning, this institution had only ten beds, but it rapidly grew both in size and in usefulness. In 1866 Stoeber began to suffer from a painful affection of the bladder. Nevertheless, at the siege of Strasbourg, in 1870, he was actively on duty among the sick and wounded. He wrote no other book of an ophthalmologic character than that above mentioned, but his articles in journals, especially in the "*Annales d'Oculistique,"* are very numerous (34 ophthalmic papers and 10 bibliographical reviews), and relate to almost every branch and phase of ophthalmology. With colleagues, Stoeber founded, in 1835, the *Archives médicales de Strasbourg*, which was the first medical journal in that region, before becoming from 1841 editor of the *Gazette médicale de Strasbourg* which appeared until 1914. After becoming a widower, he married again and adopted the sons of his wife, herself also a widow. One of these sons was Ferdinand àMonoyer who became himself professor of ophthalmology in Lyon. American Encyclopedia of Ophthalmology 16,p.12262-12263. Extended informations can be found written by Durand de Bousingen D. : "*Stoeber Daniel Victor*", in: *Nouveau Dictionnaire de Biographie Alsacienne*, vol. 36, Strasbourg, Fédération des Sociétés d'Histoire et d'Archéologie d'Alsace , décembre 2000 ; Sitzmann, II, pp.832-833 ; Encyclopédie de l'Alsace, volume XI., p 7O17 ; *Biogr.Lexikon der hervorragenden Aerzten aller Zeiten und Völker(Reprint)*, vol. 5, 1962 , pp.434-435; Héran J. et coll. , *Histoire de la Médecine à Strasbourg*, Strasbourg 1997 and 1998 ; Stoeber V. *A mes enfants*, slnd (1867), biographic notes ; Tourdes G. *Discours prononcé en hommage à Victor Stoeber*, Paris-Strasbourg 1871 ; Weill G. *Victor Stoeber et l'enseignement de l'ophtalmologie* , in : *Deux siècles d'Alsace française*, Strasbourg, 1948, pp 351-379.Durand de Bousingen D, *Un médecin strasbourgeois à Vienne : le voyage de Victor Stoeber en 1856* , in : *Etudes Danubiennes*, tome III, vol. 1, Strasbourg, 1987, pp 17-29. Bibliographic datas received from D. Durand de Bousingen; Hirschberg, Julius *The History of Ophthalmology*, Wayenborgh 1986, vol.7,[§609-611],p.300-315,with portrait. JPW

Stone, Elise Pfeiffer (1819-1880). American medical practitioner of Oakland, Calif., whose practice was almost wholly limited to ophthalmology and otology. Elise Pfeiffer was born in Mainz, Germany. Having studied medicine at the University of Giessen for three years, she moved to New York, where she practised general medicine until 1857, when she married a Mr. George Stone, and changed her residence to Nevada City, California. Six years later she moved to San Francisco, and again began to practise. In 1867 she was graduated from the Woman's Medical College of Philadelphia, and four years later located in Oakland, where she practised general medicine, but especially ophthalmology and otology, until her death. American Encyclopedia of Ophthalmology 16,p.12263

Stone, Robert King (1822-1872). American anatomist, physiologist, and ophthalmologist. Born at Washington, D, C., of old American ancestry, he received the degree of A. B. at Princeton University. For a time he studied medicine under Thomas Miller, of Washington, and then attended lectures at both the National Medical College, District of Columbia, and the University of Pennsylvania. At the latter institution he received his degree in 1848. In 1849 he received the degree of M. D. ad *eundem* at the University of Louisville, and again, in 1851, at the University of New York. For a number of years he studied in London, Edinburgh, Vienna, and Paris, paying especial attention to anatomy, physiology, and ophthalmology. He settled in Washington in 1847 as general practitioner, and was shortly afterward made assistant to the professor of anatomy in the National

Medical College. In 1848 he was adjunct professor of anatomy and physiology at the same institution, and a few years later full professor of anatomy, physiology, microscopic anatomy, and ophthalmic and aural surgery. Being thrown from his carriage, he suffered a fracture of the thigh, and was never well afterwards. He resigned his teaching positions, and, for a time, restricted his practise to ophthalmology and otology. American Encyclopedia of Ophthalmology 16,p.12263-12264

Straub, Manuel (1858-1916). Dutch ophthalmologist from Amsterdam. Straub completed his study of medicine at the University of Amsterdam. After having been for a few years assistant in the department of pathological anatomy he entered the military medical service, and in this capacity was transferred to Utrecht where he came in contact with F.C. ®Donders and ®Snellen,sen., and soon became one of their most enthusiastic pupils. Under Donders´direction, he worked in the physiological laboratory, while as assistant to Snellen, he enjoyed the opportunity to advance in clinical ophthalmology. His original education as pathologist led to histological work in the laboratory, finding ample material in the large collection of eyes in the clinic. From this resulted a series of publications on the anatomy of the cornea, on glioma and other subjects. In 1895 he was called to the vacant chair of Amsterdam which he occupied for twenty years. After Straub´s death the Amsterdam chair was occupied by his pupil W.P.C.®Zeeman. The Ophthalmoscope, 1916,p. 627-628. Am Encyclopedia of Ophthalm. vol.16, p. 12290; Schett/*The Ophthalmoscope*,Vol.1,p.120

Strawbridge, George (1844-1914). American ophthalmologist of Philadelphia, Pennsylvania, born at Philadelphia, of Dutch ancestry. His bachelorship in arts was received at the University of Pennsylvania in 1862, and his medical degree at the same institution in 1865. For the next three years he studied ophthalmology and laryngology at Vienna, Heidelberg, and Berlin. In 1868 he settled at Philadelphia as ophthalmologist and laryngologist and soon was widely known as an operator, teacher and writer. From 1873-1899 he was lecturer on ophthalmology and otology at the University of Pennsylvania. He was also oculist and aurist at the Philadelphia Dispensary, surgeon to the Wills Eye Hospital, ophthalmologist to the Presbyterian Hospital, surgeon in charge of Pennsylvania Eye and Ear Hospital, etc. He was a, fellow of the College of Physicians of Philadelphia, a member of the American Ophthalmological Society, and of the American Otological Society, and in 1876 was a delegate to the International Medical Congress. He was also a member of numerous foreign ophthalmological and otological societies. Strawbridge wrote: „ *Ophthalmic Contributions* “ Philadelphia 1873, which was only a reprinting from previous articles in different medical journals. The Ophthalmoscope,1914, p.743. Albert:Source Book of Ophthalmology, p.330. Am Encyclopedia of Ophthalm. vol.16, p.12290-12291

Streatfeild, John Fremlyn (1828-1886) English ophthalmologist, for a long time editor of the Royal *London Ophthalmic Reports* and one of the founders of the British Ophthalmological Society. Born at Chart's Edge, Westerham, Kent, studied at the London Hospital, where be was one of the private pupils of Curling and in 1852 became an M. R. C. S. Having served for a time in the Crimean War, he devoted himself exclusively, on his return to London, to diseases of the eye. He became at once assistant surgeon at Moorfields, and in 1862 F. R. C. S. A short time after he was made ophthalmic surgeon at the University College Hospital and professor of clinical ophthalmic surgery at University College. Still later he was senior surgeon at Moorfields. He was a good talker, a poor writer, an excellent operator. Most of Streatfeild's writings are to be found in the *R.L Reports.* Some, however, were contributed to the *Lancet*, to Erichsen's *"Surgery,"* and to Quain's *"Dictionary of Medicine* of the most important refers to a special operation for *enucleation of the eye. (Lancet, p.849,* 1872) Am Encyclopedia of Ophthalm. vol.16, p.12292.

Streiff, Bernardo Enrico (1908- ?) Swiss ophthalmologist of Italian origin. Streiff was born in Genoa, Italy, the son of a well known ophthalmologist. He was Professor of ophthalmology in Lausanne from 1944 until he became Emeritus of that University. He earned his M.D. from the Genoa University in 1933 with the thesis *Rechts-Links Problem im binokularen Gesichtsfeld*. In 1934 Streiff moved to Switzerland and worked there in Geneva under A. Franceschetti until 1944, becoming in 1938 an ophthalmologist. He

became in 1940, still under Franceschetti, Lecturer in ophthalmology before moving in 1944 to Lausanne where he received the professorship in ophthalmology at the University. He wrote countless papers (about 250) and also book chapters in *Schweizer Lehrbuch der Augenheilkunde*, Basel 1948, 2nd.ed.1954; *Hereditary and constitutional dystrophies of the cornea* (with Franceschetti) in *Modern Trends in Ophthalmology*, London 1940; *Augenveränderungen bei konstitutionellen Anomalien des Stoffwechsels* in *Almanach f.d.Augenheilkunde 1960*, edited by Rorschneider and *Uvéitis allergiques* in *Thérapeutique médicale oculaire*, Paris 1957. Streiff authored with M. Monnier: *Der retinale Blutdruck im gesunden und kranken Organismus*, Vienna 1946. He was editor of *Fortschritte der Augenheilkunde* since 1952 and of *Moderne Probleme d. Ophthalmologie* Basel 1957. Streiff edited *Ophthalmologica* (formerly *Zeitschrift f.Augenheilkunde*) and *Confinia Neurologica*, both Karger Basle. A *Festschrift* was published to honor his 70th birthday, edited by H.Sautter and W.Straub: *Commemorative volume in honour of Professor E.B. Streiff* in *Advances in Ophthalmology*, vol.36, Basel Karger 1978. Streiff was elected to Emeritus status in 1968. His collection of first editions (mostly Italian) was acquired by Edward Norton and included in the Mary and Edward Norton Library at Bascom Palmer Eye Institute in Miami. His name is connected with the *Hallermann-Streiff- François* syndrome. JPW

Strempel, Karl Friedrich (1800-1872). German internist, who was active in ophthalmology. Born at Bössow, Mecklenburg, he received his medical degree at Berlin in 1822, practised at Schwerin and Rostock, where, in 1826, he was made professor of medicine. He wrote a number of works of a general character, but, on ophthalmology, only the introduction to F. Keil's "*Das Schielen, und dessen Heilung nach Dieffenbach's Erfindung"* (2d ed., 1841). He seems himself to have performed a rather large number of strabismus operations, but not with any high degree of success. He died at Ludwigslust. Am Encyclopedia of Ophthalm. vol.16, p.12293

Stricker, Wilhelm (1816-1891). German physician and medical historian, who devoted considerable attention to ophthalmology. Born at Frankfort a.M., he studied at Dresden, Göttingen and Berlin, at the last center receiving his medical degree. For the greater portion of his life, he practised in his native city. He was one of the founders of the ophthalmic institute. For a time he was head librarian of the United Senckenberger Medical Library. Stricker's ophthalmologic writings are as follows: *1. Die Krankheiten des Linsensystems nach Physiologischen Grundsätzen.Eine in Brüssel Gekrönte Preisschrift.* (Frankf. 1845.) *2. Der Ritter. Ein Beitrag zur Geschichte der Augenkeilkunde vor 100 Jahren. Drei Bücher.* (Jour. f. Chir. u. Augenheilk., N.F,II *)* Am Encyclopedia of Ophthalm. vol.16, p. 12302

A drawing by Stromayr

Stromayr, Caspar (16th cent.,) German physician of Lindau im Bodensee, Germany. Stromayr was a physician who specialized in hernia repair and eye surgery. His manuscript was found in the city library of the little town of Lindau where it has been "asleep" for about 400 years. Wanting to write a book about the town of Lindau, the librarian wished to include parts of this manuscript, not knowing what he had found. The manuscript finally found its way to the famous German medical historian Karl Sudhoff who recorded the first photographs of this manuscript. It took another 14 years to find a surgeon, Brunn, prepared to analyse and to publish Caspas Stromayr beautiful work.It includes 186 colored illustrations depicting surgical procedures and instruments, and a series of line drawings of eye diseases and operations. Title given by Brunn: *Die Handschrift des Schnitt-und Augenartztes ... Wertung von Walter von Brunn* Berlin 1925.

Stromeyer, Georg Friedrich Louis (1804-1876). German surgeon was the first to propose the section of a muscle as a means of curing cross-eye. Born at Hanover, Germany, the son of the known physician, Christian Friedrich Stromeyer, he receved his medical degree at Berlin in 1826. For a number of years, both before and after his graduation, he travelled in Germany, France and England, studying the healing art with the greatest assiduity in a number of universities. In 1838, on the death of Michael Jaeger, he was called to the chair of surgery at the University of Erlangen, a position he held till 1841. After this he taught and practised in Munich, Freiburg and Kiel. For a number of years he then saw service of the hardest character as surgeon in the Schleswig-Holstein army. In 1876 he celebrated the jubilee (50th anniversary) of his doctorship and shortly

afterward, June 15, 1876, he died. Stromeyer's most important services, perhaps, were rendered in the field of military surgery. In the domain of ophthalmology, however, he will always be remembered because of his important connection with the strabismus operation. Stromeyer, in 1838, proposed (in his *Beiträge zur Operativen Orthopädie)* the employment of muscular section as a means of treating cross-eye, and even went so far as to perform the operation on a cadaver. Dieffenbach, however, in 1839, reported the case of a boy of seven on whom he had actual formed this operation for an inward squint, in the presence of Jüngken and with an almost perfect result. The Paris Academy of Sciences divided the Monthyon prize between Stromeyer and Dieffenbach: "To M. Stromeyer for having first proposed the strabismus operation and for having first performed it on the cadaver, and to M. Dieffenbach for having first performed it (and with success) on the living subject". He also wrote *Das Korektom, ein neues Instrument für die künstliche Pupillenbildung*... Augsburg 1842 and *Verletzungen und chirurgische Krankheiten des Kopfes* Freiburg 1864.Am Encyclopedia of Ophthalm. vol.16, p. 12302. JPW

Strudwick, Edmund (1802-1879) American surgeon, of chief importance as a lithotomist and gynecologist, but also of a certain interest in ophthalmology. Born in Orange County, North Carolina, he received the degree of M. D. at the University of Pennsylvania in *1824.* He performed the operation for lacerated perineum a number of times, and cut for stone on twenty-eight consecutive occasions without a death. Concerning his ophthalmologic activity, we quote the following passage from Kelly's "*Cyclopedia of American Medical Biography," 1, p. 424:* "Scores of operations for cataract were performed by him, according to the now obsolete needle method, without losing an eye. Once as he was driving homeward after a long trip in the country, he saw an old man trudging along, led by a small boy at his side. Strudwick stopped, ascertained that the man had been blind for twelve years, made him get into his carriage and took him to his home. One eye was operated on first and the other the next week, sight being restored to each. This case, as did all other similar ones appealed to Dr. Strudwick very greatly. Am Encyclopedia of Ophthalm. vol.16, p.12303-12304

Stucky, J. A. (?-1931) American oto-rhino-laryngologist and ophthalmologist. About him is known that he graduated in medicine from the University of Louisville in 1878, and that he practiced in Louisville and Lexington till his death. He was President of the American Laryngological, Rhinological and Otological Society in 1903, President of the American Academy of Ophthalmology and Oto-Laryngology in 1907, Chairman of the Section on Laryngology, Otology and Rhinology, American Medical Association in 1921, President of the Kentucky State Medical Association in 1921, Chairman of the Section on Laryngology, Otology and Rhinology, Southern Medical Association in 1922. To ophthalmologists Stucky was, in his time, best known for his "work on trachoma in the mountains of Kentucky" which he *first* reported to the Academy of Ophthalmology and OtoLaryngology in 1911. He made many trips to the mountains, conducting a traveling clinic, and was successful in interesting the Russell Sage Foundation, the Kentucky State Board of Health and the U. S. Public Health service, to the end that trachoma hospitals were established, and the incidence of this disease in Kentucky greatly lessened. Besides his clinical observation on the treatment and transmission of the disease, Stucky insisted that it be considered a deficiency disease, and by appropriate diet and hygienic living was able to secure excellent results from his treatment. Stucky was more known for his work in Oto-Laryngology, to which field the greatest efforts of his long professional life were devoted. His contributions were many and valuable. He was a missionary with a message, which he delivered often and earnestly. He was a serious student, a hard worker, a speaker of much force, and a man of great energy, which qualities have enabled him to leave his mark in his special field. His interest in sociology was great, and on many occasions he delivered public addresses on a great variety of subjects, upon all of which he was interesting and helpful to his hearers. AJO 1931,14:696-697

Subedi, Sudesh (1961-) Nepalese ophthalmologist, Chief Ophthalmologist at Lumbini Rana Ambika Eye Hospital, Bhairahawa, Nepal. He received MBBS degree from L'vov State Medical Institute, USSR in 1991 and MD in Ophthalmology in 1997 from Institute of Medical Sciences, Maharajgunj, Nepal. He has been in the present position since 1998.(SM)

Keiu Suda

Suda, Keiu (1903-1988) Japanese ophthalmologist, Professor Emeritus of Kumamoto University, son of SUDA Takuji. He graduated from Tokyo University in 1928, studied Ophthalmology under Prof. ISHIHARA Shinobu and received the degree Doctor of Medical Sciences from the University. He served as the Professor and Chairman of the Department of Ophthalmology of Kumamoto University from 1947 to 1969. During his tenure, he gave a special lecture "*Early diagnosis of glaucoma*" at the 56th Congress of the Japanese Ophthalmological Society in 1952 and served as the President of the 69th Congress of the Society (1965) where he delivered a special lecture "*Diagnosis and treatment of primary glaucoma*". His interest in glaucoma led him to establish the Japan Glaucoma Research Society, which became the present *Japan Glaucoma Society*. He served as the Honorary President of the International Glaucoma Symposium held in 1978 in conjunction with the 23rd International Congress of Ophthalmology. He donated his private money and founded "*Suda Keiu Memorial Fund for Glaucoma Research, Inc*." The Fund gives the "*Suda Award*" to young scientists conducting excellent research on glaucoma. The "Suda Memorial Lecture" is given by doctors having done outstanding works on glaucoma at the Congress of Japan Glaucoma Society. He was the Honorary Member of the International Glaucoma Society of the International Congress of Ophthalmology.(SM)

Takujii Suda

Suda, Takujii (l869-1941) Japanese ophthalmologist, one of the founders of the Japanese Ophthalmological Society, Professor of Tokyo Medical College, son of àSUDA Tetsuzo. He graduated from the Second High School, School of Medicine (presently Tohoku University), studied Ophthalmology at Tokyo University under Prof. àKOMOTO Jujiro. He further studied during 1892-1896 at Heidelberg University under Prof. Th.àLeber. On his homecoming he worked as the Director of the SUDA Eye Hospital that his father Tetsuzo founded. He persuaded Prof. KOMOTO, together with OHNISHI Yoshiakira and KAWAKAMI Genjiro, to establish the Japanese Ophthalmological Society. He received the degree Doctor of Medical Sciences from Tokyo University in 1920 (thesis: *Studies of the causes of blindness in children and prognosis of surgery of congenital cataract*). He taught many Ophthalmologists at his own Hospital and conjointly he served as the Professor of Ophthalmology of Tokyo Medical College from 1916 to 1941. He served as the President of the Trachoma Prevention Society (presently Japan National Society for the Prevention of Blindness) and of the Japan Ophthalmologists Association. (MS)

Tetsuzo Suda

Suda, Tetsuzo (1848-1894). An early Japanese ophthalmologist. Born in 1848 in Shinano Province, Japan, he studied English at the inauguration of the medical college of Tokyo, and afterwards, when the German professors Müller and Hoffmann came to Japan, he studied European medicine for the first time. He graduated at the Tokyo Imperial University in 1876, and he was invited to be the Dean of Hiroshima Medical School in 1878 and contributed to the foundation of the Medical School. He returned to Tokyo in 1881 and he taught as Professor at the Bekka (4-year Medical School) of Tokyo University, and at the same time he was made assistant professor at Tokyo University. In 1886 he began to engage in private practice at SUDA Eye Hospital in Tokyo, where he taught more than 500 Ophthalmologists, including OGUCHI Chuta, HIROTA Kyoemon and many other outstanding people. A Japanese physician, contemporary, describes Dr. Suda: "*He usually spoke little and was exceptionally studious. He was gentle in his appearance, wore a long beard and taught his students with a fatherly kindness, while his attitude toward his patients was as tender as it could be, and he was in the consultation room from morning till night*." "*As a good Buddhist, he attended the sick with care and pity*," wrote Dr. Komoto, and added that Dr. Suda is said to have seen and treated no fewer than 400 patients daily, many of whom gathered about his door before daylight. Suda died of lung disease and was then succeeded in practice by his adopted son, the widely known Takuji Suda. Am Encyclopedia of Ophthalm. vol.16, p.12325. (SM)

Sue, Jean Joseph (1710-1792). He was also called "Sue le Jeune" and "Sue de la Charité"; a well known Parisian surgeon and anatomist, who devoted considerable attention to ophthalmology. Born at La Colle, France, a younger brother of the celebrated Parisian surgeon, Jean Sue, he became in Paris a Master of Surgery in 1751, his dissertation being "De Cataracta." For nearly forty years he taught anatomy in Paris.Am Encyclopedia of Ophthalm. vol.16, p.12325

Kazuo Suga

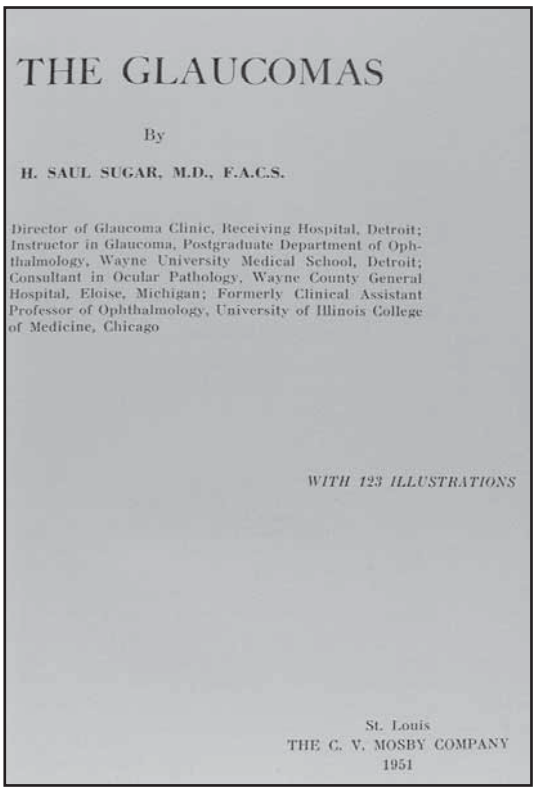
Sadao Suganuma

Suga, Kazuo (1909-1980) Japanese ophthalmologist, Professor Emeritus of Mie University. He graduated from Kyoto University in 1934, studied Ophthalmology under Prof. MORI Shinnosuke and received the degree Doctor of Medical Sciences in 1942 (thesis: *Studies of Blessig vesicles*. J. Jpn. Opthalmol. Soc. 45: 1085, 1941). He was the First Professor and Chairman of the Department of Ophthalmology of Mie University and worked from 1944 to 1974. During his tenure he served as the Dean of the Medical School twice 1961-1965 and 1967-1969, and as the Director of the University Hospital in 1972-1974. After retirement, he worked as the Director of Yamada Red Cross Hospital in Mie Prefecture until his death. His interest in Ophthalmology covered a wide area, e.g. orbital diseases, myopia, electrophysiology of the retina and environmental medicine. He is the author of "*Orbital diseases*" in the *Handbook of Ophthalmology* Vol. 13 of the Japanese Ophthalmological Society (1954). In recognition of his distinguished service the Government conferred on him The Third Order of the Rising Sun in 1980.(SM)

Suganuma, Sadao (1879-1946) Japanese ophthalmologist, Professor Emeritus of Keio University. He graduated from Kyoto University in 1906, studied under Prof. ASAYAMA Ikujiro and was invited to be the Professor of Ophthalmology of Niigata Medical School (presently Niigata University) in 1910. He then studied in Munich under Prof. C. Hess from 1912 to 1914, and returned to Niigata. In 1916 he received Doctor of Medical Sciences from Kyoto University (thesis: *Pathology of lamina vitrea of the choroid and the pigment epithelium of the retina*, 1-5: J. Jpn. J. Ophthalmol. Soc. 20:931,1102,1393: 1916 and 21: 12, 308: 1917). He was then invited in 1919 to be the First Professor and Chairman of the Ophthalmology Department of the newly founded Keio University and stayed in this position until retirement in 1941. During his tenure, he delivered a special lecture "*Tuberculosis and eye diseases*" at the 38th Congress of the Japanese Ophthalmological Society in 1934 and he served as the 40th Congress President of the Society in 1936. He was an excellent teacher and many outstanding Ophthalmologists including àUEMURA Misao, àKAWAKAMI Riichi, àKUWAHARA Yasuharu, àKATO Ken and many others were trained during his tenure. His main interest was ocular pathology and among many of his books "*Pathology of the Eye*, 1932, 1933" were written on the basis of his own experience and findings; this is regarded as the most comprehensive book of eye pathology ever written in Japan. àUEMURA Misao was his son-in-law.(SM)

Sugar, Alan (1944-) American ophthalmologist. Alan Sugar received his medical education at the University of Michigan School of medicine and University of Michigan School of Public Health. He achieved his MD 1969 at the University of Michigan and became ophthalmologist 1973 at Washington University, St.Louis under BernardàBecker. Sugar´s Academic Path is: Resident in Ophthalmology at Washington (St.Louis) 1970-1973, Instructor and Chief Resident 1973-74. Sugar became Fellow in Cornea and External Disease at the University of Florida under HerbertàKaufman 1974-75 and Assistant Professor Mt.Sinai School of Medicine (New York) 1975-1979. He became Associate Professor in 1979, and was Associate Professor from 1979 to 1984 at University of Michigan (Ann Arbor). He has been Professor at the last named place since 1984 and there Associate Chairman from 1993 to present. Alan Sugar co-authored with R.Stamper "*The Intraocular Lens*", American Academy of Ophthalmology, 1982 and with R.Tamper and D.Ripkin "*Intraocular Lenses, Basics and Clinical Applications*" American Academy of Ophthalmology 1993. He has published 123 papers and 35 chapters which, more recently, were published in: *Cornea* 1999;18:249-56, 2000;19:126-134; *J Am Coll Surg* 2000;190:179-82; *Ophthalmology* 1999;106:185-206, 422-37; *Brit J Ophthalmol* 1999;83:987; *Am J Ophthalmol* 1999;127:373-78; *J Cataract Refract Surg* 1999;25: 556-561, 688-92. Alan Sugar belongs to the following societies: ARVO, Am Academy of Ophthalmology, American Ophthalmological Society, American College of Surgeons, Castroviejo Cornea Society. Phone: (734) 763 5506 Fax: (734) 936 2340 email: asugar@umich.edu (AB)

Sugar, Hyman Saul (1912-1993) American ophthalmologist. At age 15, he graduated from Cass Technical High School in Detroit, Mich, and enrolled in Wayne University in Detroit. He then transferred to the University of Michigan, Ann Arbor. By that time, he knew that he wanted to be involved in direct patient care, and he enrolled in the University of Michigan Medical School, Ann Arbor, graduating at the age of 22.



THE GLAUCOMAS

By

H. SAUL SUGAR, M.D., F.A.C.S.

Director of Glaucoma Clinic, Receiving Hospital, Detroit; Instructor in Glaucoma, Postgraduate Department of Ophthalmology, Wayne University Medical School, Detroit; Consultant in Ocular Pathology, Wayne County General Hospital, Eloise, Michigan; Formerly Clinical Assistant Professor of Ophthalmology, University of Illinois College of Medicine, Chicago

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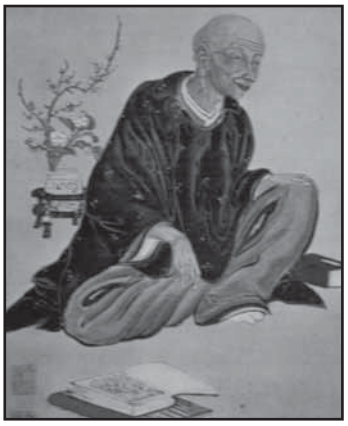
Following internship at Michael Reese Hospital in Chicago,Ill, he participated in the then 2-year ophthalmology residency at the same institution. Subsequently, he spent a year as a traveling fellow, spending time at the Columbia College of Physicians and Surgeons, New York, NY, and Johns Hopkins University in Baltimore, Md, sponsored by his patient and friend Will K. Kellogg, the cereal magnate. Subsequently, he spent 5 years in the army, stationed in Portland, Ore. He then returned to Chicago in private practice with HarryàGradle, while also teaching at the Illinois Eye and Ear Infirmary. In 1947, he moved to Detroit, where he remained in private practice and served as the first Chief of Ophthalmology at Sinai Hospital until his first retirement at age 65. Subsequently, he moved to Henry Ford Hospital, Detroit, as a consultant until his final retirement 1991. Despite being based in a private practice, his investigative and teaching interests were limitless. In 1945, he published *The Extrinsic Eye Muscles* for the American Academy of Ophthalmology monograph series, based on his experience performing strabismus surgery during his military service. In 1951, he published the first of two editions of *The Glaucomas*. Over the years, he published 239 original scientific manuscripts, reports, books, and book chapters covering areas from glaucoma to oculoplastics, and from retina to pediatric ophthalmology. Arch Ophthalmol 1994,112:315



Genpaku Sugita

Sugita, Genpaku (1733-1817) Japanese surgeon of the 18th Century, Translator and Author of the First Japanese Textbook of Human Anatomy. He was born as son of a Surgeon, and studied surgery at the age of 17-18 years in Edo (Yedo) (now Tokyo). At the age of 37, he started to learn the Dutch Language and Medicine. The late 18th Century was the era when many Japanese physicians learned the advanced knowledge of Dutch Medicine and a wave took place to import Dutch books. Among these books, there was a Dutch text of "*Tabulae Anatomicae* by AD Kulmus" published in 1734. He joined with MAENO Ryotaku and ISHIKAWA Genjo and observed dissection of an executed prisoner in 1771: they were astounded at the accuracy of description of this book. Hence, they decided to translate it into the Japanese Language, and they formed a group with NAKAGAWA Junnan, KATSURAGAWA Hoshyu and KIRIYAMA Shotetsu. This group of scholars translated the Dutch text into Japanese through extensive discussions over 3 years; during the course of this work they referred to books by Caspar Bartholin (1585-1629), Joann Vesling (1598-1649), Steven Blankaart (1650-1702) and Jean Palfyn (1650-1730). The atlases of organs were drawn by ONODA Naotake through studies of the above anatomy and surgery books. They published a book "*Kaitai-Shinsho*" (New Book of Anatomy) in 1774: thus this book is not a mere translation but is a product of their extensive studies. "*Kaitai-Shinsho*" was translated into the modern Japanese Language by àSAKAI Shizu. This book gave a revolutionary impact to Japanese Medicine of that time. Ophthalmology was not an exception. The structure of the eye and its explanation written in this book drove Japanese ophthalmologists of that time to the study of Dutch Ophthalmology; Dutch was then the only European Language officially permitted access by the Japanese. SUGITA Genpaku died at the age of 85; he is the father-in-law of SUGITA Ryukei.(SM)

Sugita, Ryukei (1786-1845) Famous Japanese ophthalmologist in the Edo Era. He was the son of SUGITA Genpaku who published the first Anatomy textbook (translation of *Tabulae Anatomicae* of Kulmus from the Dutch text: *Ontleedkundige Tafeln* published in 1734) in Japan. Genpak's son-in-law, UDAGAWA Gensin translated the "*Doctorina de Morbis Oculorum*" (Vienna, 1777) of Joseph JacobàPlenck from its Dutch text (*Verhandeling over de Oogziekten*) into the Japanese Language, and named it "*Taisei Ganka Zensho*: *Handbook of Western Ophthalmology*". SUGITA Ryukei amended this handbook by the addition of his own experiences and of detailed atlases, and published "*Ganka Shinshyo*: *New Textbook of Ophthalmology*" in 1815. This is the first comprehensive textbook of Ophthalmology in Japan. Ryukei invented many Japanese terminologies in Ophthalmology, and these terms became the standard used in present Japanese Ophthalmology (byàOKUZAWA Yasumasa). This textbook, Ganka Shinshyo, was used throughout Japan in many medical schools before the beginning of the formal education of Western Medicine.(MS)

Sugita, Shinichiro (1917-) Japanese ophthalmologist, former Director of Sugita Eye Hospital. Born the son of a scholarly ophthalmologist in Nagoya, he graduated from Tokyo Jikei Medical College in 1944 and studied Ophthalmology at Nagoya University under Prof.àNAKAJIMA Minoru; he received his Doctor of Medical Sciences in 1949 (thesis: *Experimental studies of corneal siderosis*. J. Jpn. Ophthalmol. Soc. 51: 62, 1947). He is a pioneer in Japan of Ophthalmic Microsurgery: he founded, together with several ophthalmic surgeons, a Research Group of Ophthalmic Microsurgery in 1970, which later evolved as the Japanese Society of Ophthalmic Surgeons. He served as the Executive Director of the Society from its foundation. Some examples of his many publications are "*Modified Ceiling -Mounted Zoom Operating Microscope*. Am. J. Ophthalmol. 72: 5, 1971", "*New suspension of operating microscope and chair*. Am. J. Ophthalmol. 88: 4, 1979", "*Use of a mirror in micro-surgery*. Jpn. J. Ophthalmol. 17: 344, 1973" and " *Gonio-trabeculotomy ab interno*. Folia Ophthalmol. Jpn. 26: 3, 1975". The Sugita knife for goniotomy is an excellent tool for the surgery and is widely used in Japan. His hospital is now maintained and managed by his son, SUGITA Gentaro (Sugita Eye Hospital: Sakae 5-1-30, Naka-ku, Nagoya 460-0008, Japan. phone: +81-5-2251-6571, fax: +81-5-2261-5097)(SM)

Sugiura Seiji (1915-) Japanese ophthalmologist, Professor Emeritus of Kokkaido University. He graduated from Tokyo University in 1940, studied Ophthalmology under Prof. SHOJI Yoshiharu and received his Doctor of Medical Sciences in 1953 (thesis: *Physicochemical studies of the vitreous*. Jpn. J. Ophthalmol. 1: 7, 1957). He was appointed the Associate Professor of Ophthalmology at Tokyo University in 1957: he lectured as a symposist "*Epidemic keratoconjunctivitis and adenovirus – superficial punctate keratitis*. J. Jpn. Ophthalmol Soc. 63: 3370, 1959" at the 63rd Congress of the Japanese Ophthalmological Society. He was then promoted to Professor and Chairman of the Department of Ophthalmology of Kokkaido University in 1966 and served in this position until retirement in 1978. During his tenure, he served as the President of the 31st Congress of the Japanese Society of Clinical Ophthalmology in 1977 and delivered a special lecture "*Uveitis in Japan with particular attention to Vogt-Koyanagi- Harada disease and Behcet's disease*. J. Jpn. Opthalmol. Soc. 80: 1285, 1976" at the 80th Congress of the Japanese Ophthalmological Society in 1976. To commemorate his retirement, his students issued the Jpn. J. Ophthalmol. Vol.22, No. 1 1978, where his detailed biography and 104 publications can be found. He wrote "*Vogt-Koyanagi-Harada disease* " in this issue. He worked together with Drs. R.àKONO and K.àISHII in the discovery of Enterovirus 70 that causes epidemic hemorrhagic conjunctivitis (Kono, Ishii, Sugiura et.al. The Lancet No. 7762:1171, 1972). After his retirement, he further served as the Director of Hakodate National Hospital for 4 years. His professional activities included Board of Trustees of the Japanese Ophthalmological Society (1966-1978), Board of Directors of the Society (1966-1974,1977-1978), Board of Trustees of the Japanese Society of Transplantation (1968-1975). He served also as a member of the Organizing Committee of the 2nd International Symposium on Immunology and Immunopathology of the eye (1976-1978), Organizing Committee of the 23rd International Congress of Ophthalmology, Editorial Board of Jpn. J. Ophthalmol. (1957-1978), Manager of the Behcet's Disease Research Project of the Ministry of Health and Welfare (1972-1978). He also worked as the President of Japan Association of Behcet's Disease and contributed to the rehabilitation of blind patients. (SM)

David Sulzer

Sulzer, David (1858-1918) Swiss ophthalmologist, born in Winterthur, the son of a Swiss State Sectretary. He grand father participated in the Napoleonic campaigns. He attended Swiss (1876), and later a Strasbourg school, finishing there his schooling. He then entered the Zurich university to start his medical studies which ended with his doctoral thesis on the Iridectomy in primary glaucoma, published in 1882.He was already under the influence of Horner who turned his attention to ophthalmology. Sulzer now went to the Netherlands, working under Donders who influenced his future general scientific research. With a colonial war erupting in the Netherlands he was engaged on a voluntary basis as a military physician and left for Java. His stay in the Dutch Indies was prolonged until 1889. After his return to Europe he settled in Geneva becoming lecturer in ophthalmology there in 1892. One year later, with Valude, Sulzer acquired the *Annales d´Oculistique* from the heirs of Warlomont. In 1898, Sulzer left Switzerland for France, re-doing his medical

examinations crowning them with his thesis on the *Ophthalmic Zona*. Sulzer became naturalized Frenchman in 1913. The next year, with World War I errupting, he was engaged as military assistant physician. Sulzer published papers mainly on physiology and physiological optics and contributed importants articles in the Encyclopedie Francaise d´Ophtalmologie edited by Lagrange & Valude. Interesting to historians is his 50 pages paper *Documents servant à l´Histoire de l´extraction de la Cataracte*, published 1895 in the *Annales d´Oculistique*, november/december issues.Annales d´Oculistique 1918,155:165-171. Am Encyclopedia of Ophthalm. vol.16, p.12328. JPW

Summerskill William (Bill) Hedley (1898-1957) British ophthalmologist. Summerskill was born in 1898 and, although the first world war, when he served in destroyers as probationary Surgeon Sub-Lieutenant, interrupted his medical training at Guy's, he qualified L.M.S.S.A. in 1920. He was in general practice in London from then until 1931, and during this time stood once as Liberal candidate for one of the London constituencies. His career in ophthalmology started in 1931, in which year he was an undergraduate at Exeter College, Oxford. He held an appointment at the Oxford Eye Hospital, and took the D.O. (Oxon.) in 1933. He then practised in London, holding an appointment as clinical assistant to the Royal Eye Hospital, and qualifying M.B., B.S. During the second world war he served as P.M.O. in troopships, and was finally invalided home. In 1943 he settled down to practise in Portsmouth, with an appointment as temporary ophthalmic surgeon to the Portsmouth and Southern Counties Eye and Ear Hospital. In 1944 he was appointed ophthalmic surgeon to the Royal West Sussex Hospital, Chichester. He was also visiting ophthalmic surgeon to the Queen Alexandra Ministry of Pensions Hospital at Cosham, and ophthalmic surgeon to St. Mary's Hospital, Portsmouth. The advent of the National Health Service saw his hospital appointments consolidated into an appointment as ophthalmic surgeon to the Portsmouth Group Hospitals which he held until his death. His contributions to ophthalmology were many. He was an advocate of the transconjunctival approach to the orbit. He made an important modification of Mules's operation. His most notable contribution, however, was his work on intubation as a method of re-establishing lacrimal drainage, and his name, and his operation for this, are known all over the world. His contributions to ophthalmology were marked by the award of the Nathaniel Bishop Harman Prize in 1948, and he won the Treacher Collins Prize in 1957 for his essay on *Diseases of the Lacrimal Apparatus and their Treatment*". He was president of the Southern Ophthalmological Society in 1955/1956. BJO 1958,42:128

Guiyu Sun

Sun, Guiyu (1915-1980) Chinese Ophthalmologist, Professor of Ophthalmology, Shandong Medical University. He was born in Haishenwai City of North-East part of China and graduated from Qi-Lu University School of Medicine in 1943. Subsequently, he worked as a resident at the Department of Eye & ENT of Joint Hospital of the National Central University, Qi-Lu University and West China Universities' School of Medicine. He then worked as a Visiting Doctor of Ophthalmology at the Department of National Central Hospital in Nanking until February 1949 when he went to Great Britain. As a visiting scholar, he worked at the Institute of Ophthalmology, London University; Department of Ophthalmology of Liverpool University Hospital, Liverpool University School of Medicine and the Department of Ophthalmology of Victoria Hospital. He came back to China in 1951 and worked as the Professor and Chairman of the Department of Ophthalmology of the Hospital Affiliated Shandong Medical College (Shandong Medical University); and Vice-Director of the Hospital. He was the member of the Committee of the Chinese Ophthalmological Society, Member of the Editorial Board of the *Chinese Journal of Ophthalmology* and the President of Shandong Ophthalmological Society, Shandong Medical Association. He was interested in refraction and made great contributions to the development of refraction in ophthalmology in China. He wrote books "*Refraction*" and "*Practical Refraction*" and published many papers in this field. During 1950s - 1960s, he made great contributions on corneal transplantation and the prevention and treatment of trachoma as well.(SM)

Sun, Xinfu (1915-) Chinese ophthalmologist, former Professor and Chairman of the Department of Ophthalmology, Hubei Medical University. Born in Suzhou Jiangsu Province, he graduated from the Medical College of Aurore University in Shanghai in the class from 1935 to 1941, and received the academic degree of M.D.. He has accomplished ophthalmic clinical practice, education, research and writing works over 47

years (from 1941 to 1994) until retirement. After the liberation, he served as a member of the 5th, 6th and 7th National Committee of the CPPCC (from 1978 to 1994). He worked as Associate professor at Lingnan University and its affiliated Sun Yat-Sen Memorial Hospital in collaboration with Profs. Eugene Chan and Winifred Mao (1950-1956). Subsequently, he worked at the Beijing Friendship Hospital (now 2nd Medical University) for 2 years. He was invited to the Chair of the Department of Ophthalmology of Hubei Medical University in 1958 and worked until retirement in 1994. He also served on the Committee of Ophthalmology of the Chinese Medical Association, Editor and honor editor of "*Chinese Journal of Ophthalmology* " and *Ophthalmic Research* Senior member of Chinese Medical Association, editor of the Section of Ophthalmology in *Chinese Medical Encyclopedia*", Chairman of the ophthalmic Audio-Visual education under the Ministry of Health of the P.R. of China. Editorial member of the medical high school's expert text under the Ministry of Health of P.R. of China. Vice chairman of the Editorial Board of "*Textbook of Ophthalmology* " for medical universities. He has been active as a Supervisor and Tutor of Ph. D. and was awarded the provincial prizes for advancement in science and technology. He also extended the activities for the Prevention of Blindness and training of its personnel in the mountain rural areas of northwest Hubei province. He has published more than one hundred papers in Chinese and English in the *Chinese Journal of Ophthalmology* and the *Chinese Medical Journal* (English Edition), e.g. "*Color blindness among the Chinese, a survey in Canton,*. Chin. M. J. 71: 465, 1953" and "*Operative methods for complicated cataract with iridocylitis*. J. Chin. Ophthalmol. Soc. 9: 272, 1969". Also, he wrote many books and some examples are "*Clinical tumor of the eye* in 1985" , " *Diseases of the retina* " in 1958, translated from the 2nd edition, 1953, written by Herman Elwyn. (Department of Ophthalmology, Hubei Medical University, 238 Jie Fang Road, Wuhan, Wuchang, Hubei, P. R. China.) (SM)

Surisupan Vicharn (1937-) Thai ophthalmologist, Head of the Buriram Eye Clinic, Buriram Hospital, Buriram Province. He graduated from the Faculty of Medicine, Siriraj Hospital, Mahidol University and received his M.D. degree in 1961. He has been in-service training in Ophthalmology under Prof. K. KONYAMA at Buriram Hospital by the Colombo Plan. He extended his higher studies at the Department of Ophthalmology of Juntendo University in 1968 under Prof. A.àNAKAJIMA. After homecoming, he received the Diploma of the Thai Board of Ophthalmology in 1969. He has been the Head of the Eye Clinic of Buriram Hospital since 1969. He served as the Member of the Prevention of Blindness (PBL) Program of the Ministry of Public Health since 1978 and is currently the Consultant to the Thai PBL Program. As the result of the Program, the cataract problem is solved, the rate of blindness dropped from 1.14% in 1983 to 0.31% in 1994, and the Primary Health Care program covers more than 80% of the whole Country. He is currently devoted to Eye Care of the Buriram Province. His publications are focused on public health problems, e.g. "*Mass cataract intervention in the context of primary health care*. Proc. 13th Congress of the Asia-Pacific Academy of Ophthalmology (APAO): Vol.1: 65, 1991" and "*The Thai model of mass cataract intervention.* Proc. 13th APAO Congress, Vol. 1: 59, 1991". He is the recipient of the *Golden Eye Award* from the Ophthalmological Society of Thailand (1989), Doctor of the Year 1995 from the Provincial and Regional Hospital Club, Award from the 20th Anniversary of National Program for the Prevention of Blindness (1997) and the APAO Distinguished Service Award (1999).(SM)

Susruta (also Sushruta) (600-700 BC) Legendary Surgeon in Bengal Region (now Bangladesh). Studies in the 19th Century in Europe and those in India in the 20th Century agree that Susruta lived in the era when Buddha was teaching in India. Susruta was an excellent surgeon and compiled old teachings of Veda into a textbook of Surgery: Susruta Samhita. J. Hirschberg made a penetrating study of Susruta and described in his "*The History of Ophthalmology*, Vol. 1" and concluded that Susruta's Surgery was independent of ancient Egyptian Medicine and that he supported the view of Susruta's activity being in 6-7 Centuries BC. *Susruta Samhita* consists of 3 volumes: the third volume describes 76 eye diseases and treatment in 19 Chapters. The Cataract (Kaphaja Linga-nasa) couching is described in Chapter 17 of Volume 3 of the Samhita. There seems to be a plural number of Samhita written in the Sanskrit language: Hirschberg had it translated by Professor Gustav Oppert of Berlin, from the Calcutta edition of 1835-1836. Kunja Lai Bhishagratna Kaviraj translated the presently available English edition during 10-year period from 1907 to

1916. This text was translated into the Japanese Language by Prof. ITO Yaeji in 1950s and the work completed after his death by Prof. SUZUKI Masao in 1971. The Third Volume that describes the eye diseases and cataract couching is named "*Uttara-Tantram*" (the Supplement), and Hirschberg maintains that this part was added by unknown authors after the Susruta the Older. It is difficult to inherit the original book over many centuries, and it is probable that the *Samhita* was altered over many Centuries. Nevertheless, the Samhita gives the exact procedure of Cataract Couching. Comparison of the Hirschberg text and the Ito text of Couching indicates that they used the same Sanskrit Text. The description of Couching reads as follows (Hirschberg: *The History of Ophthalmology*, Vol. 1, translated by F. C. Blodi, Wayenborgh 1982). *"I shall now discuss the medical treatment for the cure of a cataract (Linganasa), provided that the intraocular disease does not have the shape of a half-moon, of a drop of sweat or of a pearl, is neither firm nor uneven, neither thin in the center, nor striped, neither glistening, nor painful, nor entirely red. The expert opens widely both eyes of the patient. The weather should not be too hot, nor too cold. The two white parts of the eye should be separated at the external canthus from the black in the eye. The patient should be anointed and perspiring, tied down, seated and look at this own nose. The physician then opens cautiously but decisively, neither above nor below the natural hole (the pupil) the coats of the eye with a lance. The tip of the lancet resembles a grain of barley. The instrument should be held with the middle finger, the index and the thumb. The right hand is used to open the left eye and the left hand to open the right eye. Immediately after the perforation a drop of water appears and a noise can be heard. The expert should then put mother's milk on the perforation regardless whether the pathologic material is solid or fluid. The eye should then perspire from the outside. He then scratches the eyeball with the point of a lancet which has been wrapped in hemp. He then closes the nares opposite the eye to be operated on. Thus mucus in the eyeball is then removed by having the patient suck it into his nose. If the eye then lights up like a sun without clouds or if it is free of pain, one can assume that the incision was well performed. If the patient then recognizes forms, the lancet is slowly withdrawn and molten butter is put on the eye which is then covered by a bandage*". Hirschberg stated that it is difficult to confirm whether Susruta is the first man who invented Cataract Couching; nevertheless, Susruta Samhita is by far the oldest (2500-year old) text that gives detailed procedures for Cataract Couching. The Asia-Pacific Academy of Ophthalmology created in honor of this Ancient Surgeon "*the Susruta Lecture*" at the 14th Congress of the Academy in Dhaka (1993) to be delivered by surgeons having done outstanding service for the prevention of blindness. The Lecturers are LIM, A.S.M. (1993), MATIN, M.A. (1995) and VENKATASWAMY, G. (1997).(SM)

Yoshitami Suzuki

Suzuki, Yoshitami (1909-1987) Japanese ophthalmologist, Professor Emeritus of Chiba University. He graduated from Chiba University in 1936, studied Ophthalmology under Prof. àITO Yaeji and received the degree Doctor of Medical Sciences from the University in 1946. He was the Professor and Chairman of the Department of Ophthalmology from 1955 to 1975. He delivered a special lecture "*Studies of retrobulbar neuritis in Japan*, J. Jpn. Ophthalmol. Soc. 61:2068, 1957" at the 61st Congress of the Japanese Ophthalmological Society in 1957. He served as the President for the 19th Congress of the Japanese Society of Oriental Medicine in 1968, for the 71st Congress of the Japanese Society of Medical History 1970 and for the 27th Congress of the Japanese Society of Clinical Ophthalmology in 1973. He is the author of "*Eye diseases in psychiatric diseases and degenerative brain diseases*" Vol. 12, No. 1 of the *Handbook of Ophthalmology* of the Japanese Ophthalmological Society published in 1955. In recognition of his distinguished service the Government conferred upon him The Third Order of the Rising Sun in 1981.(SM)

Akihiro Suzumura

Suzumura, Akihiro (1927-1986) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Aichi Medical University. He graduated from Nagoya University in 1950, studied Ophthalmology under Prof. HAGINO Ryutaro, and received the degree, Doctor of Medical Sciences, in 1957 (thesis: *Visual function and environment*: series of 7 papers, J. Jpn. Ophthalmol. Soc. 54: 55, 1950; 57: 601; 57: 1406, 1953; 58: 163; 58: 235; 58: 1729, 1954; 59: 247, 1955). He served as the Professor and Chairman of the Department of Ophthalmology of Aichi Medical University from 1973 until his death in 1986. He was the Director of the Institute of Research in Aging of the University 1985-

1986. His research interest was in the visual function as influenced by the environment and working conditions. He developed instruments to study the dynamic aspects of accommodation and the visual acuity of moving objects (*Research on clinical diagnosis of floating accommodation*. Folia Ophthalmol. Jpn., 31: 367, 1980). He published many papers in this field and made a special report "*Moving objects in space, fluctuation of visual acuity and development of optimum condition for vision*" at the 75th Congress of the Japanese Ophthalmological Society in 1971 (J. Jpn. Ophthalmol. Soc. 75: 1974, 1971). He served as the Councillor for the Japanese Ophthalmological Society, Japanese Society of Illumination, Japanese Society of Traffic Medicine and many other organizations.(SM)

Swanzy, Henry Rosborough (Sir Henry) (1844-1913) Irish ophthalmologist born in Dublin who received his medical degree in 1865 and studied in Berlin under A.v.®Graefe. He served as surgeon under the Prussian army in the 1866 campaign. After his return to Dublin , he devoted himself to eye and ear work. He joined the staff of the National Eye and Ear Infirmary. He was senior surgeon to the Royal Victoria Eye and Ear Hospital. In 1888 Swanzy delivered the Bowman Lecture of the Ophthalmologic Society. From 1896 to 98 Swanzy held office as oculist to the Lord Lieutenant in Ireland and was from 1897 to 1899 President of the Ophthalmological Society of the United Kingdom. From 1873 he was Fellow of the Royal College of Surgeons of Ireland and occupied its presidential chair from 1906-1908. He received honorary degrees from the universities of Dublin and of Sheffield. His more important articles and papers are as follows: 1. *On Essential Phthisis Bulbi*. (Dub. Quart. Jour., 1869.) 2. *On von Graefe's Insufficiency of the Internal Reeti Muscles*. (Ibid., 1870.) 3. Ophthalmic Notes. *(Ibid.,* 1871.) 4. *Retinal Hemorrhages, with Detachment of Vitreous Humor*. *(Travs. of the Ophth. Soc.,* U. K., 1882.) 5. *Tubercle of the Iris*. (Ibid., 1882.) 6. *Case of Hemiachromatopsie*. (Ibid., 1883.); he also wrote *A handbook on the Diseases of the Eye and their Treatment* London 1884 of which the tenth edition appeared 1912. An American edition was published also in 1884. Swanzy also is to be remembered for the ophthalmoscope he invented, according to Schett, in about 1895. The Ophthalmoscope, 1913, p.319-321. Schett/Keeler *The Ophthalmoscope*, vol.1, Ostend 1996. JPW

Sym, William George (?- 1938) Scottish ophthalmologist. Sym was born and educated in Edinburgh. His father, William Sym, was a cousin of Professor John Wilson "Christopher North" and a nephew of Robert Sym W.S. the "Timothy Tickles" of the " Noctes Ambrosianae." He graduated M.B., C.M., at Edinburgh University in 1886; and M.D. in 1889, the subject of his Thesis being "Diphtheritic paralysis of accommodation and allied conditions." His interest in ophthalmology was aroused during his undergraduate career, and was related to his association with Dr. ArgyllàRobertson, for whom he always cherished a warm and lasting admiration. Sym was actively connected with the Eye Department of the Royal Infirmary of Edinburgh from the year of his graduation, a connection which lasted for 34 years. He held office as Surgeon in charge of Wards from 1905 to 1920. On his resignation in 1920, the Managers appointed him Consulting Ophthalmic Surgeon to the Hospital and paid him a high tribute of appreciation for his long and much valued services. He was a skilful operator, and in the Out-patient Department his duties were discharged with great success and acceptance. He was naturally cheerful and optimistic and his patients, while receiving the expert advice he was so well able to give, also got from him - sympathy and encouragement. In his capacity as Lecturer on Diseases of the Eye in the University of Edinburgh he proved a remarkably good teacher, clear and arresting in his lectures, and untiring in practical exposition and clinical demonstrations. His undergraduate classes were very well attended and the students, appreciative of an enthusiastic teacher, always maintained a lively interest in the work of his class. He delighted to entertain his students with occasional amusing anecdotes which were much appreciated. Sym started the Eye Department at Leith Hospital in February, 1896, and developed a large and increasingly busy clinic during nine years, till 1905, when he resigned. He was Ophthalmic Surgeon to the Edinburgh Eye, Ear and Throat Infirmary, where he continued his interest in clinical Ophthalmology to the end of his life. He was also for many years Ophthalmic Specialist to the Military Hospital, Scottish Command, Edinburgh. For eleven years Dr. Sym was Editor of the *Ophthalmic Review*, which at that time, 1899 to 1909, some years prior to its incorporation in the *British Journal of Ophthalmology*, was an important Ophthalmic journal in this country.

He published a manual for students and practitioners entitled " *Diseases and Injuries of the Eye*," which was a useful and widely read book; and translated from the German, Adams " *Handbook of Treatment for Diseases of the Eye*." He also contributed many articles on ophthalmic subjects in medical journals. In 1911 Sym took a leading part in forming the Scottish Ophthalmological Club, and was its Secretary for twenty-two years. His active participation in discussion and his genial presence at the meetings promoted the success of the club, both in its scientific and social aspects. He was a Life Member of the Ophthalmological Society of the United Kingdom; a member of Council, 1906-1909; and Vice-President, 1918-1921. He was a Fellow of the Royal Society of Medicine; of the Royal Medical Society of Edinburgh; and of the Zoological Society of Scotland. BJO 1938,22:187-188

Szily, Adolf (1848-1920) Hungarian Ophthalmologist. Adolf Szily was born in Pest. He studied medicine in Vienna. After receiving his medical degree in 1871, he worked under Stellwag and later under Arlt to become an ophthalmologist. In 1873 he returned to his native city to set up ophthalmological practice. He became superintendent of the Eye Department of the Polyclinic of Budapest, and in 1878 he was appointed the Head of the Department of Ophthalmology in the Jewish Hospital of Budapest, where he worked until his death in 1920. He wrote about 50 articles. He was interested in the physiology of the eye, and in malformations of the fundus but primarily in the morphology of the optic disc. In 1883 he was appointed Privatdocent in the latter subject and in 1895 was awarded Associate Professorship. Ever since his student years, he had loved and had been skillful in drawing and drew many of the fundus sketches himself. He arranged the artistic drawings in book-form published in Wiesbaden, 1901, under the title '*Augenspiegel Studien zu einer Morphographie des Sehnerveneintrittes beim Menschen*'. Dr. Szily described first the 'astigmia fundi'. He wrote several chapters for Grosz-Hoor's '*Handbook of Ophthalmology*', and he, too, was deeply concerned by the plight of the blind. In order to understand better the way of living of the blind, he studied Braille writing. For many years he was Chairman of the Society for the Protection of the Blind in Hungary. As a practicing ophthalmologist, Dr. Szily was renowned, and a skilled eye surgeon. He was devoted to progressive ideas. He was the *first* in Hungary who did not perform surgery at the sickbed but in a sterile operating room. He attended regularly the Ophthalmological Congresses in Heidelberg. He was the father of Aurel Szily, the future famous professor of ophthalmology in Muenster.Magda Radnòt: Famous Hungarian Ophthalmologists (Budapest 1970); AJO 7:488

Szily, Aurel von (1880-1945) Hungarian ophthalmologist, born in Budapest, the son of Adolphe von àSzily. Aurel von Szily studied medicine in Budapest and Freiburg and became in 1901 demonstrator in the Anatomical Institute in Budapest under M.v.Lenhossék (1863-1937). In 1903 he moved to Freiburg to work under the famous anatomist Robert Wiedersheim (1848-1923). During that period he met Theodor àAxenfeld, who urged him to follow Aurel´s father´s ophthalmological path. In 1905 Szily received his MD in Budapest and became the same year assistant, later first physician at the University Clinic in Freiburg, a post he kept until 1924. In between he served during World War I and received 1918 German Citizenship. In 1924 he received a call as Professor and Chairman of ophthalmology at the Münster University. In 1925 he became head of the new clinic in that University. The same year von Szily received the Albrecht von Graefe Prize of the German Association for Ophthalmology. In 1927 he became co-editor of the *Klinische Monatsblätter für Augenheilkunde*. von Szily received in 1928 two calls respectively from the Cologne University and from the Freiburg University. He declined both calls. In 1935 von Szily was stripped of his post by the Nazis because of his Jewish origins, despite interventions of famous ophthalmologists of his time. Among others: Bietti from Rome, Nordenson from Stockholm, Weve from Utrecht, Jötten, the Dean of the Münster University, Engelking from Heidelberg and also students and many patients. In 1937 von Szily was forced to leave his clinic which he did, according to Bietti, with a broken heart. The same year he was also forced to leave the editorship of the *Klinische Monatsblätter für Augenheilkunde*. He was a prolific writer, a list of his papers can be found in Historia Ophthalmologica Internationalis, 4:92-95(1998). von Szily´s monographs and articles in treatises are: 1.*Über die Entstehung des melanotischen Pigmentes im Auge der Wirbeltierembryonen und in Chorioidalsarkomen*: 1911; 2. *Die*

Anaphylaxie in der Augenheilkunde: 1914; 3. *Atlas der Kriegsaugenheilkunde* : 1918; 4.*Vergleichende Entwicklungsgeschichte der Papilla nervi optici und der sog. axialen Gebilde*. 1922 ; 5. *Die Ontogenese der idiotypischen (erbbildlichen) Spaltbildungen des Auges, des Mikrophthalmus und der Orbitacysten.* 1924; 6. *Erkrankungen der Tränenwege, der Lider, der Binde-, Leder- und Hornhaut*: 1924; 7. von Szily with E Poos; *Das inkretogene Moment in der Augenheilkunde*: 1927; 8. *Die Linse*: 1937; *Hist. Ophthal. Intern.4:59-96*; *Klin.Mbl.Augenheilk.162:107-110*; *ditto*171:816-831; *ditto*.192:252-255.JPW

Szokalski, Victor Felix (1811-1891). Polish ophthalmologist. Born in Warsaw, he studied at first in his native city. After a period of active service in the army, he resumed his studies at Giessen where he received his degree in 1832. For the next two years he studied ophthalmology at Heidelberg and Würzburg and, under Sichel, in Paris. In Paris he received in 1839 a second medical degree, presenting as dissertation "*La Diplopie Unioculaire ou la Double Vision d'un Oeil*. In 1844 he founded, the Paris Society of German Physicians, and became its first president. In 1853 he returned to Warsaw, where he at once became chief surgeon to the Ophthalmic Institute, and in 1861 ordinary professor of ophthalmology and otology. He wrote a large number of articles, chiefly in Polish but also in German and French. The most important are : *De la diplopie uni-oculaire ou double vision d´un œil* Paris 1839; *Essai sur les Sensations des Couleurs dans l´ Etat Physiologique et Pathologique de l'Oeil* (Paris, 1840; 2d ed., 1841; Germ. trans., Giessen, 1842) and *"Fantazyjne Objawy Zmyslowe"* (Imagined Sensuous Appearances, Cracow, 1861-63, 2 vols.). He published also a *Treatise of ophthalmology* in 2 volumes in Polish language in 1870 and received for this work the Prince Lubomirski prize. Am Encyclopedia of Ophthalmology, vol.16, p.12488-12489. Annales d´oculistique 1891,105:203-206. JPW

Szulislawski, Adam (1865-1911) Polish ophtthalmologist who worked together with ®Wickerkiewicz in Posen and ®Fuchs in Vienna. He became extraordinary professor of ophthalmology in the University of Lemberg. The Ophthalmoscope, 1911,p.59.

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Tabari (full name, ***Abul Hasan Ahmad b. Muh. at-Tabari***). Arabian oculist (who flourished 970 A.D.) and body physician of the Emir Rukn ad-Daula, composed an important work entitled *"The Therapeutic Book of the Eye,"* which, very unfortunately, has not come down to our day. He also wrote a comprehensive treatise on general medicine, which he called *"Hippocratic Treatments,"* in ten books. Of these, the fourth is devoted to the eye, and is still extant. Tabari, though an excellent general clinician and a clear writer, is said to have been surpassed by many as an ophthalmic surgeon. Am. Encyclop. of Ophthalm. vol.16,p.12489-12491

Tabit b. Qurra (836-901 A.D.) (full name, Abul Hasan Tabit b. Qurra b. Zahrun al-Harrani). Arabian physician and astronomer was born at Haran in Mesopotamia and died in Bagdad. Besides a number of works of a general nature, he composed a treatise on ophthalmology entitled, *"On the Seer and the Seeing"'* Nothing of this remains today, except a few very short quotations in a work called *"The Light of the Eyes,"* by Salah ad-din, who lived in the 13th century. One of these quoted bits runs as follows: "Let the operation [for cataract] take place on the border of the carpet whereupon thou lettest the patient sleep." Am. Encyclop. of Ophthalm. vol.16,p.12505

Tabuchi Akio (1943-) Japanese ophthalmologist, Professor and Chairman of Department of the Ophthalmology, Kawasaki Medical School. He graduated from Kobe University in 1968, studied Ophthalmology under Prof. IMACHI Jo and received his Doctor of Medical Sciences in 1976 (thesis: *Pathology of retinopathy of prematurity*). He has been in the present position as above since 1989, and conjointly he has served as the Professor and Chairman of the Department of Sensory Science of Kawasaki University of Medical Welfare since 1995. His major interest is in Pediatric Ophthalmology and Neuro-ophthalmology, and he has many publications in the field, e.g. "*Pediatric Ophthalmology*, Compact Ophthalmology Vol. 6, Kanehara Publ. Tokyo, 1994" and "*Importance of an Ophthalmic rehabilitation and its problems*, Folia Ophthalmol. Jpn. 49:695, 1998". He is a Councillor of the Japanese Ophthalmological Society (1991-), of the Japanese Society of Electroencephalography and Electromyograpy (1997-), Executive Director of the Japanese Neuro-ophthalmology Society (1989-), Japanese Association of Strabismus and

Amblyopia (1990-), Japanese Society of Pediatric Ophthalmology (1991-), Japanese Society of Clinical Electrophysiology of Vision (1988-) and Japan Contact Lens Society (1985-). He is the Founder and Chairman of the Japanese Society of Low Vision Research and Rehabilitation (2000). For the excellence of his research, he received the Yuge Prize in 1983 from the Japanese Society of Strabismus and Amblyopia (*Morphological studies of the dorsal lateral geniculate nucleus, area 17 of the visual cortex, and abducens and oculomotor nuclei in kitten with convergent squint*. Acta Soc Ophthalmol Jpn (J. Jpn. Ophthalmol. Soc.) 86: 2024-2032,1982). (Department of Ophthalmology, Kawasaki Medical School, Matsushima 577, Kurashiki Okayama, 701-0192, Japan. phone:+81-8-6462-1111, fax: +81-8-6463-0923, e-mail: tabuchia@mw.kawasaki-m.ac.jp) (SM)

Tagawa Sadatsugu (1920-) Japanese ophthalmologist, Professor Emeritus of Sapporo Medical College. He graduated from Hokkaido University School of Medicine in 1943; subsequently he was drafted and served as an army surgeon. In 1946 he started his career as an ophthalmologist under Prof.àFUJIYAMA Hidetoshi and received his Doctor of Medical Science in 1951 (thesis: *Hypothermic effects on rabbit cornea*, J. Jpn. Ophthalmol. Soc. 54: 62, 1950). He became a chief Ophthalmologist in Aomori City Hospital in 1952.He was promoted to Associate professor of the Department of Ophthalmology, Sapporo Medical College in 1956, and appointed Chairman of the Department of Ophthalmology in 1972: he worked in this position until his retirement in 1986. His research interest has been in neuro-ophthalmology and retinal detachment. Among his numerous publications are "*Brain Angiography in regards to neuro-ophthalmological disorders*. J. Jpn. Ophthalmol. Soc. 61: 1777,1957", "*Result of 100 cases of diathermy treatment in rhegmatogenous retinal detachment*, Ganka (Ophthalmology) 1967" and "*Reactivity of ciliary artery to adrenergic drugs* .Jpn Rev Clin Ophthalmol. 1972". He was a recipient of the Award of the Hokkaido Medical Association in 1967. He is an Honorary Member of the Japanese Ophthalmological Society.(SM)

Tait, Peter Guthrie (1831-1901). Scottish natural philosopher and mathematician, was born in Dalkeith. In 1860 he was elected professor of natural philosophy in Edinburgh University. To mathematical physics he contributed several valuable memoirs, of which those on *Mirage* and on the *Kinetic Theory of Gases*, and those involving quaternionic treatment, call for special mention. In pure mathematics his papers on *Knots* and on *Quaternions* are best known. In conjunction with Sir W. Thomson (Lord Kelvin), Tait wrote a well-known *Treatise on Natural Philosophy (1867). The Unseen Universe, by* Stewart and Tait *(1875),* and *Paradoxical Philosophy (1878),* a sequel to the former, interest others besides scientific minds. He also published treatises on *Light (1884), Heat (1884) Properties of Matter (1885), etc.* Am. Encyclop. of Ophthalm. vol.16,p.12507-12508

Koshun Takahashi

Takahashi Koshun (1854-1938) Japanese ophthalmologist, inventor of the *first* Japanese glass prosthesis. Born as the son of an ophthalmologist, he studied Ophthalmology at Himeji Hospital under J. C.àBerry, an American Missionary, during 1873-1875. He developed Japan's first glass-ceramic prosthesis in 1885. He had a busy practice in Osaka and produced many prosthesis that were adopted by the Japanese Army for wounded soldiers. He applied his glass prostheses to patients with corneal leucoma or staphyloma with a small central hole having been made with a trephine. He demonstrated the patients to Prof. J.àHirschberg in 1892: Hirschberg published it under Takahashi's name in his Journal (*Das Hornhautfensterchen*. Centralblatt. prakt. Augenheilkd. 20: 12, 1896). Also he reported 3 cases of keratoconus (*Demonstration of 3 cases of keratoconus in siblings*. J. Jpn. Ophthalmol. Soc. 5: 472-451, 1901) and mentioned the usefulness of the Fick contact lens for the first time in Japan. He was a Councillor of the Japanese Ophthalmological Society.(SM)

Takaku Isao (1921-) Japanese ophthalmologist, Professor Emeritus of Nagasaki University. He graduated from Tohoku University, Sendai, in 1946 and studied Ophthalmology at the University under Prof.àHAYASHI Yuzo: he received his Doctor of Medical Sciences in 1958 (thesis: *Studies of the transparent ocular media by means of ultracentrifugation and electrophoresis*. J. Jpn. Ophthalmol. Soc. 61: 1821, 1957; Studies of mucopolysaccharide in the cornea and sclera. ibid. 62: 1359, 1958). He was promoted

to Assistant Professor of the University in 1968 and was invited to be the Professor and Chairman of the Department of Ophthalmology of Nagasaki University in 1969: he served until retirement in 1988. During his tenure, he served as the University Hospital Director (1977-1979), Councillor of the Japanese Ophthalmological Society (JOS) (1969-1988), Executive Board of Trustees of JOS (1975-1984), Executive Board of the Japanese Society of Connective Tissue (JSCT) (1969-1988) and Councillor of the Japanese Society of Chemotherapy (1969-1988). He also organized the 80th Congress of the JOS as the President (1976), 11th Congress of the JSCT in 1979 and the 9th Congress of the Japanese Society of Ophthalmic Surgeons (1986). He is an Honorary Member of these Societies. His research interest covered a wide area including biochemistry of connective tissues, glaucoma, diabetic retinopathy, chemotherapy etc. and some examples of his publications are "*Experience with pyridinolcarbamate in diabetic retinopathy*, Excerpta Med. 201:309, 1969 ", "*Evaluation of double flap procedure in glaucoma surgery*. J. Jpn. Ophthalmol. Soc. 76: 1268, 1972" and " *Studies on the effects of growth hormone on the retinal vascular elements of streptozotocin induced diabetic rats*. The Acta Med. Nagasaki. 26: 73, 1981". He is the author of "*Biochemistry and Pathology of Connective Tissue*. Igaku-Shoin, Tokyo, 1974".(SM)

Takata, Kuniaki (1951-) Japanese cell biologist working on the eye, Professor, Department of Cell Biology, Institute for Molecular and Cellular Regulation, Gunma University. He graduated from the Faculty of Science of Tokyo University in 1974, studied at the Zoological Institute of the University and received his Ph.D. degree in 1979. He has been in the present position since 1994. His research interest is cell biology and anatomy, and in the eye he has done much work on the blood-ocular barriers, two examples of his many publications are as follows: "*Ultracytochemical localization of the erythrocyte/HepG2-type glucose transporter (GLUT1) in the ciliary body and iris of the rat eye*. Invest. Ophthalmol. Vis. Sci. 32:1659, 1991", and "*Transport of glucose across the blood-tissue barriers*. Intl. Rev. Cytol. 172: 1-53, 1997". He is a Councillor of the Japanese Association of Anatomists, the Japanese Society of Electron Microscopy, Japan Society of Histochemistry and Cytochemistry and Japan Society of Cell Biology. His is also on the Board of Directors of the Clinical Electron Microscopy Society of Japan. He is a member of American Society for Cell Biology and on the Board of Directors of the International Society of Histology and Cytology. In recognition of his outstanding contributions, the Japanese Society of Electron Microscopy granted him the JSEM Seto Prize in 1995. (Laboratory of Molecular and Cellular Morphology, Institute for Molecular and Cellular Regulation, Gunma University, Maebashi Gunma, 371-8512, Japan; phone:81-27-220-8840, fax: 81-27-220-8844, e-mail: takata@akagi.sb.gunma-u.ac.jp) (SM)

Akira Takayasu

Takayasu, Akira (1902-1990) Japanese ophthalmologist, Professor Emeritus of Kagoshima University, Son of TAKAYASU Mikito. He graduated from Kumamoto University in 1929, studied Ophthalmology under Prof. àKAGOSHIMA Shigeru and received the degree Doctor of Medical Sciences from the University in 1935 (thesis: *Clinical and experimental studies of ocular tumor growth*. J. Jpn. Ophthalmol. Soc. 37: 553, 1933). He was the Professor and Chairman of the Ophthalmology Department of Kagoshima University from 1948 to retirement in 1968. He served as the Director of the University Hospital in 1956-1958. He carried out excellent work on ocular tumors, and he is the author of *Orbital tumors*, Vol. 13 of the *Handbook of Ophthalmology* of the Japanese Ophthalmological Society published in 1955. In recognition of his distinguished service, the Government conferred on him the Third Order of the Rising Sun in 1972.(SM)

Mikito Takayasu

Takayasu, Mikito (1860-1938) Japanese ophthalmologist, Professor Emeritus of Kanazawa University. He graduated from Tokyo University in 1887 and studied Ophthalmology under J.àSCRIBA at the Graduate School of Medicine of the University. He was appointed the Professor of Ophthalmology of the 4th High School of Medicine (presently Kanazawa University) in 1888. He studied in Berlin under Prof. R. Greeff from 1899 to 1903. On his return to Kanazawa, he received the degree Doctor of Medical Sciences from Tokyo University in 1903 (thesis: *Beitraege zur pathologischen Anatomie des Arcus senilis*. Arch. Augenheilkd. 432:154, 1901). Through several changes in the educational system, the Medical School became Kanazawa Medical University in 1923

and he was elected the first Dean of the University (presently Kanazawa University, Faculty of Medicine). He served as the President for the 19th Congress of the Japanese Ophthalmological Society 1915. He retired from the University in 1924. In 1905 he saw a 22-year old woman with peculiar changes of the retinal vessels. After having confirmed the changes he reported the case at the 12th Congress of the Japanese Ophthalmological Society in 1908. He described that there was a vascular ring with the shape of a flower petal, 2-3 mm from and around the optic disc and that there were arteriovenous anastomoses and aneurysms in the branches of the vessels. Prof. Y.àOhnishi and Dr. S.àKagoshima discussed their recognition of similar cases. Since then, reports of similar cases were added and àNAKAJIMA Minoru discussed this disease in 1921, 1926 and concluded that it should be named Takayasu's Disease. In the latter half of the 20th Century, this disease was found to constitute Aortic Arc Syndrome and Pulseless disease, and gene analyses of this disease is in progress. (SM)

Takeuchi Shinobu (1949-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Sakura Hospital, Toho University. He graduated from Toho University in 1973, studied Ophthalmology under Prof.àTOBARI Ikuo and submitted his thesis (*Vitreous Surgery for Proliferative Vitreoretinopathy*. J. Jpn. Ophthalmol. Soc. 89: 967-976, 1985) to Toho University and received his Doctor of Medical Sciences in 1985. He has been in the present position as above since 1992. He has held key positions in professional Societies, including Director of The Chiba Ophthalmologist Association (1992-), Councillor of the Japanese Society of Ophthalmology (1993-), Director of The Vitreoretina Society of Japan (1993-) and Director of The Japanese Society of Ophthalmic Surgeons (1994-). He is also Councillor of Toho University (1996). His interest is concentrated on vitreoretinal surgery and he has some 150 papers: some examples are "*Surgical treatment of proliferative vitreoretinopathy (PVR).* Acta Concilium Ophthalmologicum. Proceedings of the XXVth International Congress of Ophthalmology p.2255-2259. Kugler & Ghedini, 1988" and "*Vitreous surgery for giant retinal tears*. Current Aspects in Ophthalmology 2: 1144-1148, 1992". (Toho University School of Medicine, Department of Ophthalmology, Sakura Hospital 564-1 Shimoshizu Sakura, Chiba 285 Japan. Phone : +81-43-462-8811 Fax: +81-43-463-0662; e-mail : ophtake@med.toho-u.ac.jp)(SM)

Taliaferro, William J. (1795-1871) American surgeon and ophthalmologist. Born in Newington, Orange County, Va., of Italian extraction. Having attended one year's lectures (in *1818)* at the University of Pennsylvania, he settled as general practitioner and ophthalmologist in Washington, Mason Co., Ky. Here he was widely known as an operator for cataract. In *1841* he moved to Cincinnati, where he was made professor of ophthalmology in the Cincinnati College of Medicine and Surgery, and where he lived and practised until his death. Am. Encyclop. of Ophthalm. vol.16,p.12508

Talko, J. (1839-1907) Russian ophthalmologist of Lublin. He wrote no books, but often contributed to the *"Centralblatt für Praktische Augenheilkunde.'* Am. Encyclop. of Ophthalm. vol.16,p.12508

Tamai Akihiko (1936-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Faculty of Medicine, Tottori University. He graduated from Tottori University in 1962, studied Ophthalmology at the Graduate School of Medicine of the University under Prof.àKANDORI Fumio and received his Doctor of Medical Sciences in 1967 (thesis: *The C-wave of the Cat ERG*. Yonago Acta Medica 9:199,1965). He worked as a visiting assistant Professor to the Department of Ophthalmology of Tulane University LA, U.S.A in 1970-1971. He served as the Professor and Chairman of the Department of Ophthalmology of Kochi Medical School (1981-1989) where he founded and consolidated the Department. He was then invited to his Alma Mater in 1989 and has held the present position as above since then. He served as the Director of the University Hospital in 1995-1997. He is Councillor of the Japanese Ophthalmological Society (1981-), of the Japanese Neuro-ophthalmological Society (1981) and on the Executive Board of the Japanese Society for Clinical Electrophysiology of Vision (1981-). He worked extensively in the field of electrophysiology of vision and neuro-ophthalmology and examples from his many publications are "*Spectrally selective flash early receptor potential (ERP) in dichromats*. Doc. Ophthalmol. 63: 389, 1986" and

"*Full-width tenotomy of four rectus muscles for intractable neovascular glaucoma*. Curr. Aspects of Ophthalmol. Proc. 13th Congress of Asia-Pacific Academy of Ophthalmology (APAO), P. 1431, Elsevier Science Publ. Amsterdam, 1992". He has been very active in exchange with Asian Countries. He is Emeritus Professor of the Medical College of Qingdao University, China and gave invited lectures in the People´s Republic of China on many occasions, at the Japan-Thailand Joint Meeting, at the Zhongshan Ophthalmic Center of Sun Yat-sen University of Medical Sciences, and at the 14th APAO Congress in Dhaka. He received the Distinguished Service Award of the APAO in 1997. He is also the President of the Japan-Korea Joint Meeting of Ophthalmology combined with the Japan-Taiwan Joint Meeting in 2000. (Department of Ophthalmology, Faculty of Medicine, Tottori University. 36-1 Nisi-machi Yonago, 683-0826, Japan. phone:+81-8-5934-8121, fax: +81-8-5934-8091, e-mail: tamaia@grape.med.tottori-u.ac.jp)(SM)

Tamai Makoto (1941-) Japanese ophthalmologist, Professor and Chairman of the Department of Tohoku University. He graduated from Tohoku University in 1966, studied Visual Science in the Physiology Department, the Graduate School of Medicine under Prof.àTASAKI Kyoji; he completed the course in 1972 with a Doctor of Medical Sciences granted (thesis: *Interaction between cortico-tectal and retino-tectal inputs as revealed by analysis of field potentials of the cat's superior colliculus*. Tohoku J exp Med, 107: 127-142,1972). Then he learned ophthalmology under Prof. Mizuno Katsuyoshi. He studied at the National Eye Institute, NIH under Dr. Jerry Chader and Kuwabara Toichiro as visiting scientist in 1976-1978. He published several papers such as "*The pineal gland does not control rod outer segment shedding and phagocytosis in the rat retina and pigment epithelium*. Invest. Ophthalmol. Vis. Sci. 17: 558-562,1978; *The early appearance of disc shedding in the rat retina*. Ibid, 18: 913-917, 1979" . He has been in the present position since 1986. His major interest in research is vitreous, retina, genetics in Ophthalmology and molecular biology of ocular diseases. Some examples of his many publications are "*Development of photoreceptor cells in vitro. Influence and phagocytic activity of the homo-and heterogenic pigment epithelium*. Exp. Eye Res. 26: 581, 1978" and "*Arrestin gene mutations in autosomal recessive retinitis pigmentosa*. Arch. Ophthalmol.116: 498, 1998". He serves the Japanese Ophthalmological Society (JOS) as a Councillor (1995-), Executive Director (1989-), Editor-in-Chief, J. Jpn. Ophthalmol. Soc. (1989-1991), Editorial Board Member of Curr. Eye Res. (1993-), to the International Society of Eye Research (ISER) as a Councillor (1996-1999) and to the Association for Research in Vision and Ophthalmology as a member of the Editorial Board (1997-). As President he organized the Xth Congress of the Japanese Chapter of ISER. Also he organized the 21st Congress of the Japanese Society of Ophthalmic Surgeons in Sendai. (Department of Ophthalmology, Tohoku University Graduate School of Medicine, Seiryo Aoba-ku, Sendai, 980-8574, Japan. phone: +81-22-717-7294, fax: +81-22-717-7298, e-mail:mtamai@oph.med.tohoku.ac.jp)(SM)

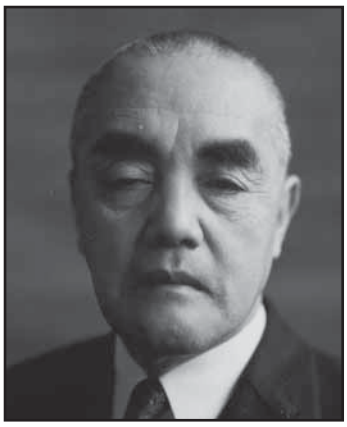
Tamesis, Sr., Jesus V. (1919-1995) Filipino ophthalmologist, former President of the World Medical Association and the Philippine Medical Association, former Vice President of the Philippine Ophthalmological Society, Awardee of the Presidential Medal of Honor in 1960, Vice Chairman and co-author of the Medicare Law, Jose Rizal Memorial Lecture Awardee of the Philippine Society of Ophthalmology are but a few of his accomplishments in his lifetime. He acquired his Medical degree from the University of the Philippines College of Medicine in 1943, studied ophthalmology as a resident at the Philippine General Hospital from 1943-45, after which he completed residency at the North General Hospital after the second World War. He was a fellow in Ophthalmic Pathology at the New York Eye and Ear Infirmary in 1956. He eventually became Department Head of the Jose Reyes Memorial Hospital until 1965, after which he was chairman of Ophthalmology at the Far Eastern University Hospital until 1984. He became known for his pioneering work in eye banking and corneal transplantation , and was co-founder of the *Philippine Eye Bank for Sight Restoration* in 1951 (*Keratoplasty in the Philippines: A Review . The Journal of the International College of Surgeons*, Vol XXX, no. 4, October 1958). He was also known for his technique of Suprachoroidal Implantation of the Inferior Oblique for Retinitis Pigmentosa . He had varied interests and other studies included *Suprachoroidal Drainage of the Anterior Chamber with Polyethylene Tube for Glaucoma* (Philippine Journal of Ophthalmology and

Otolaryngology, vol. VII, no.2, April-June 1955), *The Central Serous Control of IOP and its Relationship to the Concepts of Glaucoma* (The Journal of the Philippine Medical Association, Vol.XXIX, no.8, August 1953), *Leprosy Lesions of the Eye* (Journal of the Philippine Medical Association, vol. 39, no.2, February 1963). In 1960 he was Executive Organizer of the First Congress of the Asia Pacific Academy of Ophthalmology held in Manila and was one of its constitution drafters. At that time he was also Vice President of the Philippine Ophthalmologic Society. Besides Ophthalmology, Dr. Tamesis was involved with various government and private efforts in health care delivery, including the Introduction of the Concept of National Health Planning which was adopted by the Philippine government in 1964-69. He developed the Philippine Magna Carta of Health and the Philippine Medicare Plan, introduced integration of the Rural Health System and the development of the government hospital system complex. For his many achievements in the field of Ophthalmology and Public Health, he was awarded, in 1960, the Presidential Medal of Honor by then Philippine President Carlos P. Garcia. He became president of the Philippine Medical Association in 1963,during which he established the MARIA Project (Medical Aid to Rural Isolated Areas), planting doctors in doctorless areas and building 35 hospitals through private funding and community participation, initiated efforts to control schistosomiasis and tuberculosis, and the "*Green Revolution*" to fight malnutrition. In 1966 he became the first Filipino president of the World Medical Association, and was also president of the Third World Medical Education Conference in New Delhi. In 1973 he was honored with having been chosen to deliver the Xth Jose Rizal Memorial Lecture of the Philippine Society of Ophthalmology , the lecture being "*Problems in Ophthalmology due to Diabetes Mellitus*". Dr. Tamesis was in private practice as an ophthalmologist but was equally pre-occupied with public health and health care delivery. He was co-author and drew up the plans for government based health care insurance that eventually became Medicare. He served as Vice President of the Philippine Medical Care Commission for many years until 1986. He remained consultant for health of the Philippine Senate and Congress until he was taken ill. His later years before his demise were spent, as well on writing, on the weaknesses of Philippine society, from the viewpoint of a physician : "*A Clinical Diagnosis of the Sick Filipino*." The Examiner Magazine 1965. ; " *A Clinical Appraisal of the Sick Filipino Nation* "1984; "*Philippine AIDS (Acute Insurgency Destructive Syndrome*);" "*Command Responsibility vs. Compliance with Sworn Duty*;" "*Demo-crazy*!;" "*Democracy as the Solid Foundation of National Recovery* "; "*A Constitution for All Seasons*." All these were published in major daily newspapers. Dr. Tamesis passed away from pancreatic cancer, on January 1, 1995 and left a message to his fellow ophthalmologists to " *transcend the confines of ophthalmology and heal the ailments of society as well*". He was very proud of and lived the Tamesis family motto *Non Nobis Solum* ("not for ourselves alone"). The Philippine Academy of Ophthalmology in 1996 established the Jesus V.Tamesis Community Service Award for deserving ophthalmologists, in his honor, to start in year 2000.(SM)

Tamesis-Villalon , Pearl M. (1950-) Filipino ophthalmologist, Associate Professor and Chief of the Vitreoretina Service of the Department of Ophthalmology of the University of the Philippines College of Medicine and Philippine General Hospital. She holds the same positions at the St. Luke's Medical Center Institute of Ophthalmology. She graduated in 1971 as cum laude with a degree of Bachelor in Science, Pre-Medicine at the University of the Philippines. In 1975 she earned her Doctor of Medicine degree from the College of Medicine of the same university. In preparation for Ophthalmology training she studied the Basic and Clinical Course in Ophthalmology at Harvard Medical School in 1977. She trained in ophthalmology in a residency program at the Philippine General Hospital , and was chief resident during her last year. She was awarded a China Medical Board fellowship in Visual Physiology at the University of the Philippines College of Medicine in 1982, after which, having been certified Diplomate in Ophthalmology by the Philippine Board of Ophthalmology, she became Clinical Assistant Professor of the same university. In 1984,1985 she studied vitreoretina microsurgery at the *Hôpital de la Croix-Rousse*, Université de Lyon-Claude Bernard under the tutelage of Professor MireilleàBonnet. Her interest in vitreoretina surgery has been widely recognized in her country, with special emphasis of her studies on pneumatic retinopexy and intraocular foreign bodies (*Pneumatic Retinopexy As An Alternative Procedure in Certain Cases of Rhegmatogenous Retinal Detachments*, ICMR Annals vol. 9 1989, & vol 10 1990 p. 131.

Rhegmatogenous Retinal Detachment After Scleral Perforating Injury and Cryopexy, presented at the 17th APAO Congress 1999, and in press for Congress Proceedings * as co-author . *Vitreous Substitute Potential of Squalene Oil*, Phil. Journal of Ophthalmology vol. 24 no.1, Jan-Mar 1999. * As co-author. *Intraocular Non-metallic Foreign Bodies in Rabbits*, Phil. Journal of Ophthalmology, vol. 24, no.1, Jan-Mar 1999 * as co-author). She was a lecturer at the Trauma Symposium of the 16th Congress of the Asia Pacific Academy of Ophthalmology in Nepal in 1997, where she presented a paper on the 5 year experience of the Philippine General Hospital on Intraocular Foreign Bodies. Dr. Tamesis-Villalon was president of the *Philippine Academy of Ophthalmology* from 1998-1999 and was president of the host society during the 17th Asia Pacific Academy of Ophthalmology Congress held in Manila in March 1999. At that congress, she was awarded a Distinguished Service Award by the APAO. In recognition of her role in the staging of a successful 17th APAO Congress as president of the host society and as Organizing Vice President, she was presented with a special award of recognition and appreciation by the APAO Council. At present, besides being Associate Professor and Chief of the Vitreoretina Services of two hospitals where she also directs the training of Retina Fellows, she holds the position of founding Vice-President of the newly formed Vitreoretina Society of the Philippines. (Department of Ophthalmology, Philippine General Hospital, Taft Avenue, Manila Philippines. tel no. 63-2-5210007.; CLINICA TAMESIS , 42 Quezon Ave., Quezon City, Philippines 3008. tel. 63-2-7123570. fax: 63-2-7124446 . e-mail: eyecare@i-manila.com.ph or gabriel@i-manila.com.ph)(SM)

Tamin-Radjamin, Retna Kentjana (1924-) Indonesian ophthalmologist, Professor Emeritus of Airlangga University Surabaya. She graduated from the Faculty of Medicine, University of Indonesia in 1957, and continued postgraduate studies at Airlangga University and completed its course in 1960. She extended her studies in 1965 in the U.S.A. at San Francisco, Baltimore, and Philadelphia. She was appointed the Professor and Head of the Department of Ophthalmology of Airlangga University in 1963 and served until retirement in 1989. At the University, she served as the Vice-Rector of Administration and Finance of the Airlangga University (1969-1981). In the National Organizations, she has served as the Chairman of the Eye Bank Surabaya (1974-present) and the President of the Indonesian Ophthalmological Society (1976-1984), Vice-Chairman of Hellen Keller in Indonesia, Chief of the Rural Eye Care Christoffel Blinden Mission Project. In the International Organization, she served as the Councillor of the Asia-Pacific Academy of Ophthalmology (APAO) (1978-1983), Vice-President of APAO (1985-1987), President of the APAO (1987-1989), Consultant of the WHO in Prevention of Blindness since 1986 and the Member of the International Council of Ophthalmology in 1988. Her clinical research interest has been in orbital disorders, strabismus, prevention of blindness and cataract. She published a paper on possible Marinesco Sjogren syndrome, in 1969, and is the editor of the "*Eye Diseases Handbook for Medical Doctors and Medical Student*". She is a recipient of the Medal from the Indonesian Ophthalmological Society (1988), distinguished service Award from the APAO (1981) and the Medal from the President of the Republic of Indonesia in 1990. (SM)



Shigemi Tamura

Tamura, Shigemi (1895-1973) Japanese ophthalmologist, Professor Emeritus of Kyushu University. He graduated from Kyushu University in 1920 and studied Ophthalmology under Prof. àOHNISHI Yoshiakira. He joined with Prof. S. Ochi in 1922 to establish a new Department of Ophthalmology at Hokkaido University and was promoted to Assistant Professor of Ophthalmology in 1925. He received the degree Doctor of Medical Sciences from Hokkaido University in 1931 (thesis: *Absorption of ultraviolet rays in the serum and urine in patients with eye diseases*, J. Jpn. Ophthalmol. Soc. 34: 1608, 1930). He spent 2 years as the Professor of Ophthalmology of Taipei Medical School (presently National Taiwan University) in 1928-1930. He was then the Professor and Chairman of the Department of Ophthalmology of Kyushu University from 1940 to 1959. He maintained the Department during the hard time of the World War II and trained many ophthalmologists, e.g. IKUI Hiroshi, TANIGUCHI Yoshiaki, HAYASI Fumihiko and many others. He served as the President for the 56th Congress of the Japanese Ophthalmological Society in 1952 and delivered a special lecture "*Central nervous system and the eye*" at the 59th Congress of the Society in 1955. In recognition of his distinguished service, the Government conferred on him the Second Order of the Sacred Treasures in 1969.(SM)

Tan, Nguyen Duy (1930-) Vietnamese ophthalmologist. He was born in Saigon (present Ho Chi Minh City). He graduated from Hanoi Medical College in 1959. He was a lecturer of the Eye Department, Hanoi Medical College (1960-1971). He worked for the National Institute of Ophthalmology from 1972 to 1998. He was the Head of Corneal and Conjunctival Department, National Institute of Ophthalmology from 1988 -1998. He is Associate Professor. He has made great contributions in training eye doctors in Vietnam. He wrote a textbook on ophthalmology and many articles on trachoma and other kerato-conjunctival diseases. He attended many international ophthalmological conferences in Seoul and Singapore. (SM)

Naohiko Tanaka

Tanaka, Naohiko (1928-1988) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Yokohama City University. He graduated from Yokohama City University Medical School in 1950, studied Ophthalmology at the University under Prof. OHKUMA Tokuji and received his Doctor of Medical Sciences in 1961 (thesis: *Studies of zonulorhexis by chymotrypsin*. I. J. Jpn. Ophthalmol. Soc. 63: 3256, 1959; II. *ibid.* 65: 1036, 1961). He extended his studies during 1964-1966 as a Rockfeller Fellow at the University of California, San Francisco. He was appointed the Professor at his Alma Mater in 1973. He served many professional Societies, and they were Councillor of the Japanese Ophthalmological Society (1975-1988), Executive Director of the Japanese Association of Ocular Infection (1977-1988), President of the 22nd Congress of the Japan Contact Lens Society (1979), Executive Director of the Japanese Society of Environment and Infection (1986-1988), Chairman of the 19th Meeting of Pseudomonas Symposium (1986). He was Honorary Professor of the Hainan Institute of Ophthalmology, China (1986) and editor of International Ophthalmology Clinic (1987). He worked extensively in the field of ocular infection and anterior ocular segment: some examples are "*Studies of immunity in herpetic corneal infection*. J. Jpn. Ophthalmol. Soc. 80: 893,1976" and "*Studies of immunological treatment of pseudomonas cornal infection*. ibid. 81: 1252, 1977". Unfortunately, he died before completing his tenure.(SM)

Tane, Sadanao (1930-) Japanese ophthalmologist, Professor Emeritus of St. Marianna University. He graduated from Jikei University School of Medicine in 1954, studied Ophthalmology under Prof.àOHASHI Kohei and received his Doctor of Medical Sciences in 1960 (thesis: *Clinical studies on ocular congestion tests*. *I*. J. Jpn. Ophthalmol. Soc. 60: 1699, 1956; *II*. ibid. 62: 895, 1958; *III*. ibid. 62: 2347, 1959; *IV*. ibid. 63: 3551, 1959). He served as the Professor and Chairman of the Department of Ophthalmology of St. Marianna University School of Medicine during 1972-1996. His major interest has been in ultrasonography in Ophthalmology, orbital diseases, glaucoma and ocular pathology, and some examples of his publications are "*The study on the microscopic biometry of the thickness of the human retina, choroid and sclera by ultrasound*. J. Jpn. Ophthalmol. Soc. 88:1412, 1984" and "*New Ophthalmic Ultrasonography*, Shindan-to-Chiryo Publ. Tokyo 1993". He served as a Councillor to the Japanese Ophthalmological Society (1972-1996), the Japan Society of Ultrasound in Medicine (1975-1997), of Calamity Medicine (1972-), of Medical Imaging (1985-1996) and of the Japan Glaucoma Society (1985-1998). He also served on the Executive Board (1978-) and Vice-President of International Society of Ophthalmic Ultrasound (SIDUO)(1992-1998) and Director of the Japanese Society of Ophthalmological Optics (1974-). He organized many congresses, and they are the 54th Congress of Japanese Society of Ultrasound Medicine (1989), 26th Congress of the Japanese Society of Ophthalmological Optics (1990), 14th Congress of International Society of Ophthalmic Ultrasound (1992) and 47th Congress of the Japanese Society of Clinical Ophthalmology (1993). He is an Honorary Member of the Japanese Ophthalmological Society and of the Japan Glaucoma Society and Meritorious Member of the Japan Society of Ultrasound in Medicine.(SM)

Tangeman, Charles William (1856-1923) American ophthalmologist of Cincinnati, born at Mansfield, Ohio. Obtaining his early education in the public schools, he received the medical degree at Miami Medical College in 1879. Tangeman at no time practiced general medicine, but, shortly after graduation, became associated with Dr. W.W. Seely in eye and ear practice. Soon, however. he began to practice independently and, from that time, restricted his practice to the eye. He became clinical professor of ophthalmology at the Ohio Medical College, and for more than twenty years was ophthalmologist to Christ's Hospital and to the Betts Street Hospital. For a long time he was chief oculist to the Big

Four Railroad. While engaged in the latter work, he is said “to have initiated and standardized the visual tests and qualifications for railway employes, which now are in common practice on all roads throughout the country." He was a member of the Cincinnati Academy of Medicine, the Ohio and American medical Associations, and the American Academy of Ophthalmology and Otolaryngology. In 1918 he became Professor Emeritus at the Ohio Medical College. AJO 6:65

Tani, Michiyuki (1920-) Japanese ophthalmologist, Professor Emeritus of Kyoto Prefectural University of Medicine. He graduated from Kyoto Prefectural University of Medicine in 1945, studied Ophthalmology at the University under Prof. àFUJIWARA Kenzo and Prof.àYUGE Tsunekazu. He received his Doctor of Medical Sciences in 1954 (Thesis: "*Studies on the pyruvic acid in the cerebrospinal fluid in case of retrobulbar neuritis*”. J. Kyoto Pref. Med. Univ. 54: 752, 1954). He served as Professor and Chairman of the Department of Ophthalmology of the University as the successor to Prof. YUGE Tsunekazu from 1947 to 1968. His interest in research has been in diabetic retinopathy, fluorescein angiography and photocoagulation, and some examples of his publications are “*Introduction of fluorescence fundus angiography*. J. Jpn. Ophthalmol. Soc. 74: 1360, 1970”, “*Clinical aspects of diabetic retinopathy, retinal microangiopathy in early diabetic stages including prediabetes*. J. Jpn. Ophthalmol. Soc. 80: 1478, 1976”, and he is the author of “*Concise Ophthalmology*, revised 4th edition. Kinpodo Publ. Co. Kyoto, 1991”. He served as Councillor to the Japanese Ophthalmological Society and on the Board of Trustees of the Japanese Society of Ophthalmic Diabetology, Japanese Association of Strabismus and Amblyopia and Japan Diabetes Society. He is an Honorary Member of these Societies. Currently he is the Director General of Osaka Dai-Ichi Hospital of the Osaka Occupational Health Center.(SM)

Taniguchi, Yoshiaki (1920-) Japanese ophthalmologist, Professor Emeritus, of Kyushu University. He graduated from Kyushu University in 1946, studied Ophthalmology at the University under Prof. àTAMURA Shigemi and received his Doctor of Medical Sciences in 1955 (thesis: *A cyotopathological study of retinal pigment epithelium*. Report I: J. Jpn. Ophthalmol. Soc. 58: 1330, 1954; Report II: ibid. 59: 659, 1955). He conducted research at Indiana University with Prof. T. F. Schlaegel Jr. in 1957-1958. He served as the Professor and Chairman of the Department of Ophthalmology of Kagoshima University from 1968-1976 and was then invited to Kyushu University in 1976 and worked as the Professor and Chairman of the Department of Ophthalmology until retirement in 1983. He served as a Member of the Board of Trustees of the Japanese Ophthalmological Society (JOS) (1965-1985), Japan Diabetic Society (1964-1986) and Japanese College of Angiology (1980-1984). He also served as a Member of the Science Council Committee, Ministry of Education (1981-1983). He has been editor of the Japanese Journal of Ophthalmology (1979-1983) and Folia Ophthalmologica Japonica (1969-1983). He organized the 84th Congress of the JOS in 1980. He is the leading expert in ocular pathology and electron microscopy. The major Lectures he delivered are the special report at the 65th Congress of the JOS (*Electron microscopy of the uveal tract*. J. Jpn. Ophthalmol. Soc. 65:2302, 1961), lecture on the pathogenesis of diabetic retinopathy at the 17th Congress of Japan Diabetic Society (*Pathology of diabetic retinopathy: electron microscopic approach*. Diabetes J. 18: 35, 1975) and Special Lecture at the 36th Congress of the Japanese Society of Clinical Ophthalmology (*Uveal circulatory disturbance in experimental diabetic rats: an electron microscopic study*. J. Jpn. Ophthalmol. Soc. 86: 1633.. 1982). On the occasion of his retirement from Kyushu University, his students published a commemorative issue in the Jpn. J. Ophthalmol. Vol. 27, No. 1, 1983, and he has a paper in this issue “*Choroidal neovascularization in long-standing case of Vogt-Koyanagi-Harada disease*. Jpn. J. Ophthalmol. 27: 9, 1983”. A list of his selected publications can be found in this issue. From 1983-1988, he served as the Director of Kitakyushu City Moji Hospital. (SM)

Tanihara, Hidenobu (1960-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Kumamoto University School of Medicine. Tanihara graduated from Kyoto University in 1985 and studied Ophthalmology at Kyoto University under Prof. HONDA Yoshihito. He worked as a clinical fellow at the Department Ophthalmology, Tenri Hospital under Dr. NAGATA Makoto (see his biography). He received his Doctor of Medical Sciences in 1993. After having served at Kyoto

University, Doheny Eye Institute of the Southern California University, and Bascom Palmer Eye Institute of the Miami University, he has been in the present position since 2001. His scientific works cover molecular and/or cell biology of neural network formation, cell adhesion molecules, extracellular matrices, cytokines, retinal diseases and glaucoma. Also, most of his clinical studies are associated with surgical treatments for retinal diseases and glaucoma. He has published more than 70 English papers so far, and some examples are *Cloning of five human cadherins clarifies characteristic features of cadherin extracellular domain and provides further evidence for two structurally different types of cadherin*. Cell Adhesion Commun 2: 15, 1994, *Characterization of cadherin-4 and cadherin-5 reveals new aspects of cadherins*. J Cell Sci 107: 1697, 1994, *Surgical effects of trabeculotomy ab externo on adult eyes with primary open angle glaucoma and pseudoexfoliation syndrome*. Arch Ophthalmol. 111: 1653, 1993 and *Identification of transforming growth factor-beta expressed in cultured human retinal igment epithelial cells*. Invest/ Ophthalmol. Vis. Sci. 34: 413, 1993". He is a Councillor to the Japanese Ophthalmological Society and Japan Glaucoma Society, and is a member of many National and International professional Societies, including Association for Research in Vision and Ophthalmology (ARVO) and International Society for Eye Research (ISER). (Department of Ophthalmology, Kumamoto University School of Medicine, 1-1-1 Honjo, Kumamoto 860-8556, Japan. phone: +81-96-373-5247, fax: +81-96-373-5249, e-mail: tanihara@fc.kuh.kumamoto-u.ac.jp) SM

Tano, Yasuo (1948-) Japanese ophthalmologist, Professor and Chairmen of the Department of Ophthalmology of Osaka University, Graduate School of Medicine. He was born as a son of TANO Yoshio, the first Professor of Ophthalmology of Tokyo Medical and Dental University, and he graduated from Osaka University in 1972, and studied ophthalmology at the University under Prof.àMANABE Reizo: he received his Doctor of Medical Sciences in 1981.(thesis: *Vascular Casts of Experimental Retinal Neovascularization*). He extended his studies as a Research Fellow at Bascom Palmer Institute of Ophthalmology, Miami, U. S. A. (1977-1978) and Duke Eye Center, Durham, U.S.A. (1978-1980), and worked with MACHEMER Robert (*Inhibition of intraocular proliferations with intravitreal corticosteroid.* Am. J. Ophthalmol. 89: 131, 1980, and Retinal Neovascularization after intravitreal fibroblast injection. Am. J. Ophthalmol. 92: 103, 1981). He has been in the present position since 1991. His specialty in ophthalmology is vitreoretinal diseases and ocular surgery, and he has many publications: some examples are (*Lens changes during rapid tightening of metabolic control in diabetes*. Lancet. 347:1764, 1996) and (*Identification of the gene responsible for gelatinous drop-like corneal dystrophy*. Nat. Genet. 21:420, 1999). His professional activities are extensive and he is a member of many National and International Societies. He is a Member of the Advisory Committee for International Council of Ophthalmology (1998-), Gonin Medal Selection Committee (1995-), Executive Committee of the Club Jules Gonin, ARVO (Association for Research in Vision and Ophthalmology) Program Committee (1998-), International Board of the International Society of Ocular Trauma (1989-), Councillor of the International Society for Eye Research (ISER), Alcon Research Institute Scientific Advisory Board (1993-1998) and Academia Ophthalmologica Internationalis (Chair V, 2000-). In National societies, he is on the Board of Trustees of the Japanese Ophthalmological Society (JOS) (1993-2001), Japanese Society of Ophthalmic Surgeons (1991-), Osaka Eye Bank (1991-) and many other Ophthalmological Societies. His editorial assignments are or have been Editor-in-Chief of the Folia Ophthalmologica Japonica (1991-), Executive Editor of the Jpn. J. Ophthalmol. and of the J. Jpn. Ophthalmol. Soc., Member of Editorial Board of Am. J. Ophthalmol. (1995-), v Graefe's Arch. Clin. exp. Ophthalmology (1992-), Survey of Ophthalmol. (1992-), Seminars in Ophthalmol. (1996-), J. Eye Trauma (1996-1998), Invest. Ophthalmol. Vis. Sci. (1996-1998) and many Japanese Ophthalmological journals. (Department of Ophthalmology, Osaka University Graduate School of Medicine, Rm-7, 2-2 Yamadaoka, Suita, Osaka 565-0871 JAPAN, phone: +81-6-6879-3450, fax: +81-6-6879-3459. e-mail: ytano@ophthal.med.osaka-u.ac.jp)(SM)

Tansirikongkol Visuthe (1938-) Thai ophthalmologist, Emeritus Clinical Professor of Mahidol University. He graduated from Karl Ruprecht University, Heidelberg Germany, received the Diploma of the German Board of Ophthalmology (1973) and then was

granted Doctor of Medicine from the Faculty of Medicine, Nordrhein-Westfalen Technische Hochschule in 1973. On his return to Thailand, he received the Diploma of Thai Board of Ophthalmology in 1975. He served as the Chairman of the Department of Ophthalmology of Ramathibodi Hospital, Mahidol University in 1992-1995 and was appointed the Clinical Professor of the University in 1994 and named Emeritus Clinical Professor in 1995. He served the Ophthalmological Society of Thailand as a Member of the Committee (1990-1991, 1994-1995), Vice-President (1992-1993) and he has been President of the Society since 1996. He is also the President of the Royal College of Ophthalmologists of Thailand since 1999. He has served the Asia-Pacific Academy of Ophthalmology, as a Councillor since 1999. He has been very active in the Prevention of Blindness, i.e. Consultant of the Program Prevention of Blindness of the Ministry of Public Health (1978-1996, and also since 1997-present), Committee Member of the Foundation of Prevention of Blindness, Bangkok (1985-1996), Vice-Chairman for the Project "*Analysis of Problems and Needs of the Disabled Children*, Social Department, Interior Ministry" (1986-1989), Ophthalmic Consultant to the Thai Red-Cross for National Eye Bank (1993-1994), Vice-Chairman of the *Foundation of Prevention of Blindness*, Bangkok since 1997 and Ophthalmic advisor of the Princess Mother's Medical Volunteer Foundation since 1997. He has published many scientific papers and written books, e.g. "*Diagnosis and management of amblyopia*. Thai J. Ophthalmol: 6 155, 1992", "*The basic principles of strabismus*, Textbook, Ramathibodi Hospital, Mahidol University, 1986" and "*The strabismus*, in *The Pediatric Textbook*, Holistic Publishing, 1997". He is a recipient of many Awards, e.g. *Distinguished Service Award* of Chulalongkorn University (1985), *Distinguished Honor Award*, Suranaree Ophthalmic Foundation (1987), *Golden Eye Award* of the Ophthalmological Society of Thailand (1989), *Distinguished Service Award* of the First Thailand-Japan Joint Meeting of Ophthalmology (1993). In recognition of his service, the Ministry of Public Health granted him the *Distinguished Honor Award* in 1996. (SM)

Tarkkanen, Ahti (1930-) Finnish ophthalmologist, Helsinki, Finland. He graduated from the University of Helsinki 1955 and started his specialization in ophthalmology at the Helsinki University Eye Hospital under the guidance of Professor Mauno Vannas. He completed his training as a postgraduate fellow in ophthalmology with an ASLA-Fullbright grant at the Washington University, School of Medicine, Saint Louis, Missouri, USA, 1957-1958 under BernardàBecker who introduced Tarkkanen to research in glaucoma. Further training was obtained in ophthalmic pathology at the Institute of Ophthalmology, University of London 1960 under Professor NormanàAshton. Tarkkanen held various senior appointments at the Helsinki University Eye Hospital l962-1968, and he was appointed to the chair of full-time Associate Professor 1968-1984 followed by the appointment to the chair of Professor, Chairman of the Eye Department and the Director of the Eye Hospital 1984 -1996. Tarkkanen founded the First Ophthalmic Pathology Laboratory in Finland at the Helsinki University Eye Hospital 1962 and lead the planning which resulted in a new operation wing annex in 1993. He presented his doctoral thesis at the University of Helsinki 1962 (Pseudoexfoliation of the lens capsule. Acta Ophthalmol 71: Suppl 71, 1962). His papers total more than 400 in the main ophthalmological journals with subjects on exfoliation syndrome, glaucoma, ophthalmic pathology and pediatric ophthalmology. Tarkkanen served as President of the Finnish Ophthalmological Society 1978-1979 and became its Honorary Member 1991. He was also invited to become an honorary member of the Hungarian Ophthalmological Society 1996 and Swedish Ophthalmological Society 1999. He was the President of the Finnish Medical Society Duodecim 1973 and was invited to become an Honorary Member 1993. He is one of the founders of the European Ophthalmic Pathology Society 1962. He has been the member of the European Council of Ophthalmology since 1988 and of the Academia Ophthalmologica Internationalis (Chair III) since 1993, He was awarded the National Pohjola Price in Medicine in Finland 1994. Published books: *Pathology of Intraocular Lens Implantation*. Acta Ophthalmol Scand. 1985:63: Suppl 170; *Surgical Pharmacology of the Eye* (& M Sears) Raven Press, New York, 592 pp, ISBN 0-88 167-047-2; *Exfoliation Syndrome*. Acta Ophthalmol. Scand.1988:66:Suppl 184; *Principles of Ophthalmology*, Recallmed Ltd Helsinki, ISBN 951-9221-57-3. (Department of Ophthalmology, Helsinki University Central Hospital, Haartmaninkatu 4C/PB220, Fin-00029, Helsinki, Finland. phone: +358-9-471-73110, fax: +358-9-471-75100, e-mail: ahti.tarkkanen@pp.kolumbus.fi [AB]

Tartra, A. E. (c.1775-1840) French surgeon, who seems to have devoted considerable attention to ophthalmology. Born about 1775, he received his surgical degree at Paris in 1802. In 1812 he wrote *"De 1'0pération de la Cataracte"* in unsuccessful competition for a professorship. Am. Encyclop. of Ophthalm. vol.16,p. 12520

Tasaki, Kyoji (1924-) Japanese physiologist working on physiology of vision, Professor Emeritus of Tohoku University. He graduated from Tohoku University Faculty of Science in 1949 (with major subject of physics) and from the School of Medicine in 1953. He studied physiology of vision under Prof.àMOTOKAWA Koichi and received his Doctor of Medical Sciences in 1963 (thesis: *Some observation on the retinal potentials of the fish*. Arch. ital. Biol. 98: 81, 1960). He was appointed the Professor and Chairman of the Department of Physiology of Tohoku University in 1966 and served until retirement in 1988. He held key positions in the professional Societies: Physiological Society of Japan, Councillor (1962-present), Board of Trustees (1967-1987), Neuroscience Society, The Japanese Society of Psychiatry and Neurology, Japan Medical Association, and New York Academy of Sciences. He is the Founding Member of the Japanese Chapter of the International Society for Eye Research (ISER) in 1971. Two examples from his many publications on Vision Physiology are "*Intraretinal discrimination of horizontal and vertical planes of polarized light by octopus*, Nature. 209: 334-335, 1966" and "*Rods also participate in human color vision*. Tohoku J. exp. Med. 194: 57-62, 1988". He gives guidance to a team of the Department of Ophthalmology of Tohoku University, in developing a new video-system for image analysis of the ocular fundus. J. Jpn. Ophthalmol. Soc. 94: 637, 1990; ibid. 95: 861, 1991. For the excellence of his works, the Japanese Ophthalmological Society (JOS) granted him the *Society Prize* in 1982 (Award Lecture: *Fluorescein and visual function*. 86th Congress of the JOS). He continues his activity as an Advisor to Tohoku Bunka Gakuen University and as the Director of Tohoku Medical Information Center. (SM)

Tasman, William (1929-) American ophthalmologist, Ophthalmologist-in-Chief, Wills Eye Hospital and Professor and Chairman of the Department of Ophthalmology, Jefferson Medical College, Philadelphia, Pennsylvania. He received M.D. degree from Temple University, School of Medicine in 1955. He spent 2 years (1957-1959) in Wiesbaden Germany and studied under Dr. Meyer-Schwickerath who developed the xenon arc photocoagulator during this period. On his return from Germany, he completed his residency training in Ophthalmology at Wills Eye Hospital, Philadelphia in 1961. He extended his study as a Fellow at the Massachusetts Eye and Ear Infirmary during 1961-1962. He has become one of the very few pioneers in the treatment of retinal diseases by photocoagulation. He has served in the following academic positions: Associate Professor, Temple University Health Center (1966-1971), Professor and Director of the Department of Ophthalmology, Medical College of Pennsylvania (1979-1981), Professor of Ophthalmology (1974-) and Chairman of the Department of Ophthalmology (1985-) of Jefferson Medical Collage. He has joint Hospital appointments at Chestnut Hill Hospital (1965-), Wills Eye Hospital (1962-), Children's Hospital of Philadelphia (1977-) and Thomas Jefferson University Hospital (1981-). He is a member of and has served as an officer for many professional societies in the United States and abroad, and some examples are as follows: Founding member of the Club Jules Gonin Retina Society (1959-), Founding member of the Retina Society (1967-), American Academy of Ophthalmology Member, Program Committee (1974-1981), Pennsylvania Academy of Ophthalmology Co-Chairman, Program Committee (1980-1981), Vice-President (1986-1987), President (1988-1989) of Retina Society, American Academy Board of Directors (1982-1986), Associate Secretary of American Academy Ophthalmology (1987-1992), American Board of Ophthalmology, Director (1983-1992), Written Committee Chairman (1987-1990) Vice-Chairman (1991), Vice Chairman of the American Board of Ophthalmology (1990), Chairman of the American Board of Ophthalmology (1991), Secretary Heed Society Foundation (1986-present), American Board of Ophthalmology, American Academy of Ophthalmology-Secretary for Annual Meeting (1992-1997), American Academy of Ophthalmology-Committee of Secretaries (1992-present), American Academy of Ophthalmology-Awards Committee (1993- present), American Academy of Ophthalmology-President-Elect (1997-1998) President (1998-1999), American Ophthalmological Society President (1998-1999), Member of the French

Ophthalmological Society (1980-) and Delegate from U.S. to the French Society (1985-) and a member of the Academia Ophthalmologica Internationalis (1999-). He has served as editor to the following journals: *Survey of Ophthalmology* (1971-present), *AMA Archives of Ophthalmology* (1972-1976), Editorial Board, *Ophthalmic Surgery* (1983-present), Editorial Board, *Archives of Ophthalmology* (1985-1995), Editor, *Transactions of the A.O.S.*(1990-1996), Section Editor, *Key Ophthalmology* (Mosby) (1993-present), Associate Editor *Yearbook of Ophthalmology* (1994-1998), Ophthalmic Publishing Company Board (1995) and *Ophthalmology/World News*, Editorial Board (1995). He has been interested in vitreoretinal conditions that affect children. In his thesis to the American Ophthalmological Society (*Vitreoretinal changes in cicatricial retrolental fibroplasia*. Tr. Am. Ophthalmol. Soc. 68: 548-594, 1970), he described the conditions of the retinopathy of prematurity and his findings have been confirmed throughout the World. Subsequently, he found the effectiveness of cryotherapy and laser therapy in the active phase of this disease (*Management of retinopathy of prematurity*. Ophthalmology 92: 995-9. 1985, *Management of retinopathy of prematurity*, Elsevier Science Publ. B.V. 235-7, 1991) and played a key role in the International Classification of this disease (*The international committee for the classification of the late stages of retinopathy of prematurity: An international classification of retinopathy of prematurity*. Arch. Ophthalmol. 105: 906-912, 1987). He has been a key member in the Diabetic Retinopathy Study Group (DRS Group: *Four risk factors for severe loss in diabetic retinopathy. The third report of the diabetic retinopathy study findings*. Arch. Ophthalmol. 97: 654, 1979, The Diabetic retinopathy vitrectomy study research group: *Early vitrectomy for severe vitreous hemorrhage in diabetic retinopathy. Two year results of a randomized trial. Diabetic Retinopathy Vitrectomy Study Report 2*. Arch. Ophthalmol.103: 1644-1652, 1985). He has been interested also in other pediatric vitreoretinal conditions that include Stickler's syndrome, where he identified gene mutations in cooperation with the Molecular Genetics Laboratory of Wills Eye Hospital. He has authored or co-authored 158 articles in refereed journals, contributed 38 book chapters, 4 annual Retina reviews for the Arch. Ophthalmol. and he edited Duane's multi-volume *Textbook of Ophthalmology*. In recognition of his contributions, he is a recipient of many honor awards that embrace - Zentmayer Award, College of Physicians 1970, Heed Fellowship Award 1972, Loyalty Award, Chapel of Four Chaplains 1980, Senior Honor Award, American Academy of Ophthalmology, 1985, Founders Award, National Exhibits of Blind Artists, 1988, Silver Tray Award, Wills Eye Hospital 41st Annual Conference given annually in recognition of individual´s contribution to the field of Ophthalmology, 1989, Award in recognition and grateful appreciation of his work for the blind, Overbrook School for the Blind, 1989, Annual Ophthalmic Club Award for Life Member, 1990, Gold Medal Award of the Saudi Ophthalmological Society, 1992, Honorary Member, Jefferson Alumni Association 1994, Jules Stein Living Tribune Award, 1997, Life Achievement Award, American Academy of Ophthalmology, 1999 and Lucien Howe Medal, American Ophthalmological Society, 2000. (Wills Eye Hospital, 900 Walnut Street, Philadelphia, PA 19107. U.S.A; Phone: +1-215-928-3073; e-mail: wst1@ureach.com)(SM)

Tavignot, Francois Louis (1818- ?) French ophthalmologist born at Paris. He studied his profession in that city and from 1842-45 was assistant in the eye clinic at La Pitié. He became a distinguished operator and writer. Late in life he retired and then lived very quietly for many years. The date of his death is not procurable. The list of his journal articles is a very long one, and most of them were published in the *"Annales d'Oculistique,"* beginning in 1843: His larger writings are as follows: 1. *Quelques Remarques sur les Cataractes Secondaires.* (Paris, 1843.) 2. *Traité Clinique sur les Maladies des Yeux.* (Paris, 1847.) 3. *Etudes Cliniques sur les Maladies de la Cornée.* (Paris, 1845) 4. *Mémoires Pratiques sur les Maladies des Yeux.* (Paris, 1857.) 5. *De la catarate, son extraction directe; nouveau procédé* Paris 1867. Am Encyclopedia of Ophthalmology, vol.16, p.12522

Tawara, Akihiko (1947-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, School of Medicine, University of Occupational and Environmental Health, Japan. He is the17th generation in the Tawara Ophthalmology family and graduated from Kurume University, School of Medicine in 1974. He studied Ophthalmology at Kyushu University under Prof. àIKUI Hiroshi, Prof. àTANIGUCHI

Yoshiaki and Prof.àINOMATA Hajime, and received his Doctor of Medical Sciences in 1982 (thesis: Tawara A, Inomata H: *Developmental immaturity of the trabecular meshwork in congenital glaucoma*. Am J Ophthalmol 92:508-525, 1981). He conducted research as a postdoctoral fellow at Baylor College of Medicine in U. S. A during 1987-1989. (He worked with Prof. Hollyfield J G on proteoglycans in the interphotoreceptor matrix of the retina and in the trabecular meshwork: Tawara A, Varner H H, Hollyfield J G: *Proteoglycans in the mouse interphotoreceptor matrix.* I. *Histochemical studies using Cuprolinic Blue*. Exp Eye Res 46:689, 1988; Tawara A, Varner H H, Hollyfield J G: *Proteoglycans in the mouse interphotoreceptor matrix.* II. *Origin and development of proteoglycans*. Exp Eye Res 48:815, 1989; Tawara A, Varner H H, Hollyfield J G: *Distribution and characterization of sulfated proteoglycans in the human trabecular tissue*. Invest Ophthalmol Vis Sci 30: 2215, 1989; Tawara A, Hollyfield J G: *Proteoglycans in the mouse interphotoreceptor matrix*. III. *Changes during photoreceptor development and degeneration in the rds mutant*. Exp Eye Res 51:301, 1990.) He worked as the Lecturer of Kyushu University (1989-1996) and the Assistant Professor of the Wakayama Medical College (1996-1998) and has been in the current position as above since 1999. His major interest is in glaucoma, and some examples of his publications are "*Developmental immaturity of the trabecular meshwork in congenital glaucoma.* Am. J. Ophthalmol. 92: 508, 1981" and "*Distribution and characterization of sulfated proteoglycans in human trabecular tissue*. Invest. Ophthalmol. Vis. Sci. 30: 2215, 1989". For the excellence of his glaucoma research, he received the Suda Award for Glaucoma Research in 1990 (*Distribution and characterization of sulfated proteoglycans in human trabecular tissue*. Invest. Ophthalmol. Vis. Sci. 30: 2215, 1989). He serves as a Councillor to the Japan Glaucoma Society. He is a member of the International Society for Eye Research, the Association for Research in Vision and Ophthalmology and American Academy of Ophthalmology, besides being a member of many Japanese professional Societies. (Department of Ophthalmology, University of Occupational and Environmental Health, Japan, Iseigaoka 1-1, Yahatanishi-ku, Kitakyushu, 807-8555, Japan. phone: +81-93-691-7261; fax: +81-93-603-3657, e-mail: tawara-a@med.uoeh-u.ac.jp)(SM)

Tay, Warren (1844-1927) British ophthalmologist born in Yorkshire, disciple of Sir Jonathan ®Hutchinson. Tay studied medicine at the London Hospital and obtained the qualification of M.R.C.S. in 1886, three years later , in 1889, he received the F.R.C.S. At the London Hospital he soon came under the influence of Hutchinson, who was the lecturer of surgery and with whom Tay soon started a friendship. After the usual residential appointments Tay became Hutchinson´s clinical assistant. In 1868 he was appointed Assistant Surgeon to the Hospital for Diseases of the Skin at Blackfriars and full Surgeon in 1875, a post he continued until 1907. In 1869, at the age of 25, he became Assistant Surgeon and Ophthalmologist to London Hospital and full Surgeon with charge of beds 1876. Tay´s first connection with Moorfields was as clinical assistant together with Edward ®Nettleship to Hutchinson. It was in that period (1874-75) that he made a discovery with the ophthalmoscope which later was called „Tay´s Choroiditis". In *volume 1* of the *Transactions* Tay described with an ophthalmoscopical drawing, which since has become classical, a case he entitled "*Symmetrical changes in the region of the yellow spot in each eye of an infant*". In 1884, vol.4 of the *Transactions* he described a second case from the same family. When the first case died, the parents did not allow an autopsy and so he was unable to investigate the pathological conditions. This was first done by B. Sachs in Knapp´s Clinic in New York, hence the description of the disease sometimes is known under "*Tay-Sachs´Disease*". In 1877 , on retirement of ®Bowman and ®Critchett from the staff at Moorfields, Tay and his colleague James ®Adams were appointed to take their places. Tay attracted many enthusiastic assistants. Among them were: Andrew Stanford ®Morton, William Adams ®Frost, Ernest ®Clarke, Percy ®Dunn, ®Roxburgh, Arthur ®Thompson and others. In the 1870s surgeons at Moorfields commenced to publish in connection with the *Ophthalmic Hospital Records,* a "*Periscope*" of contemporary ophthalmic literature: the translations from foreign languages mostly were done by Tay. He also translated a volume from Hebra´s famous treatise "*Diseases of the Skin*" for the *New Sydenham Society* of which Jonathan Hutchinson was secretary. The British Journal of Ophthalmology, 1927, Vol.XI, 361-367.

Taylor, Charles Bell (1829-1909) British ophthalmologist born in Nottingham. Bell received his medical education in Edinburgh and in Paris. He started his career first as a psychiatrist and afterwards took up chest diseases. In 1859 he was appointed surgeon to the new Nottingham and Midland Eye Infirmary, and for many years enjoyed a practice in eye work that extended far beyond the confines of his native town and indeed beyond Great Britain itself. He was an unsurpassed operator and his dexterity in removing cataract was famous. The son and the brother of veterinary surgeons, Taylor was a determined opponent of vivisection. Taylor wrote: „*Lectures on diseases of the eye*." London 1888, which were reprints from *The Lancet* where they were previously published. The Ophthalmoscope 1909,p.376-377. Albert Source Book of Ophthalmology, p.335. Am. Encyclop. of Ophthalm.vol.16, p.12522-12524.

Taylor, John (1708-1772) British quack. He was also called "Chevalier Taylor." A skilful ophthalmologist, he was, at the same time, one of the most remarkable quacks in history. Born at Norwich, England, he was at first apprenticed to a London apothecary. Later he studied with Cheselden in London and with Boerhaave in Leyden. He then proceeded to Paris where his wandering, loud-mouthed career as "greatest ophthalmologist of all time" began. From Paris he went to Marseilles, and, soon after, was elected a Fellow of the Medical Faculty of the University of Basel. About this time it was, apparently, that he invented, or devised, his celebrated coach, in which he constantly rode about, either in city or in country. John Taylor, however, was not a quack merely. He was really a dextrous operator who " thought it sin that dupes should go to waste "*Populus vult decipi*". His more important writings are as follows: 1. *History of the Travels and Adventures of Chevalier John Taylor, Ophthalmiator Pontifical, Imperial, and Royal, etc.* Written by Himself. (3 vols London 1763.) 2. *An Account of the Mechanism of the Globe of the Eye.* (London 1727; Norwich 1747; Ger. trans., Berlin 1731; French trans., Paris 1738, 2d ed., 1760.) 3. *Treatise on the Immediate Organ of Vision.* (London 1735; French trans., Paris 1735; Dutch transl. Amsterdam 1735.) 4. *New Treatise on Diseases of the chrystalline humour of a human Eye: or, of the Cataract or Glaucoma.* (London and Edinburgh 1736, and numerous later editions.) 5. *Impartial Inquiry into the Seat of the Immediate Organ of Sight.* (London 1743.) 6. *Morbi Oculorum Systematice Collecti.* (Rome 1754.) 7. *An Exact Account of 243 Different Diseases to which the Eye and its Covering are Exposed.* (Edinburgh 1759.); *The Case of Sir Jeremy Sambrooke…etc..* London 1743. Am. Encyclop. of Ophthalm. vol.16,p. 12524-12526. JPW

Taylor, Robert (1815-1883) British, London ophthalmologist, who introduced glycerin for xerophthalmia. Born in Dumfrieshire, Scotland, he received his medical degree at Edinburgh in 1841. The following year he became a Member, and six years thereafter, a Fellow, of the Royal College of Surgeons. In 1852 he was made a Fellow of the London Medico-Chirurgical Society. For 23 years (1850-1873) he was surgeon at the Central London Ophthalmic Hospital. He wrote on Sympathetic Ophthalmia *(Medical Times), The Ophthalmoscope (Med. Circular,* 1858) and on *Cataract* (*Trans. Path. Soc.*, and *Med. Times and Gazette,* 1857). Am. Encyclop. of Ophthalm. vol.16,p. 12526-12527

Taylor, Robert Hibbert (1818-1898) British ophthalmologist of Liverpool, England, the *first* to lecture on ophthalmic surgery in the Liverpool School of Medicine. Born in Dumfries, Scotland, he received the degree of M.D. at the University of Edinburgh in 1834, being then only 17 years of age. He then proceeded to study the eye at Guy's Hospital, London, later in Paris and Berlin. Returning to England in 1839, he settled at Liverpool as ophthalmologist. In the very same year he founded an eye dispensary in Marylebone, which was later removed to Great George Street. In 1853 he was made an honorary surgeon to the Bristol Eye and Ear Infirmary. Sixteen years later, because of a regulation of the Institution, he was retired, but was made consulting surgeon. He wrote a considerable number of ophthalmic articles, as well as the chapters on "*Diseases of the Eye*" in Tweedie's *System of Medicine.* In 1886 he retired from practice, continuing, however, his interest in medical, especially ophthalmic, charities of various kinds. Am. Encyclop. of Ophthalm. vol.16,p.12527

Tazawa, Yutaka (1937-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Iwate Medical University. He graduated from Iwate Medical University in 1961, studied Ophthalmology at the Graduate School of Medicine

of the University under Prof. IMAIZUMI Kitetsu and received his Doctor of Medical Sciences in 1966 (thesis: *Influence of anoxia upon ERG and standing potential of the mammalian eyes*. Acta Soc. Ophthalmol. Jpn. 70: 1536-1547, 1966.). He studied a perfusion method of extracorporeal bovine eyes and application of the method to electrophysiological research of the retina under supervision of Prof. Author J. Seaman (Dept. of Medicine, Division of Hematology) and Prof. Kenneth C. Swan (Dept. of Ophthalmol.) in Oregon Medical University, Portland, Oregon from 1966 to 1969. The results were reported in papers " Tazawa, Y., Mariscal I., Moffat, C., Huebner, B. & Seaman, AJ.: *The endothelial role in thrombosis induced retinal vasculitis in the living extracorporeal eye*. Invest. Ophthalmol. 10: 481, 1971. " and " Tazawa,Y. & Seaman, AJ.: *Recording the electroretinogram in the living extracorporeal eye*. Invest. Ophthalmol., 11: 691-698, 1972. He has been in the present position as above since 1975. His major interest is electrophysiology of vision, cornea and retina, and some examples of his many publications are "*The electroretinogram in the living extracorporeal eye. Influence of anoxia and hypothermia*. Invest. Ophthalmol. 11: 691, 1972" and "*Human ERG c-wave. Its characteristics and clinical application*. Folia Ophthalmol. Jpn. 31: 1223, 1980". He serves the Japanese Ophthalmological Society as Executive Director (1975-), the Japanese Society for Clinical Electrophysiology of Vision as the President (1975-1999), and he is Executive Director of the Japanese Neuro-ophthalmology Society (1986-) and Japan Cornea Society (1994-). He also has served as the Vice-President to the International Society for Clinical Electrophysiology of Vision (1983-1990). He organized the 26th Symposium of the International Society for Clinical Electrophysiology of Vision held at Morioka, Japan in 1978. He edited and published the proceedings of the symposium including 47 papers in 360 pages as a supplement of the Japanese Journal of Ophthalmology in 1979. (Department of Ophthalmology, Iwate Medical University, 19-1 Uchimaru, Morioka, 020-8505, Japan. phone: +81-1-9651-5111(ext. 6901); fax: +81-1-9625-7382, e-mail: ytazawa@iwate-med.ac.jp)(SM)

Teale, Thomas Pridgin (1801-1868) English surgeon and ophthalmologist, son of a general physician, Thomas Teale, and father of Thomas Pridgin Teale, Jr. Born at Leeds, he studied at Guy's and St. Thomas's Hospitals, London, and became M. B. C. S. in 1823. Settling in Leeds, he became in 1824, surgeon to the Leeds Public Dispensary, a position which he held for about nine years. He was one of the founders of the Leeds Medical School, and for more than 25 years was very active in this institution, teaching anatomy, physiology, and ophthalmology. He was made an F. R. C. S. in 1843. He had an especial reputation as a lithotomist and herniotornist, but was also widely known as an operator on the eye. His only ophthalmic writing was entitled "On Stricture of the Lachrymal Duct" *(Ed. Journ. of Med.* Sc., 1828). Am. Encyclop. of Ophthalm. vol.16,p.12563

Tebaldi, Augusto (1833-1895) Italian psychiatrist. Born at Verona, he received his medical degree at Padua in 1859, settled in his native city, there became professor of psychiatry in 1874. He was the author of two or three articles of ophthalmologic interest, the chief of which is "*Ottalmoscopio nella Alienazione Mentale*" (*Riv. Clin. di Bol.*, 1870) . Am. Encyclop. of Ophthalm. vol.16,p.12564

Teissier, Clair Jean Alexis (? – 1851) French physician and obstetrician who devoted considerable attention to diseases of the eye. Born about the beginning of the 19th century, he received his medical degree in Paris in 1827. He practised in Troyes, where he became Professor of Obstetrics and Director of the Obstetrical School. He died as a result of an infected operation wound. Teissier's chief ophthalmologic writing is entitled *Observations d'Amaurose Incomplête avec Héméralopie, lue a la Soc. Anat. (Revue. Méd. Franc. et Etrang.*,III, 1833).Am Encyclopedia of Ophthalmology, vol.16, p. 12570

Tennent, James Nisbet (1897-1967) Scottish ophthalmologist, educated in Glasgow, he qualified in 1920, having previously served for 2 years as a house-surgeon in the Glasgow Eye Infirmary, a somewhat unusual arrangement necessitated by the shortage of staff caused by the First World War. The remainder of his professional life was spent in private practice and in academic activities; he joined the staff of the Ophthalmic Institution of the Glasgow Royal Infirmary where he served for some time as pathologist; he also acted as professor of ophthalmology at the Anderson College of Medicine in Glasgow, gaining all the postgraduate qualifications available in that city. Tennent will be remembered for two

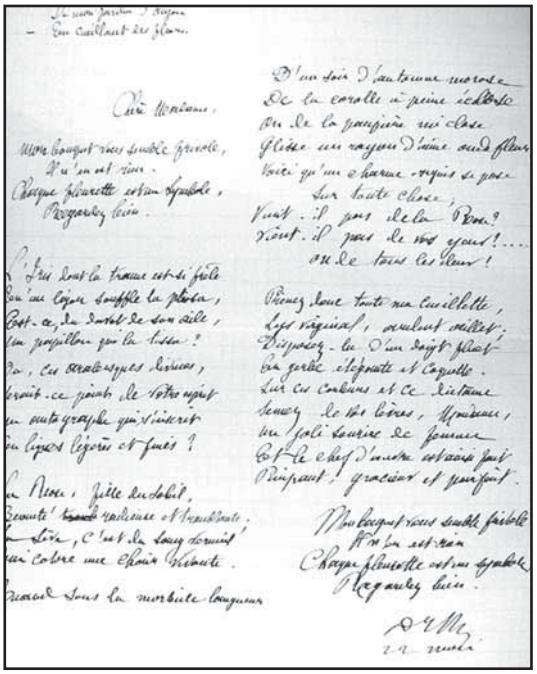
things: ophthalmic politics and religion. He acted as Chairman of the National Ophthalmic Treatment Board Association from 1950 to 1959, taking a firm view on the advisability of the prescription of spectacles by ophthalmologists; he also took a prominent part in the work of the Baptist Church. acting as chairman of the Baptist Union in 1935 and doing an immense amount of work both in Scotland and abroad for the Baptist Missionary Society of which he was also chairman-Brit.J.Ophthal.1967,51:648

Ténon, Jacques René (1724-1816) French, Parisian anatomist, surgeon and ophthalmologist, whose name has been commemorated in the term, "Tenon's Capsule." Born at Scepaux, Ivogny, the son of a physician and the eldest of eleven children, be studied medicine at Paris, became a military surgeon, and, after the expedition into Flanders, was elected surgeon-in-chief at the Salpêtrière. He became an excellent operator and a teacher of fair ability. He was one of the first to introduce Jenner's discovery into France, and was foremost in many a scientific undertaking. As a writer, he was often obscure, but his matter was generally important. His chief performance was what is usually referred to as his " discovery" of the fibrous capsule of the eye. Ténon, nevertheless, did not really discover this capsule. The structure was known quite well to the ancients, who, however, did not describe it minutely or appreciate its importance. Ténon described it with great particularity, and, if he did not discover it, he at least discovered its details. Ténon's work in this respect was largely ignored until the invention of the strabismus operation. In 1841 Bonnet, stimulated by the work of Dieffenbach and Strohmeyer, made numerous and careful dissections of the structure in question, and published the results in his *Traité des Sections Tendineuses et Musculaires dans la Strabisme, la Myopie, la Disposition à la Fatigue deg Yeux*, etc. (Lyons, 1841; with 16 plates.) Bonnet, in this work, describes the capsule so much more clearly and more specifically than Ténon had done that it is quite as generally called today by the name of its better, as by that of its first describer. The more important ophthalmologic writings of Ténon are as follows: 1. *Recherches sur les Cataractes Capsulaires*. (Mém *de 1'Acad.* 1755.) 2. *Sur quelques Maladies des Yeux*. (Ibid 1804.) 3. *De Cataracte* Paris 1757; 4. *Faits Pratiques sur Quelques Maladies des Yeux. (Ibid.,* 1804.) 5. *Obs. Succinctes sur I'Oeil du Chathuant et sur celui d´une Baleine(Ibid., 1806.)* 6.*Mémoires sur l´Anatomie, la Pathologie, et la Chirurgie et sur l´Organe de la Vue.* (Paris 1806. This work contains all of Ténon's former ophthalmologic writings, as well as several new ones.) It is interesting to note that Ténon's ophthalmologic writings were all composed, or at any rate published, in his old age. Am. Encyclop. of Ophthalm. vol.16,p.12589-12590

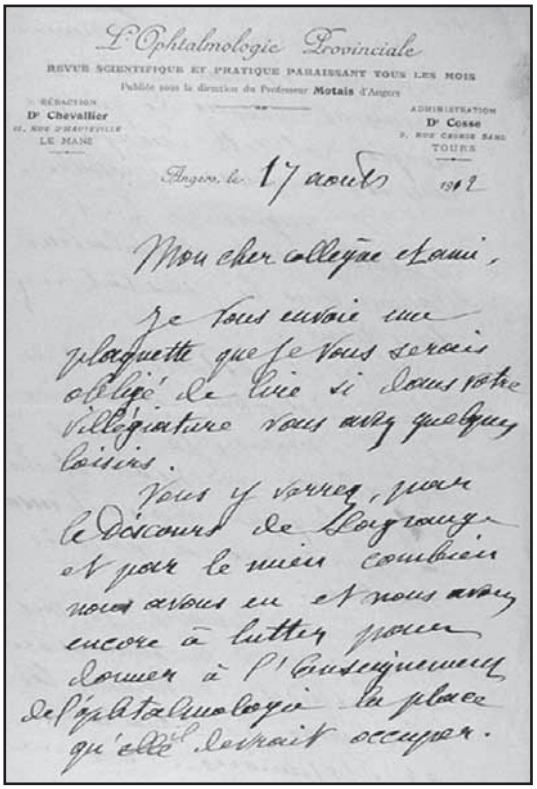
Tenzing, Samten (1961-) Nepalese ophthalmologist, Chief Ophthalmologist at Lumbini Rana Ambika Eye Hospital, Bhairahawa, Nepal. He graduated from Rajendra Medical College, Ranchi University, India with MBBS degree in 1988 and then received MD degree (thesis: *Pattern of uveitis seen in TUTH*) in Ophthalmology from Tribhuvan University, Kathmandu, in 1995. He has been in the present position as above since 1995. He is interested in pediatric Ophthalmology. (SM)

Terasaki, Hiroko (1954-) Japanese ophthalmologist, Professor of the Department of Protective Care for Sensory Disorders Nagoya University, Postgraduate School of Medicine. She graduated from Kanazawa University in 1980, studied Ophthalmology at Nagoya University under Prof. ICHIKAWA Hiroshi, and Prof. AWAYA Shinobu. She completed the postgraduate course of Nagoya University with Doctor of Medical Sciences granted in 1984 (thesis: Color vision defects in diabetic retinopathy. Jpn J Ophthalmol Soc 88: 266-274, 1984). Besides her psychophysical work, she studied electroretinograms including the focal macular ERG and pre- and postoperative retinal functions in vitrectomy candidates under the direction of Prof. MIYAKE Yozo. She extended her studies of focal macular electroretinograms and vitreous surgery for retinopathy of prematurity under the direction of Prof. HIROSE Tatsuo at the Schepens Eye Research Institute, Boston in 1997. She has been in the present position as above since 1999. Her research interests are color vision function in various retinal disease and the change of retinal function in vitreoretinal surgery, and she has more than 100 publications. Some examples are "S-cone pathway sensitivity in diabetes measured with threshold versus intensity curves on flashed backgrounds. IOVS 37: 680-, 1996", "Blue-on-yellow perimetry in the complete type of congenital stationary night blindness. IOVS 40: 2761-, 1999", "Focal macular electroretinogram before and after drainage of macular subretinal

hemorrhage. Am. J. Ophthalmol. 123: 207-, 1997", and "Focal macular electroretinograms before and after successful macular hole surgery. Am. J. Ophthalmol. 125: 204-,1998". She established clinical applications for the ophthalmic endoscope and published three papers which appeared in the *AJO* and *Retina*. She has been active in National and International Societies, and she has held the position of Councillor of the Japanese Ophthalmolgical society (JOS)(1999-). She has been a member of the International Color vision Society(1994-) and the International Society for Clinical Electrophysiology of Vision (1999-).(Department of Protective Care for Sensory Disorders Nagoya University, Postgraduate School of Medicine, 65 Tsuruma-cho, Showa-ku, Nagoya 466-8550, Japan. phone:+81-52-744-2277, fax:+81-52-744-2279, e-mail: terasaki@med.nagoya-u.ac.jp)(SM)



A poem by Motais dedicated to a friend's wife (Dr. Descaves)



A letter from Motais in which he complaints about Ophthalmology in the french provinces

Terrien, Fé1ix (1872-1940) French ophthalmologist born in Amiens. Initially, Terrien studied law and became a lawyer. He suddenly abandonned this profession to study medicine, becoming intern at the Paris faculté in 1896 and receiving there his M.D. in 1898. He was named ophthalmologist to the Hopitaux de Paris in 1906. Terrien became lecturer in ophthalmology in 1910 and professor of clinical ophthalmology in 1924. Terrien succeeded Victor Morax at the Académie de Médecine in 1935. He published important monographs on ophthalmic surgery and on syphilitic pathology of the eye. Terrien wrote: *Recherches sur la structure de la rétine ciliaire et l'origine des fibres de la zonule de Zinn* Paris 1898 ; *Thérapeutique Oculaire*, Paris 1899; *Chirurgie de l´Œil et de ses Annexes* Paris 1902; *Syphilis de l´Œil* Paris 1905; *Précis d´ophtalmologie*, Paris 1908 (2nd ed 1914, 3rd ed 1924) ; with Hubert *Traitement adjuvant du Strabisme* Paris 1912; with G. Cousin *Affections de l´Œil en Médecine Générale* Paris 1924 and with M.-A.Dollfus and P.Veil *Le décollement de la rétine et son traitement* Paris 1936. Terrien was the designer of a refraction ophthalmoscope named after him. Schett/Keeler *The Ophthalmoscope*.Albert. JPW

Terson, Albert (1867-1935) French ophthalmologist, son of Alfred Terson (1838-1925), born in Toulouse, France. Terson received his M.D. in 1892 at the Paris Faculté de médecine. He was named *interne* in 1889 and became 1892 lecturer of ophthalmology. He became chief of the laboratory of ophthalmology at the Hôtel-Dieu, then director of the eye clinic at the same institution. Terson was interested in the lacrimal system, glaucoma, the connections between ophthalmology and general pathology, histology and ophthalmic history. He wrote: *Les glandes lacrymales conjonctivales et orbito-palpébrales; Pablation des glandes lacrymales palpébrales* Paris 1892 ; *Chirurgie Oculaire* Paris 1901; *Les maladies de l´Œil* Paris 1909 (Volume XVII of *Nouveau Traité de Chirurgie* edited by A.Le Dentu and Pierre Delbet) and translated Otto Haab´s Ophthalmoskopie: *Atlas manuel d´ophtalmoscopie* Paris 1901.To be mentionned is his speech held in Paris and published at the anniversary of the *French Society* at the Musée St.Germain *Les Oculistes Gallo-Romains et leurs Instruments* Paris 1908. JPW

Terson, Alfred (1838-1925) French ophthalmologist, also called *Terson père* to distinct him from his son Albert, also an emminent French ophthalmologist. Terson père was born in Puylaurens, Tarn, France. The name Terson, in his birth place goes back to the 16th century, and many Tersons were physicians and pharmacists. Terson studied médicine in Toulouse, later in Montpellier receiving his medical degree with a non-ophthalmic thesis on gout in 1861. For a short time he settled as physician in Puylaurens, his birth place, to leave very soon for Paris attracted by the success and fame of Desmarres. There he met his ancient companion in studies from Montpelier, de Wecker, who had taken over Deval´s Clinic. De Wecker became his ophthalmic tutor, and Terson worked under him from 1862 to 1864, receiving a lasting taste for ophthalmic surgery. In 1865, he returned to Toulouse, settling there and becoming a member of

the Société de médecine of that town. He founded a private clinic for ophthalmology that he kept his whole life. At the creation of the médical faculty in Toulouse, in 1891, he was appointed to the ophthalmic clinic and organized teaching at the Hôtel-Dieu. He kept this post only a few years, to concentrate entirely on his own clinic. Terson operated until the age of 83, handing over his practice to both his sons Albert Terson (Paris) and Jean Terson (Toulouse). Terson wrote about 62 papers in the *Annales d´oculistique*, but, to my knowledge, no books. Annales d´Oculistique 1925,vol.162.JPW

Tervo, Timo (1950-) Finnish ophthalmologist, born in Helsinki. Tervo received 1975 his M.D. at the University of Helsinki and completed his M.D./ PhD thesis on corneal innervation at the University of Helsinki in 1977: "*Histochemical observations on cholinesterases, NaK-ATPase and catecholamines in the epithelium, endothelium, and nerve fibres of the cornea of the rat*". He was 1980-83 resident in ophthalmology at the Helsinki University Eye Hospital under AhtiàTarkkanen. Tervo served as Director of the Outpatient Ward of Helsinki University Eye Hospital 1986-2000 after which he has been a Consultant in Cornea and Refractive Surgery . He served as Assistant Professor of Microscopic Anatomy 1978-1986 in University of Helsinki, Assistant Professor of Ophthalmology 1986-2000, and currently as Professor of Clinical Applied Ophthalmology from 2000 onwards. Dr Tervo has published about 165 scientific publications, and 60 book chapters and reviews. These are his latest published papers: Linna TU, Vesaluoma MH, Pérez-Santonja JJ, Petroll WM, Alió J, Tervo TMT. *Corneal sensitivity and morphology of subbasal nerves after laser in situ keratomileusis* Invest Ophthalmol Vis Sci. 41;393-397:2000; Vesaluoma M, Pérez-Santonja J, Petroll WM, Linna T, Alió J, Tervo T. *Corneal stromal changes induced by myopic LASIK*. Invest Ophthalmol Vis Sci. 41;369-376:2000; Rosenberg ME, Tervo TMT, Petroll WM, Vesaluoma MH. *In vivo confocal microscopy of patients with corneal recurrent erosion syndrome or epithelial basement membrane dystrophy*. Ophthalmology, 2000;107:565-573. Linna T, Vesaluoma M, Petroll WM, Tarkkanen A, Tervo T. *Confocal microscopy of a patient with irregular astigmatism after LASIK reoperations and relaxation incisions*. Cornea 2000;19:163-169. Latvala T, Uusitalo M, Puolakkainen P, Kivel T, Tervo T. *Immunolocalization of transforming growth factor-B1, tenascin, and SPARC in secondary cataract*. Acta Ophthalmol. 2000; 78: 344-347. Vesaluoma M, Sankila E-M, Gallar J, Muller L, Petroll WM, Moilanen J, Forsius H, Tervo T. Cornea plana- Corneal sensitivity and *in vivo* confocal microscopy Invest Ophthalmol Vis Sci 2000;41:2120-6. Vesaluoma M, Hack T, Gallar J, Muller L, Moilanen J, Tervo T. *Corneal changes following an exposure to OC-(Oleum Capsacium) tear gas*. Invest Ophthalmol Vis Sci. 2000;41:2138-47.Rosenberg M, Vesaluoma M, Petroll WM, Grönhagen-Riska C, Immonen I, Tervo T. *Corneal subbasal nerves and sensitivity in type 1 diabetes mellitus*. Invest Ophthalmol Vis Sci, 2000;41:22915-2925; DursunD, Monroy D, Knighton R, Tervo T, Vesaluoma M, Carraway K, Feuer W, Plugfelder SC. *The effects of experimental tear film removal on corneal surface regularity and function*. Ophthalmology 2000;107:1235-1245. His hobbies are sports, singing, vehicles and boats.Phone: 358-9-47173109 Fax: 358-9-47175100 Email timo.tervo@hus.fi

Textor, Carl (1815-1880). German. Son of Kajetan vonàTextor, and a surgeon of high repute, of some importance in ophthalmology. Born at Munich, Germany, he received his medical degree in 1837 at Würzburg, his dissertation being "Ueber die Wiederergänzung der Krystallinse." He afterward studied in Munich, Vienna, Göttingetl, Berlin, Copenhagen, Paris, and London. In 1843 he was made privatdocent (lecturer), in surgery at the University of Würzburg, and in 1850 extraordinary professor of the same subject in the same institution. He was pensioned in 1874. Karl Textor's writings on surgery in general are of very high value, but cannot here be listed in detail. In addition to the excellent graduation dissertation, however, already mentioned, the following articles are of much importance in ophthalmology: 1. *Ueber Ausrottung der Thränendriise zur Heilung des Thränenträufelns*. (Journ. der Chir. und Augenh., *N.* Folge, 1846, VI) 2. *Hornhaut-Erweichung nach Star-Operation*. (Ann. d'Ocul., Vol. XVT, p. 192,1846.) 3. *Angeborener Iris-Mangel*. (Jour. der Chir. u. Augenh., N. Folge, VII, 1847, 1, 204.) American Encyclopedia of Ophthalmology 16,p.12633

Textor, Kajetan von (1782-1860). German. Father of Carl àTextor, and himself a celebrated surgeon of some ophthalmological importance. Born at Marktflecken,

Schwaben, Upper Bavaria, he received his medical degree in 1808 at Landshut. From 1808-10 he studied anatomy and surgery under àBoyer, at Paris. He then took further courses in surgery at Pavia, Italy, chiefly under AntonioàScarpa, and, at length, was for a long time under the instruction of Josephà Beer at Vienna in "operations on the eye." Settling in Munich, he became assistant surgeon , at the newly constructed general hospital in that city. In 1826 he accepted a call to the chair of surgery at Würzburg, a position which he occupied for many years with the highest honor to himself and to the school. In 1853, being 70 years of age, he was obliged to resign from his operative work. He was, however, allowed to continue the theoretical lectures on surgery until his death. Textor's most important writings concern the subject of operative surgery in general. Of special interest, however, to ophthalmologists is his "*Ueber Star-Operationen*" *(Deutsche Naturforscherversammlung zu Bremen,* Sept. 21, 1844).Am. Encyclop. of Ophthalm. vol.16,p.12632-12633

Thanh, Ton Thi Kim (1948 -) Vietnamese ophthalmologist. She was born in Nghe an. She studied at the Hanoi Medical College from 1965 to 1971. She worked at the National Institute of Ophthalmology (NIO) from 1971. She went to Hungary in 1981 and studied at Medical Academy. She received Ph. D in 1985. She was Vice-Head of Pediatric Ophthalmology Department and Head of Training and Research Department of NIO, Head of Pediatric Ophthalmology Department from 1993, Director of NIO from 1995. She also is the Head of Eye Department of Hanoi Medical College from 1995. She is Associate professor in 1996 and Vice-President and General Secretary of Vietnam Ophthalmological Society. She attended many International Ophthalmology Conferences. Now, she is Vice-Chairman of International Agency for the prevention of Blindness in the Western Pacific Region. She also has held the title of Eminent Doctor from 1996. She had contributions in training for doctors of Ophthalmology in Vietnam, and has built the Eye Care Network in Prevention of Blindness in the whole country. (SM)

Theobald, Samuel (1846-1930) American ophthalmologist and generalist. He came from lines distinguished in the art and science of medicine. His father sprang from English stock. The first member of the Theobald family in this country, Clement Theobald, settled in lower Norfolk County, Virginia, in 1641. On his mother's side, his great grandfather, Dr. Nathan Smith, organized the medical schools of Yale, Dartmouth, and Bowdoin, and assisted in the founding of Jefferson Medical School of Philadelphia. He was one of the great pioneers of American Medicine. The grandfather of Dr. Theobald, Dr. Nathan Ryno Smith, called "the Emperor", cooperated with his father and other distinguished men in the organization of the Jefferson Medical College just mentioned. He was one of the pioneers in otology in America. The French gave him the title of "*the Nestor of American surgery*". Samuel Theobald, son of Dr. Elisha Warfield Theobald and Sara Frances Smith Theobald, was born in Baltimore. Theobald received his early education at a well known private school in Baltimore. Later, instead of going to college, he worked and studied in the office of his grandfather, Dr. Nathan Ryno Smith, and in 1867, when twenty-one years of age, he graduated at the University of Maryland. After his graduation, he continued his association with Dr. Smith in general Medicine and surgery until 1870, when he decided to specialize in ophthalmology and otology. At his grandfather's advice he spent eighteen months abroad, studying the eye under Arlt and Jaeger in Vienna, and at the Royal Ophthalmic Hospital, London. He was also a pupil of Politzer in otology. From 1894 until 1912 he was clinical professor of ophthalmology and otology in the Johns Hopkins University school of medicine; from 1912 to 1925, clinical professor of ophthalmology and, from 1889 to 1925, ophthalmic surgeon to Johns Hopkins Hospital. From 1925 until his death, he was professor emeritus of ophthalmology. He also had many other important positions, such as ophthalmic surgeon to the Baltimore Eye, Ear, and Throat Charity Hospital, consulting ophthalmologist and aural surgeon to South Baltimore General Hospital, and consulting ophthalmic and aural surgeon to the Home for Incurables. He was at one time president of the American Ophthalmological Society, and of the Medical and Chirurgical Faculty of Maryland. He also held membership in a number of scientific societies, including the American Medical Association and the American Otological Society. Theobald contributed many articles to leading text-books and journals; in 1906 he published his excellent textbook, "*Prevalent diseases of the eye*". (2nd edition 1907) This volume of 551 pages is full of helpful suggestions to the general practitioner and to

the ophthalmologist. The author's painstaking care is shown by the fifteen and a half pages of small type devoted to *synopsis of contents* in addition to an excellent index. Many of the external diseases of the eye are beautifully illustrated in color by his son, Samuel Theobald Jr. He did much to popularize boric acid. His genius is memorialized in his method of treating closure of the tear ducts, and in "*Theobald's lachrymal probes*". AJO 1931,14:361-362.JPW

Theodor Karl *see* **Karl Theodor, Archduke of Bavaria**

Theodore, Frederick H. (1908-1994) American ophthalmologist who was born in New York and attended Columbia College and the Columbia University College of Physicians and Surgeons. He spent his internship and residency at Mt. Sinai Hospital in New York. He served his country for three years during World War II, entering the United States Army as captain and later promoted to major. Dr. Theodore was a member of many ophthalmologic societies, including the American Academy of Ophthalmology, for 56 years. He received the Academy's Senior Honour Award in 1984. In most of the local societies, such as the New York Academy of Medicine Section on Ophthalmology and the New York Society for Clinical Ophthalmology, he served as chairman or president at some time during his career. He was a highly respected teacher of his subspeciality, ocular external diseases and ocular allergy. He was clinical professor of ophthalmology at Mt. Sinai School of Medicine and associate clinical professor of ophthalmology at New York University College of Medicine. He was senior author of two different editions of "*Ocular Allergy*," one in 1958, and the second in 1983, which was retitled "*Ocular Allergy and Immunology.*" He was editor and major contributor to "*Complications after Cataract Surgery*," published in 1965. Additionally, he contributed to chapters in 26 other books on ophthalmic subjects. He authored 170 published scientific papers and was much in demand on the ophthalmic lecture circuit. His remarkable powers of observation and deep understanding of ocular external diseases made him a superb consultant, enabling him to make diagnoses that were occasionally missed by his colleagues. This attention to detail led Dr. Theodore to the discovery of superior limbic keratoconjunctivitis, now known as Theodore's SLK. He described this disease in such detail that any ophthalmologist can now readily deal with it. In another instance, Dr. Theodore discovered that carcinoma of the conjunctiva could be mistaken for a more benign inflammation. He gave this condition the name, masquerade syndrome, an apt and unusual title. This highlights another of his talents, which was the finding of a descriptive and catchy name or title, whether for a disease, article, or professional society. He had been an outstanding student during his academic years, had great facility with the English language, and a well-honed sense of humour. At present it is taken for granted that any and all eye solutions or ointments must be sterile. This is an area of public health where Dr. Theodore was a pioneer. In 1951, he initiated a campaign to ensure that all ophthalmic products would be manufactured in a sterile manner. This was not immediately accepted by the drug companies. However, as a result of his persistence and the enlistment of other well known ophthalmologists in this crusade, the Food and Drug Administration finally decreed in 1974 that all eyedrops and ointments must be sterile. AJO 118:546-547

Theodoric of Freiberg *see* **Freiberg**

Thiel, Rudolf (1894-1967) German ophthalmologist, former professor of ophthalmology at Frankfurt University. Born in Berlin, he studied medicine in Freiburg, Tübingen, and Jena; in the last university he served as assistant in the Pathological Institute as well as in the Eye Clinic (1921-25). Thereafter he went to Berlin to work in Krückmann's clinic, being nominated a Professor in 1929; and finally, in 1935, he accepted the appointment of Director of the University Eye Clinic and the professorship at Frankfurt. Thiel was an able administrator, an excellent ophthalmologist, and an original thinker; his most important contributions lay in the field of glaucoma, for which he received the Graefe Medal in 1957 while President of the German Ophthalmological Society at its centennial meeting at Heidelberg. He also took a prominent part in the international interests of ophthalmology, having been a member of the International Council, Vice-President of the 20th International Congress at Munich in 1966, and a member of the Council of the European Ophthalmological Society. Thiel wrote among other books: *Röntgendiagnostik des Schädels bei Erkrankungen des Auges und Seiner Nachbarorgane*,2 vols. Berlin 1932;

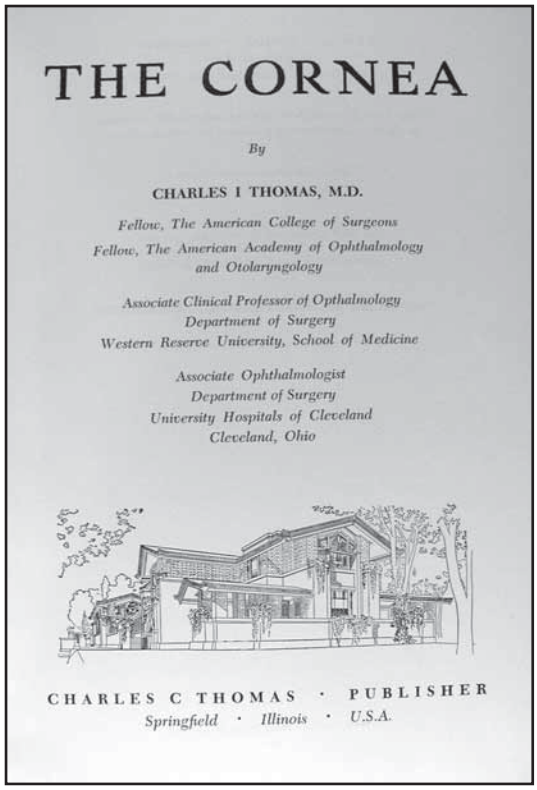
Atlas der Augenkrankheiten Sammlung typischer Krankheitsbilder mit kurzen diagnostischen und therapeutischen Hinweisen Leipzig 1937, 6th edition 1963; American edition, based on the 6th German edition, NY 1963; *Therapie der Augenkrankheiten mit diagnostischen Hinweisen. Fibel für Praxis und Klinik*. Ergänzt von Fritz Hollwich. Stuttgart 1970; *Herdinfekt am Auge* Stuttgart 1950; *Das Glaukom* (with P.A. Jaensch) Stuttgart 1952; *Der Diabetes Mellitus-Ein Gefässproblem?* Stuttgart 1956; *Durchblutungsstörungen am Auge* (with Max Ratschow) Stuttgart 1961. BJO 1968,52:288; JPW

Thielmann, Karl Heinrich (1802-1872). Russian physician, who devoted considerable attention to ophthalmology. Born at Nicolai, he studied at Breslau, St. Petersburg and Dorpat, at the latter institution receiving his degree in 1832. For a time he was engaged in military service, and treated with much success an epidemic of ophthalmia in a number of military hospitals. In 1850 he was made honorary oculist to the imperial court. He wrote a large number of articles on ophthalmologic subjects, all in Russian.Am. Encyclop. of Ophthalm. vol.16,p. 12645-12646

Thiry, Jean-Hubert (1817-1896) Belgian ophthalmologist. Thiry was born in Herpigny (in the Belgian province of Luxemburg) and died in Brussels. He was one of the first students of Brussels University, where he obtained his M.D. degree in 1841. He was since 1847 departmental head for venereal and skin diseases at the public St. Peter hospital. He was in 1848 one of the founders of the Journal "*La Presse Medicale Belge*". He was appointed by Brussels University as professor of surgical pathology in 1856 (with a department of ophthalmology in St. Peter's hospital). He was rector of Brussels University in 1873. In 1849 and 1850 he wrote ophthalmological papers in which he sustained that urethral gleet and granular ophthalmia should be identical diseases - an idea that he also gave out at the first International Congress of Ophthalmology in 1857. He wrote: *Recherches sur les granulations etc.* Bruxelles 1858. His lectures given at the Brussels University from 1862 to 1867 were published as a book in two parts Ophtalmologie: *Lecons données à l´Université de Bruxelles etc.* Bruxelles 1865-1868. A certain Thiriar (not an ophthalmologist) has been from 1885 Thiry's substitute for giving the courses on surgical pathology including ophthalmology. (Verriest)

Thoft, Richard A. (1936-1993) American ophthalmologist. Dr. Thoft was born in Missoula, Montana and went for undergraduate studies to Massachusetts Institute of Technology, Cambridge. This was followed by a M.D. degree from Harvard Medical School. After one year of internship, Dr. Thoft spent two years as a research fellow in the Howe Laboratory of the Massachusetts Eye and Ear Infirmary under the preceptorship of Jin Kinoshita, Ph.D., during which time his focus was lens biochemistry. This was followed by a clinical residency in Ophthalmology at the Massachusetts Eye and Ear Infirmary, 1965-1968. During the years of 1970-1972, Dr. Thoft was a clinical cornea fellow at the Massachusetts Eye and Ear Infirmary as well as a senior research fellow at the then Retina Foundation, Boston (preceptor, Claes H. Dohlman, M.D.,PhD). After his fellowship years, Dr. Thoft joined the full time staff at the Infirmary and Harvard Medical School with a sub-specialty of corneal diseases and surgery. Academically he moved from Clinical Instructor at Harvard to Assistant Professor and then Associate Professor of Ophthalmology (1979 - 1984). He also had substantial administrative duties in that he was appointed Assistant Chief and later Associate Chief of Ophthalmology at the Infirmary, 1975-1984. In 1984, Dr. Thoft left Boston and became the Chief of Ophthalmology at the Eye & Ear Hospital in Pittsburgh, as well as the Professor and Chairman of Ophthalmology at the University of Pittsburgh Medical School. During his career, Dr. Thoft undertook a number of Major National and Regional Committee assignments and was a member of the editorial board of several professional journals. He was also a Trustee of the Association for Research in Vision and Ophthalmology (ARVO) between 1990 - 1993. Dr. Thoft authored 76 scientific articles and numerous book chapters and monographs. He started out with some publications on lens biochemistry with Dr. Kinoshita. From then on, however, he focused his work on the ocular surface, particularly the biology of the conjunctival and corneal epithelium. Several papers dealt with corneal glucose concentrations and utilization (e.g., Thoft and Friend: Arch. Ophthalmol. 88: 85, 1972). *The fate of the corneal epithelium during eye bank storage was the subject of several publications* (Arch. Ophthalmol. 93: 357, 1975). A string of studies was devoted

to the topic of differentiation of the corneal and conjunctival epithelia (Invest. Ophthalmol. Vis. Sci. 29: 224, 1988), as well as studies on the epithelial healing in vitro and in vivo, and corneal epithelial complications in various diseases and after surgery. The understanding of the healing of the corneal epithelium received a substantial impetus from Dr. Thoft's XYZ hypothesis of corneal epithelial maintenance (Invest. Ophthalmol. Vis. Sci. 24:1442, 1983). However, the primary legacy of Dr. Thoft's research career lies in his pioneering work on conjunctival transplantation (Ophthalmology 89:335, 1982) as well as keratoepithelioplasty (Am. J. Ophthalmol. 97: 1, 1984). These concepts have already resulted in widespread clinical application. Dr. Thoft died in 1993. (By D. H. Dohlman) (SM)


THE CORNEA

By

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Thomas, Charles Monroe (1850-1916). American homeopathic ophthalmologist and oto-laryngologist of Philadelphia. Thomas received the medical degree at the Hahnemann Medical College, Philadelphia in 1871. Four years later he became demonstrator of surgery in the same institution, and from that time until 1906 was actively connected with his alma mater: professor (afterwards emeritus professor) of operative surgery, ophthalmology and otology, dean of the school (from 1903 to 1906).Am. Encyclop. of Ophthalm. vol.16, p.12649-12650.

Thomas, Frank Griffith (1872-1948) British ophthalmologist, son of Jabez Thomas. His father, Dr. Jabez Thomas of Swansea was one of those medical practitioners, who during the latter part of the 19th century, by reason of a clinical flair allied to wide knowledge and force of character, gradually assumed the ro1e of consultant in provincial towns. Jabez Thomas devoted much of his time to the study and treatment of eye diseases, and eventually was responsible for the opening of an eye department at the Swansea General Hospital. Frank Thomas received his scientific and early medical training at Cambridge where he graduated B.A. (National Science Tripos) in 1893. He finished his training at Guy's Hospital where after graduating M.B. B.S. in 1897 he became House Physician and Clinical Assistant. Concentrating on ophthalmology, he acted as a Clinical Assistant at Moorfields, and later became Registrar at the Royal Eye Hospital before returning to Swansea in 1900, where he succeeded his father as Honorary Ophthalmic Surgeon to the Swansea General and Eye Hospital. He shortly afterwards married Florence Margaret, daughter Dr. Price of Carmarthen, and herself an ophthalmologist, who assisted her husband in his work. His hospital and private practice developed rapidly, and it was not long before he was recognized as a leading ophthalmologist in Wales. He was a neat and careful operator, who adhered to well-tried and orthodox technique, which his excellent results more than justified. In his earlier days he was frequently seen at clinical meetings as a member of the Ophthalmological Society of the United Kingdom, the South West Ophthalmological Society, and a founder member of the Oxford Congress. He acted for many years on the General Committee of the British Journal of Ophthalmology. BJO 1948,33:394-395

Thomas, Tudor , James, William (Sir Tudor) (1893-1976) British, formerly ophthalmic surgeon and surgeon in charge of the corneoplastic department, United Cardiff Hospitals, and was largely responsible for the development of corneal grafting in Britain. He was born at Ystradgynlais, Breconshire, but spent most of his life in Cardiff, studying at the Cardiff School of Medicine and the Middlesex Hospital. At Cardiff he won the Alfred Sheen prize in anatomy and physiology in 1911 and graduated B.Sc. two years later. He qualified M.R.C.S., L.R.C.P., in 1915 and a year later took the M.B., B.Ch., of the University of Wales and the London M.B., B.S. He took house appointments at Swansea and during World War I served as a captain in the R.A.M.C. After the war he was for a time clinical assistant at Moorfields Eye Hospital and the Central London Ophthalmic Hospital. He was then appointed ophthalmic surgeon to the King Edward VII National Memorial Association at Cardiff and to the Mountain Ash and Maesteg hospitals. In 1921 he was appointed ophthalmic surgeon at Cardiff Royal Infirmary. He became F.R.C.S. in 1925 and proceeded M.D. and M.S. in 1929. In 1931 he was elected Hunterian professor of the Royal College of Surgeons and was clinical teacher in ophthalmology in the Welsh

National School of Medicine. He was also associate surgeon in charge of the corneoplastic department at the Central London Ophthalmic Hospital. It was during this period from 1935 to 1940 that Tudor Thomas made original and lasting contributions to the technique of corneal grafting. He had performed his experimental work on rabbits and demonstrated clear grafts in London in 1930. He was the pioneer in this great sight-saving work in Great Britain and it was he who conceived the idea of a bureau for registration and collection of donor material for grafting. Many of his close friends and colleagues helped with this work of collecting donor eyes. His technique of overlay suturing was copied all over the world; his donor eye holder is still used and his name ranks high in the history of corneal grafting. He was honored by many professional societies. In 1933 he delivered the Middlemore Lecture at the Birmingham Eye Hospital, in 1936 he gave the Montgomery Lecture in Dublin, and in 1955 he delivered the Doyne Lecture at the Oxford Ophthalmological Congress. This congress was perhaps one of his greatest joys. He was a member of the council for many years and master from 1956 to 1959. In 1958 he delivered the annual oration to the Reading Pathological Society and in 1960 he was presented with the gold medal in therapeutics of the Worshipful Society of Apothecaries of London. He was elected president of the Ophthalmological Society of the United Kingdom in 1967-1968, and he read one of the lessons at a special service for ophthalmology held in Westminister Abbey in 1967. His connection with the British Medical Association extended over many years. He was elected president for 1953-1954 when the annual meeting was held in Cardiff. His presidential address, "*With Head and Heart and Hand*," will always be remembered and these words of Charles Hastings were incorporated in the coat of arms of the association. He had been a member since 1922 and served on the council from 1949 to 1957. He was a member of the Ophthalmic Committee, the Ophthalmic Group Committee, and the Central Ethical Committee. A member of the Welsh Committee for many years and chairman in 1958, he had also been chairman of the Cardiff division and of the South Wales and Monmouthshire branch. After his tour of the Middle and Far East countries on behalf of the B.M.A. in 1954 be was made a vice-president, and at this time Glasgow University conferred upon him the honorary degree of LL.D. He was knighted in 1956 in recognition of his outstanding and pioneer work as an ophthalmologist.AJO 1976,81:690-691

Thompson, Daniel A. (1862-1904). American ophthalmologist, the son of James LivingstoneàThompson, who was himself also a well known ophthalmologist. Born in Rush Co., Ind., he received his medical degree at the Medical College Indiana in 1883. Having served for a time as house physician in the Indianapolis City Hospital, he studied ophthalmology in 1885-1886 in London and Vienna. Returning to Indianapolis he became associated with his father and so continued until his death. In 1890 he succeeded his father as professor of ophthalmology in the Medical College of Indiana, and taught consecutive courses until 1904. He was ophthalmologist to the City Hospital, St. Vincent's Infirmary, the Deaconess Hospital, the City Dispensary and the Eleanor Hospital for Children. He was an excellent teacher. Am. Encyclop. of Ophthalm. vol.16,p.12650

Thompson, George William (1865-1947) British ophthalmologist. His medical education was obtained at Edinburgh University where he qualified in 1890. He became a Fellow of the Royal College of Surgeons of England in 1901. Between 1900 and 1903 he was Chief Clinical Assistant to William Lang at Moorfields. He was Lang's Chief Clinical Assistant from 1898 to 1905. His appointments included those of Surgeon to the Western Ophthalmic Hospital. and Ophthalmic Surgeon to the French Hospital and to the Maida Vale Hospital for Nervous Diseases. He was a Member of the Ophthalmological Society, U.K., from 1905 to 1930.BJO 1947, 31:711

Thompson, H. Stanley (1932-) American ophthalmologist, emeritus professor of ophthalmology University of Iowa. Stanley Thompson received his medical education at University of Minnessota Medical School 1957-1961, University of Iowa Hospitals: Internship from 1961 to 1962; Columbia Coll Physicians New York:Fellow Pupillography with Lowenstein and Loewenfeld (1962);University of Iowa Hospitals. Ophthalmology: Residency (1962-1966); University of California San Francisco: Fellow Neuro-ophthalmology, with Wm.F.Hoyt. He received his B.A. at University of Minnessota in 1953;his M.S. at University of Iowa, and his MD 1961 University of Minnessota. Thompson started practice as an ophthalmologist 1967 at the University of Iowa. His

teachers in ophthalmology were: Braley, →Blodi, Burian, Leinfelder, Watzke, Armaly, Boeder, Loewenfeld. Stanley Thompson´s academic path reads as follows: ABO certificate 1967, Asst.Prof. U. of Iowa 1967-1971; Associate Prof. 1971-1976; Professor 1976-1997; Prof emeritus 1997-; Elected to AOS 1977; Director ABO 1989-96, Chairman ABO 1996. *Bibliography*: Thompson wrote *Topics in Neuro-ophthalmology*, Williams & Wilkins, Baltimore, 1979 (co-authors: Daroff, Frisen, Glaser, Sanders) and co-authored: Rosen, Emmanuel. *Neuro-Ophthalmology*, Mosby Yearbook, London, St Louis, 1998, (other co-authors: Eustace, Cumming). Selection of published papers: Thompson HS, Van Allen MW, von Noorden GK:*The pupil in myotonic dystrophy*.Invest Ophthalmol, 3:325-338, 1964, Thompson HS: *Afferent pupillary defects: Pupillary findings associated with defects of the afferent arm of the pupillary light reflex arc*. Am J Ophthalmol, 62:860-873, 1966. Loewenfeld IE, Thompson HS: *The tonic pupil: A re-evaluation*. Am J Ophthalmol, 63:46-87, 1967, Walsh FB, Hoyt WF, Thompson HS: *The autonomic nervous system: The pupil: the iris, its structure, innervation, reflex movements, and abnormalities of form and function in neurologic disease*.In *Clinical Neuro-ophthalmology*, 3rd edition, Walsh FB, Hoyt WF (eds), Baltimore: Williams & Wilkins, 1969, pp 464-534. Also pupil chap in 5th Edition, co-authored with Miller, Thompson HS, Franceschetti AT, Thompson PM: *Hippus: Semantic and historic considerations of the word*. Am J Ophthalmol, 71:1116-1120, 1971. Thompson HS: *Neuro-ophthalmology, Annual Review*. Arch Ophthalmol, 86:462-482, 1971, Thompson HS, Newsome DA, Loewenfeld IE: The fixed dilated pupil: *Sudden iridoplegia or mydriatic drops? A simple diagnostic test*. Arch Ophthalmol, 86:21-27, 1971, Thompson HS: *Cornpicker's pupil: Jimson weed mydriasis*. J Iowa Med Soc, August, pp.475-478, 1971, Thompson HS, Mensher JH: *Adrenergic mydriasis in Horner's syndrome*.Am J Ophthalmol,72:472-480, 1971, Loewenfeld IE, Thompson HS: *Fuchs´ heterochromic cyclitis:A critical review of the literature*.Part *I*. Surv Ophthalmol,17:394-457,1973; Part *II*. Surv Ophthalmol, 18:2-61, 1973, Thompson HS:*Medikamentose Pupillendiagnostik.Die Normale und die gestörte Pupillenbewegung*.Symposion der DOG, Bad Nauheim,1972.JF Bergmann, München, 1973, Loewenfeld IE, Thompson HS: *Oculomotor paresis with cyclic spasms. A critical review of the literature and a new case*. Surv Ophthalmol, 20:81-124, 1975, Pilley SFJ, Thompson HS: *Pupillary "dilatation lag" in Horner's syndrome*. Br J Ophthalmol, 59:731-735,1975, Thompson HS, Pilley SFJ: *Unequal pupils: A flow chart for sorting out the anisocorias*. Surv Ophthalmol,21:45-48,1976, Czarnecki JSC, Thompson HS: *Spontaneous cyclic segmental sphincter spasms in Adie's tonic pupil*.Am J Ophthalmol,82:636-637,1976, Thompson HS: *Pupillary signs in the diagnosis of optic nerve disease*. Trans Ophthalmol Soc UK,96:377-381, 1977, Bell RA, Thompson HS: *The ciliary muscle in Adie's syndrome*. Arch Ophthalmol, 96:638-642, 1978, Thompson HS: *Adie's syndrome: Some new observations*. Trans Am Ophthalmol Soc, 75:587-626, 1977(AOS Thesis), Bell RA, Thompson HS: *Relative afferent pupillary defect in optic tract hemianopias*. Am J Ophthal, 85:538-540,1978, Thompson HS: *Segmental palsy of the iris sphincter in Adie's syndrome*. Arch Ophthalmol, 96:1615-1620, 1978, Thompson HS, Bell RA, Bourgon P: *The natural history of Adie's syndrome*. In *Topics in Neuro-ophthalmology*. Baltimore: Williams & Wilkins, 1979, pp 96-99, Czarnecki JSC, Pilley SFJ, Thompson HS: *The analysis of anisocoria. The use of photography in the clinical evaluation of unequal pupils*.Can J Ophthal.14:297-302,1979, Weinstein JM, Zweifel TJ, Thompson HS: *Congenital Horner's syndrome*. Arch Ophthalmol, 98:1074-1078, 1980, Thompson HS, Hurwitz J, Czarnecki JSC:*Aberrant regeneration and the tonic pupil*.In *Neuro-ophthalmology*, Vol 10, Symposium of the University of Miami and Bascom Palmer Eye Institute (FB Walsh Festschrift), Glaser JS (ed), St Louis: CV Mosby, 1980, pp 100-106, Thompson HS, Corbett JJ: *Spasms of the iris sphincter:A case report*. Ann Neurol, 8:547-549,1980, Thompson HS,Corbett JJ,Cox TA: *How to measure the relative afferent pupillary defect*. Surv Ophthalmol,26:39-42,1981, Thompson HS,Montague P,Cox TA, Corbett JJ: *The relationship between visual acuity, pupillary defect,and visual field loss*. Am J Ophthalmol, 93:681-688, 1982, Thompson HS, Zackon DH, Czarnecki JSC: *Tadpole-shaped pupils caused by segmental spasm of the iris dilator muscle*. Am J Ophthalmol, 96:467-477, 1983, Tychsen RL, Thompson HS: *An electronically-induced Pulfrich illusion as a quantitative measure of visual delay and stereopsis*.In *Proceedings of the XIXth ISCEV Symposium*,Iowa City,1982.Doc Ophthal Proc Series, Vol.37. Kolder HEJW (ed),1983,The Hague:Dr W Junk Publishers, pp 453-461, Thompson HS:

Functional visual loss. Am J Ophthalmol,100:209-213,1985, Thompson, HS: Johann Friedrich Horner(1831-1886).Am J Ophth, 102:792-795,1986, Lam B, Thompson HS,Corbett JJ: *The prevalence of simple anisocoria*. Am J Ophthalmol, 104:69-73,1987, Folk JC,Thompson HS,Farmer SG, O'Gorman TW,Dreyer RF:*Relative Afferent Pupillary Defect in Eyes with Retinal Detachment*.Ophthalmic Surgery, 18:757-759, Oct.1987.(G.W.Weinstein Award for Best Article in 1987), Jiang MQ, Thompson HS,Lam B:*Kestenbaum's Number as an Indicator of Pupillomotor Input Asymmetry*. Amer J Ophth, 107:528-530, May 1989, Corbett JJ, Thompson HS:*The Rational Management of Idiopathic Intracranial Hypertension*.Arch Neurol,vol 46:1049-51 October 1989.Kardon RH, Denison CE, Brown CK, Thompson HS:*Critical Evaluation of the Cocaine Test in the Diagnosis of Horner's Syndrome*.Arch Ophthalmol,108:384-387,March 1990.(see also #182), Lam BL, Thompson HS:*A Unilateral Cataract Produces A Relative Afferent Pupillary Defect in the Contralateral Eye*. Ophthalmol, 97(3):334-338, March 1990, Alward WLM, Munden PM, Verdick RE, Perell HR, Thompson HS:*Use of Infrared Videography to Detect and Record Iris Transillumination Defects*.Arch Ophtholmol, 108:748-750,May 1990, Cremer S, Digre K, Thompson HS, Kardon R:*Hydroxyamphetamine Mydriasis in Normal Subjects*.Am J Ophthalmol, 110:66-70, July 1990, Cremer S, Digre K,Thompson HS, Kardon R: *Hydroxyamphetamine Mydriasis in Horner's Syndrome*.Am J Ophthalmol, 110:71-76, July 1990, Thompson HS, Maxner CE, Corbett JJ: *Horner's Syndrome Due to Damage to the Preganglionic Nerve of the Oculosympathetic Pathway*. *Sympathicus und Auge*. Herausgegeben von Alfred Huber, Ferdinand Enke Verlag Stuttgart, Germany, 1990; pgs. 99-104, Zweifel TJ, Weinstein JM, Thompson HS: *Congenital Horner's Syndrome*. *Sympathicus und Auge*. Herausgegeben von Alfred Huber, Ferdinand Enke Verlag Stuttgart, Germany, 1990,Kardon RH, Kirkali PA, Thompson HS: *Automated pupil perimetry. Pupil field mapping in patients and normal subjects*. Ophthalmol, 98:485-496, April 1991, Thompson HS, Corbett JJ: *Asymmetry of pupillomotor input*.Eye,5:36-39,1991, Verdick RE, Thompson HS: *Infrared Videography of the Eyes*.J Ophthal Photo,13:19-21,June 1991, Donahue SP, Kardon RH, Thompson HS:*Hourglass-shaped visual fields as a sign of bilateral lateral geniculate myelinolysis*.Am J Ophthalmol 119(3):378-380,March 1995, Thompson HS: *The Pupil*. Chapter 12 in Adler's *Physiology of the Eye*:Clinical Application.(9th ed).Hart Jr WM, (ed), St. Louis; Mosby-Year Book, pp 412-441, 1992. H. Stanley Thompson belongs to the AAO and AOS. He became an emeritus professor at the Iowa University in 1997.To-day Dr.Thompson enjoys his hobby: selling antiquarian medical books - especially in neurology and Ophthalmology and Visual Sciences. Phone 319-683-2822;fax: 319-683-2823 books@ginniff.com (JPW)

Thompson, Homer Warren (1859-1918) American ophthalmologist and otolaryngologist of Salem, Ohio, well known locally. Born at Salem he received the medical degree at Pulte Medical College, Cincinnati, in 1885. He was a well known aeronaut. AJO 1919,2:167-168.

Thompson, James Livingstone (1832-1913) American ophthalmologist, widely celebrated throughout the Middle West. Born in London, England, he came to America while still a small child. He began the study of medicine at St. Paul, Minn., but soon migrated to Chicago, where be received his degree from Rush Medical College in 1860. Shortly afterward he settled in Shelby Co., Ind., but, on the outbreak of the War, became assistant surgeon to the Fourth U. S. Artillery, colored. In 1864 he was promoted to be major and surgeon, and surgeon of the post, Columbia, Ky., and medical director of Western Kentucky. In October, 1865, he resigned from military service. Settling in Harrison, Ohio, as general practitioner, he removed, about two years later, to Cincinnati, Ohio, where he studied ophthalmology with Dr. Elkanah Williams. In 1871 he moved to Indianapolis, where he practised ophthalmology until his death. In 1874 he was made professor of ophthalmology and otology at the Medical College of Indiana, a position which he held for nearly fifteen years, when he was succeeded by his son, Daniel A.àThompson. Later, he was made emeritus professor, and, after the death of his son, he once more taught until the end of the year. In 1883 he became president of the Marion County Medical Society, and in 1890 was a delegate to the International Ophthalmologic Congress at Milan, Italy. In 1892 he was chairman of the ophthalmologic section of the American Medical Association. In 1894, by invitation, he read before the British Medical

Association a paper entitled "*Unusual Forms of Opacity of the Crystalline Lens*." Thompson, however, was not so much a writer as an operator and man of affairs in medicine. Absolutely ambidextrous, he worked both rapidly and well. His results, especially in cataract operation, were almost uniformly excellent. He was the life of his college and also of his local medical society, and was an enthusiastic and reliable leader in everything he undertook.Am. Encyclop. of Ophthalm. vol.16,p.12650-12653

Thompson, John Tatham (1857-1911). Anglo-American ophthalmologist. Born in New York in 1857, his early education was received at the Bortham school in his native city, and also in London, and at the Bristol University College. He entered the medical department of the University of Edinburgh in 1880, and received from this institution the degree of M.D. and C.M. For a number of years he studied ophthalmology under Argyll Robertson. Settling in Cardiff, he became ophthalmic surgeon to the Cardiff Infirmary, and twenty years later, consulting ophthalmic surgeon to the same, institution. He was, also, at various times, surgeon oculist to the South Wales Institute for the Blind; Medical Referee for the South Wales District under the Workmen's Compensation Act; Chairman of the Cardiff Division of the British Medical Association and of the Medical Board of the Cardiff Infirmary; President of the South Wales and Monmouthshire Branch of the British Medical Association; and Vice President of the Ophthalmological Society of the United Kingdom. He wrote a large number of papers, but no books. He was an excellent artist, and made nearly all the illustrations for Woodhead's *"Practical Pathology"* and absolutely all of those (so justly celebrated) for Berry's *"Textbook of Ophthalmology."* He was a caricaturist of the first rank, and the humorous drawings which he made of his professor and his fellow students, during the years of his college life, are, many of them, preserved until this day, by some of the noted physicians and surgeons of England. Even in later life, he was "a valued cartoonist, on the Liberal side at rectoral elections." Am. Encyclop. of Ophthalm. vol.16,p.12653-12654; The Ophthalmoscope, 1911,p.462-463.

Thompson, Robert (1797-1865). American general practitioner and ophthalmologist, inventor of Thompson's cornea knife and Thompson's cataract needle. Born in Washington Co., Pennsylvania, he was licensed to practice medicine in 1824 and ten years later received the honorary M. D. from the Medical College of Ohio. He was one of the founders of the Ohio State Medical Society, and its president in 1847. His most important ophthalmic article is "*Cataract*" (Trans. Ohio State Med. Soc., 1859) Am. Encyclop. of Ophthalm. vol.16,p.12654

Thompson, Silvanus Philips (1851-1916) British physicist, born in York. Thompson received his D.Sc. in 1878 at London University and taught physics at Bristol University before becoming in 1885 professor of applied physics and electrical engineering at Finsbury Technical College, London, a post he held until his death. He wrote several important textbooks on various fields of physics and electro-physics. He wrote interesting biographies of Faraday, Kelvin and others. On optics he wrote:"*Light, visible and invisible; A series of lectures delivered at the Royal Institution of Great Britain, Christmas 1896*" New York 1897. He was the brother of the ophthalmologist John Tatham àThompson who also was demonstrator of physics. Albert: Source Book of Ophthalmology,p.341. The Ophthalmoscope, 1916, p.391.

Thomson, Edgar Steiner (1871-1931) American ophthalmologist, born at Mount Savage, Maryland. He died in New York City. His father was major and surgeon in the Federal Army in the Civil War. His grandfather, Alexander Thomson, was a supreme court judge; his greatgrandfather, Archibald Thomson, was a Revolutionary soldier and officer, and his great-great-grandfather, Alexander Thomson, the founder of the family in America, came from Scotland to Pennsylvania in 1771. Thomson was a nephew of Dr. William Thomson of Philadelphia, one of Philadelphia's leading ophthalmologists of the latter part of the nineteenth century and who did some excellent pioneer work in color-blindness. E. S. Thomson was educated in Allegheny Academy, Maryland, and by private tutors. He received his medical degree in 1893 from the University of Pennsylvania, where he was a member of the Phi Alpha Sigma fraternity and of the D. Hayes Agnew Surgical Society. We was an interne at Kings County Hospital in 1894 and immediately after finishing that service became a member of the house staff of the Manhattan Eye, Ear, and Throat Hospital of New York City. He was assistant surgeon at the Manhattan from 1895 until

1902, when he became surgeon director of his clinic, as well as a director of the Manhattan Eye, Ear Throat Hospital. Among other appointments, he was professor of ophthalmology at the Manhattan Postgraduate Medical School, and for some years was an instructor in ophthalmology at the New York Postgraduate Medical School and Hospital, and also professor of ophthalmology at the New York Polyclinic Medical School and Hospital. He was a member and one-time-president of the New York Ophthalmological Society, to which he was elected in 1899, a member of the American Ophthalmological Society, and a former secretary and vice-chairman of the Section on Ophthalmology of the American Medical Association. At the entry of the United States into the World War he became a member of the Special Draft Bureau of the Manhattan Hospital, which examined prospective aviation force members, and in 1918 he was commissioned a major in the Army Medical Corps, serving until the end of the war at United States General Hospital No. 1 in New York. His professional writings were many. To Wood's *American Encyclopedia of Ophthalmology* he contributed a monograph on "*Electric appliances and their use in ophthalmic surgery*". He was author of "*Your eyes and their care*", published as a part of the Appleton Health Series. He was one of the first ophthalmologists to advocate trephining and aspiration in retinal detachment, reporting many striking successes from this surgical procedure. He had in his practice an unusual number of cases of diseased eyes due to sinus disease, and in 1928 he wrote an exhaustive paper entitled *Ocular involvement in sinus diseases* published in the *Laryngoscope*, in which he reviewed the literature on this subject and cited forty-four of his own private cases, giving in great detail the history of each case from onset to termination, beside stressing early recognition of these cases and thorough and properly done sinus operations. AJO 1931,14:362-363

Thomson, Lewis Charles (1913-1955) British physiologist who focused his research on the physiology of vision. A student of Guy's Hospital, he qualified in medicine in 1937 after an unusually brilliant academic career, and subsequently worked in the departments of anatomy and physiology of that school. Here he was attracted towards the study of the physiology of vision, a subject whereon he worked first with W. D. Wright at the Imperial College, and after 1947 for the Medical Research Council at the Institute of Ophthalmology, London, initially with àHartridge and after 1951 until his death as Director of the Group for Research in the Physiology of Vision. In the relatively short period permitted him to engage in research, Thornson's output of substantial work was enormous. His more important contributions to the subjective study of vision concerned the colour sensitivity and intensity discrimination of the central fovea, the factors influencing the course of dark adaptation, binocular summation within the nervous pathways of the pupillary light reflex, the irregularities in the equal energy luminosity curve, and the variations of hue discrimination with changes in luminance level. The results of these researches were published in some twenty papers which earned him an established position as a world authority on the physiology of vision. His most important work, however, and the endeavour nearest to his heart, was the study of the electrical responses following visual stimulation. A superb experimentalist, and endowed equally with the patience and ingenuity necessary to pursue intricate and delicate techniques whereby he succeeded in picking up the impulses travelling along single fibres of the optic nerve, he showed promise of becoming a worthy successor to Adrian, Hartline, and Granit; when suddenly he was taken away by his premature death. Academic honours came his way freely. He was awarded the Ph.D. degree of London University in 1948 and the D.Sc. in 1955. During 1955 he was Ettles Memorial Lecturer and he was nominated as the first Edridge Green Lecturer for 1956. He was Chairman of the Colour Group of the Physical Society from 1953 until the time of his death and as a prominent and active member of the Physiological Society. BJO 1955,39:703-704

Thomson, William (1833-1907) American ophthalmologist, inventor of Thomson's "color-stick" for worsteds and Thomson's color-test lantern-devices in almost universal employment. Born at Chambersburg, Penna., he received his medical degree at Jefferson Medical College in 1855. He settled at once as general practitioner at Merion, a suburb of Philadelphia. He served throughout the Civil War in a medical and surgical capacity. At the very beginning he entered the regular army as assistant surgeon, and in 1862 was chief of staff to Dr. Letterman who then was medical director. In 1863 he was surgeon-in-chief

to the Douglas Hospital, at Washington, and in 1864 was made inspector of the Washington Hospitals. In 1866 he was promoted to the rank of captain. He seems to have had his attention directed to ophthalmology by his own high degree of hypermetropia, 5.00.D. Finding that he read much better when his pupils were strongly contracted by a bright light held up close to his eyes, he set about to ascertain the cause of this phenomenon. Deciding to devote himself to ophthalmology, he resigned from the army in 1868, and began to study the diseases of the eye in Philadelphia. In that city, too, he settled, in course of time, as ophthalmologist. In addition to the color-stick and the color lantern, he invented a perforated disc for the better performance of Father Scheiner´s experiment, and a refractometer based on the principle of circles of diffusion. Both highly praised by àLandolt, who devoted considerable space to them in his *"Refraction and Accommodation of the Eye"*. He was, at various times, attending surgeon to the Wills Eye Hospital, lecturer, honorary professor, full professor and professor emeritus of ophthalmology at the Jefferson Medical Co!lege. Bibliography to be found in *Transactions of the Coll. Of Physicians of Phila*, 1909, XXXI and in Kelly Cylopedia of American Medical Biography, II,p.447. Am. Encyclop. of Ophthalm. vol.16,p.12654-12656

Thomson, William Ernest Francis (1865-1937) Scottish ophthalmologist born in Edinburgh. His father was William Mann Thomson an Advocate. Ernest Thomson's father died at an early age, when his son was only four years of age. Later his mother married an army officer with a large family. Ernest's early years were spent in Ireland, the Channel Islands and at Chatham. For a very brief period he was at a school in Jersey, but in 1873 he entered the United Services College, Westward Hol, where he was a contemporary of Kipling. In his recollections he was wont to point out that neither Greek nor German was taught at this school in his day, but that English was " pumped into " the pupils as much as possible. Especially for " *the services examinations, the boys had to write rapidly to dictation in a competitive manner, where a single mistake in spelling would cost many marks*." Doubtless this was the origin of his mastery of the English language and his remarkable proficiency in correcting proofs. On leaving school Ernest Thomson went for a short period into his uncle's office in Glasgow to study for the law, but this proved uncongenial, and he pushed on with his education at Glasgow University, where he took his M.A. in 1885. His friendship with Harry Bamber, whose sister was his first wife, inclined his thoughts towards medicine; and he started in Glasgow, but migrated half way through his course, to Edinburgh, where he graduated M.B., C.M., in 1889. After qualification he spent some two or three years as a ship's surgeon, travelling to the Cape and to India. Though never sea sick, he confessed to being home sick, and he returned to this country in 1890 and married Miss Bamber. His first venture in practice was medical officer to a parish, with private practice, in Orkney. The 1889 epidemic of influenza had visited the island severely, and Ernest Thomson soon found that the practice did not offer sufficient scope, so he sold out, and returning work in London, where he first seriously took up the study of ophthalmology. In Glasgow he began work at the Eye Infirmary where Leslie Buchanan was the house surgeon at that time. Life was a struggle at this time, as it is with so many of us at the start, and Ernest Thomson put in a good deal of work in the Physiological Laboratory of Professor McKendrick. He obtained the post of lecturer at the Western Medical School, and was also for five years Professor of Physiology at Anderson's College Medical School. He took his M.D. in 1893, and the F.F.P.S.Glas. in 1897. In the following year he became a member of the Ophthalmological Society of the United Kingdom. In 1902 he was elected to the senior staff of the Glasgow Eye Infirmary. On the foundation of " *The Ophthalmoscope* " in 1903, ErnestThomson became editorial secretary and later sub-editor. In 1911 he paid a long visit to the continental eye clinics and his notes on continental work were published in eight numbers of *TheOphthalmoscope* in 1912. Not long after, he decided to give up his practice in Glasgow for departmental work, and was appointed part time ophthalmic surgeon to the Glasgow School Board, and later, whole time ophthalmic surgeon to the Education Committee of the County of Lanark. During the War years he was single handed, and had to undertake the inspection of school children as well as their treatment, all the other medical officers of the County Education Committee having volunteered for service. In 1921 he resigned his whole time appointment, and the Committee, a year later, decided to appoint two part-time officers instead, and Ernest Thomson was glad to come back. After leaving Glasgow he moved to Bothwell, and in 1923 to Stirling which was his home for

the rest of his life. He gave up operative work in 1914, but in Stirling did some private practice as well as his school work. Ernest Thomson wrote a great many papers, mainly on ophthalmological subjects. His first important paper, however, was his M.D. thesis, for which he obtained the Gold Medal. It was on " *The true position of oxygen as a restorative in carbonic acid. poisoning*," and was published in the Glasgow Medical Journal in 1894. Among other early papers was one in the Edinburgh Medical journal in 1897 on " *Sensory Aphasia, with sector-shaped homonymous defect of the Fields of Vision*." To *The Ophthalmoscope* he was a regular contributor from the start until 1914. Many of his papers were written conjointly with his friend Dr. Leslie Buchanan. In 1909-10 he was the author of a long review on *Detachment of the Retina* and in 1912 his *Notes on the Continental Clinics*, noticed above, were published. In the *British Journal of Ophthalmology* he published many papers. He was a member of the executive editorial committee from the start. Altogether more than 66 papers stand to his credit. BJO 1938,22,57-59

Thorington, James (1858-1944) American physician born in Davenport, Iowa, received his M.D. in 1881 at Jefferson Medical College, Philadelphia, and spent several years in Panama as surgeon to a railroad company before settling in Philadelphia working at Wills Eye Hospital under Charles August Oliver and later under Samuel Doty Risley as ophthalmologist. Thorington became 1900 professor of ophthalmology at the Philadelphia Polyclinic, and served also the Training School in Vineland (New Jersey), the Elwyn Training School for mentally handicapped individuals in Elwyn, Pennsylvania and the Central Manual Training School. Thorington put special emphasis on the exact determination of refraction. He developed the Thorington Ophthalmoscope, built by Wall and Ochs (two models), a Schematic Eye for Studying Retinoscopy and the Thorington Asbestos Chimney. He wrote: *Retinoscopy (or shadow test) in the determination of refraction at one meter distance, with the plane mirror* Philadelphia 1897 (2nd 1898, 3rd 1899,4th 1901,5th 1907, 6th 1911; *The Ophthalmoscope and how to use it* London 1906; *Prisms, their Use and Equivalents* Philadelphia 1913. Schett/Keeler The Ophthalmoscope, Vol.1,383. JPW

Thune, Ludwig Georg Wilhelm (1803-1869) Danish military physician, who devoted much attention to ophthalmology. Born at Copenhagen, he became a physician in 1828, and two years later an officer in the Danish army. In 1834 he received the medical degree at Halle. He continued to serve in the army, and to devote the major portion of his time to ophthalmology. In 1857 he was sent to the Ophthalmologic Congress. His chief ophthalmologic writing was "*Om Ophthalmia Aegytiatica Belgica, Contagiosa*" and "*Prof. Fr. Jaeger's Ausknelser af denne Sygdom*" (Jour. f. Med. og Chir., VII). Am. Encyclop. of Ophthalm. vol.16,p.12676

Tien, Ha Huy (1925 -) Vietnamese ophthalmologist Professor. He was born in Ha tinh. He graduated from Hanoi Medical College in 1958. He worked at the National Institute of Ophthalmology from 1960 to 1998, as Head of Administration Department, and as Head of Pediatric Department. He wrote many articles and publications on children's eye diseases and squint. He was very active in the prevention of blindness and training of ophthalmologists. He participated in the International Congress of Ophthalmology in Kyoto (1978).(SM)

Tiffany, Flavel Benjamin (1846-1918) American ophthalmologist of Kansas City, Mo. Born at Cicero, Oneida Co., N. Y., he early moved with his parents to Rutland, Dane Co., Wisconsin, and afterward to Baraboo. The following year he moved again, to Rice Lake, Minn., The Civil War breaking out, he enlisted at the age of seventeen in Battery B, Fourth Minnesota Light Artillery, and served until the close of the strife. Returning to Minnesota, he went to school at Faribault, living with a Dr. Bemis, and doing manual labor for his board. Before he was twenty years of age he entered the State University at Minneapolis, but, could not quite complete the literary course because of failing health, the result of over-work and great privations. In 1872 he entered the Medical Department of the State University at Ann Arbor, Mich., receiving the degree in 1874. He settled at first in Grand Haven, Mich., but, being, unsuccessful, went again to Minnesota, thence to East St. Louis, where, however, he was once again unsuccessful. Returning once more to Minnesota, he was ably assisted by a worthy and wealthy lady, Mrs. Esther Fuller, and,

settling at Medford, soon had a very large practice. In 1876-'7 he studied the eye, ear, nose and throat at London, Berlin, Vienna, and Paris. In 1878 he settled as ophthalmologist and oto-laryngologist at Kansas City, Mo., and soon was widely known as a lecturer and operator. In 1880 be founded the Kansas City University, in which institution he held the chair of ophthalmology, otology and microscopy until 1893. The chair of ophthalmology and laryngology he continued to hold until about the time of his death. For many years he was, president of the institution. Tiffany was oculist to the Burlington and the Missouri, Kansas and Texas railways. He was a fellow of the American Medical Association, the Mississippi Valley Medical Association, Missouri Valley Medical Association, and the Tri-State Medical Association. He was president once of each of the two last mentioned institutions, he was also a member of the City Club. Tiffany wrote numerous books and articles, the most important of the former being, *"Anomalies of Refraction and Diseases of the Eye"; "A Sojourn in Switzerland"; "A Sojourn in Spain,"; "Journey Round the World by an Oculist"* etc. The more important journal articles deal with cataract and glaucoma. Am. Encyclop. of Ophthalm. vol.16,p.12685-12687; AJO,1:382

Tilley, Robert (? – 1898). American, Chicago ophthalmologist. Born in England, he came to America, when a mere lad. His medical degree was received at the Chicago Medical College in 1876. He was ophthalmologist to St. Luke's Hospital. Am. Encyclop. of Ophthalm. vol.16,p.12687

Tobari, Ikuo (1935-) Japanese ophthalmologist, Professor and Chairman, the Second Department of Ophthalmology of Toho University. He graduated from Toho University in 1964, studied Ophthalmology at Tokyo University under Prof. SHIKANO Shinichi and received his Doctor of Medical Sciences in 1970 (thesis: *Electron microscopic studies of the ciliary ganglion*. J. Jpn. Ophthalmol. Soc. 75: 635, 1971; ibid. 75: 655, 1971). He has been in the present position as above since 1982. He is an expert in Laser therapy, vitreo-retinal diseases and cataract, and he has published 146 original papers that include "*Effect of tranilast eyedrops in preventing posterior capsule opacification: Preliminary report.* J. Cataract Refract. Surg. 25: 1394, 1999". He wrote a book "*Atlas of laser therapy of fundus diseases*. Medical Aoi Publ. Co. Tokyo, 1999". He is a Councillor of the Japanese Ophthalmological Society, Japanese Society of Laser Medicine and Japanese Society of Gerontology. (the Second Department of Ophthalmology, Toho University. 2-17-6 Ohashi, Meguro-ku, Tokyo 153-0044, Japan. phone: +81-3-3468-1251, fax: +81-3-3468-2926)(SM)

Tochikubo, Tetsuo (1949-) Japanese ophthalmologist, Professor of Ophthalmology at the First Department of Toho University. He was born as the 6th generation of an Ophthalmology family and graduated from Toho University in 1976. He studied Ophthalmology at the University under Prof. OHOKA Ryoko and Prof. KOMOTO Michiji and received his Doctor of Medical Sciences in 1985 (thesis: *A study of cell mediated immunity in perforating ocular injuries, the relationship between the location and clinical course of injuries*. Trans. Asia-Pacific Acad. Ophthalmol. 8: 1023, 1982). He was promoted to Assistant Professor in 1992 and to the present position as above in 1996. He has been on the Editorial Board of Folia Ophthalmologica Japonica since 1996. He is working in the field of pediatric Ophthalmology, glaucoma and ocular surgery, and among his more than 110 papers, some examples are "*Retinopathy of prematurity in extremely premature infants*". J. Jpn. Ophthalmol. Soc. 88: 540, 1984" and "*A modification of filtering surgery in glaucoma*." Nihon-no-Ganka (Ophthalmology of Japan) 67: 1291, 1996. Besides being a member of many National Societies, he is a member of the Association for Research in Vision and Ophthalmology, American Society of Cataract and Refractive Surgery. (Department of Ophthalmology, Toho University, Omori-Nishi 6-11-1, Ohta-ku, Tokyo 143-0015, Japan. phone: +81-3-3762-4151; fax: +81-3-3298-0030, e-mail: ttochi@med.toho-u.ac.jp)(SM)

Toda, Noboru (1933-) Japanese pharmacologist, Professor Emeritus of Shiga University of Medical Science. He graduated from the Faculty of Medicine of Kyoto University in 1958, studied pharmacology in the Graduate School of Medicine of the University and received the degree Doctor of Medical Sciences in 1963 (thesis: *Effects of adrenaline, noradrenaline and reserpine on the transmembrane potentials in both pacemaker and non-pacemaker fibers of the rabbit atrium*. Jpn. J. Pharmacol. 10: 78-91, 1960). He

conducted research as a visiting scientist in 1964-1966 at the Department of Pharmacology, School of Medicine, University of Washington, Seattle, Washington U. S. A. On his homecoming, he was appointed the Instructor (1966-1972) at the Department of Pharmacology of Kyoto University, and then promoted to the Associate Professor (1972-1976). He was invited to be the Professor and Chairman of the Department of Pharmacology of Shiga University of Medical Science in 1976 and served until retirement in 1999. He served as the President to the Japanese Pharmacological Society, Japanese Hypertension Society, Japanese Society of Ocular Pharmacology (18th Congress) and is the Honorary Member of these Societies. He is also a member of American Physiological Society. He has published many original articles and wrote books, and some examples are "*Cardiovascular Therapeutics*: *Mechanism of Action*. Eds. Toda, N. & Abiko, Y., Nankodo Publ. Co., Tokyo 1998" and "*The Biology of Nitiric oxide*. Eds. Moncada, S., Toda, N. et al., Portland Press, Ltd., London, 1998)". Currently, he works as Consultant to Nippon Shinyaku Co. (14, Kisshoin Nishinosho-Monguchi-Cho, Minami-ku, Kyoto 601-8550, Japan. fax: 81-75-314-3269, email: n.toda@po.nippon-shinyaku.co.jp)(SM)

Todd, Frank Chisholm (1869-1918) American ophthalmologist. Todd was born at Minneapolis.He attended for a time the academic college of the University of Minnesota, but did not complete the course. He received, however, at the same university the degree in dentistry in 1891 and the Doctor of Medicine in 1892. Having studied ophthalmology and oto-laryngology at New York, London, Paris, Berlin and Vienna, he returned to Minneapolis, and in 1899, was made professor of the eye, ear, nose and throat at his alma mater. In 1902 he was made chief of the department, a position which he held until his death. Todd was surgeon to the University of Minnesota, the Hill Crest Surgical, St. Barnabas, City, Northwestern, and Asbury Hospitals, and to the Chicago, Milwaukee and St. Paul Ry. He was Fellow of the American Academy of Ophthalmology and Oto-Laryngology, of the American College of Surgeons, a Member of the Association of Military Surgeons, and, in 1914, was President of the Minnesota Academy of Medicine. He was the secretary and one the organizers of The American Board for Ophthalmic Examinations.Shortly after the United States entered the war, Todd enlisted in the Medical Reserve Corps as Major. Later he was advanced to a Lieutenant Colonel. He was first assigned to the base hospital at Camp Dodge, of which he was shortly made commanding officer. Am. Encyclop. of Ophthalm. vol.16,p.12696-12698 AJO, 1:697-698.

Tokoro, Takashi (1932-) Japanese ophthalmologist, Professor Emeritus of Tokyo Medical and Dental University. He graduated from Tokyo Medical and Dental University in 1957, studied Ophthalmology in the Graduate School of Medicine under Prof. OHTSUKA Jin and received his Doctor of Medical Sciences in 1962 (thesis: *Photographic determination of the refractive power of the crystalline lens*. No. 1. J. Jpn. Ophthalmol. Soc. 65: 868,1961, No. 2. ibid. 65: 877, 1961, No. 3. ibid. 66: 26, 1962, No.4. ibid.66: 110, 1962). He conducted research as a research fellow at Washington University, St. Louis, U. S. A. in 1968-1970 (*Experimental myopia in rabbits*. Invest. Ophthalmol. Vis. Sci. 9: 926, 1969; *Relationship between the blood flow velocity in the ciliary body and the intraocular pressure of rabbit eyes*. ibid. 11: 945, 1972). On his homecoming, he was promoted to Lecturer (1970-1976), to Assistant Professor (1976-1977) and to Professor and Chairman of the Department of Ophthalmology as the successor of Prof. àOHTSUKA in 1977: he served in this position until his retirement in 1998. During his tenure, he served as the Dean of the School of Medicine of the University (1995-1998). He has held many key positions in professional Societies, i.e. Councillor of the Japanese Ophthalmological Society (JOS) (1977-1998), Executive Director of the JOS (1989-1994, 1995-1999), Vice-President (1991-1994) and President of the Japanese Society of Ophthalmological Optics (1995-1998), Board of Trustees of Japan Contact Lens Society (1984-1999), of the Japanese Society of Intraocular Lens and Refractive Surgery (1993-1999), of the Japanese Society of Neuro-ophthalmology (1990-1999) and Japanese Association of Strabismus and Amblyopia (1993-1999). He has served as an editor to the Jpn. J. Visual Sciences (1992-1999), Ganka (Jpn. Ophthalmology) (1980-1998) and the Hong Kong J. Ophthalmol. (1996-1999). His research interest has been ocular refraction and accommodation, and some examples of his many publications are "*Refractive anomalies and their correction*. Kanehara Publ. 1997" and "*Atlas of posterior fundus changes in pathologic myopia*. Springer-Verlag, Tokyo,

1998". He received the JOS Award in 1998 (Award Lecture: *Mechanisms in the development of moderate myopia and the possibility of its treatment.* J. Jpn. Ophthalmol. Soc. 102: 796, 1998). He organized, as the president, the 6th International Symposium of Myopia in 1996 and was the editor of its proceedings, "*Myopia Updates*, Springer-Verlag, Tokyo, 1998". He is an Honorary Member of the JOS and an international advisor to the International Myopia Research Foundation.(SM)

Tokunaga, Fumio (1944-) Japanese biologist working on retinal physiology and biochemistry, Professor of the Department of Earth and Space Science of Osaka University. He graduated from the Faculty of Science of Osaka University and received his Ph.D. degree in the field of Biochemistry from the University in 1972. He has been working in Biophysics and his many publications embrace "*Phylogenetic relationships among vertebrate visual pigments*. Vision Res. 34:3097, 1994" and "*The primary structure and distribution of killifish visual pigments*. Vision Res. 37:3089, 1997". He is a member of the International Society for Eye Research, American Association for the Advancement of Science and many Japanese Scientific Societies including The Zoological Society which conferred on him the Society prize for his outstanding contributions.(Department of Earth and Space Science, Osaka University, Machikaneyama, Toyonaka, 560-0043, Japan; phone: 81-6-6850-5499, fax: 81-6-6850-5542, e-mail: tokunaga@ess.sci.oska-u.ac.jp) (SM)

Tsuneo Tomita

Tomita, Tsuneo (1908-1991) Japanese physiologist, Professor Emeritus of Keio University. He graduated from Keio University, Faculty of Medicine in 1932, studied at the Department of Physiology and received the degree Doctor of Medical Sciences in 1936. He then conducted postdoctoral studies at the Johns Hopkins University with Prof. Hartline. He was the Professor and Chairman of the Department of Physiology, Keio University in 1957-1971 and he served as the Dean of the Keio University School of Medicine in 1969-1970. After retirement he was invited to Yale University CT, U.S.A as the Professor at the Department of Ophthalmology in 1971 and then to the Professor of Physiology of St. Marianna Medical College in Japan. He was an Honorary Member of the Physiological Society of Japan, Society of Neuroscience, U.S.A, International Society for Clinical Electrophysiology of Vision, American Academy of Arts and Sciences, Physiological Society U.K. He was a Member of the Japan Academy and Deutsche Akademie der Naturforscher Leopoldina. He was Visiting Professor to the Instituto Venezolano de Investigaciones Cientificas, The Rockefeller Institute, University of California San Francisco, Institute for Research in Vision of Ohio State University, Yale University, Carl-Ludwig-Institut fuer Physiologie of Karl-Marx Universitaet Leipzig. He was a recipient of many awards, e.g. *Purple Ribbon Medal* 1972, *Fujiwara Award* 1974, *Proctor Award* 1975 from Association for Research in Vision and Ophthalmology (*Electrophysiological studies on retinal cell function*, Invest. Ophthalmol. Vis. Sci. 15: 171, 1976), Japan Academy Award 1976 and the von Sallmann Prize in Vision and Ophthalmology 1984. He was the first to introduce microelectrodes into visual cells and to open the way for studying physiology of the visual cells. He has many publications that include "*Studies on the intraretinal action potential*. Part I. *Relation between the localization of micro-pipette in the retina and the shape of the intraretinal action potential*. Jpn. J. Physiol. 1:110, 1950", "*Mechanism of lateral inhibition in eye of Limulus*. J. Neurophysiol. 21: 419, 1958" and "*Electrophysiological study of the mechanisms subserving color coding in the fish retina*. Cold Spring Harb. Symp. Qaunt. Biol. 30: 559, 1965".(SM)

Tonosaki, Akira (1937-) Japanese anatomist, specializing in the structure of Photoreceptor Cells and Human Anatomy. He graduated from Hirosaki University, School of Medicine and carried out postgraduate works at the Department of Anatomy of Tohoku University: Doctor of Medical Science was granted in 1968 from Tohoku University. He was appointed the Professor and Chairman of the Department of Anatomy of Yamagata University in 1973 and is active in this position. His many publications include "*Fine structure of the retina in Haliotis discus*. Z. Zellforsch.79: 409,1967, and "*Demonstration of rod and cone photoreceptors in the lamprey retina by freeze-replication and immunofluorescence*." Cell Tiss. Res. 249:241, 1987. For his original improvement of the complementary freeze-fracture method, the Japanese Society of Electron Microscopy granted him the annual Setou Prize in 1982. He is a member of the Japanese Association

of Anatomists, Japanese Society of Electron Microscopy and International Society of Eye Research. He is the President of the National Association of Donation of Cadavers for Medical and Dentistrial Education (1997-2000). (Department of Anatomy, Yamagata University, School of Medicine,2-2-2 Iida-Nishi, Yamagata, 990-9585, Japan; phone:81-23-628-5200, fax:81-23-628-5205, e-mail: takira@kaibou1.id.yamagata-u.ac.jp) (SM)

Tooke, Frederick Thomas (1873-1955) Canadian ophthalmologist born in Montreal where he had all his schooling. At McGill University he graduated B.A. in 1895 and M.D., C.M. in 1899, after which he was an interne for 3 years at the Royal Victoria Hospital in Montreal. Then, on the advice of Dr. Frank Buller, he spent the following 3 years in Europe studying ophthalmology. During this latter period he served as clinical assistant in succeeding years under Professors àAxenfeld of Freiburg and àMorax of Paris, and under Sir William Lister and Mr. Marcus G. Gunn, at Moorfields, London. He returned to Montreal and opened his practice in ophthalmology. At this time he joined the staffs of McGill University and the Royal Victoria Hospital. He became Professor and Chairman of the Department at the former from 1937 to 1939, and Ophthalmologist-in-Chief at the latter from 1935 to 1940. Throughout a long professional life Dr. Tooke made many contributions to ophthalmic knowledge. These were mainly of a clinical nature. He will be remembered for his introduction of a cornea-splitting knife for use in the Elliot trephine operation. He carried on a very large and active practice in his specialty and only retired from it in 1950. He was a member and past president of the Montreal, the Canadian, and the American Ophthalmological Societies. He was also active in the Canadian Medical Association and the American Academy of Ophthalmology. He kept up his many European friendships through his membership of the Ophthalmological Society of the United Kingdom and the Societé d'ophtalmologie Française.

Akira Toriyama

Toriyama, Akira (1898-1994) Japanese ophthalmologist, Professor Emeritus and Executive Director of Showa University. He graduated from Tokyo University in 1925, studied Ophthalmology under Prof. àISHIHARA Shinobu and received the degree Doctor of Medical Sciences in 1931. He was appointed the Professor of Ophthalmology at Showa Medical School in 1928. By changes in the educational system, the Showa Medical School evolved to the Showa Medical College in 1946 and further to Showa University Faculty of Medicine in 1964. Dr. Toriyama continued to serve as the Professor and Chairman of the Department of Ophthalmology throughout the course of this evolution of the University. He worked as the Director of the University Hospital in 1964-1968 and was then elected to be President of the University in 1969-1978. He was further elected to the Executive Directorship of Showa University in 1971 and served until 1978. His research interest was in physiology of the aqueous humor and he gave a special lecture "*Studies of aqueous humor production and outflow*" at the 68th Congress of the Japanese Ophthalmological Society in 1964 (J. Jpn. Ophthalmol. Soc. 68:607, 1964). In recognition of his meritorious service, the Government conferred on him The Second Order of Sacred Treasures in 1971.(SM)

Tornamira, Johannes de A 14th century French ophthalmologist of Montpellier. See **Jean de Tournemire**.

Torresini, Giuseppe (19th century). Italian surgeon, who flourished about the middle of the 19th century, and who seems to have paid considerable attention to diseases of the eye. He wrote neither book nor article on any ophthalmic subject, but some of his methods of treatment appear in the book of his son, MichelangeloàTorresini, *"Trattato di Oculistica"*(1856) Am. Encyclop. of Ophthalm. vol.16,p. 12712

Torresini, Michelangelo (19th century). Italian ophthalmologist, who flourished about the middle of the 19th century. He wrote *"Trattato di Occulistica del Dottore Michelangelo Torresini di Padova,"* etc. Parte Prima (Padova, 1856, 53 pp.) ; *"Anatomy and Physiology of the Eye"* Parte Seconda, Padova, 1857, 212 pp.; *"Ocular Pathology and Treatment."* Am. Encyclop. of Ophthalm. vol.16,p.12712

Tosswill, Louis Henry (1843-1922) British ophthalmologist. He was a graduate of Cambridge University, an original member of the Ophthalmological Society, and a member of Council from 1896-99, and was at one time Surgeon in the West of England Eye Infirmary, and in 1903 was appointed Consulting Surgeon. In 1907 he was President

of the Ophthalmic Section of the British Medical Association at its meeting at Exeter. BJO 1922,6:383

Toulant, Pierre (1883-1962) French ophthalmologist, professor of ophthalmogy at the Algiers faculty of medicine in Algeria. Toulant was a pupil, at the begin of the 20th century, of Victor Morax at the Lariboisière hospital in Paris, later head of the eye clinic under Lapersonne. In 1919 Toulant moved to Algeria starting a brilliant clinical university career at Algiers. During the first World War, Toulant was an airforce pilot and was severely wounded when his plane caught fire during an attack and crashed. During the second World War he was consultant ophthalmologist to the Algerian army (still a French army at that time) which came to the help of France to fight Germany. During his stay in Algeria, Toulant had duplicated his chair of ophthalmology, creating an Institute for Tropical ophthalmology in which he thaught , not only his Algerian pupils, but also foreign ophthalmologists. He main writings were on tropical ophthalmology. He contributed material to the *Traité d´ophtalmologie* (Baillart) and to the *Encyclopédie Medico-Chirurgicale*. From 1947, he was Corresponding Member of the Académie de Médecine. Annales d´oculistique 1964, 197:1125-1126.JPW

Tournemire, Jean de. He was also known as Johannes de Tornamira. A 14th century French physician and ophthalmologist. Born at Pouzols, in the diocese of Albi, in 1329, or 1330, he began practice at Montpellier in 1348. In 1372 he was called to Avignon as physician to Pope Gregory XI; but, four years later, when Gregory quitted Avignon, Jean de Tournemire returned to Montpellier. In 1379 he again moved to Avignon, where he was made physician to Gregory's successor, Clement VII. In 1384 Clement made him chancellor of the Montpellier faculty, which position he seems to have held until his death, which occurred somewhere between 1390 and 1396. The only writing of Jean de Tournemire of ophthalmic value is entitled *Clarificatorum in Nonum ad Almansorem* (composed at Montpellier in 1365; printed at Lyons in 1490 and again in 1500; at Venice in 1507 and again in 1521). This book contains a number of chapters on the eye, its diseases and their cure. The surgery of the eye is barely mentioned, the remedy for almost every kind of ocular difficulty being a collyrium.American Encyclopedia of Ophthalmology,Vol.9,p.6716

Tourtual, Kaspar Theobald (1802-1865) German anatomist, physiologist and ophthalmologist. Born at Münster , son of the well known German official physician, Karl Florens Tourtual, he received the medical degree at Berlin in 1823, presenting as dissertation "*De Mentis circa Visum Efficacia*" (published in JustusàRadius *"Collectio Script. Ophthalmol. Minorum, Vol.II).* After further study at Paris and a number of the universities of Southern Germany, he taught at Münster for several years. He wrote *Die Dimension der Tiefe im freien Sehen und im stereoskopischen Bilde*. Münster 1842. Am. Encyclop. of Ophthalm. vol.16,p.12715. JPW

Toussaint, Daniel (1925-1985) Belgian ophthalmoloigist. Toussaint was born in La Hulpe (french speaking Brabant) . He participated voluntarily in the second World War. He obtained the M.D. degree at the Brussels University in 1953. He specialized in ophthalmology from 1953 in Paris (Hôpitalpital de la Salpêtrière , Institut National des Quinze-Vingt) and from 1955 in Brussels. He worked from 1960 to 1961 in the Eye and Ear Infirmary in Boston and in Howe's laboratory directed by Professor D.àCogan at Harvard Medical School; After his return to Belgium he became adjunct head at the Department of ophthalmology of the Brussels University (Prof P.àDanis). He worked also at the Queen Elisabeth Medical Foundation (Prof L. Desclin) and at the Laboratory of Electron Microscopy (Prof P. Dustin). He obtained in 1968 the special doctorate with a thesis on *diabetic retinopathy in man and in animals*. Indeed he made important contributions to the knowledge of diabetic retinopathy, especially the *retinal vascular patterns as observed after trypsin digestion* (with D. Cogan and T.àKuwabara), 1961), *the extravascular lesions as seen after gelatin inclusion* (with the same authors, 1962) and the *effects of cortisone on the islet tissue* (1963). He published many cases of rare and interesting diseases as *Raeder's syndrome* (1956), *Refsum's syndrome* (1959), *Pompe's generalized glycogenosis* (1965), *generalized Loa loa filariosis* (1965), oxalosis, Menkès`disease, etc. Most of these papers were published in the *Archives of Ophthalmoloqy*. (Verriest)

Toyofuku *see* **Ideta, Hidenao**

Toranoshin Toyota

Toyota, Toranoshin (1864-1918) Japanese ophthalmologist, the first Professor of Ophthalmology at Kumamoto University. He graduated from Tokyo University in 1892, studied Surgery first then one year later Ophthalmology from Prof. KOMOTO Jujiro. He became the Head of the Eye Clinic of Kumamoto Prefectural Hospital in 1895 and started the Kumamoto Ophthalmological Society which is the oldest regional Ophthalmological Society in Japan. He played the key role in the Foundation of Private Kumamoto Medical School and he was made the Professor of Ophthalmology in 1904. Dr. Toyota went to Germany and studied at Freiburg University (Prof. Th.àAxenfeld) and at Breslau University (Prof. W.àUhthoff) in 1902-1905 and published "*Ueber zwei Fälle von chronischer Intoxikations-Amblyopie mit voruebergehender vollstaendiger, aber nicht durch die Alkohol-rep. Tabak-Intoxikation bedingter Erblindung nebst Sektiosnsbefund*". Klin. Mbl. Augenheilkd. 45: 178, 1907". The Medical School evolved to Kumamoto Prefectural Medical College in 1922, to National Kumamoto Medical College in 1929 and then to Kumamoto University in 1949. Unfortunately he died before the evolution of his Medical School.(SM)

Tra, Dao Xuan (1924-1984) Vietnamese ophthalmologist. He was born in Ha Tay. He studied at Hanoi Medical College from 1946 to 1953. He received his Ph.D. in 1964. He was the Head of the Eye Department of National Army Hospital from 1954 to 1975. He was the director of the National Institute of Ophthalmology and he also was the Head of the Eye Department of the Hanoi Medical College from 1975 to 1984. He was Associate Professor in 1980. He served as General Secretary of Vietnamese Association of Medicine, President of Vietnam Ophthalmological Society (1975-1984). He made contributions in training eye doctors in Vietnam and for the Army, built the Eye Care Network in Prevention of Blindness in the whole country. He wrote many articles on eye trauma, particularly in eye burn. He has been awarded the order of Independence Second Degree and many other medals. He participated in the international congress of Ophthalmology in Kyoto in 1978. (SM)

Trantas, Alexis (1867-1961) Greek ophthalmologist born in Jannina. Trantas studied medicine in Athens, receiving his medical degree in 1891. He specialised in ophthalmology in Paris under Photinos Panas. Trantas settled in Constantinople. In 1922, he returned to Greece and settled in Athens. Trantas is remembered for his work on gonioscopy. He was the first, already in 1900, to study and publish on this special topic of ophthalmology. Annales d´oculistique 1962,195:190. JPW

Traquair, Harry Moss (1875-1954) Scottish ophthalmologist, the younger son of the late R. H. Traquair, F.R.S., Traquair was born in Edinburgh and was educated at Edinburgh Academy, at the University of Halle, and at the University of Edinburgh. During the third or fourth year of his study at Edinburgh University he developed tuberculosis, a misfortune which again affected him during the latter part of his life and was, ultimately, caused his death. For this reason he decided to take a post in the Orange Free State, where he remained until he was 21 years of age. Returning to Edinburgh just before the commencement of the Boer War, he took the degree of M.B., C.M. in 1901, with first-class Honours, and the D.P.H. in the following year. In 1903 he obtained the M.D. and in 1904 he was elected a Fellow of the Royal College of Surgeons of Edinburgh. He was appointed an ophthalmic surgeon to the Royal Infirmary of Edinburgh in 1927 and a Lecturer in Diseases of the Eye, in the University of Edinburgh, in the same year. He was President of the Royal College of Surgeons of Edinburgh during the period 1939 to 194 1, President of the Ophthalmological Society of the United Kingdom during the years 1943 and 1944, and a member of the Council of the Faculty of Ophthalmologists. On his retirement from active practice he was elected the first Honorary Member of the Faculty. Traquair was also a member of the Senatus Academicus of the University of Edinburgh from 1932 to 1941, and he served on the University Court from 1941 to 1949. He contributed widely to the literature of ophthalmology and was awarded the Middlemore Prize in 1920, the Doyne Memorial Medal in 1922, and the Mackenzie Memorial Medal in 1939. Having received his first medical training in general practice, Traquair brought to ophthalmology not only a brilliant academic brain and a natural ability in operative surgery, but a broad clinical outlook which governed his thought throughout his life.

Although he was the author of many papers, his most outstanding contribution to medical knowledge was the work which culminated in the publication, in 1927, of "*An Introduction to Clinical Perimetry* , of which the 6th edition was published in 1949. This book was, in fact, an amplification of his Middlemore Prize Essay for 1920 *On Perimetry (inclusive of Scotometry), its Methods and its Value to the Ophthalmic Surgeon* ". A rich storehouse of painstaking personal observations, carefully selected, this book has become a world classic, and deals with a branch of ophthalmology with which the name of Traquair will always be associated. In his later years Traquair suffered a long period of painful illness which he endured bravely and philosophically. To the end he retained a characteristic interest in all that was happening in the progress of research work in ophthalmology. BJO 1954,38:770

Travers, Benjamin (1783-1858) English London surgeon and ophthalmologist, who published in 1820 the first extensive text-book on the eye to appear in the English language. Born at London he became in 1800 a private (and the first) pupil of Sir AstleyàCooper, who had just then been appointed surgeon to Guy's Hospital. In 1806 he became an M. R. C. S. Shortly afterward he was made anatomical prosector at Guy's Hospital, and, almost immediately thereupon, surgeon to the Volunteer Brigade of the East India Company. In 1810, however, he returned to civil practice, and was elected surgeon in that year to the Eye Infirmary, later known as Moorfields. In 1813 he became a Fellow of the Royal Society. After the reception of many other honors, he was made, in 1837, surgeon-extraordinary to the Queen, and in 1840 surgeon-in-ordinary to Prince Albert. He is said to have been a slow and tedious operator, but very careful and safe, and to have had remarkably good results. Aside from numerous works and articles on subjects connected with general surgery, Travers wrote: 1.*Observations on cataract*. (Med. Chir. Trans., IV, I813.) 2. *Further Observations on cataract*. (Ib., V, 1814.) 3. *On Iritis*. (In *"Surgical Essays,"* by Astley Cooper, F. R. S., and Benjamin Travers, F. R. S., London, 1818. To Travers is owing the use of mercury in non-specific iritis.) *4. Synopsis of Diseases of the Eye and Their Treatment*. (The greatest English work on ophthalmology to and including its time. London, 1820; 2d ed., 1821; 3d ed., 1824; American ed., 1825; Italian trans., Pisa 1823.) 5. *Observations on the Local Disease termed Malignant*. (Treats, among other matters, Pseudoglioma. *Med. Chir. Trans.*, XV, London, 1829,) 6. *Principles and Practice of Ophthalmic Surgery*. (Together with J.H. Green, London, 1839.) Am. Encyclop. of Ophthalm. vol.17,p.13041-13043

Travers, Benjamin, Jr. (? – 1868) English ophthalmologist, son of Benjamin Travers, Sr., and himself a surgeon and ophthalmologist, who, however, died very young. The date of his birth is not known. He was made M.R.C.S. in 1831 and was for a short time resident assistant surgeon at St. Thomas's Hospital (from 1841), and died in 1868. He wrote *Further observations in several parts of surgery…by the late Benjamin Travers, dated 1828* London 1860 (which were in fact his father´s "*Observations*"). Am. Encyclop. of Ophthalm. vol.17,p. 13041.JPW

Trembecki, Onuphrius (1812- ?). Polish physician, who devoted considerable attention to ophthalmology. Born in Jaslo County, Galicia, in 1812, he received his medical degree in 1838 at Vienna. In 1841 he was appointed hospital physician at Sacz, and, at the same time, practised at the bathing resort, Szczawnica. In 1862 he was made a Fellow of the Cracow Academy of Sciences. Aside from compositions in the Polish language, he wrote "*Allgemeine Anweisung zum Augenkrankenexamen mit Diagnost. Tabellen,"* etc. (Cracow, 1859-'68.) Am. Encyclop. of Ophthalm. vol.17,p.13043

Trnka von Krzowitz, Wenzel (1739-1791) A Bohemian anatomist and surgeon, who devoted considerable attention to ophthalmology. Born at Tabor, Bohemia, he received the medical degree in 1770 at Vienna. In the same year he was made professor of anatomy at the University of Tyrnau, in 1777 at Ofen, and in 1784 at Pest. He died at Pest May 12, 1791. His chief ophthalmologic writings were *"Historia Opthalmiae Omnis aevi observata medica continens"* Vienna 1783 and *Historia Amauroseos omnis aevi observata medica continens* Vienna 1781. Am. Encyclop. of Ophthalm. vol.17,p.13094

Troeltsch, Anton Friedrich, Freiherr von (1829-1890) German otologist of only of moderate importance for ophthalmology. Born at Schwabach, near Nürnberg, he studied at Würzburg, Vienna, Berlin, Prague, Dublin, London, and Paris. His medical degree was

received in 1853. For a long time he taught otology in Würzburg, and practised there both otology and ophthalmology. Am. Encyclop. of Ophthalm. vol.17,p.13094

Troja, Michele (1747–1827) Italian, Neapolitan ophthalmologist. Born at Andria, Italy, he studied at Naples, became assistant surgeon to the Hospital of St. James of the Spaniards, and in 1774 moved to Paris. Here, almost immediately, he was appointed surgeon-in-chief and lecturer on ophthalmology to the Hospital for Incurables. He did not write much, but was highly esteemed both as an extractor and as a depressor of cataract. In 1781 he became surgeon-in-ordinary to the King and Queen. In 1812, after a visit with the King and Queen to Sicily, he returned to Naples. Here he was one of the founders of the Institution for the Education of the Blind, and here too he remained until his death, April 12, 1827. His ophthalmologic writings are as follows: 1. *Nota sulla Cannula Lagrimo-Nasale a Cannula di Dupuytren.* Naples 1780. 2. *Lezioni Intorno, alle Malattie degli Occhi.* Naples 1780.) Am Encyclop.of Ophthal.vol.17, p.13094.

Troncoso *see also* **Victoria-Troncoso, Virgilio**

Troncoso, Manuel Uribe (1867-1959) Mexican ophthalmologist, inventor of the gonioscope. Troncoso was born in the city of Toluca, capital of the state of Mexico, the son of Romualdo Uribe and Guadalupe Troncoso. He was one of 16 children. After his preparatory schooling at the Scientific and Literary Institute of the state of Mexico, where he was a distinguished pupil, he studied medicine at the University of Mexico, receiving the degree of doctor of medicine on April 15, 1890. His thesis, an original research study entitled, "*A study on herpetic keratitis*," foreshadowed his career as a great ophthalmologist. Two years after his graduation, Troncoso, as a member of the Section on Ophthalmology, assisted at the First Mexican Medical Congress held in Mexico City in December, 1892. In 1898 he founded the *Anales de Oftalmologie* and, in 1899, he was named to the staff of the Ophthalmic Hospital which had been opened in Mexico City in 1898. Attending the XIII International Conference on Hygiene and Public Health in Berlin in September, 1907, he remained in Europe until 1908, studying ophthalmology and medical examinations in schools. On his return to Mexico, he organized a department of student hygiene with a staff of 21 doctors and three nurses who assisted him in the medical examination of 35,000 pupils. When Troncoso moved to New York in 1916, he received from the regents of the University of the State of New York the extraordinary distinction of being granted a license to practice medicine without examination because of his "*conceded eminence and authority in his profession.*" From 1916 on, Troncoso dedicated himself completely to ophthalmology. He became professor of ophthalmology at the Post-Graduate Medical School and Hospital of New York City. In 1932, he gave up this post to accept an appointment to the Institute of Ophthalmology of the College of Physicians and Surgeons, Columbia University, where he did research work. Until his retirement he served as assistant Professor of ophthalmology at Presbyterian Hospital (Columbia University). Troncoso's contributions to ophthalmology have been many and varied. In 1916, he founded the Spanish-American Medical Society of New York. In 1945, he invented the gonioscope and his second book, *A Treatise on Gonioscopy*, was published in 1947 and reprinted in 1948. The first such book in the world, it marked Troncoso a pioneer in this method of eye examination. His first book, *Internal Diseases of the Eye and Atlas of Ophthalmoscopy*, was published in 1937; the second American. edition appeared in 1950 and the Spanish translation was published in Mexico in 1952. Troncoso also wrote more than 150 articles on medicine, ophthalmology, and school hygiene, papers which have been published in Spanish, French, German and English. During his long and active life Manuel Uribe Troncoso contributed greatly to the welfare of mankind, and particularly to the progress of ophthalmology. AJO 1959,47:597-598

Trousseau, Armand (1856-1910) French ophthalmologist of Paris, grandson and namesake of a famous clinician (Armand Trousseau 1801-1857). Trousseau received his M.D. at Paris in 1883, adopted ophthalmology as his specialty, and from 1905 was director of the Foundation Ophtalmologique Adolphe de Rothschild. A distinguished cataract surgeon, he was also an investigator of prolapse of the iris, diseases of the lacrimal apparatus, and the ophthalmic manifestations of congenital diseases, especially syphilis. Trousseau wrote: *Guide pratique pour le choix des lunettes* Paris 1891 (7th edition 1907); *Travaux d'ophthalmologie* Paris 1891; *Traitement des Maladies des Yeux*

Paris 1895 (was translated into Russian) ; *Ophtalmologie; hygiène de l'œil* Paris 1892. He also edited with Truc a *Rapport* for the *Société Française d´Ophtalmologie*: *Rapport sur la Cécité & les Aveugles en France* Paris 1902. Albert.JPW

Trow, Charles (1856-1911) Canadian ophthalmologist. He graduated at Trinity Medical College, Toronto, Canada, and practised in that city. He became associate professor of ophthalmology and otology at the University of Toronto and a member of the Medical Council. Am. Encyclop. of Ophthalm. vol.17,p.13096

Truc, Hermentaire (1857-1929) French ophthalmologist. Born into a poor family in Draguignan (South France) , Truc had a difficult start in life. Having found a job in a drug store, he studied on his own to win his two bachelor´s diplomas. He then moved to Lyon, studying medicine and receiving his degree in 1885. In 1886 Truc was named lector in surgery in Montpellier where he had to teach otolaryngology, orthopedics, external pathology and ophthalmology. Four years later he was named professor of ophthalmology at the chair of the ophthalmic clinic at Montpellier university. He kept this same position for 36 years. Most of Truc´s papers are to be found in the *Annales d´Oculistique*. Truc wrote the following books: *Essai sur la Chirurgie du Poumon*, Paris 1885; *Traitement Chirurgical de la Peritonite*, Paris 1886; *De l´Extirpation des Glandes Lacrymales Orbitaires dans les Larmoiements incoercibles chez les Granuleux*, Paris 1889 ; with Valude : *Nouveaux Elements d´Ophtalmologie*, Paris 1896 (2nd ed. in 1908) ; with A. Jalabert and P. Chavernac he edited the second edition of *Catalogue Général des Thèses Françaises d´Ophtalmologie* Montpellier 1904 ; with P. Chavernac : *Hygiène Oculaire et Inspection Oculistique des Écoles*, 3rd ed. 1911 ; with P. Pansier *Contributions à l´Histoire de l´Ophtalmologie Francaise*, Paris 1907. Truc received on the occasion of his scientific jubilee, May 16th 1928, a medal engraved by Dropsy bearing on one face his portrait and on the back a picture of the clinic he founded. JPW

Tseng, Peter (1956-) Singaporean ophthalmologist. Senior Consultant, Head of Department A , Director, Cataract and Comprehensive Ophthalmology Division, Singapore National Eye Centre. He graduated from the University of Singapore in 1980. He received the Fellowship of the Royal College of Surgeons (Glasgow) in 1987. He has held the above appointments since 1993. His research interest includes Photorefractive Keratectomy and Laser-in-situ Keratomelieusis. He has presented many scientific papers and published articles in scientific journals on these topics. He has a contribution in the book Refractive Surgery — Current Techniques and Management by Olivia N. Serdarevic, M.D. published by Igaku-Shoin. He is a member of the editorial board for the Asia Pacific Journal of Ophthalmology and the review board for the Singapore Medical Journal. He was the past president of the Singapore Society of Ophthalmology (1990-1992), Treasurer General, World Cataract Surgeons Society (1994 —1996). He is a member of the National Committee for Ophthalmology, American Society for Cataract and Refractive Surgery and many other International Societies. (Dr Peter Tseng, Singapore National Eye Centre, 11 Third Hospital Avenue, Singapore 168751. Tel: (65) 2277255, Fax: (65) 2277290; e-mail: snecpt@pacific.net.sg)

Tso, Mark O. M. (1936-) American ophthalmologist and pathologist of Chinese origin, Professor of Ophthalmology and Pathology, Johns Hopkins University, School of Medicine. He graduated from the University of Hong Kong, Medical School with M.B., B.S. in 1961. He received his residency training in Ophthalmology at Boston University Hospital (1964-1967) and then further training in Ophthalmic Pathology at Walter Reed Army General Hospital (1975-1976), at Armed Force Institute of Pathology with Dr. Lorenz E. Zimmermann (1967-1968) and at the Department of Anatomic Pathology, University of Illinois (1977-1978). He has been in the present position as above since 1999 and also serves the University of Illinois as Adjunct Professor (1995-) and Honorary Professor to Beijing Medical University (1988-). He returned to Hong Kong in 1994 and worked until 1999, as the Professor and Chairman, to establish the Department of Ophthalmology and Visual Sciences of the Chinese University of Hong Kong and to consolidate the Department of Ophthalmology of the University of Hong Kong. He also spent a busy period as the Chief of Service of Hong Kong Eye Hospital. For his outstanding contributions on Pathology of Retinal Diseases, the University of Hong Kong conferred on him Doctor of Science in 1995. His professional activities extended

worldwide and he holds many positions in the International Societies: they are Vice-President of the International Council (1998-), Councillor and Honorary Treasurer of the Asia-Pacific Academy of Ophthalmology, Member (Chair XI) of the Academia Ophthalologica Internationalis (1997-) and Member of the Verhoeff Society: he is a member of many reputable International professional Societies. He is one of the world's leading Ophthalmic Pathologists and has published more than 240 original papers in international journals. Due to his expertise, he has been invited to many universities as visiting professor and engaged in teaching. He also has many editorial assignments and they are Investigative Ophthalmology (1977-1982), American Journal of Ophthalmology (1995-1999), Hong Kong Medical Journal (1995-1998), Japanese Journal of Ophthalmology (1998) and British Journal of Ophthalmology (1998), and many others. For the excellence of his contributions, he has received honor awards on more than 34 occasions. Above all, the Association for Research in Vision and Ophthalmology (ARVO) granted him the highest honor "Friedenwald Award" in 1989 in recognition of his meritorious research (*Experiments on visual cells by nature and man: in search of treatment for photoreceptor degeneration* (Friedenwald Award and Lecture). Invest. Ophthalmol. Vis. Sci. 30: 2421-2454, 1989). One can find a list of his selected bibliography in this issue of Invest. Ophthalmol and Vis. Sci.. Some recent works embrace "*Expression of a mutant opsin gene increases the susceptibility of the retina to light damage*. Vis. Neurosci, 14: 55, 1997", "*Iron-induced apoptosis in the photoreceptor cells of rats*. Invet. Ophthalmol. Vis. Sci. 39: 631, 1998" and "*Studies of prevalence of blindness in the Asia-Pacific Region and the worldwide initiative in ophthamic education.* Am. J. Ophthalmol. 126: 582, 1998". (Professor of Ophthalmology and Pathology, The Wilmer Ophthalmological Institute, the Johns Hopkins University, School of Medicine, 474 Wilmer-Wood Building 600 North Wolfe Street, Baltimore, MD 21287-9142, U. S. A. phone: +1-410-614-0229; fax: +1-410-614-1114, e-mail: matso@jhmi.edu)(SM)

Tsubota Kazuo (1955-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Tokyo Dental College. He graduated from Keio University in 1980, studied Ophthalmology at the University under Prof.àUEMURA Yasuo and received his Doctor of Medical Sciences in 1989. He extended his studies in 1987 as a Research Fellow at Massachusetts Eye and Ear Infirmary, Harvard Medical School and worked under Prof. C. H. Dohlman (*Noninvasive measurements of pyridine nucleotide and flavoprotein in the lens.* Invest. Ophthalmol Vis. Sci. 28: 785, 1987; *Noninvasive metabolic analysis of preserved rabbit cornea*. Arch. Ophthalmol. 106: 1713, 1988. with Kenyon, K. R.). He has held the current position above since 1998, and conjointly serves as a visiting clinical professor to Keio University (1990-) and Asahikawa Medical University (1993-). He works in the field of tears, contact lens, cornea and external eye diseases and has published more than 135 original articles in the English Language. His many publications in these fields embrace "*Treatment of severe dry eye*. Lancet 348, 123, 1996", "*Quantitative videographic analysis of blinking in normal subjects and patients with dry eye*. Arch. Ophthalmol 114: 715, 1996" and "*Cost-effectiveness in Japanese eye banks*. Cornea 16: 243, 1997". He is a Councillor to the Japanese Ophthalmological Society (1992-), Executive Director of the Japan Contact Lens Society (1993-), of the Japan Keratoplasty Society (1998-) and Director of the Eye Bank of Tokyo Dental College (1998-). He is also on the Medical Advisory Board of National Sjogren's Association (U.S.A.) and on the Advisory Council of World Cataract Lens Project. He is on the editorial board of Atarashi-Ganka (Journal of the Eye), J. Jpn. Contact Lens Society, Folia Ophthalmologica Jpn., Cornea, Jpn. J. Ophthalmol., Revista Brasilieira de Oftalmologia, Current Insights in Ophthalmology, Vision Times, Ophthalmology Times, and Middle East Journal of Ophthalmology. For the excellence of his research, he received the Junior Award of the Japanese Ophthalmological Society (1988), Honor Award of the American Academy of Ophthalmology (1994) and Film Festival Grand Prize at American Society of Cataract and Refractive Surgery (1996) and at the European Society of Cataract and Refractive Surgery (1996) and Summit Technology - Pioneer in Refractive Surgery Award (1999). (Department of Ophthalmology, Tokyo Dental College, Ichikawa General Hospital. 5-11-3 Sugano, Ichikawa, Chiba, 272-8513, Japan. phone: +81-47-322-6781, fax: +81-47-322-6786, e-mail: kazuo@eyebank.or.jp)(SM)

Tsukahara, Isamu (1923-) Japanese ophthalmologist, Professor Emeritus of Kyoto University and of Kansai Medical University. He is currently the Chairman of the Board of Trustees of the Kansai Medical University. He graduated from Kyoto University in 1945 and studied at the Ophthalmology Department under the ProfessorsàYAMAMOTO Seiichi andàASAYAMA Ryoji; he received his Doctor of Medical Sciences in 1955 from the University (thesis: *Effects of anterior pituitary hormones on thiamin concentration in the retina and choroid*. J. Jpn. Ophthalmol. Soc. 58:1189, 1195, 1954). He also studied in 1958-1960 at Stanford University with Prof. D. K. Pischel and at Columbia University, College of Physicians and Surgeons with Prof. A. B.àReese. He served as the Professor and Chairman of the Ophthalmology Department of Kansai Medical University in 1966-1975 and of Kyoto University in 1975-1984. He worked as the Director of Kyoto University Hospital in 1980-1984 and as the President of Kansai Medical University 1985-1992. He has been the Chairman of the Board of Trustees of this University since 1988 and a Trustee of the Japan Association of Private Universities since 1991. He also served as the President of the Japan Association of Private Medical Colleges in 1995-1999. His research interest has been in retinal diseases with emphasis on the pigment epithelium. He gave a special lecture "*Disorders of the retinal pigment epithelium*" at the 23rd International Congress in 1978, and an Award Lecture of the Japanese Ophthalmological Society "*Functions of the retinal pigment epithelial cells* " at the 87th Congress of the Society in 1983. Also he delivered the Holmes Lecture "*Some new biochemical aspects of the retinal pigment epithelium* " at the 13th Congress of the Asia-Pacific Academy of Ophthalmology in 1992 (Proceedings of the Congress: Current Aspects in Ophthalmology, 1992). He also gave the Commemorative Lecture of the Centennial of the Japanese Ophthalmological Society "*Some aspects of research and development in diagnosis and treatment of central serous chorioretinopathy in Japan*" at the 100th Congress of the Society in 1996. (President, Kansai Medical University, 10-15 Fumizono-cho, Moriguchi, Osaka 570-8506, Japan. phone: +81-6-6992-1001, fax:+81-6-6996-2855)(SM)

Tsukahara, Shigeo (1935-) Japanese ophthalmologist, Vice-President and Hospital Director of Yamanashi Medical University. He was born as the son of an ophthalmologist from Tokyo University; he graduated from Chiba University in 1961 and studied Ophthalmology at Tokyo University under Prof. HAGIWARA Hogara, and received his Doctor of Medical Sciences in 1969 (thesis: *Histochemical studies of sympathetic nerve*, No. 1. J. Jpn. Ophthalmol. Soc.72: 1649,1968, No. 2, ibid.73: 982, 1969). He received a British Council Scholarship in 1969 and carried out research at Manchester Royal Eye Hospital with Prof. C.àPhillips and in the following year he conducted research at the University of Pennsylvania with Dr. A. Laties. On his homecoming he was appointed Lecturer at Tokyo University in 1971, and then he moved to being Assistant Professor of Shinshu University in 1974. He was promoted to Professor and Chairman of the Department of Ophthalmology of Yamanashi Medical College in 1988 and then he was elected to the present position in 1998. His research interest has been vegetative nerves of the eye and glaucoma, and he served as the Chairman of many Research Projects in this field. Some examples of his publications are "*Morphological changes and immunocytochemical localization of microtubule-associated protein 1 in guinea pig optic nerves after acute increase in intraocular pressure*. Invest. Ophthalmol. Vis. Sci. 39: 963, 1998" and "*Anterior chamber angle biometry: quadrant variation, age change and sex difference*. Curr. Eye Res. 17: 120, 1998S. He has written many books that include "*Ophthalmology ; A primer for medical students and practitioners*," with C. .Phillips and C. V. Clark, Bailliére Tindal, 1994 and "*Glaucoma*", Kanehara Publ. Co.1995. He is a Councillor of the Japanese Ophthalmological Society since1988, and the Executive Board of Trustees of Japan Glaucoma Society on which he served as the Secretary General in 1994-1997, and a member of many Japanese professional Societies and a fellow of the American Academy of Ophthalmology, and a member of European Society of Ophthalmology. In recognition of his meritorious research, the Japan Glaucoma Society granted him the Suda Award and he delivered the Award Lecture in1997 (Recent concept of glaucomatous atrophy). (Yamanashi Medical University, Tamaho-cho, Nakakoma-gun, Yamanashi-ken, 409-3821, Japan; phone:81-55-273-1111, fax: 81-55-273-2675 or 81-55-273-6685, e-mail: shigeot@res.yamanashi-med.ac.jp)(SM)

Tsuru, Tadahiko (1953-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Jichi Medical School. He graduated from Tokyo University in 1978, studied Ophthalmology under Prof. àMISHIMA Saiichi and received his Doctor of Medical Sciences in 1984 (thesis: *Endothelial wound-healing of monkey cornea: Fluorophotometric and specular microscopic studies*. Jpn. J. of Ophthalmol. 28:105-125, 1984).He spent one year (1988-1989) at the Retina Foundation, Boston, and carried out research with Drs. K. Kennyon, A. Neufeld and N.C. Joyce. He has been in the present position as above since 1998. His major interest is cornea and some examples of his publications are "*A fluorometric study of the corneal graft: a postoperative follow-up*. Graefe Arch. Clin. exp. Ophthalmol. 222: 105, 1984" and "*The role of cell adhesion molecules and cytokines in allograft rejection after penetrating keratoplasty in mice.* Current Opinions in the Kyoto Cornea Club. Vol.II, pp.41-54, Kugler Publications, The Hague, 1998". He serves the Japanese Ophthalmological Society as a Councillor (1998-) and the Japanese Cornea Society as Executive Director (1997-). He is a member of the American Academy of Ophthalmology, Association for Research in Vision and Ophthalmology and International Society for Eye Research, besides being a member of many Japanese professional Societies. (Department of Ophthalmology, Jichi Medical College, 3311-1 Yakushiji, Minamikawachi, Kawachi, Tochigi 329-0498, Japan. phone: +81-285-58-7382, Fax: +81-285-44-8365, e-mail: ttsuru@jichi.ac.jp)(SM)

Jun Tsutsui

Tsutsui, Jun (1923-1991) Japanese ophthalmologist, Professor Emeritus of Kawasaki University, son of Yoshimitsu TSUTSUI. He graduated from Kumamoto University in 1945, and studied for 2 years at the Department of Pharmacology of the University and in 1947 he started to study Ophthalmology at Okayama University under Prof. HATA Bunpei. He received the degree Doctor of Medical Sciences from Okayama University in 1952 (thesis: *series of several papers on biochemistry and metabolism of conjunctiva affect by trachoma*, J. Jpn. Ophthalmol. Soc.Vol. 53, 54, 55 and 56: 1949, 1950, 1951, 1952). In recognition of his contributions to Trachoma study, he received the Chibret Award from the Ophthalmological Society of France in 1953. He was the Professor and Chairman of the Department of Ophthalmology of Kumamoto University from 1969 to 1974 and moved to Kawasaki University as the Professor and Chairman of the Ophthalmology Department in 1974 and served until his retirement in 1989. His studies covered a wide area of Ophthalmology. He served as the Secretary General of the International Symposium of Strabismus in Kyoto 1972, and gave a lecture on "*Abnormality of the visual evoked response in various types of amblyopia*, Jpn. J. Ophthalmol.17: 83, 1973". He delivered a lecture on keratoplasty as one of the symposists at the 69th Congress in 1965, a lecture on dynamic electroencephalography at the 88th Congress in 1984 (*Dynamic topography of visual evoked potentials and extrageniculate projection in case of riddoch phenomenon*. Jpn. J. Ophthalmol. 28: 20, 1984) and a special lecture "*From the eye to the brain, from the brain to the eye: study with moving topography*" at the 92nd Congress in 1988 of the Japanese Ophthalmological Society. He founded a new Faculty in the Kawasaki University of Medical Welfare in 1991, i.e. the *Faculty of Medical Professions*, Department of Sensory Science and served as the Chairman of the Department. Unfortunately he passed away just after the Entrance Ceremony of the first class of students.(SM)

Tsutsui, Yoshimitsu (1895-1976) Japanese ophthalmologist, Professor of Ophthalmology of Kumamoto University, father of TSUTSUI Jun. He graduated from Tokyo University in 1920, studied Ophthalmology under Prof. àISHIHARA Shinobu. He was appointed the Assistant Professor of Ophthalmology of Okayama University in 1927 and spent 2 years in 1929-1931 at University of Zurich. He received the degree Doctor of Medical Sciences from Tokyo University in 1931(thesis: *Effects of radium and x-rays on the pigment migration in the retina*. J. Jpn. Ophthalmol. Soc. 36: 1767, 1931). He was then invited to be the Professor and Chairman of the Ophthalmology Department of Kumamoto University in 1941. He maintained the Department during the hard time of World War II and resigned in 1947: he practiced in the city of Okayama. He carried out many works on dark adaptation, vitamin deficiency and lens protein. In 1947, the Government granted him the Third Order of The Sacred Treasures in recognition of his meritorious service. (SM)

Tuano, Prospero M. C. (1947-) Filipino ophthalmologist, Assistant Director, Institute of Ophthalmology, St Luke's Medical Center and Head of the Orbit Service, Department of Ophthalmology, University of Philippines, College of Medicine (UPCM). He graduated from the UPCM in 1974 and received his M.D. degree. After completing the Residency Training he became a Diplomate of the Philippine Board of Ophthalmology. He carried out research on Orbital Diseases at the Academisch Medisch Centrum in Amsterdam (1983) and at Kobe University, Kobe Japan (1990). He has held the following important positions: Chairman, Department of Ophthalmology, UPCM (1991-1998), President of the Philippine Society of Ophthalmology (1995), Executive Council of the Society (1986-1995) and Consultant of Medical Manpower Training and Education Committee of the Ministry of Health (1993-1995) and Editorial Board of Philippine Pharmaceutical Directory (1993). He acted as the Assistant Secretary General to the Asia-Pacific Academy of Ophthalmology (APAO) (1999). He currently serves as the Secretary of the Philippine Board of Ophthalmology and Managing Editor of the Philippine Journal of Ophthalmology. He wrote many publications, e.g. "*Conjunctivoplasty for phthisis bulbi prosthesis*." Phil. J. Ophthalmol. 11: 4, 1979 and "*The National Eye Injury Registry of the Philippines*." Proc. HOYA Vision Care First Asia-Pacific International Conference, 1998. He has contributed chapters to the (Philippine) Textbook in Ophthalmology. He is a recipient of G. de Ocampo Professional Chair and Distinguished Service Award from the APAO.(Institute of Ophthalmology, National Institute of Health, UP Manila, PGH Compound Taft Avenue, Manila, phone/fax: 63-524-7119, e-mail: pmt-md@i-manila.com.ph) (SM)

Tuckett, Ivor Lloyd (1873-1942) British ophthalmologist. Tuckett was educated at Marlborough and Trinity College, Cambridge, and took his medical course at University College Hospital where he was house physician. He took the "College" diplomas in 1898 and proceeded M.D.Cantab. in 1910. After leaving University College Hospital he was house surgeon at Moorfields and next returned to Cambridge to act as senior demonstrator of Physiology and assistant to the Downing Professor of Medicine. After a few years he was elected Fellow of Trinity College and he was also a Fellow of University College, London. Tuckett joined the Ophthalmological Society in 1917. He contributed papers on intra-ocular foreign bodies to early volumes of the British Journal. Much of his literary work was physiological and he was the author of an important paper in the Journal of Physiology on the structure of non-medullated nerve fibres.BJO 27,143,1943

Tuovinen, Erkki (1927-) Finn professor of ophthalmology at the University of Kuopio, Finland from 1974 to 1994 (retirement). Born May 15th, 1927, Tuovinen received his MD degree in Helsinki University in 1954. From 1955 he was a resident at the University Eye Clinic in Helsinki for five years, during which time he served as private assistant for professors Mauno and SalmeàVannas. After specializing in ophthalmology in 1960 at he University Eye Clinic of Helsinki, Tuovinen held positions of senior ophthalmologist at the same clinic for two years. During that time his primary interest was glaucoma, which later became his main topic of scientific research. Tuovinen studied new tonography research, brought into Finland from USA in 1958 by AhtiàTarkkanen, who later was professor at the same clinic.Using the tonography method, among other criteria, Tuovinen published in 1961 his medical thesis: Therapeutic Results in Primary Glaucoma with Special Reference to Tonographic Observations. Tuovinen moved from Helsinki to Kuopio in 1962 to head the recently founded eye clinic in the regional hospital. His eight year tenure there focused on developing operational glaucoma treatment, but also involved spreading the use of contact lenses for extended wear in connection with cataract operation. Research activities and cooperation with other clinics was developed at that time, as well. Among other fields, neuro-ophthalmological methods with radioisotopes were adapted in diagnosing various nonhaemorrhagical cerebral strokes. Also, the number and value of his scientific publications was increased during this period. As a result, in 1967 Tuovinen was appointed as docent of ophthalmology at Helsinki University, a position he held until 1992. In 1970 Tuovinen's career took a change as he again moved to Helsinki, this time to head the City Eye Hospital. At that time both clinical and scientific cooperation with the University Eye Clinic was developed. This period lasted for four years, after which Tuovinen returned to Kuopio to head the newly founded University Eye Clinic and he became the first professor of ophthalmology of the new Kuopio University.

His work in developing and carrying out ophthalmological teaching, both on the basic and specialist fields, on theoretical and practical levels, was so successful that at the time of Tuovinen's retirement nearly half of the residents had doctorate degrees. In 1982 Tuovinen wrote a part of a textbook of Ophthalmology in Finnish. He published 36 research reports, overviews and articles in Finnish , the latest on etiology of Sjögren's syndrome in November 1999. In 1991 Tuovinen received the "*Teacher of the Year*" award in Kuopio University. He has served on the board of *Finnish Ophthalmological Society* in 1968-69, and as chairman 1976-77. He has served on the board of *The Eye Foundation*, giving grants to ophthalmologists since 1970, and as chairman 1990-96. Since 1970 he has been on the national committee to develop cooperation between ophthalmologists and opticians. He designed the new eye clinic as an expert member of the construction board of Kuopio University Hospital in 1972-75. He has been national advisor on ophthalmological matters in insurance and related fields in 1975-96 and on the board of *Acta Ophthalmologica* in 1979-90.Publications: (This list excludes 36 articles written in Finnish) Thesis: *Therapeutic Results in Primary Glaucoma with Special Reference to Tonographic Observations*: Acta Ophthalmological Supplement number 67, 1961; he contributed in the book "*The eighteenth Reumatism Review*" 1967, a chapter concerning the eye; Papers were published in *Acta Ophthalmologica*, Copenhagen (Acta Ophthal.), *Klinische Monatsblätter fur Augenheilkunde* (Klin Mbl Augenhk), and in other periodicals: a) *Acta Ophthal*.1957:35:381, 528-542, 543-549; 1960:38:227-228;1961:39:433-438, 445-459;1962:40:149-152; 1965:43:410-414,669-672; 1966:44:581-584, 585-589, 631-636, 669-675, 676-683, 704-706, 713-714, 714, 823-827, 901-905, 960-973; 1967: 45:257-258,1027-1029; 1968:46:162-170.1971:49: 293-300.1980:58:121-124; 1985:63:439-442; b) *Nordisk Medicin* 1960:63:700-701; c) *Klin Mbl Augenhk.* 1962:140:443-444,711-713;1965:146:123-124; *Das Deutsche Gesundheitswesen* 1962:29:1237-1238; *Ann.Med.exp.Fenn.*1963:41:415-418; Wissenschaftliche Zeitschrift der Universität Rostok 1965:14:131-137. Ann.Med.Int.Fenn.1967: *Iv-injection of Radioisotope and Ophthalmodynamometry for the Evaluation of Occlusive Cerebrovascular Diseases* Chemotherapy:1983:29:188-191. Email: tuovinen@sci.fi (AB)

Turnbull, Alexander (1794(?)-1881) Scottish ophthalmologist, who received his M.D. at the Edinburgh University in 1820 and later on practiced in London. He wrote the following: *A Treatise on Painful Nervous Diseases, more Especially on the Discovery and Application of Many New Remedies for Affections of the Eye and Ear*.1837, *Treatment of the Diseases of the Eye by Means of Prussic Acid Vapor and Other Medical Agents*. London 1843. Am. Encyclop. of Ophthalm. vol.17,p.13464

Turnbull, Charles Smith (1847-1918) American ophthalmologist. Turnbull received the A.B. at the Central High School , Philadelphia in 1868, the A.M. in 1869, the Ph.D. at the University of Pennsylvania in 1871, and also there the M.D. in 1873. In 1874-5 he studied the eye, ear, nose and throat in Vienna. He was surgeon to the U.S. Geological Survey in Wyoming and Montana in 1872, and of the Yellowstone Park in 1871-72; resident surgeon to the New York Ophthalmic and Aural Institute in 1873-75; chief of the aural department at the Jefferson Medical College for ten years, oculist and aurist to the German Hospital, Philadelphia, for more than 25 years. He was the author of numerous articles on ophthalmology and otology, and also translated from the German, Arlt "*Injuries of the Eye Considered Medico-Legally*," Gruber´s "*Tenotomy of the Tensor Tympani Muscle*," and Bruner's treatise "*On the Methods of Connection of the Ossicles*" AJO,1:698-699.

Tyndall, John (1820-1893) Irish physicist, born near Carlow, Ireland. Tyndall worked for some years as a civil engineer before beginning mathematical, physical, and chemical studies at the University of Marburg in 1848; two years later he received a doctoral degree. Settling in London, he conducted research in a great range of fields, most notably on the absorption and radiation of heat and light by gases and liquids, and on the effects of the atmosphere on sound. He became professor of natural philosophy at the Royal Institution in 1853, and in 1867 succeeded his friend Michael Faraday as superintendent. Tyndall's popular lectures and books were admirable expositions of science for the layman. He wrote: *Light and electricity: notes of two courses of lectures before the Royal Institution of Great Britain*. New York 1871; *Lectures on light delivered in the United States in 1872-1873*. New York 1871; *New fragments*. London 1892; *Das Licht. Sechs Vorlesungen ... autoristirte Deutsche Ausgabe* Braunschweig: Friedrich Vieweg und Sohn, 1895 (2 nd ed). Albert.

Tyrell, Frederick (1793-1843) British ophthalmic surgeon of London. Tyrell was apprenticed to Sir Astley Cooper in 1811 and made M.R.C.S. in 1816. He became surgeon to the London Eye Infirmary (1820) and St. Thomas' Hospital (1822), and was renowned for his skill in ophthalmic surgery. His major publications are an edition of Cooper's surgical lectures (1824-1827). He also wrote: *A practical work on the diseases of the eye, and their treatment, medically, topically, and by operation*. 2 vols. London 1840. Albert

Tyrrell, Timothy Martin (1908-1968) British London ophthalmologist. Educated at Westminster School and Trinity College, Cambridge, he studied medicine at St. Thomas's Hospital, where he became ophthalmic house-surgeon and registrar, taking his F.R.C.S. in 1935. Thereafter his professional career was established and unusually full. His main post was honorary surgeon at the Royal Eye Hospital where, apart from his brilliance as a surgeon and surgical teacher, he participated wholeheartedly in every activity and interested himself enthusiastically in its management. In addition he was ophthalmic surgeon to the Willesden General Hospital, the Nelson Hospital, the Teddington Hospital, the French and the Italian Hospitals in both of which his wide knowledge of languages was useful, and to the Royal School for the Blind at Leatherhead, where his humanity became evident in his efforts to rehabilitate patients who had previously been on the blind register. In 1944 he was elected a Hunterian professor at the Royal College of Surgeons for his work on the surgery of the lacrimal passages, and for many years was an examiner for the diplomate examinations in ophthalmology. Nor were Tyrrell's interests confined to ophthalmology. He was a Liveryman of the Drapers' Company, a Past Grand Deacon of his Masonic Lodge, a member of the Council of the Worcestershire Association, an authority on ecclesiastical architecture in Britain. At the time of his death he was president of the Southern Ophthalmological Society. BJO 1968,52:432

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Yukio Uchida

Uchida, Yukio (1926-1998) Japanese ophthalmologist, Professor Emeritus of Tokyo Women's Medical College. He graduated from Tokyo University in 1953, studied Ophthalmology under Prof. HAGIWARA Hogara and received the degree Doctor of Medical Sciences in 1961 by *studies of cultured corneal cells and their alterations by herpes and adenovirus* (J. Jpn. Ophthalmol. Soc. 63: 468, 2897, 3753, 1959; ibid. 64: 1257, 1960; ibid. 65: 861, 1961). He served as the Assistant Professor of Tokushima University (1962-1967) and of Tokyo Women's Medical College (1967-1972), and then the Professor and Chairman of the Ophthalmology Department of the Medical College (1974-1992). He was the Director of the College Hospital in 1988-1992, and then he worked as a Member of the Executive Board of the College. He was the leading specialist in viral external eye diseases and gave lectures "*Corneal infections, corneal herpes – diagnostic problems*" at the 76th Congress of the Japanese ophthalmological Society in 1972 (J. of the Society. 76: 1391, 1972) and "*External eye diseases due to viral infection*" at the 94th Congress in 1990 (J. of the Society. 94: 889, 1990). He was also a member of the Study Project of Acute Hemorrhagic Conjunctivitis: "*Clinical features of acute hemorrhagic conjunctivitis due to Enterovirus 70.* Ed in Chief, ISHII Keizo: *Acute Hemorrhagic Conjunctivitis*, p. 213, Tokyo University Press, 1989. He served as a Member of the Executive Board of many Japanese Societies and of Government Committees. In recognition of his distinguished service, the Government conferred on him the posthumous decoration of the Third Order of the Sacred Treasures.[SM]

Ueki, Showa (1927-1993) Japanese neuropharmacologist, Professor Emeritus of Kyushu University, the President of the 10th Congress of the Japanese Society of Ocular Pharmacology in 1990. He graduated from the Faculty of Medicine, Kyushu University in 1949, studied at the Department of Pharmacology of the University and received his Doctor of Medical Sciences in 1956. He served as Assistant Professor 1956-1966 and the Professor and Chairman of the Department of Pharmacology of the University from 1966 to his retirement in 1990. He studied at the Department of Pharmacology, University of Michigan in 1957-1959. His research interest covered many areas of pharmacology, and particular emphasis was on the pharmacology and metabolism of neurotropic drugs and further neuroprotective drugs that ameliorates the brain functions. He developed many new antidepressants that are currently used in clinical practice. He served many domestic Societies as a Councillor, e.g. Japanese Society of Pharmacology, Japanese Society of Neuropharmacology. He was also a member of Collegium Internationale Neuropsychopharmacologicum and he delivered 21 lectures at International Congresses,

e.g. "*Differntial mechanisms of anticonflict action of benzodiazepines (BDZZ) in the central amygdala (ACE) and mammillary body*. Xth International Congress of Pharmacology, Sidney 1987". He organized as the President the 4th Symposium of the Japan Science Council "*The basic and clinical aspects of neurotropic drugs*" in 1980 and played a similar role in many Japanese Societies. In recognition of his outstanding contributions, the Czechoslovakia Society of Pharmacology elected him as an Honorary Member in 1979 and also he received the Japanese Society of Pharmaceutical Sciences Award in 1984. He published 39 books, 290 original scientific papers and gave 52 special lectures at domestic and international congresses. Two examples of his publications are "*The effector sites of drugs in the central nervous system*. Nankodo, Tokyo 1968", "*Mouse-killing behavior (muricide) in the rat and the effect of antidepressants*. *New Vistas in Depression*. Ed. Langer et.al., Pergamon Press, Oxford, 1982"(SM)

Misao Uemura

Uemura, Misao (1900–1997) Japanese ophthalmologist, Professor Emeritus of Keio University. He graduated from the Faculty of Medicine of Keio University in 1925, studied Ophthalmology under Prof. →SUGANUMA Sadao and received the degree Doctor of Medicine in 1929. He worked as the Assistant Professor in 1931-1941 and the Professor and Chairman of the Department of Ophthalmology of Keio University from 1941 to his retirement in 1961: he served as the Director of the University Hospital (1957-1959) and the Dean of the Faculty of Medicine (1959-1961). He further served as the Director of Tokyo Second National Hospital (1961-1971) and the Director of Ryukyu University Hospital (1971-1975). His professional activities were numerous, e.g. President of the Japanese Ophthalmological Society (1951-1967), President of the 57th Congress of the Society (Special Lecture: *the Ocular arterial pressure*. J. Jpn. Ophthalmol. Soc. 57: 394, 1952), founder of the *Japanese Association of Strabismus and Amblyopia* and the first President (1964-1972), President of the Japanese Association of Illumination (1961-1965), and many others. At the 17th International Congress of Ophthalmology in 1954 (Montreal-New York), he presented *Uemura's Electronic Ophthalmodynamometer* (J. Jpn. Ophthalmol. Soc. 56: 168, 1319, 1952) which impressed the participants. He edited, together with Prof. →NAKAMURA Yasushi and Prof. →UMAZUME Kakichi, the *Handbook of Ophthalmology*, 26 volumes and 42 books of the Japanese Ophthalmological Society in 1955: himself being the author of Vol. 4, Book 1 "*The eye and illumination, the eye and environment*". He was elected to Membership of the International Council of Ophthalmology in 1958 and served until 1970. He was a Member of many Government Councils, e.g. Medical Ethics Council of the Ministry of Health and Welfare (1967-1969) and Council for Medical College Evaluation of the Ministry of Education and Culture (1961-1965), etc. He received many Awards for his scientific achievements, e.g. ICHIKAWA Award of the Jpn. Ophthalmol. Soc. and many others. In recognition of his distinguished service, the Government conferred on him the Second Order of the Rising Sun.[SM]

Yasuo Uemura

Uemura, Yasuo (1924-1996) Japanese ophthalmologist, Professor Emeritus of Keio University. He graduated from the Faculty of Medicine of Keio University in 1953, studied Ophthalmology under Prof.→UEMURA Misao and received the degree Doctor of Medical Sciences in 1960 (thesis: *Pressure of the central retinal artery during general anesthesia*. Series of 5 articles: Jpn. J. Ophthalmol. Soc. 61: 2422, 1957; ibid. 62: 19; 634, 777, 2399, 158; ibid. 63: 1, 327, 1959). He worked as the Assistant Professor of Ophthalmology in 1965 and also as the Head of the Department of Ophthalmology of the National Childrens Hospital in Tokyo (1965-1973). He was then appointed Professor and Chairman of the Department of Ophthalmology of Keio University in 1973 and served until his retirement in 1990: during his tenure he served as the Dean of the Faculty of Medicine in 1983-1989. He was then on the Executive Board of Keio University from 1989 until his death. His professional activities included the following. President of the Japanese Ophthalmological Society (1983-1985, 1989-1991), President of the 37th Congress of the Japanese Society of Clinical Ophthalmology, Founder and the President of Japanese Association of Strabismus and Amblyopia (1978-1990), Member of the Japan Science Council (1991-1993) and Member of Medical Ethics Council of the Ministry of Health and Welfare (1994-1996). He also served as a member of many Government Committees. He played a key role in the enactment of the "Orthoptist Act" in 1971 and served as the Director of the National School of Orthoptists in 1971-1973. His main

interest was strabismus, amblyopia, development of the eye and Pediatric Ophthalmology. His publications and special lectures in these fields are “Studies of amblyopia” (68th Congress of the Jpn Ophthalmol. Soc., J. of the Society, 68: 663, 1964), “Clinical aspects of retinopathy of prematurity” (80th Congress of the Society, J. of the Society 80: 1420, 1976) and “Specific problems in the development of the retina and vitreous” (89th Congress of the Society, J. of the Society 90: 1, 1986). He served as the Chairman of the Joint Committee for the Study of Retinopathy of Prematurity of the Ministry of Health and Welfare (1974-1977): the Committee proposed a new Classification of this disease (Uemura: Current status of retrolental fibroplasia, Jpn. J. Ophthalmol. 21: 366, 1977). This classification greatly contributed to the International Classification of this disease. He was granted the Torii Award, Merit Award of Prince Orinda, and International Cooperation Award of the Japanese Government.

Ueno, Hisayuki (1942-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology of Kochi Medical School. He graduated from Tottori University, School of Medicine in 1968, studied Ophthalmology at Okayama University School of Medicine under Prof. OKUDA Kanji and received his Doctor of Medical Sciences in 1976 (thesis: *Studies on the radial peripapillary capillaries (RPCs)*. I. J. Jpn. Ophthalmol. Soc. 80: 267, 1976; II. ibid. 80: 281, 1976). He has been in the present position as above since 1990. His special interest is in Ophthalmic Pathology and he has many publications in the field, e.g. "*Electron microscopic observation of the cells floating in the anterior chamber in a case of phacolytic glaucoma*. Jpn. J. Ophthalmol. 33: 103, 1989" and "*Floating cells in anterior chamber after IOL implantation*. Jpn. J Ophthalmol. 35: 359, 1991". He is a Councillor to the Japanese Ophthalmological Society and the Japan Glaucoma Society. He is also a member of the Association for Research in Vision and Ophthalmology. (Department of Ophthalmology, Kochi Medical School, Nankoku-shi, Kochi-ken, 783-8505, Japan. phone: +81-8-8866-5811, fax: +81-8-8880-2392)(SM)

Ueno, Satoki (1947-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, St Marianna Medical College. He graduated from Kyoto University in 1973, studied Ophthalmology at the University under Prof.→TSUKAHARA Isamu, and received his Doctor of Medical Sciences in 1981 (thesis: *Ultracytochemical localization of ouabain-sensitive,K⁻-dependent p-nitrophenyl- phesphatase activity in the guinea pig retina*. Acta histochem. cytochem. 13: 679, 1980.) He studied cytobiology in retinal and pineal photoreceptor cells with Prof. Andreas OKSCHE and Prof. Manfred UECK at the Institute of Anatomy and Cytobiology of the University of Giessen , Germany (1982-1983). His research interest is in Ophthalmic cytobiology and Glaucoma, and some examples of his publications are “*Cyclic nucleotide phosphodiesterase activity; histochemical and cytochemical methods*”. Methods in Enzymology 159: 477, Academic Press, 1988 and “*Studies of the blood-ocular barrier-ultrastracture in relation to function, development of methods*” J.Jpn. Ophthalmol. Soc. 92:1913, 1988 (Special Report to the 92nd Congress of the Society). He has been in the present position since 1996, and serves as a Councillor to the Japanese Ophthalmological Society, Japan Glaucoma Society, Japanese Society of Electron Microscopy and also the International Society of Cytochemistry. (Department of Ophthalmology, St. Marianna Univ. School of Medicine, Address: 2-16-1. Sugao. Miyamae-ku. Kawasaki-shi. Kanagawa-ken. 216-8511 JAPAN, phone: +81-044-977-8111, fax:+81-044-976-7435, e-mail: ganka@marianna-u.ac.jp)(SM)

Uenoyama, Kenshiro (1929-) Japanese ophthalmologist, Professor Emeritus of Wakayama Medical University. He is the 3rd generation of an Ophthalmology family. He graduated from Wakayama Medical University in 1955, studied Ophthalmology at the University under Prof.→IINUMA Iwao and received his Doctor of Medical Sciences in 1960 (thesis: *Study of the anthranilic acid as an agent for the treatment of glaucoma*). He was appointed the Professor and Chairman of the Department of Ophthalmology in 1976 and served until retirement in 1995. He has conducted research in the field of electrophysiology of vision and published more than 100 papers. Some examples are "*Effect of intraocular pressure on visual electrical response*. Arch. Ophthalmol. 81: 722, 1969" and "*Visual evoked response produced by patterned light stimulus*. Invest. Ophthalmol. 10: 664, 1971" He has served the Japanese Ophthalmological Society as a

Councillor (1979-1997), as Auditor (1993-1995), and he is an Honorary Member of the Society. He also served the Japanese Society of Intraocular Lens Implant as a Councillor (1978-1994) and the President (1980). He is a member of American Academy of Ophthalmology and International Intraocular Implant Club.(SM)

Uji, Yukitaka (1947-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Mie University. He graduated from Mie University in 1973, studied Ophthalmology at the University under Prof.→YOKOYAMA Minoru and received his Doctor of Medical Sciences in 1980 (thesis: *The effects of absorption of visible light in the human lens on the electroretinogram*. I. J. Jpn. Ophthalmol. Soc. 79: 1154, 1975, II. ibid. 81: 1321, 1977, III. ibid. 83: 1606, 1979). He extended his study in 1986-1987 at University of Zurich and published a paper with Prof. G. Niemeyer (*The effects of beta-adrenergic agonists on cone system in the cat eye*. Doc. Ophthalmol. 70: 77, 1988). He has been in the present position as above since1987. He is a Councillor of the Japanese Ophthalmological Society (1987-), Japan Glaucoma Society (JGS) (1989-) and the President of the 10th Congress of the JGS (1998), Executive Director of the Japanese Society for Clinical Electrophysiology of Vision (1987-). He is working on retinal electrophysiology, ultrasonography, ocular blood flow and physiology of retinal ganglion cells. Also he organized the first Internet World Congress on Biomedical Science (INABIS) 94 in Mie University and holds the INABIS Ophthalmology in 1999 and 2000. Two examples of recent publications are "*The multifocal electroretinogram in retinal detachment*. Doc. Ophthalmol. 94: 239, 1998" and "*Immunocytochemical localization of glutamate in normal and detached cat retina*. Invest. Ophthalmol. Vis. Sci. 39: 786, 1998". (Department of Ophthalmology, Mie University, 2-174, Edobashi, Tsu-shi, Mirken, 514-8507, Japan. phone: +81-5-9232-5027; fax: +81-5-9231-3036; e-mail: uji@clin.medic.mie-u.ac.jp)(SM)

Ullman, Christoph (1773- 1849). German anatomist, surgeon and ophthalmologist. Born at Cassell, Germany, May 11, 1773, he received his medical degree at Marburg in 1795, presenting as dissertation "*Diss. sistens …Ossium Cariem*." Settling in Marburg, he became in 1804 extraordinary, and, in 1807, ordinary professor of anatomy; and, in 1805, ordinary professor of surgery. In 1839 he was made Privy Upper Medical Councillor. For a number of years he lectured on ophthalmology and held ophthalmic clinics. His only ophthalmologic writing was "*Ophthal. Beobachtung*." (v.Ammon's Zeitschrift f. Ophthalm., 1832). In 1843 he retired on account of ill health. Am.Encyclop. of Ophthalm. vol.17,p. 13480

Ulrich, Richard (1849-1915).German ophthalmologist. The Ophthalmoscope,1916, p.391.

Kakichi Umazume

Umazume Kakichi (1895-1981) Japanese ophthalmologist, Professor Emeritus and the President of the Executive Council of Tokyo Medical College. He graduated from Tokyo Medical School (presently Tokyo Medical University) in 1920, studied Ophthalmology in the Postgraduate School of Nagoya University and received the degree, Doctor of Medical Sciences in 1930. He was appointed Professor and Chairman of the Department of Ophthalmology of Tokyo Medical College in 1932 and served until 1963 when he was elected to the President of the Tokyo Medical College. He served as the Director of the Hospital (1952-1964), and was the President of the 65th Congress of the Japanese Ophthalmological Society. His research interest was in the Color Sense and its Anomalies, and he delivered a special lecture "Studies of Color Sense and its Clinical Applications" at the 60th Congress of the Society in 1956. His extensive studies were realized in the "*Tokyo Medical College Color Test Charts; U-O Test* " that are widely used throughout the world. He retired from the Presidency of the College in 1967 and was entitled the Professor Emeritus. He further served the College as a member of the Executive Council of the College and in 1971 was elected as President of the Executive Council and served until death. He was also a Co-editor, with Y. →NAKAMURA and M.→UEMURA, of the *Handbook of Ophthalmology* (26 volumes, 42 books) of the Japanese Ophthalmological Society published by Kanehara Publ. Co. Tokyo in 1952. In 1977 the Government of Japan conferred on him the Second Order of the Rising Sun in recognition of his life time service. (SM)

Kinnojyo Ume

Ume, Kinnojyo (1858-1886) The first Japanese teacher of ophthalmology at Tokyo University. He was born in Matsue and studied Medicine in Osaka from Bauduin in 1869-1870. He then entered Tokyo University and graduated from there in 1879 (He was one of 20 graduates of the first Class of Tokyo University who were granted the Degree, Bachelor of Medicine). Immediately thereafter, he was sent to Germany by the Government to study Ophthalmology at the University of Berlin under Prof. C.→Schweigger where he stayed from 1979 to 1883. In March 1883, he was appointed the First Head of the Eye Clinic of Tokyo University. Unfortunately, he had to resign in December 1885 due to illness. During his short tenure, he published the statistics of the Clinic and lectured many times on Eye Health, in particular, prevention of myopia. He gave much advice to the Government regarding School Health. His 2-year younger brother, UME Kenjiro was the Professor and Dean of the College of Law at Tokyo University, and he drafted the first Civil Law of Japan.[SM]

Unger, Karl (1782-1835) German surgeon, of some importance in ophthalmology. Born at Lissa in 1782, he studied at Leipsic and Halle, at the latter institution receiving his medical degree. In 1810 he became assistant at Hufeland's University Hospital in Berlin, in 1813-14 served in the army in a medico-chirurgical capacity, and in 1815 became professor of surgery and ophthalmology in the Albertus University at Königsberg. In 1829 he received a dissection wound, from which he never wholly recovered, though he did not die until Mar. 28, 1835. Aside from works of a general medical or surgical character, he wrote *Nachricht über das Ärzl.-Wundärztl. und Augenheilkund. Klinikum der Königl. Universität zu Königsberg* (Königsb., 1823).American Encyclopedia of Ophthalmology vol.17,p.13490

Unna, Moritz Adolph (Mauritius Adolphus) (1813- ?) German ophthalmologist, father of Paul Gerson Unna, born in Glückstadt, Germany. Unna received his M.D. at the University of Heidelberg in 1835, with the prizewinning dissertation *De tunica humoris aquei; commentatio anatomico-physiologica et pathologica* Heidelberg 1836. He left for Vienna and Zurich returning 1837 to Hamburg settling there as an ophthalmologist. In 1841 he published in Fricke´s and Oppenheimer´s *Zeitschrift* an important survey of current surgical treatment for strabismus: Zusammenstellung der im Auslande bis jetzt gemachten Erfahrungen und mitgetheilten Ansichten über den Stabismus und vorzugsweise über dessen Operation. We know only that, according to Hirsch in his Biogr.Lex., Unna was still alive in 1888. The exact date of his death is not known. JPW

Upadhyay, Madan Prasad (1942-) Nepalese Ophthalmologist. Dr. Upadhyay is a popular Clinical and conscientious Public Health Ophthalmologist, a rigorous scientific investigator, a committed teacher and medical educator and a dedicated social worker in Nepal. He was born in Biratnagar, East Nepal and completed his medical education at Osmania Medical College Hyderabad (India) in 1964. Subsequently, he returned to Nepal and served in different parts of the country before being awarded a British Council fellowship in 1970 to study Ophthalmology in Britain. He obtained Diploma of Ophthalmology from the University of London in 1971 and a Fellowship of the Royal College of Surgeons of Edinburgh (FRCS) in 1974. While in Britain he received his training at Moorfields Eye Hospital, University of London; University of Cardiff and University of Dundee Teaching Hospitals. He returned to Nepal in 1974 and worked with the Ministry of Health at various Hospitals until he joined Tribhuvan University as an Associate Professor in 1979. Subsequently he was appointed Professor of Ophthalmology in 1984. While much of his earlier work was based at Bir Hospital and later on at Nepal Eye Hospital, both in Kathmandu, he has traveled extensively to remote districts of Nepal providing Medical and Surgical care to the population of these outlying areas stretching from the Indo-gangetic plains bordering India in the south to the borders of Tibet in the north. Main areas of his clinical work have been in the field of anterior segment. Prof. Upadhyay is credited with the discovery of fungal infection of the cornea in 1974 in Nepal and has been an active worker in this field ever since. He has been involved in clinical trials of many ocular antifungal drugs, of which some have been marketed now and are helping large number of individuals with corneal ulcer. He has described a new disease entity called *seasonal hyperacute panuveitis*, the most rapidly destructive inflammatory ocular disease described to-date, which appears seasonally every other year soon after monsoon. Although the cause of this disease has remained elusive, he and his colleagues

have developed a method of treatment which has rescued many eyes, all of which ended earlier in blindness. The study has been published in many international journals and is now included as a specific entity in a text book on Uveitis, published from USA. His contributions to Ophthalmology include leading the *first* National Xerophthalmia Survey in 1980 using the new WHO criteria. This study brought out the magnitude, distribution and population characteristics of this blinding nutritional disorder and has been published in major International and National Medical and Public health journals. More importantly, the study resulted in pilot intervention programs in two districts of Nepal in the mid and late eighties and subsequently, to launching of a National Vitamin A distribution program in 1993, now contributing to prevention of blindness in thousands of Nepalese Children. He and his colleagues have completed an Epidemiological and microbiological study of corneal ulcers in Nepal, which has been acclaimed worldwide. He has recently completed, with his team, an evaluation of "Efficacy of antibiotic prophylaxis following ocular trauma in preventing microbial keratitis". The results of this community-based study have shown that prophylactically applied antibiotic following ocular surface trauma is effective in preventing corneal ulcers in over 96 percent of cases in large population groups. On the basis of these studies, a national program for prevention of traumatic corneal ulcers is being now launched in Nepal. Prof. Upadhyay is also responsible for launching of a three year Ophthalmic Residency Training Program, M.D. Ophthalmology at Tribhuvan University, which aims to produce compassionate, competent and comprehensive Ophthalmologists. Ophthalmologists trained through this program are now contributing to the work of restoring sight and preventing blindness in different parts of Nepal. Prof. Upadhyay is first among Nepali Ophthalmologists to choose the career of a full time ophthalmic teacher. He is also the founding Chairman of the Department of Ophthalmology as well as the founder of a new Center for Ophthalmic Education and Research at Tribhuvan University. He has contributed richly to Ophthalmic literature with over 70 scientific articles in National and International Journal. These include: American Journal of Ophthalmology, British Journal of Ophthalmology, American Journal of Epidemiology, Japanese Journal of Ophthalmology, Japanese Journal of General and Applied Microbiology, Annals of Tropical Medicine and Parasitology, International Pharmacy Journal, Annals of Ophthalmology (Chicago) and three scientific monographs. Among his contributions to Ophthalmology are included first reports from Nepal of Fungal endophthalmitis, Toxocara granuloma of retina, and sympathetic ophthalmitis. His reports on efficacy of garlic against fungi isolated from human corneal ulcers and successful treatment of Aspergillus flavus keratitis with Thiabendazole and the role of Prophylactic antibiotics in preventing post-traumatic corneal ulcer constitute first reports in international ophthalmic literature. He is a recipient of Distinguished Service Award of the Asia Pacific Academy of Ophthalmology. In addition to his contributions to Clinical and Public Health Ophthalmology he has distinguished himself in the field of medical education, both as a committed teacher and a promoter of innovative curricula for graduate and postgraduate medical education. He joined the University in 1979 as a full time Associate Professor and established the Department of Ophthalmology at Tribhuvan University and its Teaching Hospital. He has been instrumental in the development of the medical school and its Teaching Hospital having been responsible for drawing up a master plan for the hospital, overseeing its construction and finally its dedication to public service in 1986. His contributions to the development of ophthalmology and to the development of medical school led to his appointment as the Dean of the Institute of Medicine in 1985. His continued leadership resulted in his election in 1986 to the Governing body of Tribhuvan University- the Executive Council. He has also served as a member of Tribhuvan University Senate. As Dean of Tribhuvan University Institute of Medicine, he introduced several innovations Specialty clinics like Cardiology, Glaucoma, Cervical Cancer and many others were also initiated during his term of office. He also introduced systems of *medical audit, grand round* (a joint round of Hospital and Campus leaders) to supervise activities in the hospital and campus. In the field of advancement of Medical Education he established an *education support unit* entrusted with the responsibility of ensuring regularity of classroom and clinical teaching, teachers training and national workshop for teachers. For promotion of Nursing education, he was instrumental in establishing a Nursing Education Unit and through this, launching of a Primary Health Care Oriented Nursing Curriculum in Tribhuvan University. Both these units have now

achieved the status of a department. To improve communication he launched a monthly newsmagazine. A monthly "*Senior Faculty Meeting*", launched during his tenure as Dean provided an opportunity for inter staff communication and inputs from senior faculty. Human Resource Development Unit and Financial Resource Development Unit were also established at IOM during his tenure as the Dean. This period also witnessed ushering in of a new culture of recognizing the contributions of its former leaders. The basic sciences building which took almost, 14 years to complete, was dedicated to all his predecessor Deans who had worked for its completion. The garden at the Teaching Hospital was dedicated to its Founding Director. He has recently completed his tenure as the Founding Director of a new medical university in eastern Nepal. This Institute follows an innovative curriculum with integration of basic sciences with clinical medicine, integration of clinical medicine with community health. The Institute is involved in providing quality medical services not only at its Teaching Hospital but also to the rural community through a network of low cost institutions, which serve as the "Teaching District" for its students providing real-life experience to the graduates. This school has been identified as one of the twenty medical schools in the world to develop criteria for monitoring social accountability of medical schools by the World Health Organization. Prof. Upadhyay is a Past President of Nepal Ophthalmic Society. He is also the Immediate Past Chairman of Nepal Association for the Welfare of the Blind having earlier been its Secretary General and Vice President, a twelve year long active engagement in all.. He is also the founding secretary general of B. P. Eye Foundation, a national non-government organization for prevention and control of blindness. He has, on many occasions served as on the High Level National Education Commission. Prof Upadhyay is now working with the World health Organization at its South East Asia Regional Office for the last two years, overseeing both Human Resource s for Health and Prevention of Blindness Program. With the launching of Vision 2020.The Right to Sight, he is now fully dedicated to programs for prevention of blindness in South Esat Asia Region.(Mailing address: World Health Organization South East Asia Regional Office Indraprastha Estate Ring Road New Delhi 110022,India, e-mail: UPADHYAM@whosea.org) (SM)

Tada Urata

Urata, Tada (1873-1936) The first Japanese female ophthalmologist who received Doktor Medicine. She was born in Ushibuka Amakusa Island (Kumamoto Prefecture). She studied in Tokyo at Saiseigakusha (Private Medical School existed in 1876-1903) and passed the National Examination for Practice Medicine in 1899. She studied at the Institute of Infectious Diseases in Tokyo under KITASATO Shibasaburo (Student of R. Koch and Founder of Japanese Bacteriology and Keio University School of Medicine) for 2 years. She further studied at the University of Marburg in 1903-1905, and received the Degree of Doktor der Medizin (thesis: *Experimentelle Untersuchungen ueber den Wert des sogenannten Crédéschen Tropfens*. Zeitschr. Augenheilkd. 13:242, 1905). On her homecoming she married to Dr. Nakamura and worked in Tianjin China with her husband from 1910 to 1931. After the death of her husband, she came back to Japan and practiced in her hometown, Ushibuka, and then in Tokyo.[SM]

Akira Urayama

Urayama, Akira (1918-1993) Japanese ophthalmologist, Professor Emeritus of Akita University. He graduated from Tohoku University in 1942, studied under Prof. HAYASHI Yuzo and Prof. KIRISAWA Naganori and he received the degree Doctor of Medicine in 1951 with his work on ocular allergy. He worked as Assistant Professor of Tohoku University (1949-1972) and Professor and Chairman of the Ophthalmology Department of Akita University (1972-1983). He gave special lectures at the Congresses of Japanese Ophthalmological Society 3 times. They are "*Causes and pathology of uveitis*" at the 64th Congress (J. of the Society, 64: 2263, 1960), "*Causes and treatment of Behcet's Disease*" at the 78th Congress in 1974 (J. of the Society 78: 1304, 1974) and "*Clinical aspects of uveitis*" at the 87th Congress (J. of the Society 88: 22, 1984). He also served as the 86th Congress President of the Society in 1982. In recognition of his meritorious service the Government conferred on him the Third Order of the Rising Sun in 1991. [SM]

Usher, Charles Howard (1865-1942) Scottish ophthalmologist. Born in 1865, he was the 4th son of Thomas Usher of Edinburgh, and nephew of Andrew Usher, who was one of Edinburgh's benefactors. He was educated at Cambridge University and St. Thomas's Hospital, where he came under the influence of Edward→Nettleship, which determined his life's work in ophthalmology. Qualifying M.B., B.Ch.(Cantab.), in 1891 he took the

F.R.C.S.(Edin.) in 1894. At Aberdeen he was ophthalmic surgeon and later consulting ophthalmic surgeon to the Royal Infirmary, and ophthalmic surgeon to the Royal Aberdeen Hospital for Sick Children. In early days he had been ophthalmic house surgeon at St. Thomas's, and chief clinical assistant at Moorfields. Usher joined the Ophthalmological Society of the United Kingdom in 1894, served on the council early in the 20th century, was vice-president, and president from 1927-1928. In 1927 he was awarded the Edward Nettleship prize and in 1935 he delivered the Bowman Lecture. In association with Karl Pearson and Mr. Nettleship he produced A Monograph on *Albinism in Man*," several volumes of the Drapers' Company Research Memoirs, 1911-1913. It is not too much to say that the bulk of the work and many of the best illustrations are his work. Some very interesting facts and pictures were obtained by Dr. Usher in his world tour when he visited the Solomon Islands, New Guinea and Japan. Many of his contributions are of a highly technical character, especially those dealing with the inheritance of eye affections not only in man but in some of the lower animals. BJO 26,235-238,1942

Usui Masahiko (1941-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Tokyo Medical University. He graduated from Tokyo Medical University in 1966, studied Ophthalmology in the Graduate School of Medicine of the University under Prof.→MATSUO Harutake and received his Doctor of Medical Sciences in 1971 (thesis: *Studies of osteo-keratoprosthesis*. No.1. J. Jpn. Ophthalmol. Soc. 74: 664, 1970; No.2. ibid. 75: 2091, 1971; No.3. ibid. 75: 2137, 1971; No.4. ibid. 75: 2199, 1971). He studied ocular immunology at the Hôtel Dieu, Paris, in 1974-1976 under Prof. Y.→Pouliquen and Prof. J. P.→Faure. He has been in the present position as above since 1994. He has served the University as a Councillor (1986-1994), Executive Director (1994-) and Vice-Director of the University Hospital (1994-). He is a Councillor (1985-) and Executive Director (1993-1996, 1998-) of the Japanese Ophthalmological Society (JOS) and President of the Japanese Ocular Inflammation Society and he holds key positions in many National Societies. He serves as a member of many Government Council and Committees. He is the Chairman of the International Workshop on Vogt-Koyanagi-Harada Syndrome (1999-), member of French Ophthalmological Society, American Academy of Ophthalmology, the International Ocular Inflammation Society (IOIS) and many other International Societies. He is active in the field of ocular immunology, viral infection ,uveoretinal diseases, and he organized, as the President, the 5th International Symposium of Immunology and Immunopathology of the Eye in 1990. Some examples of his many publications are "*Polymerase chain reaction for diagnosis of herpetic intraocular inflammation. Ocular Immunology and Inflammation*. Vol. 1, No.1/2: 105, 1993", "*A new surgical technique for the treatment of giant tear*. Jpn. J. Ophthalmol. 23: 206, 1979", "*Immunology Today*", Excerpta Medica, 1990" and "*Uveitis Today*. Elsevier, 1998".(Department of Ophthalmology, Tokyo Medical University, Nishi-Shinjyuku, Shinjyuku-ku, 160-0023, Japan. phone:+81-3+3342-6111, fax: +81-3-3346-9170)(SM)

Usukura, Jiro (1948-) Japanese retinal cell biologist, Associate Professor at the Department of Anatomy of Nagoya University, Graduate School of Medicine. He graduated from University of Tokyo, Graduate School of Medicine in 1981 and studied at the Department of Anatomy with Prof. YAMADA Eichi; he received his Doctor of Medical Sciences in 1981 (thesis: *Molecular organization of the rod outer segment. A deep-etching study with rapid freezing using unfixed frog retina*). He has been in the present position as above since 1988. His many publications include "*Ultrastructure of the synaptic ribbons in photo-receptor cells of Rana catesbeiana revealed by freeze-etching and freeze-substitution*. Cell Tiss. Res. 247: 483, 1987" and "*Rapid freezing and subsequent preparation methods in retinal cell biology*. Meth. In Neuroscience, 15: 37, 1993". In recognition of his outstanding work, the Japanese Society of Electron Microscopy granted him the *Seto Prize* in 1994. He is an active Member of American Society of Cell Biology, Association for Research in Vision and Ophthalmology, International Society of Eye Research and New York Academy of Science. He is a Council member of many Japanese Societies of biological sciences. He serves on the Editorial Board of the Journal of the Japan Bioimaging Society. (3rd Department of Anatomy, Nagoya University, Faculty of Medicine, 65 Tsurumai, Showa-ku, Nagoya, 466-

0064, Japan; phone:81-5-2744-2029, fax:81-5-2744-2040: e-mail: usukuraj@tsuru.med.nagoya-u.ac.jp)(SM)

Yasuo Uyama

Uyama, Masanobu (1932-) Japanese ophthalmologist, Professor Emeritus of Kansai Medical University. He was a graduate of Kyoto University in 1956, studied Ophthalmology at the University under Prof.→ASAYAMA Ryoji and Prof. →KISHIMOTO Masao and received his Doctor of Medical Sciences in 1966 (thesis: *Ophthalmological studies on experimental hypertension*. I. J. Jpn. Ophthalmol. Soc. 67: 1377, 1963; II. ibid. 70: 132, 1966 ; III. ibid. 71: 303, 1966). He spent one year (1966-1967) as a postdoctoral fellow at the Department of Ophthalmology of the University of California, San Francisco, where he studied Eye Pathology and clinical uveitis from Dr. M. J.→HOGAN (*Histopathological studies on vascular changes, especially on involvement in the choroidal vessels, in hypertensive retinopathy*. J. Jpn. Ophthalmol. Soc. 79: 163 1975). He was promoted to Assistant Professor at Kyoto University in 1975 and was invited to be Professor and Chairman of the Department of Ophthalmology of Kansai Medical University in 1976 and worked until retirement in 1999. During his tenure he served as the Director of the University Hospital (1983-1987). His service to the professional Societies are Councillor (1971-1999), Executive Director (1985-1998) of the Japanese Ophthalmological Society (JOS), the President of the 101st Congress of the JOS (1997), the Chairman of the Administration of the Opening Ceremony of the 23rd International Congress of Ophthalmology (1978), Trustee of the Japanese Intraocular Inflammation Society (1976-present) and the Secretary General of the 5th International Symposium on Ocular Circulation and Neovascularization (1997). He is the leading expert in Japan of diseases of the retina and some examples of his papers are "*Choroidal neovascularization and the retinal pigment epithelium*. (eds.) BenEzra, D. et al.: Doc. Ophthalmol. Proc. Series 50. *Ocular Circulation and Neovascularization*, p. 451, Junk Publ. 1987", "*Idiopathic polypoidal choroidal vasculopathy in Japanese patients*. Arch. Ophthalmol. 117: 1085, 1999 " and "*Indocyane green angiography and pathophysiology of multifocal posterior pigment epitheliopathy*. Retina 19: 12, 1999". He has written many books e.g. "*Central serous chorioretinopathy and allied diseases: Color atlas*. Life Science Publ. Tokyo 1986". For the excellence of his works, he received the JOS AWARD in 1998 (Award lecture: *Choroidal neovascularization, experimental and clinical study*. J. Jpn. Ophthalmol. Soc. 95: 1145, 1991) and also the Michaelson Medal in 1992 from the Israel Academy of Humanity and Science (Award lecture: *Choroidal neovascularization and the retinal pigment epithelium*). He is an Honorary Member of the JOS and also a member of Club Jules Gonin, Retina Society and American Academy of Ophthalmology.(SM)

Uyama, Yasuo (1895-1981) Japanese ophthalmologist, Professor Emeritus of Osaka University. He graduated from Osaka University in 1921, studied ophthalmology under Prof. NAKAMURA Bunpei and received the degree of Doctor of Medical Sciences in 1927 (thesis: *Embryological studies of lamina cribrosa*. J. Jpn. Ophthalmol. Soc. 30: 648, 1926). He worked as the Assistant Professor in 1934-1943 and the Professor and Chairman of the Department of Ophthalmology of Osaka University from 1943 to 1957: he was the Director of the University Hospital in 1952-1957. He founded a new Journal "*Folia Ophthalmologica Japonica*" in 1950 and he served as the Editor-in-Chief until 1957: it is one of the prestigious professional journals in Japan. He served as the Member of the Council for Medical College Evaluation of the Ministry of Education in 1954-1957. His research interest was in histology and pathology of the retina, and he delivered a Special Lecture "*Special structures of the retina*. J. Jpn. Ophthalmol. Soc. 55: 686, 1951" at the 55th Congress of the Japanese Ophthalmological Society in 1951 and he was the President of the 51st Congress, i.e. the first Congress of the Society after the World War II, in 1947. He served as the Director of the Osaka National Hospital in 1957-1961. He wrote a very significant book "*Pioneers of our Ophthalmology World*" in 1973: the book is a magnificent compilation of biography of distinguished Ophthalmologists in Japan and it lists 561 individual Ophthalmologists and 19 Families of Ophthalmologists over many generations. In recognition of his meritorious service, the Government conferred on him the Second Order of the Sacred Treasures. [SM]

Uytterhoeven, Andre (1799-1868) Belgian surgeon, the first professor of ophthalmology at Brussels University. He was the son of the famous surgeon Jean-Baptiste Uytterhoeven. He obtained his M.D. degree at the Ghent University in 1825 and followed Dupuytren's lectures in Paris in 1829. He was surgeon of the Brussels public hospitals from 1826, cared for the victims of the Belgian independance war in 1830, and succeeded his father as chief surgeon of the Brussels public hospitals in 1837. He taught at the Brussels University hygiene, legal medicine, psychiatry,ophthalmology (from 1848 to 1856) and clinical surgery. He published much on surgery and other subjects, but not on ophthalmology. He was a member of the Belgian Academy of Medicine. He loved books and was interested in paleontology. (Verriest)

V

Vacher, Louis (1852-1929) French ophthalmologist and otologist, founder of a private eye clinic in Orléans. Vacher was born in Allevard, Isère, France. He undertook his medical sudies in Lyon and at the Val-de-Grâce, Paris. He received his medical degree in Paris 1877 with the thesis *De la voix chez l´homme* and continued his career as a military physician. After this he was sent to Orléans in 1882. In 1886 he left the army, coming back only for the first Worl War in 1914. He now opened, in Orléans, a private clinic for ophthalmology and otology, first alone, later with his son-in-law, Dr.Denis. Vacher was a member of the Société Francaise d´Ophtalmologie since its foundation in 1883 and was a founding member of the Société d´Oto-Rhinologie to which societies he was very active. Vacher published in 1890 his *Manuel pratique des maladies des yeux*. Annales d´oculistique 1929,166 :933-934.JPW

Vail Jr., Derrick Tilton (1898-1973) American ophthalmologist. Vail was born in Cincinnati, Ohio, to Derrick Tilton and Della Harriss Vail. His father (*see next entry*), already a well known ophthalmologist, later became chairman of the Department at the University of Cincinnati, a position Dr. Vail also held from 1937 to 1945. Before achieving this first peak in a brilliant career, he attended Yale University (A.B. 1919) and Harvard University Medical School (M.D., 1923). After a residency at the Massachusetts Eye and Ear Infirmary , a stint in India to polish his surgical skills, and an ophthalmologic fellowship at Oxford, he returned to Cincinnati to take up practice with his father and to eventually become Chief of Ophthalmology at the University of Cincinnati. A large and successful practice was interrupted in 1942 when he was called by the Surgeon General to take up the post of Chief Consultant in Ophthalmology to the United States forces in Europe. As he did with all tasks he undertook, Colonel Vail distinguished himself in the field and received a Bronze Star, Legion of Merit from our government, the Medaille de Reconnaissance from the French government, and was made an Officer, Order of the Crown of Belgium. He also made many close friends among Europe's outstanding ophthalmologists, friendships that grew and flowered throughout the rest of his life, friendships he cherished and which remained to the very end a source of great pleasure to both him and to Mrs. Vail. As a matter of fact, his last days were spent in London with one of these dear friends of war-time days, Sir Stewart →Duke-Elder. In 1945, Vail was invited to take over the chair of ophthalmology, at Northwestern University which had become vacant on the untimely death of Sanford →Gifford. It must have been difficult for him to renounce the satisfying medical and social life he had attained in Cincinnati but there was a job to be done in Chicago, and in the fall of 1945, the Vails and their three children moved. (A fourth child, his oldest son Derrick, Jr., had been killed in action with the Royal Canadian Air Force in 1942.) From this point, Dr. Vail went on to ophthalmologic greatness. He became president of almost every local and national ophthalmologic organization-the Chicago Ophthalmological Society, the American Academy of Ophthalmology and Otolaryngology, the American Board of Ophthalmology, and in 1962, President of the International Ophthalmologic Council. He wrote numerous scientific articles and books but perhaps his greatest contribution was as Editor of the American journal of Ophthalmology, which under his aegis became the foremost Ophthalmic journal, not only in the United States but in the world. For all these activities numerous honors accrued: the Leslie Dana medal of the National Society for the Prevention of Blindness, the Lucien Howe medal of the American Ophthalmological Society, and almost every named lectureship in this country and abroad (De Schweinitz lecturer, 1945 ; Francis Proctor lecturer, 1947; Montgomery lecturer, Dublin, 1952; Doyne lecturer, 1957;

and Gifford lecturer, 1965). In addition, he was an active or honorary member of practically every ophthalmologic society in the world. Listing them all would double the length of this sketch and would leave the essence of this man undescribed, because in spite of the honors that were heaped upon him, he remained always kind and generous. AJO 1973,76:311-312

Vail, Sr. Derrick T. (1864-1930) American ophthalmologist, clinical professor of ophthalmology in the Laura Memorial Medical College, and staff ophthalmologist in the Associated Presbyterian Hospital, Cincinnati, 1895 to 1903; clinical professor of ophthalmology at Miami Medical College from 1896 till 1909, when it merged with the Ohio Medical College to form the college of medicine of the University of Cincinnati. He was then made chief of the eye clinics and clinical professor of ophthalmology, which positions he held till 1912, when he was made professor emeritus of ophthalmology of the college of medicine of the University of Cincinnati. In 1901 he was elected to the visiting staff of the Cincinnati Municipal Hospital as ophthalmologist, and he continued in this capacity in the new Cincinnati General Hospital when it was founded to replace the old Municipal Hospital, until 1912 when he was appointed consulting ophthalmologist. He was visiting ophthalmologist to the Deaconess' Hospital in Cincinnati from 1902 till 1912. Vail was a founder member of the following societies and institutions: the American Academy of Ophthalmology and Otolaryngology, (president in 1908); the Oxford (England) Ophthalmological Congress (1909); the American College of Surgeons (1913) ; the Gorgas Memorial Institute (1916); the Cincinnati Ophthalmological Club (president in 1919). After ten years association with C. R. Holmes, Dr. Vail located for himself in 1899. By 1906 his practice had grown so heavy that he purchased a Catholic Boys' Home Building at 24 East Eighth Street, remodeled it, and established his private offices and the Vail private hospital there. The entire building was devoted exclusively to ophthalmology and otology in his own private practice. He was known as a resourceful and skillful operator. He gave up the practice of otology and rhinology in 1916, and thenceforward devoted his entire time to the practice of ophthalmology. In 1925 his second son, Dr. Derrick T. Vail, Jr., joined his father in the practice of ophthalmology. Derrick T. Vail's life scheme was to improve his own qualifications and advance the progress of his profession. To this end he made three trips to Europe, visiting the clinics of London, Hamburg, Zurich, Berlin, and Vienna (1899, 1909, and 1911); and two trips to India and around the world (1909 and 1924). He went to India for the purpose of studying Colonel Henry Smith's technique first hand. He came back convinced that the principles involved in the new operation of Smith, were sound. He wrote articles on every phase of the subject, and illustrated his points: by many of his own drawings, sketches and photographs. In 1912 Vail became interested in detachment of the retina. He investigated the various methods of treatment and, operations then in vogue, and aroused much interest by declaring that the standard treatment and operations for detachment of the retina were useless in combating it, and that new thought was needed. He also became interested in acute blindness from intranasal disease, and was a pioneer in the investigation of this striking condition. Perhaps his most outstanding contribution to ophthalmology was his discovery in 1913 and reporting 1914 with the bacteriological aid of William B. Wherry, of the first case of tularemia in man, a case of the so-called "oculoglandular type" of tularemia. His contributions to the periodical literature of ophthalmology were very numerous. He wrote the section on the pupil of the eye in health and disease to be found in volume 14 of "*The American encyclopedia and dictionary of ophthalmology*". The chapter on the intracapsular operations for cataract in volume 2 of the 5th and 6th editions of "*Modern ophthalmology*" by James Moores Ball was written and Illustrated by D. Vail. AJO 1931,14:70-71

Valdeavellano, Jorge (1899-1966) Peruvian ophthalmologist born in Lima, Peru. He received his early education at the well-known Colegio Nacional de Nuestra Senora de Guadalupe where, apparently, he was not a very good student. He was noted for being small but mighty with his fists. Valdeavellano received his medical education at the National University of San Marcos, the oldest university in the Western Hemisphere, and obtained the title of Licenciado en Medicina at the University of Madrid in 1922. His hospital training was obtained under three famous French ophthalmologists, Prof. →Morax, Prof. →Lapersonne and Prof. →Dupuy-Dutemps. Returning to Lima in 1924,

Dr. Valdeavellano, was appointed chief of the Ophthalmology Clinic of the National University of San Marcos. He became professor and head of the Department of Ophthalmology in 1942. In 1960, he was given the chair of ophthalmology in the Peruvian University, Cayetano, Heredia, and charged with the development of the department in its new medical school. He was a member of the Peruvian Ophthalmological Society and an honorary member of a number of other national ophthalmological societies. In 1948, he became a member of the executive committee of the Pan-American Association of Ophthalmology and, in 1960, he was given the honor of election to its presidency. In a true spirit of Pan-Americanism, he studied English and attained sufficient fluency to preside over the meetings of the Pan-American Association in English as well as his native Spanish.AJO 1966,62:779

Valdes, Daça de (c.1591-c.1634) Licentiate and notary of the Inquisition at Seville. In 1623 he published a work on the use of spectacles, the first of its kind in history. In this work he furnishes the earliest mention of cataract-spectacles, stating that, for distance vision, the patient should wear 11-12 "strengths"; for reading, however, 20 strengths. *Mirabile dictu,* it was more than a century before this important discovery was noted and adopted by the medical profession. Even then, the patient seems never to have been fitted by the physician himself, but to have been referred to a "dealer in spectacles." The title of the Valdes monograph is *Uso de los antoios para todo genero de vista; En que se ensena a conocer los grada que a cada uno le galtan de su vista, y los que tienen qualesquier antojos*. 8 vo. Impresso en Sevilla, por Diego Perez. Ano de 1623. Woodcut portrait of the author and diagrams. His work, now exceedingly rare, contains interesting drawings, and tables for testing sight. English translation by Paul Runge, published by Wayenborgh Publishing, Oostende 2002. Am. Encyclop. of Ophthalm. vol.17,p. 13514; Hist.ophthal.Intern. 1979/80, I:259-264.

Valentine, John Archibald (? – 1944) Irish ophthalmologist. Valentine had at Trinity College, Dublin, a brilliant career in both classics and medicine. He held the degrees of B.A., M.D., B.M., B.Ch. and B.A.O. Dublin in 1902. He was the L.M. of the Rotunda Hospital, Dublin, and D.T.M. and H., Cambridge University. He was awarded the Haughton Clinical Medal in Medicine. He studied for some time in Vienna. After qualification he went to India. During the great war he served in Salonica where his knowledge of malaria was a great value to the army. After peace returned he devoted himself solely to ophthalmology. Valentine was surgeon to the Portsmouth and Southern Countries Eye and Ear Hospital and ophthalmic surgeon to the Royal West Sussex Hospital, Chichester. He began his ophthalmic life as clinical assistant to the Royal Victoria Eye and Ear Hospital, Dublin.BJO 1944;28:369-370.

Valenton Mario J. (1943-) Filipino ophthalmologist, Clinical Associate Professor of Department of Ophthalmology, University of the Philippines, College of Medicine (UPCM) and University Researcher IV, Institute of Ophthalmology, University of the Philippines. He graduated from the UPCM in 1996 and received training in Ophthalmology at the University Hospital and University of California, San Francisco (Proctor Foundation for Research in Ophthalmology, External disease of the eye and Ocular Microbiology and Immunology)(1969-1971) and also at the University of Pennsylvania, Graduate School of Medicine (1969). He received the Diplomate in Ophthalmology from the Philippine Board of Ophthalmology in 1989. He has been active in research and published more than 40 original articles in National and International Journals; the examples are "*Toxin-producing strains of staphylococcus epidermidis (albus), isolates from patients with staphylococcic blepharoconjunctivitis.*" Arch. Ophthalmol. 89:186, 1973, "*Deep stromal involvement in Dimmer's nummular keratitis*." Am. J. Ophthalmol. 78: 897, 1974, "*Secondary ocular bacterial infection in hypovitaminosis A xerophthalmia*." Am. J. Ophthalmol. 80: 673, 1975, "*Cornea and external eye disease problems in the Philippines: A twenty-year survey (1971-1991).*" Phil. J. Ophthalmol. 22: (No.3), 1993 and "*Wound infection after cataract surgery*." Jpn. J. Ophthalmol. 40: 447, 1996. He served the WHO as a consultant in ophthalmia neonatorum, in Geneva 1986. He received many Awards for the excellence of his research, i.e. Alcon Research Award (1972,1974,1980,1990 and 1992) and National Academy of Science and Technology

Award in 1993. (Institute of Ophthalmology, University of the Philippines, College of Medicine, PGH Compound Taft Ave. Manila), (phone/fax: 63-525-3669, Manila Doctors Hospital Suite 811, 667 United Nations Avenue, Manila) (SM)

Valerius Aper. An ancient patient, whose case-report appears on a votive tablet found in the Tiberine Temple of Esculapius at Rome. The report is as follows: "*The oracle advised a blind soldier, Valerius Aper, to make of the blood of a white hen a collyrium, which should be employed for three days. And, seeing again, he came and praised the god publicly*." Am. Encyclop. of Ophthalm. vol.17,p.13514

Valk, Francis (1846- 1919). American ophthalmologist of New York City, inventor of numerous ophthalmic instruments and author of the well known handbooks, "*Errors of Refraction"* (New York 1892) and *"Strabismus."*(New York 1904) He was born at Flushing, N. Y. He received a classical training at Washington College, Chestertown, Maryland, and the M.D. at New York University in 1878. During the war he enlisted in the northern army. For a time he was assistant surgeon to the Manhattan Eye and Ear Infirmary, and later surgeon. For very many years he was ophthalmic surgeon to the New York Dispensary and surgeon and visiting ophthalmologist to the Randall's Island Hospital, as well as consulting ophthalmic surgeon to the Thrall Hospital, Middletown, N. Y. He was professor of ophthalmology at the New York Post Graduate Medical School for many years, and emeritus professor for a very brief time before his death. He was a fellow of the New York Academy of Medicine, of the American Academy of Ophthalmology and Oto-Laryngology, the Clinical. Society of the New York Post Graduate Medical School and Hospital, and many other medical societies, both general and special. Among the instruments which he invented were the twin strabismus hooks and needle-point cystotome. Am. Encyclop. of Ophthalm. vol.17,p. 13515 AJO 1920, 3: 634. JPW

Vallez, Prosper Josephus (19th cent.,) Belgian ophthalmologist, received his medical training at the University of Louvain and became professor of general ophthalmic surgery at Brussels. He wrote *Nouvelle methode de guérir l'ophthalmie purulente contagieuse, suivie d'une appréciation critique de l'emploi du nitrate d'argent* Bruxelles 1846 (which received a very bad press in the Annales d´oculistique 1846,16:135);*Traité théorique et pratique de médecine oculaire comprenant l'historique de l'ophtalmologie, l'anatomie descriptive, la physiologie, l'hygiène, la pathologie et la thérapie des parties constituantes de l'œil*. Bruxelles 1853. *Traité théorique et pratique de la chirurgie de l'œil et de ses dépendances*. Bruxelles 1858. Albert. Van Duyse *Coup d´Œil sur l´Histoire de l´ophtalmologie en Belgique au XIXème siècle*.JPW

Valsalva, Antonio Maria (1666-1723) One of the most celebrated Italian otologist and a man of some importance ophthalmologically. Born at Imola, in the Romagna, he studied mathematics, the natural sciences and medicine at Bologna, at which institution he was graduated in 1687. In 1697 he was made professor of anatomy at Bologna. Valsalva made a number of very important discoveries in general and special anatomy. In otology he is chiefly remembered for the experiment which still bears his name. In ophthalmology, he is now of little importance, and yet he was one of those who introduced into Italy the "*new learning about cataract*." Throughout all antiquity, the middle ages, and even the earlier centuries of the present period, it was universally supposed that a cataract was a deposit of corrupt and inspissated "humor" in a (wholly imaginary) space between the pupil and the lens. About 1643,→ Quarré, Frenchman, taught (theoretically only) that a cataract is simply hardening and clouding of the crystalline lens. →Rolfinck, a German, in 1656 made actual anatomical demonstrations of the truth of this theory. One or two others spoke or wrote in feeble support of the new theory, and then the matter dropped for thirty or forty years. It was, however, revived by two Frenchmen, →Brisseau and Maitre→Jan, in the opening years of the 18th century. A bitter fight ensued in France, a fight which lasted till about the beginning of the nineteenth century, and then, of course, resulted in a permanent victory for the advocates of the new doctrine. The great Heister was the means of carrying the new and highly important doctrine into Germany. To Valsalva, however, as well as to several of his Italian confreres Morgagni, Lancisi, Benevoli-belongs the credit of the introduction of the new teaching about the seat and nature of cataract into Italy. Am. Encyclop. of Ophthalm. vol.17,p. 13516

Van Biervliet, Auguste-Louis (1830-1869) Belgian ophthalmologist. Van Biervliet was the son of Antoine-Louis Van Biervliet (b. 1802 d. 1868), professor of medicine at the Leuven University. Van Biervliet became Ph.D. in 1850 and M.D. in 1854. We was physician in the St.Jan Hospital in Bruges and secretary of the Société médico-chirurgicale de Bruges. He translated into French Ammon's book on the development of the human eye: *Histoire du Développement de l´Oeil Humain* (first in the *Annales d´Oculistique*, later as a monograph in Brussels1860) and Heymann's paper on *auto-ophthalmoscopy* (1863). He wrote papers on *physiology and pathology of the iris* (1860), on *periodic ophthalmia of the horse* (1862), on *surgery and on otology*. He was member of the (French) Belgian academy of medicine. (Verriest) JPW

Van Bogaert, Baron Ludo (1897- ?) Belgian neurologist, born in Antwerp, who obtained at the Brussels University the M.D. degree in 1922 and a special doctorate in 1925. Meanwhile he specialized in neurology with Pierre Marie in Paris, Winkler in Utrecht, von Economo in Vienna and Spielmeyer in Munich. In 1924 he entered the Stuyvenberg hospital in Antwerp as assistant and he worked in the Bunge Institute since its foundation in 1934. He founded there a Laboratory of nervous pathology and was a renowned specialist in encephalitis (e.g. *Van Bogaert's subacute sclerosing leuco-encephalitis*, 1945), *myoclonias and degenerative hereditary diseases* (especially the metabolic ones). Of ophthalmological interest are his papers on *visual hallucinations* (1926), *optic agnosia* (1927), *Tay-Sachs disease* (with Léon Bauwens and Marcel Danis, 1928), *recurrent ophthalmoplegia* (1935), *ocular symptoms in dyslipidoses* (1935), *acute amaurotic epilepsy in the rhesus monkey* (1935, 1938), *Laurence Moon syndrome* (1936, 1937), *Behr's optic atrophy* (with Maria Van Leeuwen née André, 1942), *hereditary ataxia with retrobulbar neuritis* (also with Mrs. Van Leeuwen, 1949), *Friedreich's heredo-ataxia* (with W. Stadlin, 1949), *the Sturge-Weber syndrome* (with Pierre Danis, 1951), and *amaurotic idiocy* (1952, 1953). He was a founder and the secretary of the *Belgian Group for Oto-neuro-ophthalmological studies*. He founded in 1957 and was the first president of the *World federation of neurology*. He was a member of the (French) Belgian Academy of Medicine and was his president. He was made a baron by the king. (Verriest)

Van Canneyt, Julien (1895-1948) Belgian ophthalmologist. He was born in Waardamme and died in Arcos-de-Jalon, Spain. He obtained his M.D. degree in Ghent and the special doctorate in ophthalmology at the same University in 1934. He was assistant at the Department of Ophthalmology since 1925 and was thus the person who had to succeed to Marnix Van Duyse. From the scientifical point of view his principal achievements have been the papers on *experimental syphilis and tuberculosis* which he wrote under the supervision of Marnix Van Duyse and of the professor of bacteriology Albert Bessemans. He wrote also on *corneal diseases* (as *traumatic keratifis and corneal dystrophies*) and, in the Van Duyse tradition, on *ocular malformations*. In 1947 he made a report on anesthesia for the Belgian Ophthalmological Society. (Verriest)

van der Hoeve *see* **Hoeve, J. van der**

van Duyse *see* **Duyse**

Van Fleet, Frank (1960-1919) American, New York ophthalmologist. Born in New York City on Mar. 31, 1860, son of Henry S. and Esther Flandreau Van Fleet, he received his medical degree at Bellevue Hospital, Medical College of New York City, in 1881. Settling in New York as an ophthalmologist, he soon had an extensive practice and a wide reputation. He was executive surgeon to the Manhattan Eye, Ear and Throat Hospital for seventeen years, and at the time of his death was president of the Board of Surgeons of the same institution. He was a Fellow of the New York Academy of Medicine and of the American College of Surgeons, and was once President of the New York County Medical Society. He was also Treasurer of the New York State Medical Society and chairman of the legislative committee of that body for many years. During the 2nd World War he gave much time to the examination and treatment of soldiers whose eyes had been injured by poisonous gas. He wrote many articles. Am. Encyclop. of Ophthalm. vol.17, p.13520; AJO 1919,2:705-706

Van Leeuwen, Marie *born* **Andre (1906-)** Belgian ophthalmologist. Van Leeuwen was born in Holland but obtained the M.D. in Ghent in 1932. She then entered the Centre

Neurologique de Bruxelles and specialized in neuro-ophthalmology under Pierre Gaudissart in this center, under De Vleeschauwer in the Etterbeek Civil Hospital, under Weve and Stenvers in Utrecht and under Ludo Van Bogaert in Antwerp. She published from 1940 to 1950 on *palsies of ocular muscles*, on *pupillar disturbances*, and on *hereditary optic atrophies of central origin.* (Verriest)

Auguste Van Lint

Van Lint, Auguste (1877-1959) Belgian ophthalmologist, inventor of the technique of akinesia of the orbicular muscles in cataract surgery. He graduated from University of Brussels at the age of 23. In the beginning of his career, he studied Neurology and frequently visited clinics in Paris. Subsequently, he was advised by Dr. J. B.→Coppez to become an ophthalmologist and studied under Dr. Coppez. He served as Chief Ophthalmologist of Saint-Josse Hospital, Policlinique de Bruxelles and also at the Institut Provincial des Aveugles de Berchem. He became a member of the Société Belge d'Ophtalmologie in 1905 and his many lectures and discussions were accepted with keen attention. He published many original articles, e.g. on sympathetic Ophthalmia, ocular trauma by electricity (*Accidents oculaire provoqués par l'électricité*. Bull. Soc Belge d'Ophtalmol. 27: 84, 1909), *Optic neuritis* (Nevrite Optique Familiale (2 Frères, 1 Soeur) *Insuffisance Thyroidienne*. Ann. Ocul. 77:1914) and many others. The most important of all of his works is on cataract surgery: he invented a technique of akinesia of the orbicular muscles in cataract surgery (*Paralysie palpébrale temporaire provoquée dans l'opération de la cataracte*. Ann. Ocul. 77: 420-424, 1914: one month prior to this communication, he reported the technique at the French Ophthalmological Society). Since introduction of this technique, it was exercised throughout the World and cataract surgery could be performed under stable condition, with significant improvement of its success rate. This technique of Akinesia was then used in most intraocular surgery including glaucoma filtering procedures. With H.Coppez, he wrote a little book for nurses : <u>*Soins Oculaires a l´Usage des Infirmières*</u>, Brussels 1916. His other articles on cataract embrace "*Astigmatisme post-opératoire dans l'extraction de la cataracte avec glissement de la conjonctive*. Ann. Ocul. 77: 418-420, 1914", "*Il faut toujours paraliser les paupièrs dans l'opération de la cataracte*. Bull. Soc. Belge 43: 23, 1921" and "*Akinésie palpébrale*, Bull. Soc. Belge 52: 64, 1926". In recognition of his outstanding contributions, the Belgian Ophthalmological Society elected him Honorary Member of the Society in 1953. (Bulletin Soc. Belge d'Ophtalmologie, 123: 474, 1959).JPW

Van Oye, Raphael (1936-) Belgian ophthalmologist. He is the son of Herman Van Oye (himself an ophthalmologist), the grandson of Raphael Van Oye (a generalist who was interested in ophthalmology and who died in the first World War), the greatgrandson of Eugeen Van Oye (a well-known poet and generalist also with interests in ophthalmology) and the great-great-grandson of the physician Rend Van Oye from Torhout, who wrote in 1843 a study on the *choroidal pigment*. The present Raphael Van Oye obtained his M.D. in Ghent, is adjunct departmental head at the eye-clinic of the Ghent University and is a well known anterior segment surgeon. (Verriest)

Van Roosbroeck, Jules *see* **Roosbroeck, Jules van**

Van Schevensteen Jr., Auguste (1882-1940) Belgian ophthalmologist, son of Auguste Van Schevensteen Sr., who obtained the M.D. degree in Leuven and specialized in Leuven (under Venneman) and abroad. He published not only on ophthalmology (on *traumatic visual field defects by cerebral trauma* in 1907 and 1916, on *filariosis* in 1908, on *spirochetosis* in 1917, on *sympathetic ophthalmia* in 1917 and 1918) but much more on *ophthalmological folklore* and *history of ophthalmology*. (Verriest)

Van Schevensteen, (Senior) **Auguste (1848-1919)** Belgian ophthalmologist who obtained his MD degree in Leuven in 1875. He specialized in ophthalmology in Paris under Panas, de Wecker and Galezowski and in London. He was President of the Belgian Ophthalmological Society in 1900.(Verriest)

Van Trigt, Adrien Christophe (1825-1864) Dutch ophthalmologist born in Dordrecht, Holland. Van Trigt received his M.D. in 1853 at the University of Utrecht, with a classic dissertation on the ophthalmoscope: <u>*De Speculo Oculi*</u>. For the rest of his short life he practiced in Amsterdam, specializing in the treatment of venereal and skin diseases; his leisure was given over to zoological research. His dissertation was enlarged and published

the same year and same place in Dutch (*De Oogspiegel*) and the following year, translated and again enlarged by C.H.Schauenburg, into German: *Der Augenspiegel, seine Modificationen nebst Beiträgen zur Diagnostik innerer Augenkrankheiten*.Lahr 1854 Albert. JPW

Vanden Bergh, Christiaen (1851-1913) Belgian ophthalmologist. Vanden Bergh was born in Susteren in the Netherlands but took out letters of Belgian naturalization in 1883. He became doctor in medicine (1875) and specialist in ophthalmology in Brussels. He founded the department of ophthalmology in the Clinique Générale St.-Jean and worked from 1895 in Molenbeek St.Jean. He published much, e.g. on *refractive errors* (1887), *treatment of squint* and *corneal ulcers* (1888), *ocular phototraumatism by gaslight* (1897), *theory of skiascopy* (1898, 1903), *photometry based on visual acuity* (1910) and *corporal attitude during writing* (1911). (Verriest)

Vannas, Mauno V. (1891-1964) Finnish ophthalmologist from Helsinki. He was born and grew up in Uusikaupunki, a small town actively involved in shipping on the West Coast of Finland. Already at a young age he was determined to educate himself and thus entered the medical school at Helsinki University. He was active in student life and served as secretary and chairman of the student union when Finland became independent in 1917. During the Civil War in 1918 he ended up serving as a doctor on both fighting sides, as he was captured by the communist counterpart during the war. After his retirement he published a book based on his diary notes of those times called *An Eye for an Eye*. He graduated from medical school in 1923. He then devoted his time to ophthalmology, received his specialist degree in 1925 and published his doctoral thesis on the effects of adrenaline in glaucoma in 1927: "*Clinical studies about the effect of adrenalin in glaucoma*." . It took about thirty years however, before large scale employment of adrenaline derivatives was started in the management of glaucoma. During the years 1923-37 he studied and lectured in many European centers of ophthalmology, especially Vienna and Prague, with Elschnig among his teachers. The combined time spent abroad was several years. In 1937 he became the Professor of Ophthalmology at the University of Helsinki. Finland had to fight strongly for its independence during the period from 1939-1945. He held several responsible posts during these war years as a colonel. He also served as the Dean of the Medical School and was active when the University was rebuilt and developed after the Second World War. One of the outstanding achievements of Professor Vannas was the new building for the Helsinki University Eye Hospital which was completed in 1951. As a prolific writer Professor Vannas contributed more than 200 scientific articles and reports. Quite a few of them involved in ophthalmic surgery. Already in the 1930's he performed round-pupil intracapsular cataract extractions, corneal grafting operations, corrected cases of ocular torticollis by surgery of the oblique muscles, and studied the effects of cyclodialysis by gonioscopy. He devised several modifications and improvements of various operations. Corneal transplantation especially interested him and this led to the development of new instruments; Vannas scissors being one of the first microsurgical instruments invented around 1950. He also contributed greatly to the Finnish, Scandinavian and European Ophthalmic Societies and was a honorary member in several European medical Associations. In 1948-49 he received a WHO stipend and travelled to England and USA to visit several centers. He also served in the WHO trachoma prevention program as an advisor. In business life he served as the Chairman of the board of Instrumentarium 1943-63. In 1952 he remarried one of his pupils Salme, who was to follow him as the Professor and Chairman of Ophthalmology in Helsinki in 1961. They both appreciated and loved each other greatly and many discussions also at home centred on professional matters. Gardening and landscape architecture was their main hobby and the summer home even today has plenty of roses and other flowers. His son Antti and daughter Kaarina are Ophthalmologists at work in Helsinki. [by Antti and Kaarina Vannas] see also: AJO 1965, 59:951-952

Vannas, Salme F. (1918-1993) Finnish female Ophthalmologist in Helsinki. She was born in western Finland, where she grew up on the home farm. At that time it was not common to send girls to high school for further education. However she was determined and as she also was of slender build, which meant she was not fit for heavy farm work, she was allowed to continue in the high school at the closest city 40 km away. She also had an excellent memory and her parents decided to support her education. First she was thinking

of a career in teaching handicrafts but her teacher and family thought that with her talents a more demanding profession such as medicine would suit her better. She entered the medical school at the University of Helsinki in 1936. During war time medical students with clinical experience had to practice and fill in posts when men were enlisted. She received her degree in medicine in 1946 with three young children. In 1948 she started ophthalmology at the Helsinki City hospital and one year later moved to the residency program at the University Ophthalmology Department. In 1951 she received her degree in ophthalmology and published her doctoral thesis in 1952. Her first husband died in 1950. She married Mauno→Vannas in1952, and her fourth child was born in 1954. Her early scientific work centred on ocular blood flow. She studied the effects of heparin on the eye and also used fluorescein angiography in retinal disorders. Microsurgery was to become her favorite research area. She became Professor and Head of the Department at Helsinki University in 1961. The operating theaters were rebuilt and the use of operating microscopes at surgery was preferred. Corneal transplantation, corneal histocompatibility, corneal preservation and eye-banking were investigated under her guidance. Altogether she published more than 160 scientific articles in ophthalmic journals. She was a member of many national and international Societies. She was the Finnish representative on the International Council of Ophthalmology. She was the President of the European Congress of Ophthalmology which was held in Helsinki in 1984. She was the President of the Council of Foundation for Ophthalmic Research in Finland and was the key figure in collecting enough funds for the foundation to support ophthalmic research and projects. She also became a member of the Uppsala Academy of Sciences in 1979. She was a devoted teacher and was pleased that 25 University Theses were successfully defended while she acted the Head of Ophthalmology. She retired in 1984, but was delighted to see that three of her four children had decided to follow their parents and become ophthalmologists. Both Antti and Kaarina Vannas are Ophthalmologists at work in Helsinki. [by Antti and Kaarina Vannas]

Vasavada, Abhaykumar R. (1950-) Indian ophthalmologist, Director of Iladevi Cataract and intraocular lens Research Centre, Ahmedabad. He graduated from the University of Baroda in 1975, conducted postgraduate study in England and received his F.R.C.S. in 1980. He served as a Managing Committee Member of All India Ophthalmological Society (AIOS) (1987-1990) and as the Honorary Professor to N.H.L. Medical College of Gujarat University (1988-1990). He also served as Organizing Secretary of International Congress of Indian Intraocular Implant Society (1990), Scientific Committee Member of AIOS (1993-1996) and Organizing Secretary for the Vth Ophthalmological Congress of SAARC Countries (September 1998). His particular interest is lens physiology, cataract and intraocular lens implant: he holds courses and has trained more than 100 Ophthalmologists. He is a member of many National and International Professional Societies, e.g. International, American, European and Asia-Pacific Intraocular Implant Society, International Society for Eye Research and American Academy of Ophthalmology. He has been appointed the Chief Instructor of congenital cataract surgery of the courses held in U.S.A. He has published many scientific papers in National and International professional Journals, e.g. "*Primary posterior capsulorhexis with and without anterior vitrectomy in congenital cataracts.* J. Cataract Refract Surg. 23: 645, 1997" and "*Step-by-step chop in situ and separation of very dense cataracts.* Ibid. 24: 156, 1998". He also serves to rural communities with Eye Camp activities. He is a recipient of "Best Researcher" Award in Ophthalmology by the A.P. Academy of Sciences, and Dr. B. C. Roy National Award for 1997.(Cataract and Intraocular Leens Research Centre, Gurukul Road, Memnagar, Ahmedabad-380052, India. phone: +91-79-7453303, fax: +91-79-7411200, e-mail: shail@ad1.vsnl.net.in) (SM)

Vater, Abraham (1684-1751) German professor of anatomy at Tübingen, of some importance ophthalmologically. His father was Christian Vater (ordinary professor of medicine at Wittenburg and author of "*Physiologia Experimentalis"* and *"Semiotica Medica").* The subject of this sketch was born at Wittenburg and received his philosophical degree in that city in 1706, and his medical degree four years later. He studied afterward in many lands, became professor of anatomy and botany in his native city, and established there a wonderful anatomical museum. In addition to important anatomical and botanical compositions, he wrote: 1. Abrahami Vater et J. Christiani Heinicke, *Diss.*,

qua Visus Vitia duo Rarissima, Alterum Duplicati, Alterum Dimidiati Physiologice et Pathologice Exponuntur. (Wittenburg, May 25, 1723.) Written, as the title shows, in conjunction with one Christian Heinecke, concerning whom nothing else is known. 2. *De Instrumento ad Determinandas Lucis Refractiones* (1751). Am. Encyclop. of Ophthalm. vol.17,p. 13528

Veasey Jr., Clarence Archibald (1895-1960) American ophthalmologist, born in Philadelphia, Pennsylvania. Veasey did his premedical work at Yale University and received the degree of Doctor of Medicine from the University of Pennsylvania in 1920. Dr. Veasey interned at Polyclinic and Presbyterian Hospital in Philadelphia and served his residency at the New York Eye and Ear Infirmary in 1920-1924. In 1924, following certification by the American Board of Ophthalmology and by the Board of Otolaryngology, he began practice in the office of his victorian father, who was the former associate Professor of Ophthalmology at the University of Pennsylvania. He devoted most of his time to ophthalmology, and was a member of the American Ophthalmological Society (1940). For a long time he was to be remembered by many of the members of the American Academy of Ophthalmology and Otolaryngology from his popular instruction course: "*On the dissatisfied refraction patient*". His 15 papers on various subjects in ophthalmology and otolaryngology attest that a physician, though not attached to a university centre, but with a keen mind, sharp observation and sacrifice of time that could be used for recreation, also can make fine contributions to science in addition to being a successful practitioner. As one of the incorporators of the Spokane Medical Service Bureau, he did much for the interest of the public and of his colleagues at the difficult period of the recession in the early 1930's. Artistic by nature, Veasey was more than an amateur in music and painting. He composed music for choirs and arranged Wagner's Parsifal for mixed chorus and orchestration. AJO 1960

Velhagen, Karl (1897-1990) German ophthalmologist born in Chemnitz, Germany. Velhagen studied medicine in Leipzig, Munich and Freiburg receiving his medical degree (1923) in Halle. He became assistant to Th. Axenfeld in Freiburg, remaining there until 1927. He then worked from 1928 to 1929 under Trendelenburg in the pharmacological institute in Freiburg and in Berlin. Velhagen then moved 1929 to Halle becoming first assistant (Oberarzt) under prof. Clausen and the next year, in the same institution lecturer of ophthalmology. In 1936 he became professor extraordinarius in Halle/Saale. During the year 1937 he was interim director of the eye clinic at the Cologne University and from 1938 to 1946 professor and director of the University Eye Clinic in Greifswald being during the war years also director of an eye lazaret. Velhagen became 1946 director of the city eye clinic of Chemnitz and from 1950 to 1958 professor and director of the Leipzig University Eye Clinic. From 1958 to 1967 Velhagen became Professor and Director of the Humboldt University Eye Clinic in Berlin. After a hard schooling under Axenfeld, having been at the institute for pharmacology afterwards, he focused all his scientific interest and research on ophthalmic pharmacology and endocrinology publishing his outstanding monograph *Sehorgan und innere Sekretion* (Munich, Berlin and Vienna 1943) which earned him the Albrecht von Graefe Prize in 1949. At the begin of his career in Leipzig he started the concept of his monumental treatise *Der Augenarzt* published simultaneously 1958 to 1966 by Thieme Leipzig (East Germany) and Thieme Stuttgart (West Germany) and comprising 7 volumes. A second edition was published a few years later in 9 volumes. Velhagen authored also *Unterrichtsbuch für das augenärztliche Hilfspersonal* Leipzig 1949 (2nd edition 1958); *Propädeutischen augenärztlichen Operationslehre* Leipzig 1964, and contributed a chapter in G.Albrecht and W. Hartwig *Ärzte. Erinnerungen, Erlebnisse, Bekenntnisse* (1972, 4th edition 1976). Very popular and extremely successful were also his *Tafeln zur Prüfung des Farbsinnes*, of which the 28th edition was published 1989. Velhagen was editor of Abhandlungen aus dem Gebiet der Augenheilkunde and on the editorial board of many ophthalmic journals. He translated Arruga´s monograph about retinal detachment *Die Netzhautablösung* 1936. Ophthalmologen Verzeichnis 461-465. JPW

Velpeau, Alfred Armand Louis Marie (1795-1867) French surgeon, inventor of "Velpeau's bandage," and a man of some importance in ophthalmology. Born at Bruch (Inde-et-Loire) he studied at Tours and Paris, at the latter institution receiving his degree in 1823. In 1828 he became surgeon to Sainte-Antoine and in 1830 to La Pitié. In 1834 he

succeeded Boyer at the Surgical Clinic in the Charité-a place which he filled with the highest distinction for 33 years. As an operator, his fame became world-wide. Besides his books and articles (which were mostly of the highest character) on general surgery, he composed a number of ophthalmologic writings, of which the following are the more important: 1. *Du Strabisme.* (Paris, 1842.) 2. *Manuel Pratique des Maladies des Yeux, d'après les Leçons Clin. de M. le Prof. Velpeau.* (Paris, 1840.) 3. *Leçons Orales de Clinique Chirurg. Faites à l´Hôpital de la Charité*, p. par V. Pavillon et G. Jeanselme. (3 vols., Paris, 1840-4l.) Am Encyclopedia of Ophthalmology, vol.17,p.13529

Vengut *see* **Grapheus**

Venkataswamy G. (1918-) Indian ophthalmologist, President of the Govel Trust, Chairman of Aravind Eye Hospital and Lions Aravind Institute of Community Ophthalmology (LAIC0), Professor Emeritus of Madurai Medical College. He graduated from Stanley Medical College, Madras in 1944 (MBBS) and studied Ophthalmology at Government Ophthalmic Hospital Madras (M.S. degree). He was appointed as Tutor in Ophthalmology at Stanley Medical College (1955-1956). He was then promoted as the Professor of Ophthalmology at Madurai Medical College with joint appointment as the Ophthalmic Surgeon at Government Erskine Hospital, Madurai and served from 1956 to 1976. Upon retirement from the Medical College, he founded the Govel Trust, a non-profit public charitable trust that established and maintains Aravind Eye Hospital: He has been the President of this Trust since 1976. He also serves as the Adjunct Professor of the University of Illinois, Chicago, U.S.A.: he received the Honorary Doctor of Science from the University in 1985. The Aravind Eye Hospital has a large charitable Eye Care Service with the outpatients of more than one million visits and performed more than 150,000 surgery in the year 1998. The Community Outreach Programmes are an integral part of Aravind's eye care service. Free eye camps, eye health screening for school children and educating the public on eye care are conducted through this progreamme. In 1998, Aravind conducted 1,346 eye camps where about 370,000 people were screened and about 66,000 underwent surgery. Dr. Venkataswamy established Aravind Postgraduate Institute of Ophthalmology where many students receive high quality training to receive various degrees, i.e. Diploma in Ophthalmology, M.S. in Ophthalmology, Diploma of the National Board and Fellow of the Royal College of Surgeons. The Institute has Specialty Training Course and gives Ophthalmologists higher skill of clinical practice. He also maintains Continuing Medical Education (CME) in various Subspecialties for updating practicing Ophthalmologists and holds Seminars and Symposia. To further bring down the cost of cataract surgery with IOL implants, Aurolab was started in 1991. Here intra-ocular lenses, suture needles and ophthalmic pharmaceuticals are manufactured. The Lions Aravind Institute of Community Ophthalmology (LAICO) was instituted to train eye care management professionals from India and around the World. The Aravind Centre for Women, Children and Community Health is active in community health care of children and education of the public, in collaboration with UNICEF. The Aravind Hospital conducts many research projects in collaboration with universities and institutes around the World. Dr. Venkataswamy wrote many books, e.g. "*Advice to pregnant women*", "*Diabetes*", "*Eye Diseases*", "*Anatomy of the Eye* " and "*The epidemiology of eye diseases*". He is recipient of many Awards, e.g. Padmashree Award from Government of India (1973), Alpaiwala Memorial Award from National Association for the Blind (1975), Honorary Doctor of Science at the University of Illinois at Chicago (1985), IAPB Award from the International Agency for the Prevention of Blindness (1982), HeIlen Keller Award (1987), WHO Award for Health for All (1988), Academy International Blindness Prevention Award from the American Academy of Ophthalmology (1992) and National Award for Best Individual from the Ministry of Health of the Government of India (1992), Lighthouse Pisart Vision Award by the Lighthouse Inc. USA (1992), "Doctor of Science" (Honoris Causa) Award by the Tamilnadu Dr. MGR.Medical University, Madras, India,(1995), Diwaliben Mohanlal Mehta Award from the Diwaliben Mohanlal Trust, Mumbai (1999), Mahaveer Award for Excellence in Human Endeavor in the sphere of medicine & Education (1999), IAPB Award for Life Time Dedication to the Prevention of Blindness (1999), Statesmanship Award from JCAHPO (joint Commission on Allied Health Personnel in Ophthalmology) USA (1999). (Aravind Eye Hospital 1 Anna Nagar,

Madurai-625 020, India, phone: +91-452-532653, fax: +91-452-530984, e-mail: aravind@aravind.org) (SM)

Vennemann, Emile (1851-1907) Belgian ophthalmologist.Professor of ophthalmology at the Louvain(Leuven) University.He formerly occupied the Chair of Anatomy and the Chair of Histology at the same university. The Ophthalmoscope, London 1907,p.180-181**.**

Verhoeff, Frederick Herman (1874-1968) American ophthalmologist, born in Louisville, Kentucky. He came from Dutch-German stock, one of his ancestors having fought with Blücher at the battle of Waterloo. He was graduated from Yale University in 1895 and from Johns Hopkins Medical School in 1899. The next two years were spent in Baltimore at the Johns Hopkins Hospital and at the Baltimore Eye, Ear, Nose and Throat Hospital. Early in his career he became interested in ophthalmic pathology and in 1900 he moved to Boston to be in charge of pathology at the Massachusetts Eye and Ear Infirmary. After a year of study at Moorfields and other European ophthalmic centers, he returned to his work in Boston in 1903. This was a time when no one in America paid much attention to the pathology of the eye and credit must be given to Verhoeff for making American ophthalmologists conscious of this important phase of their specialty. He was advanced through all the grades at the Infirmary becoming a full surgeon in 1913. In 1915, he, was given the additional title of "chief of ophthalmic research." When the Howe Laboratory of Ophthalmology was established in 1931, Verhoeff was chosen as its first director, at the same time becoming consulting chief of ophthalmology at the Infirmary. He also had a long association with Harvard Medical School, being appointed professor of ophthalmic research in 1924. In World War I he was commissioned a Major in the Army Medical Corps serving most of the time as chief of ophthalmology at Fort Devens. After the war, he built up a large private practice in Boston and became a leading consultant in the New England area. Verhoeff was a prolific writer. His first paper appeared in the *Johns Hopkins Bulletin* in 1899, the year he was graduated from medical school; his last one in the *American Journal of Ophthalmology* in 1966. Altogether he published more than 200 papers on a wide variety of subjects. At first his interest centered on optics, muscle balance and refraction. Then came many papers on pathologic and clinical subjects. Later on, surgical procedures seemed to be his chief interest and, toward the end of his career, he reverted to physiologic optics and binocular vision. He was a regular attendant at medical meetings, always presenting something interesting, but his discussions of the papers of others were a real delight and did much to enhance the success of any meeting. Many honors came to Verhoeff. He was president of the New England Ophthalmological Society in 1920: chairman of the Section of Ophthalmology of the A.M.A. in 1932; and president of the American Ophthalmological Society in 1937. In 1921, the A.M.A. Section of ophthalmology presented him with the Herman Knapp medal for his original paper on "*Gliomas of the optic nerve*." In 1930, he received the section's Ophthalmic Research Medal. In 1932, he was awarded the Lucien Howe medal of the American Ophthalmological Society in recognition of his distinguished service to ophthalmology. In 1947 he received the Leslie Dana medal from the St. Louis Society for the Blind and the National Society for the Prevention of Blindness. He was a member of all the major ophthalmic societies, but one of his favorites was the Ophthalmic Pathology Club whose meetings in Washington he attended yearly. In 1964 this organization was renamed the Verhoeff Society in his honor. As old age came on his interest in ophthalmology never failed. After retirement from the Infirmary and the Howe Laboratory, he continued to attend the weekly clinical and pathologic conferences, always contributing something worthwhile to the discussion. Finally at the age of 92 years he was forced to give this up because of failing hearing and eyesight. AJO 1969,67:600-602; BJO 1969,53:71-72

Vermyne, J. J. B. (1835-1898) American ophthalmologist of New Bedford, Mass. Born in Holland in 1835, he became a surgeon in the Dutch navy. While on duty at Surinam, he married the daughter of a merchant of New Bedford, Mass. Returning to Holland, the doctor entered upon general practice, but, the Franco-Prussian war breaking out, both he and his wife joined the Red Cross Society and served as members of that body throughout the war. Because of his merit as surgeon the French Government conferred on him the order of the Legion of Honor. Moving to New Bedford, Mass., he engaged at first in general practice. Turning his attention, however, to ophthalmology and otology, he soon had a wide reputation. In 1873 he became a member of the American Ophthalmological,

and in 1875, of the American Otological Society. He was one of the founders of St. Luke's Hospital, New Bedford. Am. Encyclop. of Ophthalm. vol.17,p. 13533

Vernon, Bowater J. (1837-1901) British, London ophthalmologist. Born in 1837, he became assistant at Moorfields in 1864 and later curator of the Moorfields Museum. In 1867 he was made demonstrator for eye diseases at St. Bartholomew's Hospital, and two years thereafter surgeon at the Eye Division of this institution. The most of his writings appear in the *St. Bartholomew Hospital Reports.* Am. Encyclop. of Ophthalm. Vol.17,p.13543

Verrey, Arnold (1883-1964) Swiss ophthalmologist. Verrey was the son of an Swiss ophthalmologist, and established himself at Lausanne after studying in Paris under Victor Morax and Edmond Landolt and in Oxford. Verrey had an important number of private patients and a free-of-charges clinic. Despite his work, he took the time to publish from 1918 to 1926 important papers, of which were those about the perception of colours with the anomaloscope in cases of congenital and acquired dyschromatopsies. Annales d´oculistique 1964,197:1027. JPW

Verriest, Guy (1927-1988) Belgian ophthalmologist. Verriest was born in Ghent and died in Bali. He was the nephew of Marnix Van Duyse. He worked in the Department of Ophthalmology of the Ghent University since 1949. He obtained the M.D. degree in 1951 and the special doctorate in ophthalmology in 1960. By means of contacts with physicists and psychologists he specialized in visual physiopathology and studied the *central scotoma in darkness*, *congenital and acquired colour vision deficiencies*, new techniques for studying visual acuity, visual field, color vision, dark adaptation and the spectral function of relative luminous efficiency, *the influence of age on visual functions*, and problems in relation with *genetics*, *illuminating engineering*, *trafflic safety*, professionnal orientation, standardization and *visual ergonomy*. From the clinical point of view he promoted ophthalmological diagnosis by means of functional examination, measurement of the rest potential of the eye by means of electro-oculography, differentiation of photopic and scotopic components in the electro-retinogram, assessment of acquired color vision defects by means of ranking tests and static achromatic increment threshold color perimetry. He described *vascular pseudopapillitis and juvenile macular degeneration with selective cone involvement*. He was secretary of the *International Research Group on Color vision Deficiencies*, chairman of the Group "*Functional visual field*" of the International Perimetric Society, chairman of a committee on *Lighting Needs for Partially Sighted*, secretary for Europe of the *Visual Functions Committee of the International Council of Ophthalmology*. He also wrote *Ophthalmology in Belgium since 1850*, published posthumously 1994 as No.251 of the *Bulletin de la Société Belge d´Ophtalmologie*. He was secretary of the Flemish section of the Belgian Society of Ophthalmology and member of the (French) Belgian Academy of Medicine. About 15 ophthalmologists, psychologists and engineers made their thesis under the (co)-promotion of Verriest. AJO 1989,107:314. JPW.

Vetch, John (1783-1835) Scottish ophthalmologist born in East Lothian, Scotland. He studied in Edinburgh, receiving his medical degree with the thesis *De partibus irritabilitate praeditis* in 1804. He served many years in the army as assistant surgeon to the ophthalmic detachments, later becoming Principal Medical Officer at the General Hospital for the Ophthalmic Cases in the Army. Vetch practiced later in London, where he settled, and was also physician to the dermatological Infirmary as well to the Asylum for Recovery of Health. He became (1821) Licenciate to the Royal College of Physicians. Vetch wrote: *An account of the ophthalmia which has appeared in England since the return of the British Army from Egypt*. London 1807 (Germ ed.Berlin 1817); *Observations on the treatment of opaque cornea* Chichester 1812. *Observations relative to the treatment by Sir William Adams of the ophthalmic cases of the army*. London 1818. *A letter to the Right Hon. Lord Viscount Palmerston ... on the subject of the ophthalmic institution for the cure of Chelsea pensioners*. London 1819; *A practical treatise on the diseases of the eye*. London 1820.Albert. JPW

Victoria-Troncoso, Virgilio (1941-) Argentinian ophthalmologist. Victoria-Troncoso was born in Tucuman (Argentina). He is the son of a professor of ophthalmology at the Tucuman University. He obtained the M.D. degree at this University in 1963. He studied

ophthalmology under Jules Francois in Ghent from 1964 to 1967 and already in this period he specialized in histochemistry, electron microscopy and histopathology (partly under Luc→Missotten in Leuven). From 1968 to 1971 he worked in Argentina for the National council for scientifical research and created a Laboratory for fundamental research in Jorge Malbran's Ophthalmologic foundation. From 1972 to 1982 he worked again in Ghent in the department of ophthalmology; in 1978 he obtained Belgian nationality and the special doctorate in ophthalmology. Since 1983 he has been academic consultant at the Faculty of Medicine and has worked in the Central laboratory of electron microscopy. His principal scientifical achievements were the study of the mechanism and the treatment of lignous conjunctivitis, the study of the lysosomal enzymatic failure in flecked corneal dystrophy, the study of the mechanisms of cortisonic glaucoma and the role of the mucopolysaccharides in the regulation of the intraocular pressure. Victoria-Troncoso works now (1988) on new lasers in experimental ophthalmology. (Verriest)

Villard, Henri (1869-1959) French ophthalmologist. Villard was born in a little village in the Departement du Gard, France. He studied medicine in Montpellier, became externe at the hospitals in 1889, and interne 1891, before becoming assistant to professor H.Truc. From 1894 to 1923 Villard practiced ophthalmology succesfully in Montpellier. With the medical faculty founding a new chair of ophthalmology in 1923, Villard presented himself there and was named lecturer of ophthalmology. In 1927, he succeeded the chair of clinical ophthalmology left by the departure of H.Truc. Ten years later, he was forced to vacate this position having reached the age limit imposed by the French government. Villard wrote *Anatomie pathologique de la conjonctivite granuleuse* Paris 1896 and many papers on different subjects, not only on ophthalmology. JPW

Villards, Ch. Carron du *see* **Carron du Villards, Ch**.

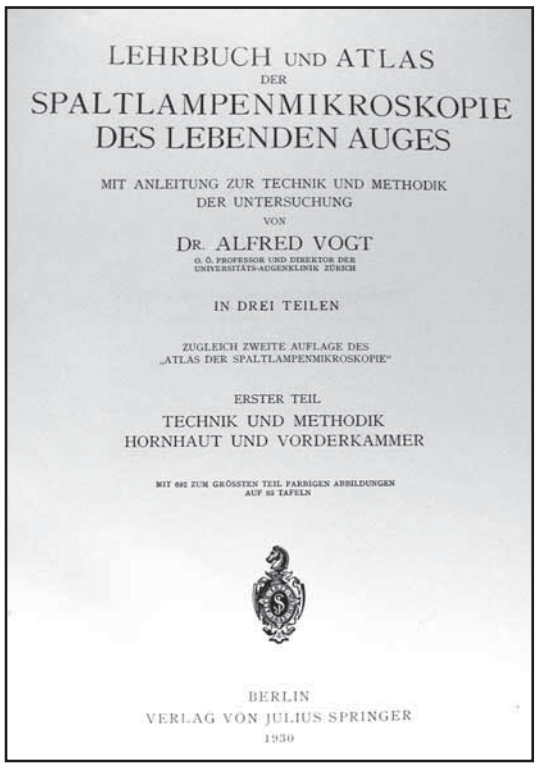
Vincentiis *see* **De Vincentiis**

Vitellio *see* **Witelo**

Vitello *see* **Witelo**

Vithoune, Visonnavong (1945-) Ophthalmologist of Lao People's Democratic Republic (PDR). Vithoune is Professor and Head of the Department of Ophthalmology, Faculty of Medical Science National University and Director of Ophthalmology at the Central Ministry of Health. After completing his premedical education in Lao, he studied medicine at the Medical school in Volgograd (former USSR) (1964-1971) and received his M.D degree. Subsequently, he extended his studies at the Institute of microsurgery in Moscow (1982-1968) and received his Ph.D Degree. In 1988 he joined the Prevention of Blindness (PBL) programme in Thailand under WHO fellowship. He also completed an eye care management Khorat course in Thailand in 1990 and a Community eye care and planning course in London (UK) in 1999. He served as Medical Doctor of the Department of Ophthalmology at Mahosot Hospital (1971-1975) and as Chief of the Department of Ophthalmology at Mahosot Hospital and Vice Director of Mahosot Hospital and chief of the Department of Ophthalmology (1975-1982). He has been in the present position as above since 1998. Vithoune initiated Eye care system development in Lao PDR and the program for Mass cataract intervention in Lao PDR. (Dr. Vithoune Visonnavong: Ministry of Health Ophthalmology Center, Louang Prabang Road Km 8, Vientiane, Lao P.D.R., Phone: +856-21-61-2079; Fax: +856-21-61-2079: e-mail: oph@laonet.net)(SM)

Vleminckx, Jean-François (1800-1876) Belgian ophthalmologist. Vleminckx obtained the M.D. degree at the Leuven University in 1822. Between 1824 and 1834 he wrote many papers on *military ophthalmia* (he was a *compressionist*). From the Belgian revolution in 1830 on, he was overloaded with public functions, especially concerning hygiene and the army. The Institut Ophtalmique in Brussels was created by the province of Brabant on his proposal of July 2, 1848. He presided over the second *International congress of ophthalmology* in Paris in 1867. He was a member of the (French) Belgian academy of Medicine and has been it´s president a long time. He wrote: *Rapport a Monsieur le Ministre Directeur de la Guerre, Baron èvain, sur l´Ophtalmie de l´Armée, etc.* Brussels 1834 and with Charles J. Van Mons *Essai sur l´ophtalmie de l´Armée des Pays-Bas* (Verriest). Annales d´oculistique 1877,78:265-295. JPW


LEHRBUCH UND ATLAS
DER
SPALTLAMPENMIKROSKOPIE
DES LEBENDEN AUGES

MIT ANLEITUNG ZUR TECHNIK UND METHODIK
DER UNTERSUCHUNG
VON

DR. ALFRED VOGT
O. Ö. PROFESSOR UND DIREKTOR DER
UNIVERSITÄTS-AUGENKLINIK ZÜRICH

IN DREI TEILEN

ZUGLEICH ZWEITE AUFLAGE DES
„ATLAS DER SPALTLAMPENMIKROSKOPIE"

ERSTER TEIL
TECHNIK UND METHODIK
HORNHAUT UND VORDERKAMMER

MIT 692 ZUM GRÖSSTEN TEIL FARBIGEN ABBILDUNGEN
AUF 88 TAFELN

BERLIN
VERLAG VON JULIUS SPRINGER
1930

Vogt, Alfred (1879-1943) Swiss ophthalmologist born in Aargau/Switzerland. Vogt studied medicine in Basle and Zürich , and graduated M.D. in 1902. In 1909 he returned to Aargau as *Oberarzt* and remained there until 1918 when he was appointed Professor Extraordinary at the University of Basle becoming full professor in 1920. He remained three years in Basle succeeding →Huguenin at Zurich where he remained until he retired. Fascinated by Gullstrand´s presentation of his slit-lamp at the Congress of Heidelberg in 1911 and the link by Henker of the Czapski microscope to the Gullstrand-Slit-Lamp, Vogt very soon became an expert in this new instrument which was meanwhile evolved by Zeiss 1919. His observations were continuously published in journals culminating in his *Atlas der Spaltlampenmikroskopie des lebenden Auges*, Berlin 1921[GM 1527] , second edition in three volumes 1931-1942 and first English translation by Frederick C.→Blodi, Bonn Wayenborgh 1978-1981. Vogt also published in 1932 an important memoir on the detachment of the retina. He introduced the use of electro-cautery, red-free light for the ophthalmoscopic examination of the retina and a diathermy operation of the corpus ciliare for the treatment of glaucoma (Ergebnisse der Diathermiestichelung des Corpus Ciliare gegen Glaukom, in *Klin.Mbl. Augenheilkunde* 1937)[GM 5988]. Vogt also carried out prolonged investigations into the causation of furnace workers´ cataract, showing that the active agent was infrared rays. He received among other honors , the Gullstrand Medal by the Swedish Medical Society of Stockholm in 1942.BJO 1944; 28:256-258.

Völckers, Karl (1835-1914) German ophthalmologist, born in Lenshan, Germany. He was professor of ophthalmology at University of Kiel from 1868 to 1907. The Ophthalmoscope, London 1914,p.253. JPW

Volkmann, Alfred Wilhelm (1800-1877) German physiologist, born in Leipzig, Germany. Volkmann received his M.D. in 1826 with the thesis *Oberservatio biologica de magnetismo animali* at the University of Leipzig, where he subsequently became lecturer (1828) and professor of zootomy (1834). From 1837 to 1843 he was professor of physiology and pathology at Dorpat; from 1837 until his death, he was professor of physiology at Halle. His writings are mainly concerned with neurophysiology, the circulation of blood, and the physiology of vision. On vision he wrote: *Neue Beiträge zur Physiologie des Gesichtssinnes*. Leipzig 1836 and *Physiologische Untersuchungen im Gebiet der Optik* (2 issues) 1863-1864. Albert. JPW

Voltaire, François-Marie Arouet de (1694-1778) French philosopher and man of letters. Voltaire was born in Paris, a lawyer's son. Voltaire had begun to make his name as a poet and playwright when a witticism at the expense of a nobleman led to his being exiled. In London (1726-1729), he became interested in the work of Newton and other English scientists; the *Elémens* was written after his return to France, during the period of his residence at the Marquisse du Chatelet's estate at Cirey (1734-1749). Voltaire waged a lifelong battle against dogma and illusion, against religious and political oppression; driven from various courts and cities because of his outspokenness, he spent most of his later life at his country home at Ferney, on the French-Swiss border near Geneva, corresponding with the great thinkers of his age. One of the finest books about Newton´s philosophy is doubtless his *Elémens de la philosophie de Neuton mis à la portée de tout le monde*. Amsterdam 1738 (English edition London, same year) Albert

von Bahr, Gunnar O. A. *see* **Bahr, Gunnar O.A. von**

von der Heydt, Robert *see* **Heydt, Robert von der**

von Noorden, Gunter Konstantin *see* **Noorden, Gunter Konstantin von**

Vossius, Adolf (1855-1925) German ophthalmologist, born in Zempelburg, Germany. Vossius received his M.D. in 1879 at the University of Giessen, where he studied under Arthur von Hippel. He was lecturer (1882-1887) and then professor of ophthalmology (1887-1890) at the University of Königsburg before returning to Giessen as professor of ophthalmology (1890-1925). Vossius was the first to describe keratitis interstitialis

centralis annularis and the annular contusion cataract now known as Vossius' lenticular ring. Vossius wrote: *Leitfaden zum Gebrauch des Augenspiegels für Studirenden und Aerzte*. Berlin 1886 (2nd ed 1889); *Grundriss der Augenheilkunde* Leipzig und Wien 1888; *Die wichtigsten Geschwülste des Auges*. Breslau 1895. (Hugo Magnus: *Augenärztliche Unterrichtstafeln*, Issue 7); *Der gegenwärtige Standpunkt in der Pathologie und Therapie des Ulcus Corneae serpens*. Halle a. S. 1898; *Lehrbuch der Augenheilkunde*. Leipzig & Wien 1898. Albert

Vottem, Ferdinand (1797-1843) Belgian surgeon. Vottem was born in Visé (province of Liège). He obtained the M.D. degree in Liège in 1820 and succeeded Antoine-Joseph Ansiaux in 1835. Already in 1838 he left the course of theoretical ophthalmology to his pupil Nicolas-Joseph-Victor→Ansiaux. Nevertheless he had written a paper on *inflammation of the capsule of the crystalline lens* (1837). He was a member of the (French) Belgian Academy of Medicine.(Verriest)

Waardenburg, Petrus Johannes (1886-1979) Dutch ophthalmologist. He was one of the first Dutchmen who was interested in anthropogenetics and, being an ophthalmologist and geneticist, he studied the genetics of eye disease in detail. He was one of the founders of clinical genetics in the Netherlands. In this respect he was far ahead of his time. His name is well known throughout the world of ophthalmology and genetics because of his many publications and because of the syndrome named after him. The Waardenburg syndrome is an autosomal dominant syndrome consisting of (1) dystopia canthorum; (2) pigmentary abnormalities of the eyes, hair, or skin; and (3) deafness. It was described for the first time in 1951 (Am. J. Hum. Genet. 3:195, 1951). After seeing a patient with deafness and dystopic canthi in 1947, Waardenburg examined all the pupils in the schools for deaf children in the Netherlands. Of the 1,050 pupils he found 12 affected by this syndrome. In the families of these 12 children he detected altogether 114 patients with similar abnormalities. Waardenburg was born in Nijeveen in the Dutch province of Drenthe, the son of a clergyman. He finished his medical studies in Utrecht in 1911. More or less by chance he became an ophthalmologist because of a vacancy in the Department of Ophthalmology. Two years later he had qualified as an ophthalmologist and he had also finished his thesis under Professor →Snellen, Jr., on "*Examination in the Human Being on the Heredity of Physiological and Pathological Characteristics of the Eye*." At that time the laws of Mendel had only recently been rediscovered (1900) so that his thesis was new at that time. He published 267 papers and six books. In 1932, he presented "*Das menschliche Auge und seine Erbanlagen*" ("The Human Eye and Its Genetic Composition [Design]"). This was the first book on genetic aspects of ophthalmology. Almost every ophthalmologist knows the monumental two-volume work, "*Genetics and Ophthalmology*," that he published in 1961 and 1963 in collaboration with Professors →Franceschetti and →Klein, both from Geneva, Switzerland. His last book, written at 84 years of age is entitled "*Remarkable Facts in Human Albinism and Leukism*," and it was published in 1970 by Royal Van Gorcum of Assen, the Netherlands. It is remarkable and almost unbelievable that he performed most of his work while as an ophthalmologist in private practice in Arnhem where he worked from 1913 to 1952. He was lecturer in medical anthropogenetics at the University of Utrecht from 1934 to 1940. From 1952 to 1956 he had a part-time appointment at the University of Leyden and he was head of the Department of Anthropogenetics of the Institute of Preventive Medicine. In 1920 he founded a Genetics Society and a Dutch National Bureau for Anthropogenetics. Out of this the Netherlandish Anthropogenetics Society was founded in 1949. He was its president from 1949 to 1963. His great scientific achievements have been honored on several occasions. He was honorary member of the Dutch and the Danish Ophthalmological Society and of the Dutch, Italian, and German Anthropogenetic Societies. In 1954 he became doctor *honoris causa* at the University of Leyden and in 1964 at the University of Münster. In 1957 he became a Knight in the Order of the Dutch Lion. In 1965 he received the Snellen medal, which is given every five years to a Dutch ophthalmologist who has made outstanding


DAS MENSCHLICHE AUGE

UND SEINE

ERBANLAGEN

VON

Dr. P. J. WAARDENBURG

AUGENARZT IN ARNHEM

MIT 8 FARBIGEN TAFELN UND 197 TEXTABBILDUNGEN

HAAG

MARTINUS NIJHOFF

1932

contributions. In 1965 the Netherlandish Ophthalmological Society instituted the Waardenburg Prize for theses of promising young ophthalmologists. His work with →Henkes of Rotterdam resulted in a joint paper with Pameyer and Henkes on the inheritance pattern of choroideremia (Br. J. Ophthalmol. 44:724, 1960) Some of his main interests were the study of the macula in red-free light and the studies of diaphanous irides in ocular or generalized albinism. AJO 1980,89:306-308

Wadsworth, Oliver Fairfield (1838-1911) American ophthalmologist born in Boston. He entered Harvard College in 1856 and graduated there with the academic degree of Master of Arts (A.M.) in 1863 and obtained his doctorate degree from Harvard Medical School in 1865. After he had served for a short time as assistant physician in the Fifth Massachusetts Cavalry he set off for further training in Zürich working under Johann Friedrich Horner. After his return in 1867, he worked at Boston City Hospital from 1870. From 1873 to 1900 he also worked at Massachusetts General Hospital and from 1892 at Massachusetts Charitable Eye and Ear Infirmary. In 1881 Wadsworth began as instructor in ophthalmoscopy at Harvard Medical School, and in 1891 became professor of ophthalmology. In 1898 he received the title Williams Professor of Ophthalmology in honor of his well-known predecessor Henry Willard Williams (1821-1895). He published 42 papers, mostly in the Transactions of the American Ophthalmological Society. He was the President of that society from 1899 to 1902. Wadsworth developed a new ophthalmoscope (manufactured by H.W.Hunter) which he presented to the Boston Society of Medical Sciences December 26, 1876. Transactions of the American Ophthalmological Society Vol.XIII, 1911. Schett/Keeler The Ophthalmoscope, Vol.1, Wayenborgh Ostend 1996.

Wahlfors, Karl Reinhold (1849- 1929) Finnish ophthalmologist from Helsinki. He graduated from the University of Helsinki in 1876 and served as a resident in ophthalmology 1879-1880. He presented his doctoral thesis at the University of Helsinki on "*Fluid Dynamics of the Eye*" in 1881. He completed his training in ophthalmology by travelling in Sweden, Denmark, Germany, Austria and United States of America. He served as Professor of Ophthalmology at the University of Helsinki 1888-1909. At the Heidelberg Ophthalmology Congress in 1888 he was the very first person to present the method of measuring human intraocular pressure using a mercury manometer connected with a cannula inserted into the vitreous cavity (*Ueber Druckmessungen im menschlichen Auge*. Siebenter Periodischer Internationaler Ophthalmologen-Congress, Heidelberg, 8-11 August, 1888, JF Bergman, Wiesbaden 1888: pp.268-274.) As a clinician he performed squint surgery, cataract surgery with a round pupil, and extracted intraocular foreign bodies using a magnet. He also experimented transplanting corneas using frog's cornea. He introduced strict aseptics and antiseptics to the operating theatre. Examination of bacteria from the conjunctival cul-de-sac before intraocular operations was routinely carried out. [by Ahti→Tarkkanen]

Wald, George (1906-1997) American biologist who discovered the role of vitamin A in vision. He was born and raised in New York City. After graduating from Washington Square College, New York City, in 1927, he moved uptown to Columbia University, where he studied with Selig Hecht, PhD, the foremost visual physiologist of the day. Hecht not only introduced Wald to visual physiology, but also had a profound influence on him. Hecht's studies had led to the realization that many visual phenomena can be explained in terms of physics and chemistry. Wald was to set many of Hecht's concepts into molecular terms. Early in his career, Wald elucidated the nature of the visual pigments, the light-sensitive molecules that initiate vision. He showed that the visual pigments consist of a protein (termed "opsin") to which is bound a light-sensitive chromophore, vitamin aldehyde (now termed "retinal"), a slightly oxidized form of vitamin A. This discovery not only elucidated the role of vitamin A in vision, but also was one of the first instances in which a biochemical role for a vitamin had been established. Wald and his colleagues went on to make many contributions to our understanding of the visual pigments and their role in vision. These include detailed studies on the rod pigment, rhodopsin, and the extraction and characterization of the first known cone pigment, jodopsin. His laboratory elucidated the role of *cis/trans* isomerization in the visual cycle, showing for the first time that such molecular transformations play a role in biology. He and his colleagues also studied the diversity of the visual pigments in nature, vitamin A

deficiency, visual adaptation, color vision, and the absorption properties of the cone visual pigments in primates, including man. His was the leading laboratory of its time in visual pigment biochemistry, and for his contributions he was awarded the Nobel Prize in Physiology or Medicine in 1967. Wald was awarded many other prizes, including the Eli Lilly Prizel, the Albert Lasker Award: the Rumford Medal and the Proctor Medal. Wald spent his entire academic career at Harvard University, Cambridge, beginning as a tutor in biochemical sciences in 1934 and retiring as Higgins Professor of Biology in 1977. He was a superb lecturer and teacher and was named one of the 10 best teachers in the country by Time magazine in 1966. He was also one of the earliest academics to speak out against the Vietnam War and became a forceful spokesperson against the war, nuclear arms proliferation, and a variety of other political issues. After his retirement from Harvard, he gave up laboratory research and devoted himself to political causes. He traveled widely until a few years before his death. Wald was one of the leading figures in vision research in this century. His contributions and insights have touched virtually all of us working in vision research. Arch Ophthalmol 1997,115:1088

Walker, Arthur Nimmo (? – 1916). British ophthalmologist , son of George Edward →Walker, the Liverpool ophthalmic surgeon and founder of St.Paul´s Eye and Ear Hospital, killed in action during World War I. Walker was appointed surgeon to St.Paul´s Eye Hospital, ophthalmic surgeon to the Lewis Northern Hospital, surgeon to the School for the Indigent Blind and Assistant Lecturer in anatomy in the University of Liverpool. The Ophthalmoscope, 1916,p.687-688.

Walker, Cyril Hutchinson (1861-1955) British ophthalmologist. Walker was born in Yorkshire, studied at Haileybury and Jesus College, Cambridge, carried out his medical studies at the London Hospital, and qualified M.B. in 1887. He became junior and later senior house surgeon at Moorfields; in 1900 he was appointed ophthalmic surgeon to the Bristol General Hospital, and then surgeon to the Bristol Eye Hospital. He was lecturer in ophthalmology to the University of Bristol, Master of the Oxford Ophthalmological Congress (1933 and 1934), President of the Ophthalmological section of the Royal Society of Medicine, and Vice-President of the Ophthalmological Society of the United Kingdom (1921 to 1924). He resigned from practice in 1933. Walker assisted in planning and carrying out the rebuilding and reconstruction of the Bristol Eye Hospital BJO 1955,39:704

Walker, George Edward (1840-1909) British ophthalmologist from Liverpool, founder of St.Paul´s Eye and Ear Hospital. He received his medical education at University College Hospital, London and was later clinical assistant to Sir William →Bowman at Moorfields Hospital, London. In the year 1870 Walker settled as a general surgeon in Liverpool, and whilst awaiting practice, he started a dispensary in St.Paul´s Square for the free treatment of the poor affected with diseases of the eye or ear. From the small two rooms where he started there grew a hospital with 50 beds and with about 10.000 patients treated a year. Walker published: *Essays in Ophthalmology* London 1879. The Ophthalmoscope 1909,p. 302-303. Albert: Source Book of Ophthalmology,p.362.

Walker, John (1803?-1847) British ophthalmologist. Walker was surgeon at Manchester (England) Eye Infirmary and instructor in anatomy, physiology, and ophthalmology at the Manchester Royal School of Anatomy and Medicine. He wrote articles and books on eye diseases and the physiology of vision. He authored : *The principles of ophthalmic surgery; being an introduction to a knowledge of the structure, functions and diseases of the eye; embracing new views of the physiology of the organ of vision*. London 1834; *The philosopy of the eye; being a familiar exposition of its mechanism, and of the phenomena of vision* London 1837; *The oculist's vade-mecum: a complete practical system of ophthalmic surgery* London 1843.Albert

Wallace, William (? -1940) Scottish ophthalmologist, composer and writer on musical subjects. Wallace received his education at Fettes and the University of Glasgow; he qualified M.B., C.M. in 1885 and took the M.D. (with commendation) three years later. During the Great War Wallace was appointed ophthalmologist to the Colchester Military Hospital and later served as Captain, R.A.M.C., attached as eye specialist to the London district. He had, early in his career, been house surgeon for two years at the Glasgow Eye Infirmary and clinical assistant at Moorfields Hospital. He recorded his ophthalmic

experiences in the war years in BJO,Vol.3 (1919) p. 481. In the same volume be wrote on the beginnings of fundus illustration, p. 102. The early ophthalmoscopic atlases was a subject to which he had devoted much attention. But it is as a musician that he will chiefly be remembered. For years he was secretary to the Philharmonic Society and he was the author of " *The Threshold of Music*" as well as works on Wagner and other musical subjects. A series of his drawings in water colour of eye injuries was in the Army Medical War Museum. BJO 25,96,1941

Wallace, William Clay (19th cent.,) American surgeon and ophthalmologist, studied under William MacKenzie and George Monteath at the Glasgow Eye Infirmary, and practiced in New York City. He wrote: *The structure of the eye with reference to natural theology*. New York 1836; *A treatise on the eye, containing discoveries of the causes of near and far sightedness, and of the affections of the retina, with remarks on the use of medicines as substitutes for spectacles*. New York 1839 (2nd edition of Structure of the Eye); *The accommodation of the eye to distances* New York 1850; *Wonders of vision, a treatise on the eye; containing discoveries of the causes of near and and far sightedness, and of the affections of the retina, with remarks on the use of medicines as substitutes for spectacles*. 3rd ed. New York 1841.Albert

Walsh, Frank B. (1895-1978) Canadian ophthalmologist, born in Oxbow, Saskatchewan, Canada. During his boyhood he developed an interest in outdoor life, hunting in the woods of Saskatchewan, an activity he continued into his later years. As a young man he was a member of the Oxbow hockey team. He was an avid, capable, left-handed golfer. At the age of 80 he was still able to play 18 holes with a score of 82. In 1915 he joined the Canadian Army together with eight other members of his hockey team. At the end of the war, there were only five. After the war Frank returned to Canada and attended the University of Manitoba, where he received his M.D. degree in 1921. He then went into general practice in Estevan, Saskatchewan, and became a Fellow of the Royal College of Surgeons of Edinburgh in 1928. Two years later he abandoned general practice and entered the residency, at the Wilmer Institute in 1930 at the age of 35. Often, a relatively minor incident tells more about the character of an individual than a long recitation of his accomplishments. There was a story frequently told about Dr. Walsh's independence, which is not meant to reflect unfavorably on either of the individuals in this story. It occurred during the chairmanship of Dr. Wilmer, who had been a general in the Army Air Force during World War I and in charge of aviation medicine. During this tour of duty he acquired some military attitudes and disciplines. One of these was to have the chief resident meet him at the front door of the Wilmer Institute and escort him down the corridor to his office. When Dr. Walsh became resident he thought this unnecessary and refused to meet the Chief. In those days the Head of the Department was treated with extreme respect and no one dared question his word. This was particularly true of Dr. Wilmer. Therefore, it took great courage on Dr. Walsh's part to show this independence. Dr. Wilmer then responded by refusing to make rounds with Dr. Walsh and avoiding him in other ways. Again, it is to Dr. Walsh's great credit that he saw that his display, of independence was disrupting things and because of this be had the humility to return to meeting Dr. Wilmer in the morning at the front door. Walsh was always extremely fond of teaching, and was certainly a superb instructor. During his residence he began conferences each Saturday morning on neuro-ophthalmology, and until his terminal illness seldom missed a meeting. It was also at his suggestion that the Wilmer Residents meetings, which are held each year in the spring, were begun. Because of his great love for teaching and instruction of the younger staff, he was affectionately known as "Pappy" by the house staff and students. After the completion of his residency be joined the fulltime staff of the Wilmer Institute, and in 1937 he began his famous book of medical ophthalmology "Clinical Neuro-ophthalmology." This classic in the field of our specialty was first published in 1947. In 1945, personal necessity caused him to leave the fulltime faculty of the Wilmer Institute and enter private practice. A year or two later he joined Charles Iliff ,in a partnership that lasted until 1957. He then returned to Wilmer to become a geographic full time member of the faculty, a position he maintained until his death. The second edition of "Clinic Neuro-ophthalmology" was published in 1957, and a third and enlarged edition was published with his former student William F. Hoyt. He also published in 1973 "*Neuropathology of Vision- An Atlas*" with Richard Lindenberg and Joel Sacks. AJO 1979,87:249-251

Walther, Philipp Franz von (1782-1849) German surgeon and ophthalmologist, born in Burweiler, Germany. Von Walther studied at the University of Vienna under Beer and at the University of Landshut, where he received his M.D. in 1803. After further study under Desault in Paris, he became professor of physiology and surgery at Landshut (1804-1818); from 1818 to 1830, the apex of his career, he was professor of surgery and ophthalmology at the University of Bonn, where students and patients from all over Europe flocked to benefit from his skill; from 1830 until his death he was professor of surgery at the Ludwig Maximilian Universität in Munich. In 1820 Walther and Carl Ferdinand von Graefe founded the *Journal fur Chirurgie und Augenheilkunde*, which became an important forum for new developments in ophthalmology. Walther worked for the uniting of surgery with medicine, and for the firm scientific grounding of both in physics and chemistry. Von Walther wrote: *Abhandlungen aus dem Gebiete der practischen Medicin besonders der Chirurgie und Augenheilkunde* Landshut 1810; *Merkwürdige Heilung eines Eiterauges nebst Bemerkungen über die Operation des Hypopyon* Landshut 1819; *Die Lehre vom schwarzen Staar und seiner Heilart* Berlin 1841; *System der Chirurgie* , 6 vols., Freiburg 1833-1852; *Lehre von den Augenkrankheiten*. 2 vols. Freiburg im Breisgau 1849.

Walton, Henry Haynes (1816-1889) British ophthalmologist born in Barbados. Walton was trained at St. Bartholomew's Hospital, London, becoming M.R.C.S. in 1839. After a residency at the Moorfields Ophthalmic Hospital, he established (1843) his own eye clinic, which grew into the Central London Ophthalmic Hospital, with Walton as its director until 1869. Walton was a frequent contributor of journal articles on general ophthalmic surgery. He wrote: *A treatise on operative ophthalmic surgery* London 1853 (American edition Philadelphia 1853); *A treatise on the surgical diseases of the eye*. London (2nd ed.1861); *A practical treatise on the diseases of the eye* London 1875 (3rd edition of *A Treatise*).

Wang, Hwei-zu (1946-) Taiwanese Ophthalmologist, Associate Professor of Ophthalmology, Chairwoman of the Department of Ophthalmology of Kaohsiung Medical Collage (KMC). She graduated from the KMC in 1971 and received her M.D. degree. After residency training (1971-1976) under Prof. CHEN Chen-Wu, she was appointed the Instructor of Ophthalmology (1976-1980), and then promoted to the Associate Professor in 1980 and serves to the present. She worked as Visiting Assistant Professor to Herman Eye Center, University of Texas, Houston in 1981. She has served as the Acting Chairman (1980-1989) and Chairman (1989 to present) of the Department of Ophthalmology of the KMC. In the professional Societies, she served as the General Secretary of the Ophthalmological Society of ROC since 1989 to the present, and Director of Eye Bank, Kaohsiung Chapter of Red Cross of Roc (Taiwan) from 1985 to 1996. Her publications embrace clinical and basic experimental aspects of Ophthalmology, and some examples are "*Using MTT viability assay to test the cytotoxicity of antibiotics and steroid to cultured porcine corneal endothelial cells*. J. Ocul. Pharmacol and Ther. 12: 35-43, 1996", "*Alteration of glucose uptake in cultured human corneal endothelial cells grown in high glucose media via cAMP-dependent pathway*. Kaoshiung J. Med. Sci. 9: 566-571, 1997" and " *The changes of ocular axial length and corneal curvatures after scleral buckling for retinal detachment*. Kaohsiung J. Med. Sci. 10: 77-83, 1994". (Department of Ophthalmology, Kaohsiung Medical College, Kaohsiung, Taiwan, fax: 886-7-3213931)(SM)

Wang, Si-hui (1929-) Chinese ophthalmologist, Chief Ophthalmologist, Advisor of Tianjin Eye Hospital. She graduated from the Faculty of Medicine, The Second Shanghai Medical University in 1954. After having completed Ophthalmology training at the Tianjin Eye Hospital in 1959, she worked (1989-1972) at the Strabismus, Eye Injury and Fundus disease Section of the Hospital, then as the Vice-Chief of the Glaucoma Section (1972-1983). She served as the Director of Tianjin Eye Hospital, Tianjin (1984-1991) and has been in this present position as above since 1987. The positions she has held in professional societies include Committee member of Ophthalmology of the Chinese Medical Association (1988), Committee member of Chairman delegation of China Disabled Persons Federation (1988-1998), Vice-President of Tianjin Disabled Persons Federation (1989-1998), Board member of the International Low Vision Research and Rehabilitation Association (Netherland)(1994-), Vice-Chairman of China Optometry Association (1997-) and Honorary President of Ophthalmology Division, Tianjin Branch

of the Chinese Medical Association. She serves as the editorial member to the *Chinese Journal of Ophthalmology* (1988-), *Chinese Journal of Practical Ophthalmology* (1988-), *Ophthalmology* (1992-), *Journal of Videology* (The Netherland)(1995-) and the *Journal of Applied Medical Science of Today* (1995). She published many papers and books and some examples are "*Ultrastructural observation of he anterior chamber angle tissues in congenital glaucoma. Eye Science*, 10: 50, 1994", "*Diseases of optic nerve*. Chapter 12, *Color Atlas of Fundus Diseases*, Tianjin Science and Technology Translation Publishing Co. Tianjin 1995" and "*Low vision textbook*. Hua xia Publishing Co. Beijing, 1998). From her contributions, she received many Honor Awards, e.g. Research in Low vision Children (1991). Distinguished Service Award of the Asia-Pacific Academy of Ophthalmology (1992) and National Excellent Person, Rehabilitation of disabled persons (1993).(Tianjin Eye Hospital, 102 Harbin Road, Tianjin 300022, People's Republic of China.phone: +86-22-23399843; fax: +86-27305083, e-mail: ophhostj@publicl.tpt.tj.cn) (SM)

Wangspa, Samran (1922-) Thai ophthalmologist, Professor Emeritus of Mahidol University, Bangkok. He graduated from the University of Medical Science, Bangkok, in 1947 and received his M.D. degree. He extended his studies at Harvard Medical School and received a certificate in Otolaryngology in 1954, and in Ophthalmology in 1955. He became a Fellow of the International College of Surgeons in 1957. He further studied Ophthalmic Pathology at the Institute of Ophthalmology London in 1959. He received training in the prevention of Trachoma in India as WHO fellow in 1959. He was appointed the Professor of Ophthalmology of Siriraj Hospital, Mahidol University in 1970 and served until 1983. He is the president of the Foundation for Sight Preservation and Prevention of Blindness in Thailand under the Royal Patronage of H. M. the Queen (1964-present), Board Committee fellow of the College of Surgeons of Ophthalmology in Thailand, Member of the National Assembly (1973) and a Member of the Scientific Terms Subcommittee of the Royal Institute (1981-present) and the President of the Subcommittee since 1990. He has served on the Editorial Committee of the Thai Encyclopaedia of the Royal Institute since 1991 to present. He has published 51 articles in Thai Medical Journals and 8 in International Journals. He has also written the Section on Ophthalmology in the Thai Encyclopedia in 1988 and 20 articles for public education. He is an expert in Medical History in Thailand and published 22 articles on this subject. He has been in public service for a long time, and has participated in the Mobile Royal Medical Unit since 1967 and examined about 3000 cases and performed about 300 cataract surgery every year. In the international relations, he worked as WHO expert on trachoma and prevention of blindness (1978-1984), Councillor of the Asia-Pacific Academy of Ophthalmology (APAO)(1967-1984), Vice-President of the 8th Congress of APAO (1981) and received the Distinguished Service Award from the Academy. In recognition of his outstanding service, the King of Thailand conferred on him Knight Grand Cordon (Special Class) of the Most Exalted Order of the White Elephant in 1985. Currently, he is working as a Medical Officer, Ophthalmologist, The Royal Medical Unit, Bangkok.(SM)

Jamshed H. Wania

Wania, Jamshed H. (1929-1991) Pakistani ophthalmologist. Born of a Parsi Zoroastrian community in Karachi, he followed his father's footstep in Ophthalmology and he graduated with MBBS from Dow Medical College, Karachi, Pakistan in 1953. He extended his study in London from 1954 and received training at Moorfields Eye Hospital and obtained DO (London) in 1956; he served in various clinical appointments in the UK. In the following year, he started to work for one year as an intern at the Ellis Hospital Schenectady, New York. He also worked for another year with Prof. Frank Walsh in neuro-ophthalmology at the Wilmer Institute where he was the first Pakistani to receive a grant for the covetous "Fight for Sight Fellowship". He returned home in 1959 and his life-time activity in Ophthalmology began. Although he set up private practice, he was involved in honorary professional and social works and he organized the first eye camp in a remote village in Sind Province. He served on various health committees of the Government and non-government organizations. In 1979, he organized the successful 7th Congress of the Asia-Pacific Academy of Ophthalmology (AP AO) as the Secretary General, and also the 8th Afro-Asian Congress in 1984. He was elected to be President of APAO at the 13th Congress in Kyoto in 1991, where he delivered the deOcampo Lecture

"The Eye and intestinal parasite diseases". He was also a Council member of the Afro-Asian Congress of Ophthalmology, International Agency for the Prevention of Blindness and Vice-President of the Federation of Ophthalmological Societies of non-aligned and SAARC Countries. He was active in philanthropic works as a consultant and chairman of various hospitals and trust in his Country. In recognition of his outstanding service, he was granted the Ramzan Ali Syed Gold Medal in 1988. His son, Hormuzshaw Wania is an ophthalmologist, following his father's footstep. (Ophthalmology awakens in Asia -40 years of Asia-Pacific Ophthalmology, Lim, K.H. & Lim Arthur S.M. Singapore National Eye Centre 1999).(SM)

Ward, Basil Arthur (1916-1968) British ophthalmologist, consulting ophthalmic surgeon to University College Hospital, West Indies, and Associate Lecturer in Ophthalmology, University of West Indies, Jamaica. He was born in Chingford, Essex, the only son of Arthur H. Ward, and was educated at Cranleigh School, Guildford, and St Thomas's Hospital Medical School. He graduated M.B., B.S. in 1942, obtaining an honours degree with distinction in surgery, and became casualty officer and house surgeon at St Thomas's Hospital. In 1943 he joined the R.A.M.C., attaining the rank of Captain, and served with the 5th Infantry Division, 1st Special Boat Service, and the 2nd Independent Parachute Brigade-without any training he parachuted into Northern Greece behind the German lines. On returning to civilian life he specialized in ophthalmology, becoming F.R.C.S. in 1948 and becoming house surgeon and senior resident officer at Moorfields Eye Hospital and senior registrar and chief assistant to the eye department at St Thomas's Hospital. From 1952 to 1954 he was Wernher Research Scholar in the department of pathology at the Institute of Ophthalmology, London, where he collaborated in the pioneer research which first demonstrated the role of oxygen in the pathogenesis of retrolental fibroplasia. This was the subject of his M.S. thesis. He subsequently became consulting ophthalmic surgeon in Fiji (Colonial Medical Service), in Perth, Western Australia, and finally in Jamaica. BJO 1969,53:144

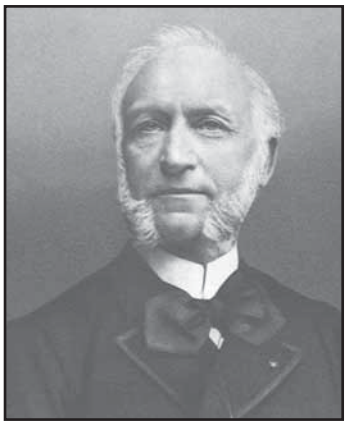
Wardle, John Dobson (1869-1959) British ophthalmologist, emeritus professor of ophthalmology in the University of Durham and honorary consulting surgeon of the Royal Victoria Infirmary, Newcastle upon Tyne. He was born in Gateshead and educated at Aston Grammar School, Market Rasen, Lincs., and later at Durham University College of Medicine, where he qualified in 1891. In 1900 he was appointed ophthalmic surgeon to the old Newcastle Infirmary on the Forth banks. He lectured in ophthalmology in the College of Medicine, and was later appointed professor of ophthalmology in the University of Durham-one of the first chairs in the subject in England. He retired from the Infirmary in 1928 and from his professorship in 1933. BJO 1959,43:192

Wardrop, James (1782-1869) Scottish surgeon, born near Bathgate, Scotland. He served an apprenticeship to his uncle, an Edinburgh surgeon, before studying in London under Abernethy, Cline and Cooper, in Vienna under Georg Beer, who kindled his interest in ophthalmology. Admitted to the College of Surgeons of Edinburgh in 1804, he settled permanently in London four years later, as a general surgeon mainly concerned with the treatment of eye diseases. In the 1820s and 1830s an active lecturer and contributor to the medical literature, he alienated many colleagues by publishing personal attacks against them, and spent his last years both avoiding and avoided by the medical community, producing no more writings. Wardrop is best remembered for his *Essays on the Morbid Anatomy of the Human Eye* (2 vols. Edinburgh 1808-1818) and for his successful ligation of the carotid artery on the distal side of an aneurysm (1809). He also wrote: *Observations on fungus haematodes or soft cancer, in several of the most important organs of the human body, containing also a comparative view of the structures of fungus haematodes and cancer*. Edinburgh 1809; *History of James Mitchell, a boy born blind and deaf; with an account of the operation performed for the recovery of his sight* London 1813; *On the effects of evacuating the aqueous humour in the different species of inflammation of the eyes; and in some diseases of the cornea* London 1818; *An essay on the diseases of the eye of the horse, and on their treatment*. London 1819.Albert.

Ware, James (1756-1815) British ophthalmologist born in Portsmouth, England. Ware served an apprenticeship to a surgeon there and received further training at St. Thomas' Hospital in London. He became assistant (1777-1778) and then partner (1778-1791) to

London surgeon and ophthalmologist Jonathan Wathen; thereafter he conducted his own practice, chiefly in ophthalmic surgery. In 1800 he founded the London School for the Indigent Blind, modeled on the institution founded in Liverpool a decade earlier. Ware was a major force in the rescue of ophthalmology from the hands of quacks. He wrote: *Remarks on the ophthalmy, psorophthalmy, and purulent eye. With methods of cure* London 1780 (3rd ed. 1795); *Chirurgical observations relative to the epiphora, or watery eye, the scrophulous and intermittent ophthalmy, the extraction of the cataract, and the introduction of the male catheter*. London 1792 (German 1809); *An enquiry into the causes which have most commonly prevented success in the operation of extracting the cataract. To which are added observations on the dissipation of the cataract, and on the cure of the gutta serena. Also additional remarks on the epiphora; or, watery eye*. London 1795 (German edition 1799); *Remarks on the fistula lachrymalis; with the description of an operation considerably different from that commonly used, and cases annexed as proof of its utility. To which are added, observations on haemorrhoids; and additional remarks on the ophthalmy*. London 1798; *Observations on the cataract and gutta serena. The second edition with many additions* London 1804. *Remarks on the purulent ophthalmy, which has lately been epidemical in this country* London 1808; *On the operation of largely puncturing the capsule of the crystalline humour in order to promote the absorption of the cataract; and on the gutta serena* London 1812. Albert

Ware, Lyman (1841-1916) American ophthalmologist from Chicago. Ware was one of the founders of the Chicago Ophthalmological Society and their vice-president in 1889 and President in 1899. He was attached to the Illinois Charitable Eye and Ear Infirmary from 1871-1889. Ware translated into English Ferdinand Arlt´s famous „*Klinische Darstellung der Krankheiten des Auges*“ 1881 : „*Clinical Studies on diseases of the eye*“ Philadelphia 1885. The Ophthalmoscope, 1916, p. 565.



Evariste Warlomont

Warlomont, Evariste (1820-1891) Belgian ophthalmologist, born in Aubel near Liège, Belgium. Warlomont received his M.D. in 1844 at Louvain (Leuven) and worked for seven years as a military physician before taking up the study of ophthalmology under Florent Cunier at the *Institut Ophtalmique de Bruxelle*s; he joined the staff of this clinic, becoming its director in 1869. In 1883 he founded an eye institute in San Remo, Italy, of which he remained director until shortly before his death. After Cunier´s death, Warlomont became chief editor of the *Annales d´oculistique* from 1853 to 1891; he published in it numerous articles and, with Achille Testelin, a French translation of Mackenzie's 4th edition of *Practical Treatise on Diseases of the Eye* and initiated the first International Ophthalmologic Congress in 1857, taking a prominent role in subsequent congresses as well. Warlomont wrote: *Quelques mots sur un nouveau cas de chromhidrose palpébrale*. Bruxelles 1864 ; he also added, with Mackenzie and Testelin, a supplement volume to the above mentioned translation of MacKenzies Treatise (1856-1865). Warlomont, in 1864, ordered a reprint of volume 1 of his *Annales d´oculistique* which he had brought to a new blossom after the death of its creator, F. Cunier. This reprint did not bear the exact title of the first volume which was *Annales d´Oculistque et de Gynécologie* causing later (until to-day!) much confusion in libraries around the world, which are not aware of that “reprint” which does not bear the words *reprint* or *second edition*. Warlomont was also the (financially seen) owner of the *Annales*, and after his death the oldest ophthalmic review in the world, was offered for auction and was bought by the French ophthalmologist Valude and his Swiss colleague Sulzer. The *Annales* left Belgium for France, where it still exists, after merging with the *Archives d´Ophtalmologie*, under the present name of *Journal Français d´Ophtalmologie*. JPW.

Warner, Joseph (1717-1801) British surgeon and ophthalmologist born on Antigua. Warner came to London as a youth and studied medicine and surgery under Samuel Sharp, whom he succeeded as first surgeon at Guy's Hospital in 1745. Warner, the first to tie the common carotid artery (1775), achieved eminence as a general and ophthalmic surgeon; an advocate of Daviel's cataract extraction operation, he devised a cataract knife in 1754, which came into wide use. He wrote: *Cases in Surgery, with Introductions, operations and Remarks* etc. London 1754, 4th ed.1784, French edition *Observations de chirurgie* Paris 1757; *A description of the human eye, and its adjacent parts, together with their principal diseases and the methods proposed for relieving them* London 1773; *Account of the Testicles etc*. London 1774, 2nd ed.1779, German ed.1775. Albert. JPW

Watanabe, Ikuo (1935-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology of Hamamatsu University, School of Medicine. He graduated from Nagoya University in 1959, studied Ophthalmology at the University under Prof.→KOJIMA Koku, and received his Doctor of Medical Sciences in 1966 (thesis: *Effect of ouabain and diamox on the S-potential*. J. Jpn. Ophthalmol. Soc. 70: 1905, 1966). He was promoted to the Lecturer of the University in 1968 and was appointed to the present position as above in 1976. He has worked on the electrophysiology of vision and published 328 original papers and has written 6 books. Some examples of his publications are "*Congenital stationary night blindness: a clinicopathological study*. Doc. Ophthalmol. 63: 55, 1986", *Retinal cell death by light damage*. Jpn. J. Ophthalmol. 43: 171, 1999", "*Clinic of ERG and EOG*. Igaku-shoin, Tokyo, 1984" and "*Ophthalmology illustrated*. Kobundo Publ. First ed. 1987,2nd ed. 1990, 3rd ed. 1991, 4th ed. 1994". He served as a Councillor to the Japanese Ophthalmological Society (1977-1998) and is an Honorary Member of the Society. He serves as an Executive Director of the Japanese Society for Clinical Electrophysiology of Vision. He is also a member of the International Society for Clinical Electrophysiology of Vision (ISCEV) and the International Society for Eye Research. He is a co-author of History of Ophthalmology in Japan, Centennial commemorative publication of the Japanese Ophthalmological Society, 1996: in cooperation with Prof. OHBA Norio, he completed the Data-Base of 100 years of the J. Jpn. Ophthalmological Society. (Department of Ophthalmology, Hamamatsu University School of Medicine, Mamamatsu-shi, Handa-cho 3600, Japan. phone: +81-5-3435-2254, fax: +81-5-3435-2372)(SM)

Wathen, Jonathan (1729-1808) British, London surgeon and ophthalmologist, the teacher and partner of James Ware, and a vigorous advocate of the extraction operation for cataract. In addition to ophthalmologic works, he published treatises on syphillis and diseases of the ear. He wrote: *A new and easy method of applying a tube for the cure of the fistula lachrymalis* London 1781(2nd ed.1792, German ed.1784); *A dissertation on the theory and cure of the cataract, in which the practice of extraction is supported and that operation in its present improved state is particularly described* London 1785. Albert

Watson, Alexander (1799-1879) Scottish surgeon, ophthalmologist, and authority on forensic medicine from Edinburgh, who named himself later Watson-Wemyss. was surgeon to the Royal Infirmary and founder of the Royal Eye Infirmary (1831). In 1846 he inherited a large country estate and retired from practice. His principal publications include a number of ophthalmological works and a *Medico-Legal Treatise on Homicide by External Violence* (1837). He also authored: *Anatomical description of the human eye* Edinburgh 1828; *Compendium of the diseases of the human eye ... to which is prefixed an account of the anatomy and physiology of that organ* Edinburgh 1822 (being the first English compendium).

Watson-Wemyss see **Watson, Alexander**

Richey L. Waugh Jr

Waugh, Richey L., Jr. (1921-2000) American ophthalmologist. Waugh received his medical education at Johns Hopkins University and earned his MD in 1946. He became Fellow in ophthalmology, Louisiana State University, New Orleans, Louisiana, 1950-1954. Waugh wrote: "*The Eye and Man In Ancient Egypt*".J.-P.Wayenborgh, 1995. (in Two Parts), (Hirschberg *History of Ophthalmology*.*The Monographs*. Volume One), and translated: Hugo Magnus. *Ophthalmology of the Ancients*. J.- P.Wayenborgh. Part 1, 1998, Part 2, 1999.(Hirschberg History of Ophthalmology.The Monographs. Volume 4a+b) and Julius Hirschberg "*The Ophthalmology of Aetius of Amida*" J.-P.Wayenborgh, (*The Monographs*. Volume 8, 2000). Waugh published the following papers: *Archives of Ophthalmology* 1952, Vol. 47, pp. 437-453;1952, Vol. 48, pp. 40-43, *Southern Medical Journal* 1952. Vol. 45, No. 9, pp. 832-839; 1953. Vol.46, No. 4, pp. 363-372, *American Journal of Ophthalmology* 1954. Vol. 38, No. 1, Part 2, pp. 205-214. He belonged to the New England Ophthalmological Society, to the The Massachusetts Society of Eye Physicians and Surgeons and the American Academy of Ophthalmology. Address: Wakelee Road, East Dover, Vermont 05341-0208, USA (JPW)

Wayenborgh, Jean-Paul (1942-) Belgian publisher and editor of historic ophthalmic literature. Wayenborgh was born in Coulommiers, France and moved in 1946 to Belgium. He lived in Germany from 1959 until 1989 when he moved to Scotland,

coming back to Belgium in 1991 where he presently lives. He started in 1960 as an antiquarian bookseller specialising in ophthalmic literature. In 1976 he met Frederick C.→Blodi whom he asked to translate A.Vogt´s second edition of the famous *Atlas of Slit Lamp Microscopy of the Living Eye*. That three volume set was promptly translated and published between 1978 and 1981. When Fred Blodi had translated Vogt´s work, Wayenborgh asked him to translate Julius Hirschberg´s monumental *Geschichte der Augenheilkunde* whose English edition is still in progress. Wayenborgh authored in German, under the pseudonym W. Poulet, the first systematic historical work on spectacles: *Atlas on the History of Spectacles*.(W.Poulet: *Atlas zur Geschichte der Brille*, 3 vols. Wayenborgh, Bonn 1978-1980) This work was translated into English by Fred Blodi (2 vols.), into French by Robert Heitz (2 vols.) and into Japanese by the Zeiss Company in Tokyo (2 vols.). At the same time, in 1981, with the help of Jules François of Ghent University, he founded the *Historia Ophthalmologica Internationalis* of which 4 volumes were published. Wayenborgh started to edit "*The Monographs*" (a supplement series to Hirschberg´s History of Ophthalmology) in 1995 of which 8 volumes have been published to date . With Saiichi Mishima and Richard C. Keeler´s help he authored IBBO-International Biography and Bibliography of Ophthalmology (2 vols. Ostend 2001-2002). He also wrote a short biography of Florent Cunier in Strabismus 2001,9:177-178. see *Belgium publisher of ophthalmic history* in: *Ophthalmology Times* March 2000.AB

Weber, Adolph (1829-1915). German ophthalmologist of Darmstadt. Pupil of Albrecht von →Graefe, he received 1854 his M.D. in Berlin and after his Master´s death in 1870, was gifted all his surgical instruments.Like Max Knies, Weber recognised the importance played in pathology of glaucoma by closure of the angle of the anterior chamber. Weber proved by pathological examination that the main factor was mechanical and brought about by pushing forward of the root of the iris by the oedematous ciliary processes. Weber settled in Darmstadt as general practioner and later, in 1855, as ophthalmologist. Weber invented numerous surgical instruments and procedures (succion method for treatment of detached retina), and made important discoveries concerning the causes and treatment of glaucoma. The Ophthalmoscope, 1916,p. 57.Albert:Source Book of Ophthalmology,p.370.

Wecker, Louis de (1832-1906) German ophthalmologist born in Frankfurt am Main. De Wecker received his M.D. at Würzburg in 1855 and pursued ophthalmologic studies under Arlt, Jaeger, von Graefe, Desmarres, and Sichel before establishing himself in Paris as an ophthalmologist in 1862. Before that he has been personal physician to count Stroganoff in Russia. Having bought the practice of Charles Deval in Paris, he became an internationally renowned practitioner, lecturer, and writer on eye diseases. He invented a pince-ciseaux for the division of after-cataract, and a double strabismus hook; advocated sclerotomy for the treatment of glaucoma; devised the capsular advancement procedure for strabismus in 1883; and devised a new method for enucleation. *Études ophthalmologiques; traité théorique et pratique des maladies des yeux*. 2 vols. Paris 1863-1866 (dedicated to *my dear master Albrecht de Graefe*), 2nd ed.1867-68 ; *Rapport sur la Valeur de l´Iridectomie* Paris 1901 (Société Francaise d´Ophtalmologie, Congrès de 1901) ; with E. Jaeger *Traité des maladies du fond de l'oeil et atlas d'ophthalmoscopie*. Paris and Vienna 1870; *Échelle métrique pour mesurer l'acuité visuelle*. Paris 1877; edited by Masselon *Therapeutique oculaire* Paris 1878-1879 (English ed. London 1879, Italian 1879) ; edited by Maselon *Chirurgie oculaire*. Paris 1879; with E. Landolt *Traité complet d'ophthalmologie* 4 vols., Paris 1880-1889 ; with Michel Julien Masselon *Ophthalmoscopie clinique* Paris 1881 (2nd ed 1891) and also with Masselon *Manuel d'ophthalmologie; guide pratique a l'usage des étudiants et des médecins*. Paris 1889; *Die Erkrankungen des Uvealtractus und des Glaskörpers* in the first edition of Graefe-Saemisch *Handbuch*, Vol.4 (1876). De Wecker also deesigned an ophthalmoscope named after him. Schett/Keeler *The Ophthalmoscope*, vol.1. JPW

Wedel, Georg Wolfang (1645-1721) German physician born at Golssen, Germany. Wedel received his medical education at Jena entering the university at the early age of 16 and from 1673 until his death was professor of medicine there. He was a pupil of Schenck and Rolfink. After a short time travelling, interrupted by his father´s death, he continued to study in Jena for five years. For a short time he practiced in Landsberg and in Züllichau, returning (1667) to Gotha as a town physician. He was in Gotha until 1672, went back to

Jena to earn his medical degree and to start his professoral career. He was a renowned teacher and the author of a vast body of medical treatises, among them several on eye diseases: *De nyctalopia*, praeside Georgio Wolffgango Wedelio ... exhibita Philippo Adamo Guolfgango Sauber ... Jena 1693; *Dissertatio De aegilope* ... praeside Georgio Wolffgango Wedelio ... submitta a Johanne Friderico Hünerwolff ... Jena 1695; Dissertatio medica *de ophthalmia* ... praxeos ... Georgii Wolfgangi Wedelii …Christiano Ludovico Schnettero. Jena 1713; Dissertatio ... *Casum de gutta serena* praesidio Georgii Wolffgangi Wedelii... submissa a Daniele Lehenherr. Jena 1716; *Pharmacia in artis formam redacta* Jena 1677; *De medicamentorum facultatibus cognoscendis* Jena 1678 *Physiologia medica* Jena 1680, 2nd ed 1686, 3rd 1688; *Compendium praxeos clinica* Jena 1707. Albert. JPW

Wedl, Carl (1815-1891) Austrian histopathologist of Vienna. Wedl received his M.D. in 1841 at the University of Vienna, where he was professor of histology from 1853 until his death. His major works are the *Grundzüge der pathologischen Histologie* (Vienna 1854, English ed London 1855),with Stellwag von Carion *Atlas der pathologischen Histologie des Auges*, 4 parts, Leipzig 1860-1861; *Pathologie de Zähne* (Leipzig 1870), and with Emil Bock *Pathologische Anatomie des Auges* (Wien 1886).

Weekers, Leo (1881-1962) Belgian ophthalmologist. Father of Roger Weekers. He was born in Mechelen (province of Antwerp) and died in Liège. He worked in Liege under Nuel and with the physiologist Léon Frédéricq already before obtaining his M.D. degree in 1906. He visited from 1906 to 1908 the Institut Pasteur in Paris and the departments of ophthalmology in Freiburg-in-Breisgau, Heidelberg, Bonn, Paris and London. He then came back to Nuel and obtained in 1911 the special doctorate in ophthalmology with an experimental work on *ocular phlyctenes and on the action of tuberculin on the conjunctiva*. He taught already in 1912 but succeeded to Nuel only in 1919, after important medical activities during the first World War. He became emeritus in 1949 but worked in the department until his death. He wrote on *teaching of medicine* (1908, 1931), *miners' nystagmus* (1910), the *treatment of painful eyes with retrobulbar injections of alcohol* (1929), *the treatment of spasmodicentropium* (1932), the *hallucinations in delirium tremens* (1934). Well prepared by his physiological background he made experiments on *retinal detachment* (1925) and especially on the *dynamics of endocular fluids* (from 1921) as basis of useful treatments of glaucoma. He wrote on the *direct and consensual reactions in intraocular pressure* (1931) and improved much *antiglaucomatous surgery by realizing successively iridencleisis* (1931), *retrociliar diathermy* (1942) and *non perforating cyclodiathermy* (1946), with a review paper in 1948. His last paper is devoted to *photocoagulation of iris prolaps* (1963). He was member of the (French) Belgian Academy of Medicine and was it´s president in 1949. He contributed to regulation of specialization in ophthalmology and of physical requirements for car driving. He was an excellent teacher. (Verriest)

Weekers, Roger (1911-) Belgian ophthalmologist. Weekers was born in Liège. Like his father Leo Weekers he worked in general physiology during his student's years. He obtained the M.D. degree in Liège in 1935 and specialized in ophthalmology and ocular biochemistry in 1936/37 in Basel with →Brückner and in 1937/38 in Chicago with Brown. Thereafter he worked in Liège and obtained in 1941 the special doctorate with a thesis on cataract and the carbohydrate metabolism of the crystalline lens. He has been associated with the Belgian National Fund of Scientifical Research from 1942 to 1948. After being professor, he succeeded his father as professor of ophthalmology in 1949. He retired in 1982. His first publications were devoted to *general physiology* (9 papers from 1931 to 1936), to the *biochemistry of the crystalline lens* (25 papers from 1937 to 1944) and on *the cornea* (1940). He started to write on *glaucoma* from 1942, *study of the aqueous veins* (1948), *physiopathology, rare clinical entities as soft glaucoma* (1943), *buphthalmos* (1949) and *capsular glaucoma* (1950) *electronic tonometry* (1951), *medical treatment with DFP* (1947), *acetazolamide* (1954) and later *sympathometic drugs, surgical treatment by iridectomy, iridencleisis* (1948), *retrociliarydiathermy* (1946) and *angiodiathermy* (1956). An early series of papers was devoted to the *assessment of visual functions with angioscotometry* (1943), *flicker fusion frequency* (1946) and *perimetry* (from 1953); he participated in the conception of the well-known *Goldmann-Weekers adaptometer* (1950). Concerning surgery he was especially interested in cataract extraction, keratoplasty, strabismus and retinal detachment. He made a report on *penicillin*

treatment in ophthalmology (1946), and later, with his still growing team, reports on *surgical treatment of paralytic squint* (1955), *early diagnosis of glaucoma* (1959), *hypertensive uveitis* (1960), and *photocoagulation in ophthalmology* (1965). He organised an international symposium on glaucoma in Liège (1958) and played an important role in the organization of postgraduate courses of ophthalmology. He is a member of the (French) Belgian Academy of Medicine. In 1951 he received with his father the award of the *International Society for Prevention of Blindness* for their common work on glaucoma. Verriest.

Weeks, John-Elmer (1853-1949) American ophthalmologist, born in Painesville, Ohio. He studied medicine at the Michigan University, and, in 1882, having met H. Knapp in New York, was named assistant under him. After this, he spent several months in Berlin, coming back to New York, where he continued to work under Knapp until 1890, the year he was named ophthalmologist at the New York Eye and Ear Infirmary. He worked there until 1920. Weeks was, with Axenfeld and Morax, one of those who created the field of bacteriologic ophthalmology. It was Weeks who discovered, already in 1886, the bacillus of the contagious conjunctivitis. Weeks wrote *Diseases of the Eye, Ear, Nose and Throat* (1892) and *Diseases of the Eye* 1910. JPW

Wegner, Wilhelm (1898-1972) German ophthalmologist born in Thorn (West Prussia). Wegner studied medicine in Marburg and Greifswald and received, at the last named his medical degree with the thesis *Amyotrophische Lateralsklerose*. He accepted 1923 a position as assistant at the Greifswald Eye Clinic under Löhlein and Meisner, becoming in 1927 lecturer at that institution. Wegner followed Löhlein (1931) to Freiburg accepting a post as first assistant (Oberarzt) at the Freiburg University Eye Clinic. He was named professor extraordinarius in 1932 and became (1934) professor and director of the Freiburg University Eye Clinic, a position he held until he retired. Wegner´s main scientific interest was focused on glaucoma. He devised a *Polyophthalmoscope* with H. Hartinger from the Zeiss Company that was presented at the International Ophthalmic Congress in Brussels 1929, that allowed up to nine persons to observe a twelve times enlargment of a fundusscopy which was ideal for teaching purposes. During his stay in Freiburg Wegner also showed a profund interest in ophthalmic tuberculosis, which he encountered frequently in the area in which he worked. He founded, in the mountains of the Black Forest in Höhenschwand, a special clinic with Th.Axenfeld and Löhlein for the treatment of ophthalmic tuberculosis, similar to the clinic founded by Werdenberg in Davos (Switzerland). He published *Die Augentuberkulose in ihren Beziehungen zum Gesamtorganismus* in: *Zeitfragen der Augenheilkunde* , edited by Löhlein, Stuttgart 1938 and *Der Morbus Besnier-Boeck-Schaumann und seine Bedeutung für die endogenen Augenentzündungen* , edited by Wener and K. Wurm, Stuttgart 1957. He edited with Löhlein *Zeitfragen der Augenheilkunde* Stuttgart 1934 (2nd edition 1938).Ophthalmologen Verzeichniss 483. Klin. Monatsbl. f. Augenheilk. 1972,161:617-619. JPW

Weill, Georges (1866-1952) French ophthalmologist. Weill was professor of ophthalmology in Strassbourg from 1918 until 1937 having reached the age limit. He was forced, for political reasons, to leave Strassbourg in 1939, coming back, after the war, in 1945. JPW

Weinreb, Robert N. (1949 -) American ophthalmologist, Professor of Ophthalmology at the University of California School of Medicine in San Diego. Weinreb graduated from Harvard Medical School in 1975. He was a Resident in Ophthalmology and Fellow in Glaucoma at the University of California, San Francisco. As a Resident, he studied uveitis with Samuel J. Kimura, M.D. and described the relationship between angiotensin converting enzyme and gallium scans with sarcoid uveitis. While at the University of California, San Francisco, he also worked in glaucoma with Jorge Alvarado, M.D. and Jon Polansky, M.D. to first grow the trabecular meshwork cells in vitro. In 1982, he was Chief Resident at the Illinois Eye and Ear Infirmary under the direction of Morton F. Goldberg, M.D. Since 1984, he has been Professor of Ophthalmology at the University of California, San Diego where he is also Director, Glaucoma Center, and Vice Chairman. At the University of California, San Diego he has worked with Pamela Sample, Ph.D. to develop new functional testing, including short-wavelength automated perimetry. He has worked with Gerhard Zinsser, Ph.D. to develop confocal scanning laser ophthalmoscopy

and with Andreas Dreher, Ph.D. to develop scanning laser polarimetry. He has collaborated with James Lindsey, Ph.D. to *first* grow ciliary muscle cells in vitro, and they have studied the biologic basis of prostaglandin action on the uveoscleral outflow pathway, including the ciliary muscle and sclera. He was elected to the Board of Trustees of the Association for Research in Vision and Ophthalmology (ARVO) in 1998. He was President of the San Diego County Ophthalmologic Society in 1990-1991 and President of the Foundation for Eye Research since 1984. He has been a member of the Society of Heed Fellows since 1982, and in 1997 was recognized with the Heed Ophthalmic Foundation Award. He has been a member of the Alcon Research Institute since 1984 and a two-time recipient of the Alcon Research Institute Award for Outstanding Contributions to Research in Visual Sciences (1983 and 1992). He has been cited in Woodward/White, "*The Best Doctors in America*" in all editions since 1992. He has received the Honor Award (1986) and Senior Honor Award (1996) of the American Academy of Ophthalmology, and the Research to Prevent Blindness Senior Scientific Investigator Award (1997). He is on the Scientific Advisory Boards of the Glaucoma Foundation, the Glaucoma Research Foundation, and Research to Prevent Blindness. He is a member of the Glaucoma Society of the International Congress of Ophthalmology (1990 -); 2001 Board of Governors and co-Founder of the Association of International Glaucoma Societies; 2001 Editor, International Glaucoma Review and 2001-2002 President, Association for Research in Vision and Ophthalmology (ARVO). His editorial appointments include *Archives of Ophthalmology* (1995 -), *Investigative Ophthalmology and Visual Science* (1992 -), Associate Editor, *Journal of Glaucoma* (1990 -), Current Research Section Editor, *Survey of Ophthalmology* (1986 -), Co-Editor, *Graefe's Archive for Clinical and Experimental Ophthalmology* (1999 -), *Seminars in Ophthalmology* (1994 -), *Ocular Surgery News* (1996 -), *Online Journal of Ophthalmology* (1998 -), and *International Glaucoma Review* (1998 -). He also has been Chief Editor of *Focus on Glaucoma*, a patient newsletter, since 1984. His books include Glaucoma Surgery: Principles and Techniques (first and second editions) with R. Mills), Glaucoma in the 21st Century (with Y. Kitazawa and G. Krieglstein), Uveoscleral Outflow: Biology and Clinical Aspects (with A. Alm), and Biology of the Ocular Microcirculation (with W. L. Joyner and L.A. Wheeler). (Department of Ophthalmology, University of California, San Diego, 9500 Gilman Drive, La Jolla, California 92093-0946, Tel: 858-534-8824, Fax: 858-534-1625, e-mail: weinreb@eyecenter.ucsd.edu) (SM)

Weiss, Leopold (1849-1901) German ophthalmologist born in Giessen, Germany. Weiss received his M.D. at the University of Giessen in 1874 and became in 1876 lecturer and from 1895 to 1901 professor of ophthalmology at the University of Heidelberg. Of Weiss's wide-ranging investigations, most were concerned with myopia or the anatomy of the orbit. He was the first to describe what is now called *Weiss's reflex*. He authored: *Über das Vorkommen von scharfbegrenzten Ektasien im Augengrunde und über partielle Farbenblindheit bei hochgradiger Myopie* Weisbaden 1897; *Ueber das Gesichtsfeld der Kurzsichtigen* Leipzig & Wien 1898. Albert

Weller, Carl Heinrich (1794-1854) German ophthalmologist born in Halle, Germany. Weller received his M.D. at the University of Halle in 1817 with the thesis *Diss. Inauguralis sistens experimenta quaedam circa animalium classium inferium incrementum et vitam* and settled in Dresden, where he practiced general medicine and ophthalmology. Weller authored: *Die Krankheiten des menschlichen Auges* Berlin 1819 (4th ed 1830, Engl. ed.Glasgow 1821, French ed 1828 and Italian 1833-34); *Diätetik für gesunde und schwache Augen, oder was hat man zu thun, um sein Gesicht bis in's hohe Alter möglichst zu erhalten* Berlin 1821; *Ueber künstliche Pupillen, und eine besondere Methode, diese zu fertigen*. Berlin 1821; *Icones ophthalmologicae seu selecta circa morbos humani oculi*. Leipsic & Paris 1825. Albert.JPW.

Wells, John Soelberg (1834-1879) British ophthalmologist born in Norwich, England. Wells received his M.D. at the University of Edinburgh in 1856 and spent several years in Berlin as student and assistant of von Graefe. In 1860 he joined the staff at Moorfields in London, first as clinical assistant to Bowman and from 1867 until his death as surgeon; in 1865 he became professor of ophthalmology at King's College, London. In addition to the monographs listed here, Wells published numerous articles on eye diseases. He brought to

England the scientific and clinical advances of Berlin, Vienna, and Utrecht. Wells wrote: *On long, short, and weak sight, and their treatment by the scientific use of spectacles*. London 1862; *Glaucoma, and its cure by iridectomy; being four lectures delivered at the Middlesex Hospital* London 1864; *A treatise on the diseases of the eye* London 1869, American ed. Philadelphia 1869. Albert.JPW

Wells, William Charles (1757-1817) American physician born in Charleston, South Carolina, to Scottish parents. Wells was educated in Scotland, receiving his M.D. at the University of Edinburgh in 1780. In 1784 he settled in London, where he became physician to St. Thomas' Hospital (1795-1817). In addition to his essays on the physiology of vision (*An essay on single vision* etc. London 1792, 1810, 1811), which advanced the understanding of fusion, accommodation, and hypermetropia, Wells published landmark works in several other fields: a paper (1797) showing that the coloring matter in blood was not iron but an organic substance (subsequently identified as hematin); the first clinical report on rheumatic heart disease (1821); a study of proteinuria and hematuria (1812); the famous *Essay on Dew* London 1814, which proved that dew is the result of condensation and discussed radiational cooling and the influence of relative humidity on people's comfort; and an essay on skin color which anticipated Darwin's theory of natural selection (1818). Albert

Welsh, Robert C. (1922-) American ophthalmologist, philanthropically engaged in work for poor countries. Welsh developed, in 1983, a Coaxally-Illuminated Eye-Operating microscope that he made from cheap dissecting microscopes. He made all these at home, checked and sent these Eye-Operating Microscopes, for teaching and high-quality cataract-microsurgery to rural areas of poorer countries. About 100,000 mostly free cataracts are done yearly with these Welsh Microscopes. He earned for this the Pfizer Award for Innovation (1984). From 1985 to 1995 he organized, promoted an ran the Volunteer Eye Surgeons Association. He donated this yearly meeting to ORBIS in 1995. Welsh was voted by 880 attendees, *Outstanding Educator in Cataract Surgery* at the 1977 Cataract congress. In 1980 he received the Maumenee Gold Medal as the World´s Top Educator in Cataract Surgery of the Past Ten Years. He founded, in 1969 the Welsh Cataract Congresses that he organized and ran until 1998 and of which the reports were printed by Miami Educational Press.Address: 1600 Onaway Drive, Miami, FL.33133, Phone (305) 856-1375 (AB)

Wenzel, Jacob de (1755-1810) French ophthalmologist of Paris, oculist to the Imperial family. Wenzel was the son and pupil of the famous itinerant cataract extractor Michael Johann Baptist von Wenzel (d. 1790). The younger Wenzel accompanied and assisted his father (who was of German birth but lived chiefly in Paris) on his travels through Europe; in 1799 he received the M.D. degree from the Paris Faculté with the thesis *Dissertatio de extractione cataractae*, and after his father's death he settled in Paris, where in 1808 he became ophthalmologist to the imperial family. He wrote *Traité de la cataracte, avec des observations qui prouvent la nécessité d'inciser la cornée transparente & la capsule du crystallin, d'une manière diverse, selon les différentes espèces de cataractes*. Paris 1786 (English ed London 1791); *Manuel de l'oculiste, ou dictionnaire ophthalmologique* Paris 1808.

Wenzel, Matys (1868-1908). Hungarian ophthalmologist who died at the early age of 40 years. A few days after his death his appointment as extraordinary professor of ophthalmology in the Czech University of Prague was officially promulgated.

Wenzl, Johann Baptist (1785-1844) German physician born in Schlehdorf, Germany. Wenzl received his M.D. in 1810 at Landshut and after several years of study abroad settled in Munich, where he became an eminent general practitioner. He wrote a critical survey about ophthalmology in France and Germany: *Über den Zustand der Augenheilkunde in Frankreich; nebst kritischen Bemerkungen über denselben in Deutschland*. Nürnberg 1815. Albert

Werner, Louis (1902-1991) Doyen of Irish ophthalmology, and past president of the Ophthalmological Society of the United Kingdom and of the Irish Ophthalmological Society . Louis Werner died in Dublin in his 90th year. His grandfather left Alsace when it became part of Germany after the Franco-Prussian war and commissioned as a portrait

painter in Ireland. His father also Louis Werner, was a gold medallist in philosophy and devoted his career to ophthalmology in Dublin where, together with Sir Henry→Swanzy, he wrote a standard textbook on diseases of the eye, which greatly raised the status of Irish ophthalmology. His education was at Stephen's Green School, Dublin, where young Louis excelled at rugger, cricket, and tennis. He was in second place in the entrance examination to Triton, College, Dublin. He was awarded the anatomy prize and first class honours and first place in medicine, being placed second with honours in surgery. After qualification he worked under Sir John →Parsons at Moorfields for a year and soon after was appointed surgeon to the Royal Victoria Eye and Ear Hospital and four other hospitals in Dublin. He was lecturer in ophthalmology Dublin University and examiner at the Royal College of Surgeons in Ireland, Queen's University, Belfast, and Dublin University. He was Montgomery lecturer in 1932 at the age of 31, twice president of the Irish Ophthalmological Society, and elected honorary member of several foreign ophthalmological societies. In 1964-8 he was president of council of the European Ophthalmological Society, in 1972 deputy master of the Oxford Ophthalmological Congress, and in 1974-5 president of the Ophthalmological Society of the United Kingdom. Among his other achievements were the award of honorary fellowship of the Royal College of Surgeons in Ireland and of the College of Ophthalmologists in London. Louis was a great teacher and had deep interest in many problems, especially those of glaucoma, and he was one of the first to appreciate the importance of relative pressures within and without capillary walls in the retina and optic nerve. He made many contributions to Irish and British ophthalmology and in his fluent French read papers in Paris and Alsace. He carried a heavy burden of responsibility but continued to work courageously in spite of pain, poor vision, and restricted mobility until almost the end of his life. By the Americans Louis will be remembered as one who, with Becher →Somerville-Large and Alan→Mooney, restored Irish ophthalmology to its rightful place after the war; to the Irish as their father figure who encouraged the young and set the standard for all; and to the British as the epitome of an Irish colleague.BJO 1991,75:448

Werner, Louis (senior) (1859-1937) Irish ophthalmologist, the eldest son of Louis Werner, a French artist, who had studied at the Académie des Beaux-Arts in Paris under Paul Delaroche, and finally settled in Dublin. At the age of fifteen, the young Louis was sent to the College of La Chapelle near Belfort in Alsace, where he acquired that proficiency in French and German which later proved invaluable to him in his extensive study of contemporary ophthalmic literature. Returning to Dublin in 1876 he entered Trinity College. At his final Arts examination he obtained the *Large Gold Medal* in Ethics and Metaphysics. In 1880 he entered the Medical School, obtained a " Scholarship," and finally qualified in 1884. Having decided to devote himself to the practice of ophthalmology, he was appointed to the Staff of the National Eye and Ear Infirmary under Dr. C. E. Fitzgerald. and Dr. (later Sir) Henry→Swanzy. During the next few years, Louis Werner played an active part in helping to bring about an amalgamation between this small hospital, established in 1814, and the hospital of St. Mark's, an institution founded in 1844 by Sir William Wilde. In 1897, he and his colleagues had the gratification of assisting in the establishment of the present Royal Victoria Eye and Ear Hospital. This institution is a worthy monument to the zeal and public spirit displayed by the Irish Ophthalmologists of the nineteenth century.Louis Werner was best known outside Ireland through his connection with the popular text-book: " Swanzy's *Diseases of the Eye* ". Between 1907 and 1925 he co-operated with Sir Henry Swanzy in producing a ninth and tenth edition, and on the death of his colleague, he produced three further editions under his own name. The sections in these which deal with optics and neurology are almost solely his own work. A further notable contribution are his beautiful paintings of external diseases and fundus conditions. Among his many and various communications recorded in the Transactions, perhaps the most interesting are a short paper published in 1886, in which he identified the condition "*Infiltration vitreuse de la retine* " described by Masselon in 1884 with "*Central guttate choroiditis* ": a note on a case of subconjunctival cysticerus (Taenia Solium) published in 1889; and a paper describing a case of " *Intra-ocular echinococcus cyst with brood capsules* " published in 1903. This last, illustrated by the author's excellent drawings of the macro- and microscopical appearances, together with microphotographs, has been accepted as the classical description of a condition which is of exceeding rarity in the British Isles. Louis Werner's

reputation in Ireland stood deservedly high. He held many public appointments, including that as Professor of Ophthalmology at University College, Dublin. His enormous private practice was evidence of the confidence that he inspired in the general public. BJO 1937,21:105-106

Westheimer, Gerald (1924-) American Vision Scientist of German origin and of Australian Citizenship. Born in Berlin, he moved to Sydney Australia and graduated from Sydney Technical College of Optometry (1943) and, then at University of Sydney, he majored in mathematics, physics and physiology, and completed the course with B.Sc. degree in 1948. He conducted postgraduate research at Ohio State University under Prof. Glenn A. Fry and received Ph.D. degree in 1953 (thesis: *The response of the oculo-motor system to visual stimuli in the horizontal plane*). He further extended his research career at Cambridge University (England) under Prof. W. A. H. Rushton in 1958 (Disjunctive eye movements. J. Physiol. 159: 339, 1961, with Rashbass C.), and later he worked with Fergus Campbell on accommodation. He has held professorship at many institutions, i.e. Professor of Physiological Optics, School of Optometry of the University of California (UC) Berkeley (1963-1967), Professor of Physiology, Department of Physiology-Anatomy, UC Berkeley (1967-1989), Head, Division of Neurobiology, Department of Molecular and Cell Biology, UC Berkeley (1987-1992), Professor of the above Department (1989-1994) and Professor in the Graduate School, Division of Neurobiology, UC Berkeley (1994-). He has conjoint appointment as Professor at the School of Optometry, UC Berkeley (1990-) and the Rockfeller University New York (1992). His many editorial assignments embrace Vision Research (1972-1979), Chairman of its editorial board (1976-1991), J. Opt. Soc. Am. (1980-1983), Invest.Ophthalmol., Optics Letters, Exper. Brain Res., Human Neurobiol. , J. Physiol., Proc. Royal Soc. London B and currently, he is an editor of Ophthalmic and Physiological Optics. He is a Fellow of Royal Society London (1985-), Optical Society of America, Society of Neuroscience, Physiological Society (UK), Association for Research in Vision and Ophthalmology (ARVO), American Academy of Optometry, Royal Society of New South Wales and many other Societies. He has served on many Committees of the National Institute of Health, U. S. He is the recipient of many honor medals, i.e., Tillyer Medal from Optical Society of America (1978), Proctor Medal from ARV0 (1979), von Sallmann Prize from ISER (1986), C.F. Prentice Medal from the American Academy of Optometry, Bicentennial Medal from the Australian Optometric Association. He also gave many named lecture throughout the World, that include Ferrier Lecture at the Royal Society (London) 1992 and Max Wertheimer Lecture at the University of Frankfurt-am-Main (1998). He has devoted his life to research of vision physiology, and has published more than 200 original papers. Some examples of his papers are "*Eye movement responses to a horizontally moving visual stimulus*. Arch. Ophthalmol. 52: 932, 1954", "*Dynamics of accommodation responses of the human eye*. J. Physiol. 151: 285, 1960", "*Modulation thresholds for sinusoidal light distributions on the retina*. J. Physiol. 152: 67, 1960", "*The Maxwellian view*. Vision Res. 6: 669, 1966", "*Temporal and spatial interference with vernier acuity*. Vision Res. 15: 1137, 1975", "Proctor Lecture: *The spatial sense of the eye*. Invet. Ophthalmol. Vis. Sci. 18: 893, 1979", "*Orientation dependency for foveal line stimuli: orientation discrimination, vernier acuity, resolution, detection and intensity discrimination*. Vis. Res. 38,1097, 1998" and "*Gestalt theory reconfigured: Max Wertheimer's anticipation of recent developments in visual neuroscience*. Perception 28: 5, 1999".(Division of Neurobiology, Department of Molecular and Cell Biology, 565 Life Sciences Addition, University of California, Berkeley, CA 94720. phone: +1-510-642-4828; fax: +1-510-643-6791; e-mail: gwest@socrates.berkeley.edu)

Weston, H. C. (?- 1963) British scientist, Director of the M.R.C. Group for Research in Occupational Optics. Weston was unique in his grasp of the apparently academic problems of vision and their application to everyday life. His work on visual performance is a classic, and forms the basis of the Code promulgated by the Illuminating Engineering Society, which underlies the illumination of operating theatres, hospital wards, schools, factories, etc. His book -*Light, Sight, and Efficiency*- is one of the pillars of the practice of industrial ophthalmology, and a new edition has recently (1963) been published under the title of "*Sight, Light, and Work*. The public will remember him incognito for his contribution to the manner in which Belisha beacons are used in connexion with zebra

crossings. Weston's work received recognition: he was awarded the O.B.E. in 1959, and the I.E.S. Gold Medal in 1961. BJO 1963,47:320

Weve, H.J.M. (1888-1962) Dutch ophthalmologist born in Nijmegen, Netherlands. Weve studied medicine in Amsterdam where he soon oriented himself to ophthalmology. His assistant time there was interrupted by the outbreak of World War I. Two years later Weve moved to Rotterdam where he was to stay until 1929. During that time Weve became famous amongst his colleagues. 41 years old, Weve was named professor of ophthalmology at the University Eye Clinic at Utrecht, following Donders (1858-1883), Snellen Senior (1883-1903) and Snellen Junior (1903-1928). Very soon he received the Chair of ophthalmology at the medical faculty of Utrecht. Weve, adopting Gonin´s ideas about retinal detachment, acquiring rapidly an international reputation for the new diathermy methods he developed, attracting patients as well as ophthalmologists from around the world wanting to benefit from his method of treatment. All his life he tried to improve his operation methods for retinal detachment. Weve was interested in many sections of ophthalmology and wrote a considerable quantity of papers on many topics of ophthalmology. He received (1939) the Bowman medal at the occasion of his Bowman lecture *On Diathermy in Ophthalmic Practice*. He wrote: *Beschouwingen Over Accomodatie En Refractie*. Utrecht 1929 (inaugural professoral lecture); *Driekwart eeuw Ned. Gasthuis voor behoeftige en minvermogende ooglijders te Utrecht. 1858-1933* Utrecht 1933 (History of his clinic); *Die Briefe Albrecht von Graefe's an F.C. Donders (1852-1870)* Stuttgart 1935; *Leerboek Der Oogheelkundige Onderzoekingsmethodes*. Leiden 1942. Annales d´oculistique 1962, 185:383-384. JPW

Wharton, John (1877-1952) British ophthalmologist from Cheshire. Wharton was elected a foundation scholar and a Hare's exhibitioner at St. John's College, Cambridge, graduating B.A. with first class honours in 1898. He continued his medical education at Owen's College, Manchester, obtaining the Cambridge degrees of B.Chir. in 1902 and M.B. in 1903, subsequently proceeding to M.A. and M.D. After a period as house surgeon to Sir William Thorburn, he was appointed in 1904 as junior house surgeon to the Manchester Royal Eye Hospital. Thus began a life-long connection with this institution, as he became successively assistant-honorary, honorary, and consulting surgeon, and was ultimately appointed a vice-president of the hospital. In 1923 he was elected honorary ophthalmic surgeon to the Manchester Royal Infirmary, an appointment which made him directly responsible for the clinical training of students: at this time he also became clinical lecturer in ophthalmology at the University of Manchester. Wharton was an active member of the Ophthalmological Society of the United Kingdom; he was a foundation member of the North of England Ophthalmological Society, though he resigned in 1923. Not a prolific writer, he produced an outstanding monograph on *ophthalmia neonatorum* and was largely responsible for the establishment of a special segregated unit at his hospital for the treatment of this, then, serious condition. Wharton was one of the great triumvirate of clinicians of the last generation at the Manchester Royal Eye Hospital-Gray Clegg, Horsman McNabb, John Wharton. All were outstanding, but possibly Wharton had the most balanced judgment. BJO 1952,36:464

Wheeler, John Martin (1879-1937) American ophthalmologist. His family originally came to America from Cranefield, Bedfordshire, UK. He received his early education in the public schools of Burlington and the University of Vermont from which he graduated in arts in 1902 and in medicine in 1905. In 1906 he received the B.Sc. degree and during the years 1906 and 1907 he was an instructor in anatomy. In 1908 John Wheeler became an intern in the New York Eye and Ear Infirmary. His natural ability and hard work soon gained him a prominent place among ophthalmologists. He served on the Councils of the American Ophthalmological Society and the American Academy of Ophthalmology and Otolaryngology, and in 1933 he became President of the latter. Wheeler was appointed Professor of Ophthalmology at Columbia University in 1928 and three years later he became Director of the newly built eye institute at the Columbia Presbyterian Medical Center. His special interest lay in surgery, particularly plastic surgery around the eyes, a field in which he felt that ophthalmic surgeons did not do nearly so much as they should. In 1928 the University of Vermont conferred upon him an honorary degree of D.Sc., and in 1933 he received a similar award from Middlebury College. In 1931 the decoration of Commande of the Order of the Cross of Siam was conferred upon Wheeler after he had

operated on the King of Siam's eyes, and in the same year he was awarded the Leslie Dana Medal for distinguished service in the conservation of sight. Wheeler published some fifty original communications. BJO 23, 1938

Wheeler, Maynard C. (1903-1979) American ophthalmologist . The son of an eye, ear, nose, and throat physician, he was born in Fargo, North Dakota. He grew up in Tacoma, Washington. He received his preliminary education at the Phillips Exeter Academy, Dartmouth College, and Stanford University before receiving his M.D. from Columbia University. After an internship in New York, he joined the resident staff at the newly opened Institute of Ophthalmology of Presbyterian Hospital at New York's Columbia Presbyterian Medical Center where he remained until his retirement in 1973, as clinical professor. In keeping with his primary clinical interest in ocular motility, he established an orthoptic department and muscle clinic, both of which continue to function strongly. He was chief of the Eye Clinic, member of the board of surgeons, and director of undergraduate teaching. He wrote "*The American Ophthalmological Society-The First Hundred Years*," to commemorate the 100th anniversary of the AOS. Appropriately, he was president of the AOS at the time. In addition to numerous publications relating to strabismus, he wrote a *History of the Eye Institute of the Columbia Presbyterian Medical Center* and a manual: "*Introduction to Ocular Motility"* AJO 1979,83:628-629

Whitehead, Arthur Longley (? – 1930) British ophthalmologist. Whitehead was educated at the Leeds Medical School and spent his whole life in Leeds. He graduated at London University in 1893 and was honoured by the Royal College of Surgeons electing him as a Fellow in 1924. He was appointed on to the Infirmary Staff in 1899 as Assistant-Surgeon to the Ophthalmic and Aural Department and in the same year was appointed to the full staff. In 1912 the two departments were separated and Whitehead and Secker Walker chose to carry on ophthalmic work only. He was Lecturer in Ophthalmology from 1912-1920. He was President of the Ophthalmic Section of the Royal Society of Medicine 1922-1924; he had also been President of the North of England Ophthalmological Society and the West Riding Medico-Chirurgical Society. BJO 1930,14:650

Widmark, Erik Johan (1850-1909) Swedish ophthalmologist. He studied medicine at Uppsala University, and after being abroad for some time, joined the Karolinska Medical-Surgical Institute in Stockholm. Widmark worked as professor for general and ophthalmic surgery, and became the first professor of ophthalmology in 1891 when this was established at the school.After bacteriological researches as to the nature of ophthalmia Neonatorum , Widmark brought it to the attention of the medical authorities resulting in energetic measures taken in Sweden since the year 1886. Widmark was for twenty-five years Sweden´s only professor for ophthalmology. He conducted important investigations on snow blindness, ophthalmia electrica,and on the pathologic effects of ultraviolet radiation on the eyes and skin.Together with J. Bjerrum of Copenhagen he was editor of Nordisk optalmologisk Tidskrift and from 1898 published the results of his own and his pupils researches in „*Mittheilungen aus der Augenklinik des Carolinschen Medicao-Chirurgischen Institutes*"Jena 1898-1910.He also published „*Beiträge zur Ophthalmologie*", Leipzig 1891, which are Widmark´s published papers from 1883-91. The Ophthalmoscope, 1910, p. 243-244. Albert:Source Book of Ophthalmology,p.377.

Wiener, Meyer (1876-1965) American ophthalmologist, born in St. Louis. Wiener received his secondary education at the St. Louis Manual Training High School, and was graduated from Missouri Medical College, later Washington University at St. Louis, in 1896 magna cum laude. He pursued his graduate studies in ophthalmology at the University of Berlin, Vienna, the Sorbonne, and the Royal Ophthalmic Clinic, Moorfields, London. He commenced the private practice of medicine in St. Louis in 1900, which continued, except for the interruption of World War I, until 1936. At the time of his retirement from active practice he had one of the largest surgical eye practices in the world. He designed many new ophthalmic surgical instruments. In 1910, Dr. Wiener was made professor of clinical ophthalmology, Washington University at St. Louis, a position be held until he was made *emeritus professor of clinical ophthalmology* following his retirement from the faculty. He was one of the pioneers who started the courses of instruction which are now such an outstanding and integral part of the annual meetings of

the American Academy of Ophthalmology and Otolaryngology. He taught his own popular course in *eye surgery* at the Academy, always oversubscribed well in advance, until 1953. For many years his course in eye surgery, including animal eye surgery, was a cornerstone at the annual meetings of the Los Angeles Research Study Club. Wiener was a life fellow and former executive vice president of the American Academy of Ophthalmology and Otolaryngology. He was a fellow in the American College of Surgeons, and a member of the Chicago, Kansas City and St. Louis Ophthalmological Societies. During his active clinical years he was associate ophthalmologist at Barnes Hospital and the St.Louis Children's Home, ophthalmic surgeon at the Missouri Pacific Hospital, and consulting ophthalmologist at the Bethesda, Jewish and Frisco Hospitals and St. Vincent's Sanitarium. During World War I, he was chief of the eye service, Army General Hospital No.14 Oglethorpe, Georgia. Immediately following the War he organized and headed the Ophthalmic Plastic Surgery Service at the Army General Hospital No. 11, Cape May, New Jersey. He rose to the rank of lieutenant colonel before being released to inactive duty in 1920. As honorary consultant to the Surgeon General. U. S. Navy, during and after World War II, he was largely responsible for organizing the residency training program in ophthalmology and establishing the Navy's program for rehabilitation of the blind. For over 25 years he was consultant and lecturer in ophthalmology at the U. S. Naval Hospital, San Diego. The fruits of his knowledge and wisdom poured from his prolific pen as author and editor over the entire span of his life. During his active clinical years he contributed over 100 professional articles to medical journals the world over. His most noteworthy and widely received contribution was his textbook, *Surgery of the Eye* Philadelphia 1940, which went into three editions, the first co-authored with B.Y.→Alvis, and the third with H.G.→Scheie. He had been the editor of the *St. Louis Medical Review* and *Annals of Ophthalmology,* and associate editor of the *American Journal of Ophthalmology* and the *Mississippi Valley Medical Journal.* Wiener was also editor-in-chief of a two volume edition of *Ophthalmology in the War Years* Chicago 1946-1948 and co-editor of the one volume edition of *Progress in Ophthalmology and Otolaryngology* which followed as a sequel a few years later. He was a moving force in the Missouri Blind Commission, The St. Louis Society for the Blind, and helped to found The Service Club for the Blind in St.Louis. The latter always remained especially close to his heart. He organized and established the Henry L. Wolfner Memorial Library for the Blind in St. Louis during the 1930's, a model in its field. In 1954, he started and became a founder member and director of the San Diego Foundation for Visually Handicapped Children. The goal of the Foundation was the integration of the visually handicapped child into normal society. He was an advisor to the California Welfare Department in matters concerning the blind-aid program. Wiener held many responsible positions and received many honors during his distinguished career. He was awarded the Braille Medal in 1947 for his contributions to the blind. During the same year, President Truman cited him for his outstanding achievements on behalf of the Armed Forces. In 1961, and again in 1963, he was the recipient of a special commendation by the Surgeon General of the Navy. He was honorary president of The Service Club for the Blind in St. Louis, and was the only honorary member of the San Diego County Ophthalmological Society. He was honorary consultant to the San Diego Zoo, giving generously of his time to the Zoological Hospital. AJO 1965, 59:953-955

Wiesel, Torsten (1924-) American neurobiologist of Swedish origin. He was born in Sweden where he received his M.D. degree from The Karolinska Institute in 1954. In 1955, he joined the Johns Hopkins Medical School and in 1958 was named Assistant Professor in Ophthalmic Physiology. In 1959, he joined Harvard Medical School and became Chairman of the Department of Neurobiology; he became the Robert Winthrop Professor in 1973. His pioneering studies of the mammalian visual cortex have significantly shaped current understanding of brain structure, function and development. Dr.Wiesel along with his long-time collaborator, Dr. David Hubel, received the 1981 Nobel Prize in Medicine and Physiology. In 1983, he joined The Rockefeller University as Head of the Laboratory of Neurobiology and was named the Vincent and Brooke Astor Professor. He became the seventh President of the Rockefeller University in 1992; in 1998, he became President Emeritus and Director of the Shelby White and Leon Levy Center for Mind, Brain and Behavior. Dr. Wiesel is a member of The National Academy of Sciences and The Royal Society. His many awards in addition to the Nobel Prize

include the Dr. Jules C. Stein Award presented by the Trustees for Research to Prevent Blindness, the Karl Spencer Lashley Prize of the American Philosophical Society, the Ledlie Prize from Harvard University , Columbia University's Louisa Gross Horwitz Prize and Friedenwald Medal from the Association for Research in Vision and Ophthalmology. He holds honorary degrees from Harvard University, New York University, Johns Hopkins University, the University of Pennsylvania, the Karolinska Institute, the University of Bergen, Linkoping University and Ancona University. Some examples among his many publications are "The Nobel Lecture: *The postnatal development of the visual cortex and influence of environment*. Nature.299: 83-592, 1982", "The Sharpey-Schafer Lecture: *Morphological basis of visual cortical function*. J. Exp. Physiol. 68: 525-543, 1983", "The Helmerich Lecture: *Neural mechanisms of visual perception*. Proc. Retina Res. Foundation Symposia. Vol 2: 7-35, 1989" and "*Receptive field dynamics in adult primary visual cortex*. Nature 356: 150-152, 1992".

Wilbrand, Hermann (1851-1935) German neuro-ophthalmologist born in Giessen, Germany. Wilbrand studied medicine at the Universities of Giessen and Strassbourg, receiving his M.D. in 1875. After ophthalmologic training under Laquer in Strasbourg and Förster in Breslau, he set up a practice in that specialty in Hamburg, becoming director of the ophthalmology department at the city hospital in 1905 and professor at the University of Hamburg in 1919. He wrote extensively on the neurological aspects of ophthalmology. He wrote his masterpiece with the neurologist A. Saenger: *Die Neurologie des Auges* 10 vols and a supplement, Munich & Wiesbaden 1899-1927. He also authored: *Über hemianopsie und ihr Verhältniss zur topischen Diagnose der Gehirnkrankheiten* Berlin 1881; *Ophthalmiatrische Beiträge zur Diagnostik der Gehirn-Krankheiten* Wiesbaden 1884; *Die Seelenblindheit als Herderscheinung und ihre Beziehungen zur homonymen Hemianopsis zur Alexie und Agraphie* Wiesbaden 1887; *Die hemianopischen Gesichtsfeld-Formen und des optische Wahrnehmungszentrum.Ein Atlas hemianopischer Defekte*. Wiesbaden 1890. Albert. JPW

Wilhelm, Helmut (1954-) German ophthalmologist. Wilhelm received his medical education at University of Freiburg, Germany, at University of Uppsala, Sweden and University of Mainz, Germany. He received his Medical Degree 1983 in Freiburg and became ophthalmologist and Privat-Dozent (Lecturer) 1988 in Tübingen. His ophthalmic teachers were: Prof. G.→Mackensen, Prof. →Hübner, Prof. →Aulhorn and Prof. Zrenner. He worked in ophthalmology in Trier (Mainz University) 1981-83 and Cardiology in Bernkastel-Kues (1983-84) and from 1984 in Tübingen. His medical thesis was titled:"*Fotokeratometrie mit einem Fotokeratoskop nach Dekking*" (under Prof. G. Mackensen/Freiburg) [Photokeratometry with a photokeratoscope after Dekking] Habilitation: *Konsequenzen neuerer Forschungsergebnisse für die Untersuchung und Abklärung der normalen und der gestörten Pupillomotorik*. Wilhelm´s clinical working field is neuro-ophthalmology and traffic ophthalmology as well as pupil research. Bibliography A: Books 1. Burde RM, Savino PJ, Trobe JD. *Neuroophthalmologie*. Stuttgart, Kohlhammer Verlag, (H. Wilhelm und B. Wilhelm: translation), 1989 2. Wilhelm H. *Pupillenreaktionen, Pupillenstörungen*. Stuttgart, Kohlhammer, 1991 B: Co-author 1. Wilhelm H. *Inverses Marcus-Gunn-Phänomen*. In: Gädecke R, Hrsg. *Fragen aus der pädiatrischen Praxis, Antworten von Experten*. Hans Marseille Verlag, München,1989; 221 2. Wilhelm H. *Die Pupille*. In: Deetjen P , Speckmann EJ, *Physiologie*. Urban & Schwarzenberg, München,1992; 83-85 3. Wilhelm H. *Pupillenstörungen*. in: Lund OE , Waubke TN *Neuroophthalmologie*. Enke, *Bücherei des Augenarztes* Band 131, Stuttgart,1993; 78-96 4. Wilhelm H. *Die Pupille und ihre Störungen*. in: Huffmann G, Braune H-J, Fritz C, Rössy W *Vegetativum - Schlaf.- Schmerz*, Einhorn-Presse Verlag, Reinbek 1997, 306-316 5. Wilhelm H. *Pupillomotorik - das autonome Nervensystem* in: Huber, A., Koempf, D. *Klinische Neuroophthalmologie*, Thieme, Stuttgart 1998; S. 105-109 6. Wilhelm H. *Akkommodation*. In: Huber, A., Koempf, D. *Klinische Neuroophthalmologie*, Thieme, Stuttgart 1998; S. 110 7. Wilhelm H. *Methoden zur Untersuchung der Pupillomotorik*. In: Huber, A., Koempf, D. *Klinische Neuroophthalmologie*, Thieme, Stuttgart 1998; S. 223-228 8. Wilhelm H. *Störungen der Pupillomotorik und der Akkommodation*. in: Huber, A., Koempf, D. *Klinische Neuroophthalmologie*, Thieme, Stuttgart 1998; S.622-631 9. Rohrbach JM, Lieb WE. *Tumoren des Auges und seiner Adnexe*. Schattauer, Stuttgart 1998; S. 153, 164-166 10.

Wilhelm H, Wilhelm B, Lüdtke H. *Pupillography - principles and applications in basic and clinical research.* in: Kuhlmann J, Böttcher M. *Pupillography: principles, methods and applications*. Zuckschwerdt Verlag, München 1999; S. 1-10 11. Wilhelm B, Lüdtke H, Wilhelm H. *Spontaneous pupillary oscillations - An objective measure for the level of tonic central nervous activation.* in: Kuhlmann J, Böttcher M. (Edts.) *Pupillography: principles, methods and applications*. Zuckschwerdt Verlag, München 1999; S. 27-36. C) published papers: *J Clin Neuro-Ophthal* 1989; 9:160-164 *Fortschr Ophthalmol* 1989; 86:380-382; 1990; 87:529-532; 1991; 88:522-529; 1991; 88:588-591 *Z prakt Augenheilk* 1991; 12: 229-238,405-417,419-431, 471-485, 503-506; 1992; 13:551-553, 1994; 15:185-189, 1994; 15:463-465, 1995; 16: 31-38, 185-188; 1996, 17:327-336; 1996, 18:27-29; 1998; 19:333-336,337-340,341-345 *Klin Monatsbl Augenheilkd* 1991; 199:442-443; 1992; 200:133-137;1992; 200:5-16;1993; 203:423-429; 1993; 203:110-116; 1994; 204:169-175; 1995; 207:1-2; 1995; 207:310-313; 1996; 208:201-202; 1997; 210:365-369; 1998; 212:40-49; 1998; 213:355-357; 1999; 214:175-177; 1999; 215:59-63 *Ophthalmologe* 1992; 89:W35-W46, 1992; 89:477-488; 1993; 90:104-119, 1995; 92:61-70; 1996; 93: 319-324,446-450; *J Neurol* 1992; 239:231-234; 1998; 245:573-583 *German J Ophthalmol* 1992; 1:96-102; 1993; 2:234-240; 1996, 5:160-167; 1996, 5:168-170 *J Physiol Lond* 1993; 461:301-320 *Clin Vis Sci* 1993; 8:609-612; *Graefe's Arch Clin Exp Ophthalmol* 1994; 232:115-121; 1998; 236:725-729; 1999; 237:297-211 *Neuro-ophthalmology* 1994; 14:85-89; 1994;14:283-295; 1995, 15:211-215; 1996; 16:219-224; 1997;17:59-62 *Münchn Med Wochenschr*. 1995, 137:689-692 *Wien Med Wschr*. 1996; 146:387-389 *Blutalkohol* 1997; 34:276-282 *Nervenheilkunde* 1997; 16:458-463 *Vis Res* 1998; 38:2889-2996 *Brit J Ophthalmol* 1998 Sleep 1998; 21:258-265 *Somnologie* 1998; 2:51-57. *Klin Neuroradiologie* 1997; 7:216-222 *Klin Neuroradiologie* 1998; 7: 32-39 *Pädiat Prax* 1993; 45:693-704; 1995; 49:289-304 *Z f Verkehrssicherheit* 1995; 41:116-118 *Internist Prax* 1994; 34:579-594 *Augenarzt* 1997; 31:25-28 (Teil 1) und 31:93-95 (Teil 2) H.Wilhelms is a member of: German Ophthalmological Society (DOG), EUNOS & INOS. Address: Dr.med. Helmut Wilhelm, Universitäts-Augenklinik, Dept. of Pathophysiology of Vision and Neuro-ophthalmology, D 72076 Tübingen, Germany. Phone +49.(7071) 294786 Fax +49 (7071) 295038 e-mail helmut.wilhelm@uni-tuebingen.de (JPW)

Wilhelmus, Kirk Robert (1949-) American ophthalmologist, born in Indiana. He received his B.A. at Indiana University, obtained his M.D. at Vanderbilt University, School of Medicine, trained in ophthalmology at Baylor College of Medicine and at Moorfields Eye Hospital, and later obtained his M.P.H. at the University of Texas, School of Public Health, with the dissertation "*A systematic overview of clinical trials evaluating the acute treatment of herpes simplex virus epithelial keratitis*." Wilhelmus is Professor at the Cullen Eye Institute, Baylor College of Medicine, where he specializes in corneal and external eye diseases, directs the Sid W. Richardson Ocular Microbiology Laboratory, and is medical director of the Lions Eye Bank of Texas. He authored 150 journal articles, predominantly on corneal infections, and with J.S. Pepose and G.N. Holland, he co-edited "*Ocular Infection & Immunity*" 1996. Wilhelmus currently works in Houston, Texas. (AB)

Williams, Cornelius (1848-1918) American ophthalmologist of St. Paul, Minn. Born in Kentucky, he moved in 1864 to Minnesota but later returned to Kentucky. His medical degree was received at the College of Physicians and Surgeons in the City of New York in 1874. Having studied ophthalmology and oto-laryngology and practiced both these specialities in New York City for a number of years he moved in 1882 to St.Paul. In 1901 he was president of the Ramsey County Medical Society. AJO 1919,2:462-463

Williams, Henry Willard (1821-1895) American ophthalmologist of Boston. Williams studied medicine at Harvard University from 1844 to 1846, receiving his M.D. in 1849 and in Europe from 1846 to 1849 under Sichel and Desmarres in Paris; Jaeger and Rosas in Vienna; Dalrymple, William Lawrence, Dixon, Critchett, and Bowman in London. On his return he established an ophthalmologic practice in Boston and was professor of ophthalmology at Harvard from 1871 to 1891. Williams gave the first clinical course in ophthalmology, at Harvard, in 1850 and is thought to have been the first to limit himself strictly to the eye. An influential teacher and writer, Williams made several significant advances, including the treatment of iritis without mercury; in cataract surgery, he advocated the suturing of the flap after extraction. He was one of the first, if not the first, to use ether anesthesia routinely for cataract surgery. Williams wrote: *On the treatment of*

iritis without mercury Boston 1856; *A practical guide to the study of the diseases of the eye: their medical and surgical treatment* Boston 1862; *Recent advances in ophthalmic science* Boston 1866; *Optical defects in school children ... an address read before the Massachusetts Teachers' Association* Boston 1869; *Our eyes, and how to take care of them* Boston 1871; *Eserine and pilocarpine in the treatment of eye disease* Cambridge, Mass. 1878 and *The diagnosis and treatment of the diseases of the eye* Boston 1881 (2nd ed.1886).

Williams, John (fl. 1790-1830) English quack who practiced in Paris, specializing in ophthalmology. He did not perform cataract surgery himself, but sold a topical medication which, he claimed, prepared the patient for the operation and made it safer. He distributed: *Traité des maladies des yeux, avec des observations pratiques, constatant les succès obtenus, tant à Paris qu'a Londres, par l'usage d'un topique inventé par J. Williams* Paris ca. 1814 ; *Compte rendu des cures faites sur des maladies des yeux réputées incurables, avec un topique inventé par J. Williams*. Paris 1815; *Observations nouvelles sur les maladies des yeux et des oreilles* Paris 1816. Albert

Williams, Patricia B (?) American, professor of pharmacology, Eastern Virginia Medical School, Norfolk, Virginia since 1986 and associate Professor of Ophthalmology, Eastern Virginia Medical School, Norfolk, VA, since 1987. Patricia Williams received her Ph.D. from the Medical College of Virginia, Pharmacology, Health Sciences Division, Virginia Commonwealth Univ. Richmond, VA, 1972 and her B.S. College of Pharmacy, University of Michigan, Ann Arbor, MI, 1968; Assistant Instructor - Undergraduate Student Laboratory, Department of Botany, University of Michigan, 1967. She became Teaching Assistant, Pharmacology, Medical College of Virginia, 1970-1971; Assistant Professor, Nursing and Dental Hygiene, Old Dominion University, Norfolk VA, 1972-1974; Assistant Professor, Pharmacology, Eastern Virginia Medical School, Norfolk, VA, 1972-1979; Lecturer, School of Continuing Education, University of Virginia, 1972 Adjunct Assistant Professor, Chemistry, Old Dominion University, Norfolk, VA, 1976-1981; Associate Professor, Pharmacology, Eastern Virginia Medical School, Norfolk, VA, 1979-1986; Adjunct Associate Professor, Chemistry, Old Dominion University, Norfolk, VA, 1984- present; Professor, Pharmacology, 1986-present. Dr. Williams has actively maintained an extramurally funded research program at EVMS since 1975. Her lab is currently funded by Orphan Medical, and by a grant from the FDA and the Lions Club. Long term research interests focus on the effects of disease on vascular function. She made a major contribution to the identification of unique characteristics of peripheral collateral arteries. A proposal to elucidate the role of growth factors in the stimulation of collateral growth is under development. A project with Dr. John Sheppard employs a unique approach to corneal neovascularization. A joint project with Dr. Earl R. Crouch, Jr., Professor and Chairman of Ophthalmology, ranging from the basic experiments to clinical trials produced a significant advancement for the topical treatment of hyphema. Other interests include wound healing and unique approaches to delivering drugs to the site of action. These projects have included revascularization of random skin flaps and re-epithelialization of chronic corneal defects. Williams received many **Honors and Awards:** Sigma Xi (President, Tidewater Chapter 1989-90) Listed in American Men and Women of Science, 13 ed. to present ; American Heart Association, Merit Award, 1989; Dean's Faculty Achievement Award, 1990; American Heart Association, Sentara Health System/Siemens Sponsored Researcher, 1992. She is a member of half a dozen scientific societies and of the ARVO. **Papers in Professional Journals (selection)** : Williams, P.B. and Riggs, P.K. *Factors affecting therapeutic concentration of topical aminocaproic acid in traumatic hyphema*. Investigative Ophthal. 31:189-194, 1990; Williams, P.B. and Crouch, E.R. *Secondary Hemorrhage in Traumatic Hyphema*. Am. J. Ophthal. 113: 344-346, 1992; Crouch, E.R. and Williams, P.B. *Trauma: Ruptures and Bleeding in Clinical Ophthalmology*, *Clinical Ophthalmology* Vol IV Chapter 61 p. 1-22. J.B. Lippincott, Philadelphia. Tasman, Wm. and Jaeger, E., editors, 1993; Crouch, Jr., E.R.. Williams, P.B., Gray, M. K., Crouch, E.R., Chames, M. *Topical Aminocaproic Acid in the Treatment of Traumatic Hyphema*. Arch. Ophthalmol. 115:1106-1112, 1997 (AB)

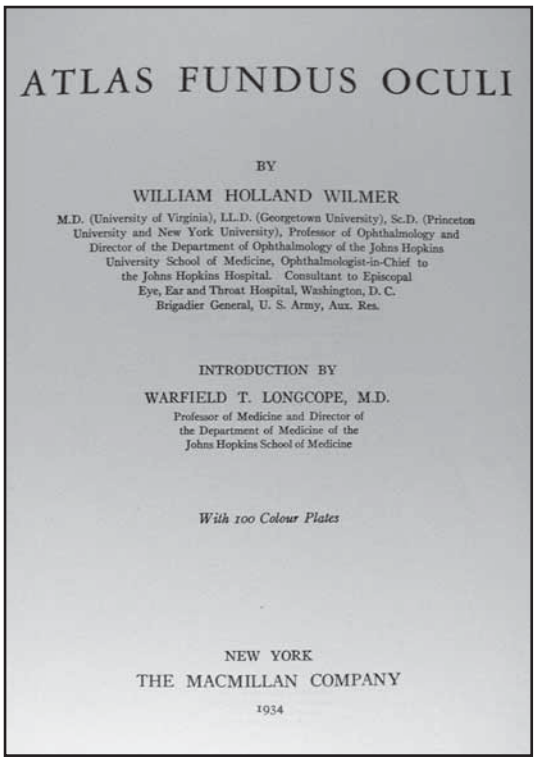
Williamson, Alexander Dewar (? – 1958) Scottish ophthalmologist, until 1957 senior ophthalmic surgeon and physician, Singapore, and lecturer in ophthalmology at the University of Malaya. Alex Williamson, the son of a Glasgow seedsman, was educated at

the High School and University of Glasgow. Before joining the staff of the Glasgow Eye Infirmary in 1928, he served as house surgeon and house physician in the Western Infirmary. In the seven years in which he was on the staff of the Eye Infirmary, his abilities as an ophthalmic surgeon developed rapidly. He displayed considerable gifts as a junior, gaining his D.O.M.S., and becoming a Fellow of the Royal College of Surgeons of Edinburgh at the first attempt. His first experience of work in the East was obtained in a 6 months' operating tour with Dr. McPhail's Mission Hospital in India, where he obtained a vast experience in intraocular surgery. In 1935 he was appointed ophthalmic surgeon and university lecturer in Singapore, so that most of his working life has been spent in Malaya. He established the School of Ophthalmology in Singapore under considerable difficulties, in a country of a multi-racial population striving in recent years towards independent nationhood. In early days he ran his department alone; later, he trained a succession of Asian medical officers, encouraging each in turn to seek higher qualifications in Britain. During the Japanese occupation he continued his work among the local population for over a year, subsequently, and with relief, being interned with his fellow civilians until the liberation. His early death may be attributed, in part, to this internment. It is characteristic of the man that he returned immediately after only a short leave to carry on his work in Singapore. In 1949 the Army Council appointed him an honorary consultant to the army in Singapore. He was also consultant to the Singapore Association for the Blind and a member of its Executive Committee. Post-war operative pressure was very great both in Singapore and in the Federation. The number of medical students at the University of Malaya has been increased so that teaching has become an essential part of the work of the department. In April, 1957, Williamson elected to retire; by this time his department had become completely Malayanized and was staffed by his former students. Williamson was not a man who wrote, all his energies being devoted to the creation of the Ophthalmic School in Singapore, but the hospital, there, is a monument to him. After the war he worked on the problem of neonatal keratomalacia. In Singapore this occurred not only in under-nourished and marasmic children, but also in apparently well-nourished infants, whose only dietary defect was vitamin A deficiency. His work with P. C. Leong of the University of Malaya led to the fortifying of all tinned and dried milks sold in Malaya with vitamin A, and has banished the disorder from the Dominion. He was also an acknowledged expert on trachoma.BJO 1958,42:63-64

Williamson-Noble, Frederick Arnold (1889-1969) British ophthalmologist, Consulting Surgeon to St. Mary's Hospital, Moorfields Eye Hospital, the National Hospital for Nervous Diseases, and the Royal National Throat, Nose and Ear Hospital. died on February 27, 1969. He was educated at Oundle School, Queen's College, Cambridge, and St. Mary's Hospital Medical School, where he qualified in 1914. He joined the Royal Navy upon the outbreak of the first world war - and served throughout the period of hostilities. He was present at the Battle of Jutland, and in the next ship in line of battle the medical officer was Sir Cecil Wakeley, lately President of the Royal College of Surgeons of England. Williamson-Noble returned to St. Mary's after demobilization and became house surgeon to Warren Low. He decided to specialize in ophthalmology and took the F.R.C.S. together with those extra papers which allowed him to be designated the first fellow with Ophthalmology. He was appointed to the post of supernumerary ophthalmic surgeon to St. Mary's in 1924 and he joined Leslie→Paton and Frank→Juler in a very happy association which continued for many years. Upon the retirement of Leslie Paton he became Assistant Ophthalmic Surgeon at St. Mary's and at about the same time he was appointed surgeon to the Central London Ophthalmic Hospital (later to amalgamate with the Royal London Ophthalmic Hospital and the Royal Westminster Ophthalmic Hospital to form Moorfields Eye Hospital). He was appointed Ophthalmic Surgeon to St. Mary's when Frank Juler retired. He was a very enthusiastic ophthalmologist, who attended, most regularly, all the ophthalmic meetings and who always had his own definite opinions regarding developments in the specialty. He served as Master of the Oxford Ophthalmological Congress, and as Vice President of the Ophthalmological Society of the United Kingdom, and he was the first Treasurer of the Faculty of Ophthalmologists. He served for many years as a member of the Editorial Board of the British Journal of Ophthalmology and was a Civilian Consultant in Ophthalmology to the Royal Navy. He was the joint author with Humphrey→Neame of "*A Handbook of Ophthalmology*" and was a regular contributor to the ophthalmic journals. BJO 1969,53:504

William Willis

Willis, William (1837-1894) Scottish surgeon, a graduate of the University of Edinburgh in 1859, came to Japan in 1862 as a Medical Attaché to the British Embassy. During the Japanese Civil war for Meiji Restoration, he treated many wounded and traveled in Japan along with the Army of the Meiji Government. It is said that his medical skill made the New Japanese Government reach the decision to systematically import European Medicine. He taught at The Tokyo Hospital (Precursor of the Tokyo University Hospital) in 1868-1869. Due to the Government decision of inviting German Teachers, he left Tokyo and taught Medicine at Kagoshima Medical School during 1869-1874 and 1876-1877. He left the statistics of 3050 patients he saw January-July of 1970: 534 were patients with eye diseases and their description became the *first* statistics of eye diseases in Japan. He performed 5-cataract operations and 4 were successful.[SM]



ATLAS FUNDUS OCULI

BY

WILLIAM HOLLAND WILMER

M.D. (University of Virginia), LL.D. (Georgetown University), Sc.D. (Princeton University and New York University), Professor of Ophthalmology and Director of the Department of Ophthalmology of the Johns Hopkins University School of Medicine, Ophthalmologist-in-Chief to the Johns Hopkins Hospital. Consultant to Episcopal Eye, Ear and Throat Hospital, Washington, D. C. Brigadier General, U. S. Army, Aux. Res.

INTRODUCTION BY

WARFIELD T. LONGCOPE, M.D.

Professor of Medicine and Director of the Department of Medicine of the Johns Hopkins School of Medicine

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1934

Wilmer, William Holland (1863-1936) American ophthalmologist of Washington, born in Virginia. He had his medical education at Virginia University and took his degree in 1885. He then served an internship at a New York Hospital, and after two years as assistant to Emil Gruening; he began practice at Washington in 1889. In 1897 he took an active share in the foundation of the Episcopal Eye, Ear and Throat Hospital, and in 1906 became Professor of Ophthalmology in Georgetown University. In 1917 he became Major in the Medical Corps of the United States Army, and served in charge of a Research Laboratory for Air Service at Mineola. He rose to be Brigadier-General in the Medical Reserve Corps. The Wilmer Ophthalmological Institute of Johns Hopkins University is a tribute to his standing as an ophthalmologist in the United States. Before the buildings were planned Wilmer gave up his practice at Washington and went to Baltimore to organize his new Institute. He came to Europe to study the great hospitals and in 1927 started work in temporary quarters. The Institute was formally opened in 1929, with addresses from Ernst→Fuchs, Dr. George →de Schweinitz and Sir John→Parsons. Until 1935, when he reached retiring age, Wilmer was in charge of this great Institute, and on ceasing to hold the Directorship he went home to Washington and resumed private practice. Wilmer held the Distinguished Service Medal and the Cross of a Commander of the Legion d'Honneur. He wrote a magnificent *Atlas Fundus Oculi* published in 1934, that became his chief work. JPW

Wilson, Kinnier Samuel Alexander (1878-1937) British neurologist. Kinnier Wilson was born in the United States in 1878 and was educated in Edinburgh. He qualified M.B.Edin. in 1902 and served as house physician in the Edinburgh Royal Infirmary. In the following year he obtained the B.Sc. with honours in physiology. A research scholarship enabled him to put in post-graduate work at Paris and on his return to England he became house physician at the National Hospital, 1 Queen Square. At the expiration of this appointment he became resident medical officer, and later registrar and pathologist. He was elected to the honorary staff in 1913, became physician to out-patients in 1921 and physician to in-patients in 1925. It was not until 1912 that he took his M.D.Edin., securing the gold medal. His connection with the Royal College of Physicians began with his taking the M.R.C.P. in 1907; seven years later he became F.R.C.P., and in 1925 he gave the Croonian Lectures. In 1912 he joined the staff of the Westminster Hospital and was at one time Dean of the Medical School. In 1919 he resigned his appointment at the Westminster Hospital on being elected junior neurologist at King's College Hospital. It was in 1912 that he contributed to *Brain* the description of progressive lenticular degeneration which has ever since borne the name of Wilson's disease. In 1920 he was appointed the first Editor of the *Journal of Neurology and Psychopathology*, a post which he held until the end of his life. Wilson was the author of numerous papers on such neurological subjects as aphasia, epilepsy and narcolepsy. His purely ophthalmological writings were infrequent and were mainly concerned with the ophthalmoplegias. In 1921 at a combined meeting of the Neurological and Ophthalmological sections of the Royal Society of Medicine, Kinnier Wilson contributed to a discussion on "*Ocular palsies*"; he confined his remarks to the question of a possible unilateral cranial polyneuritis. In the same year he read a paper at the Annual Congress of

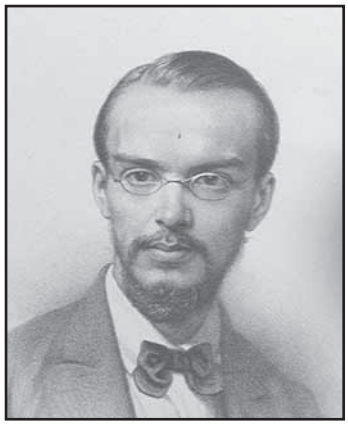
the Ophthalmological Society of the United Kingdom on " *Psychological peculiarities in certain visual auras in epilepsy*." He had been a member of the Society since 1911. He was elected one of the secretaries in 1915 and served for the customary period of three years, when he became a member of the Council. Kinnier Wilson also served for many years as a trustee both of the Society and of the Nettleship Prize Fund. In 1930 he gave the Morison lecture before the Royal College of Physicians at Edinburgh. Kinnier Wilson had a great reputation abroad as well as at home and was made an honorary member of many foreign Neurological Societies. BJO 1937,21:396-397

Wilson, Steven Eugene (1951-) American ophthalmologist and scientist, Professor and Chairman, Department of Ophthalmology, University of Washington, Seattle,WA, (1988) M.S. Molecular Biology and Biochemistry, University of California, Irvine, CA, 1977, M.D. University of California, San Diego (1984). Residency in Ophthalmology, Mayo Clinic, Rochester, MN, (1985-1988), Fellowship in cornea, external disease, and refractive surgery at the LSU Eye Center, New Orleans, LA with Herbert Kaufman, M.D., Marguerite McDonald, M.D., and Stephen Klyce, Ph.D, (1988-1990). Assistant Professor and Associate Professor of Ophthalmology at University of Texas Southwestern Medical School, (1990–1995), Medical Director of Refractive Surgery, The Cleveland Clinic Foundation, Cleveland, OH, (1995 – 1998), Professor of Cell Biology, Neurobiology, and Anatomy. The Cleveland Clinic Foundation Health Sciences Center of the Ohio State University, (1996 –1988). Founder and organizer of Ocular Cell and Molecular Biology Symposium, (1992, 1995, 1997) (Keystone Symposium), 1999 (Keystone Symposium), Program Planning Committee, Cornea Section, Association for Research in Vision and Ophthalmology, (1993 – 1995), Chair (1995), Organizer of Cornea section for ICER, Santa Fe, New Mexico, USA, 2000. Editorial boards Investigative Ophthalmology & Visual Science, (1997-date), Experimental Eye Research, (1995-date) (section editor, 1998-), Cornea, (1998-date), Journal of Refractive and Corneal Surgery, (1994-date), EyeNet, (1999-date) Dr. Wilson has had a long-standing interest in growth factors and growth factor receptors roles in corneal development, wound healing, and homeostasis, as well as in the lacrimal gland. Major contributions characterization of expression and function of numerous growth factor and receptor systems in the cornea including hepatocyte growth factor, keratinocyte growth factor, bone morphogenic proteins 2 and 4, Fas and Fas ligand, and platelet-derived growth factor. His laboratory discovered that disappearance of keratocytes after corneal epithelial injury was mediated by apoptosis and reported evidence that it is mediated by cytokines released from injured epithelial cells. Characterized keratocyte apoptosis as the initiator of the subsequent events in wound healing in the cornea following surgical procedures and injury. Discovered the association between keratocyte apoptosis and keratoconus. Discovered the association between hepatitis C virus and some cases of Mooren's corneal ulcer. Together with Stephen Klyce, Ph.D. performed many of the early studies on corneal topography including effect of contact lens wear, effect of PRK, ALK, and other surgical procedures on corneal topography, and development of quantitative descriptors of corneal topography, including SRI and SAI. Performed a number of clinical studies on refractive surgical procedures and development of techniques for limiting and treating complications. Key publications: 1) *Hepatocyte growth factor (HGF), keratinocyte growth factor (KGF), their receptors, FGF receptor-2, and the cells of the cornea*. Invest Ophthalmol Vis Sci 34:2544-61, 1993. 2) *Mooren's corneal ulcers and hepatitis C virus infection: A New Association*. N Engl J Med 329:62, 1993. 3) *Epithelial injury induces keratocyte apoptosis: hypothesized role for the interleukin-1 system in the modulation of corneal tissue organization and wound healing*. Exp Eye Res 62:325-8, 1996. 4) *Apoptosis in the cornea: further characterization of Fas-Fas ligand system*. Exp Eye Res 65:575-89, 1997. 5) *Keratocyte apoptosis after corneal surgery*. Invest Ophthalmol Vis Sci 39:276-83, 1998. 6) *Stimulus-specific and cell type-specific cascades: Emerging principles relating to control of apoptosis in the eye*. Exp Eye Res 1999;69:255-66. Research to Prevent Blindness William and Mary Greve International Research Scholar (July 1, 1992- February 1, 1994), Manpower Award, Research to Prevent Blindness, (July 1, 1994-June 30, 1995), Honor Award, American Academy of Ophthalmology (1995), Everett-Kinsey Lecturer for 1998 CLAO Meeting, Dean's award lecture in Neurosciences, Louisiana State University, New Orleans, 9/2000 " *Strategies for Control of Wound Healing and Manipulation of Other Cellular Functions in the Eye*" (Professor and Chairman, Department of Ophthalmology,

University of Washington, Box 356485, Seeattle WA 98195-6485. phone: +1+206-543-7250, fax: +1-206-543-4414, e-mail: sewilson@u.washington.edu)(SM)

Wise, George Nelms (1915-1974), American ophthalmologist, professor of ophthalmology at the Albert Einstein College of Medicine. A native of Virginia, a graduate of the Virginia Military Institute, The University of Virginia Medical School, and the Institute of Ophthalmology of Columbia Presbyterian Medical Center, Wise devoted his life to his profession. Rising through the ranks from instructor to full professor of ophthalmology at New York University School of Medicine, he founded a clinic devoted to the study of retinal diseases and was instrumental in initiating an ocular pathology laboratory. He maintained an active private practice throughout this period. In 1970, he accepted the challenge to help develop an academic Ophthalmology Department for the Albert Einstein College of Medicine and the Montefiore Hospital and Medical Center. He accepted a full-time academic position, founded a new retinal clinic at Montefiore Hospital, developed a fellowship program in medical retinal diseases, and provided exceptional guidance and leadership to a fledgling department. His ability as an observer of the retina was unparalleled, and his contributions to the delineation of retinal vascular disease will remain a cornerstone of ophthalmic knowledge. He held many important positions in ophthalmology, among which were: chairman of the Medical Advisory Committee for the New York State Commission for the Blind; chairman of the New York Academy of Medicine, Section of Ophthalmology; chairman of the New York Ophthalmologic Society; member of the Scientific Advisory Committee of Fight for Sight, Inc.; member of the American Ophthalmologic Society. He was the recipient of the 1966 Will A. Fisher Award of the Chicago Ophthalmological Society and was the 1973 Schoenberg Lecturer of the New York Society for Clinical Ophthalmology. AJO 1974,78:871-872

Wistrand, Per J. (1927-) Swedish pharmacologist and ophthalmologist. He took his M.D.- degree 1954 and PhD-degree (Thesis: *Carbonic Anhydrase and its Inhibitors*, Almqvist & Wiksell,Uppsala 1960) at Uppsala University,the latter after studies with Ernst Ba'ra'ny at Uppsala and Thomas Maren at University of Florida in Gainesville. He was Professor (1968-1993) and Chairman (1970-1979) of Pharmacology at Uppsala University and since 1994 Emeritus Professor. He was Visiting Research Professor at the Department of Pharmacology and Experimental Therapeutics,University of Florida,for several periods during the years 1973-1990. He had appointments at drug industries and was Head of Pharmacology at Astra Co,at Sodertalje, 1964-1968, and a full or part time consultant to Pharmacia Co.,at Uppsala between 1960-1963 and 1994-1999. His clinical training in internal medicine and ophthalmology took place at the Johns Hopkins and Uppsala University Hospitals. He was a consultant Ophthalmologist and Associate Professor of Ophthalmology at Uppsala University Hospital 1983-1993. His research has focused on the physiology and biochemistry of the enzyme Carbonic Anhydrase (CA) in many tissues, including CNS, G-I-tract, kidneys and eye. His finding in 1951 of CA in the ciliary epithelium initiated the 1954 introduction of acetazolamide in the treatment of glaucoma. His isolation and purification of the membrane-bound CA isozyme, CAIV, from human kidneys in 1989, and his subsequent finding and characterization of this isozyme in the eye, have been critical for understanding the mechanism of the IOP-lowering effect of dorzolamide, a topical inhibitor of CA, introduced 1995 by Thomas Maren in the treatment of glaucoma. He was the recipient of the Governor Lehman Fellowship 1964 and the Alcon Research Foundations' Award 1991.(Department of Pharmacology, University of Uppsala, Sweden. e-mail: per.wistrand@neuro.uu.se) (SM)



Mikhail Mikhailovitch Woinow

Witelo, (ca.1230 - ca.1275) German (?) scientist who was probably born and raised in Breslau, and who studied at the Universities of Paris and Padua; where and how he spent his last years are unknown. Although he is known to have written other works (most of them now lost), his reputation rests on the *Perspectiva*, a treatise on optics: *Peri optikes, id est de natura, ratione & proiectione radiorum visus, luminum, colorum atque formarum, quam vulgo perspectivam vocant, libri X* Nurnberg 1535.Albert

Woinow, Mikhail Mikhailovitch (1844-1875) Russian ophthalmologist. Woinow studied under Hermann von Helmholtz and Otto Becker in Heidelberg and under Ferdinand Arlt in Vienna. He established a highly successful ophthalmologic practice in Moscow,

lectured at the University and published, in German, three monographs and a number of articles on topics in physiological optics: *Über das Verhalten der Doppelbilder bei Augenmuskellähmungen in Tafeln Dargestellt* Wien 1870; *Ophthalmometrie* Wien 1871 and with August Ritter von Reuss *Ophthalmometrische Studien* Wien 1869. Albert.

Wolfe, John Reisberg (1824-1904) British ophthalmologist born in Breslau, Germany. Wolfe received his M.D. in 1856 in Scotland, at Glasgow University, and spent most of his life thereafter as an ophthalmologist in Glasgow, establishing the *Glasgow Ophthalmic Institute* in 1870. A skilled and inventive cataract surgeon and the deviser of new methods for blepharoplasty and keratoplasty, Wolfe also invented a refracting ophthalmoscope. He wrote: *Clinical demonstrations on ophthalmic subjects given during the sessions of 1875-76* Glasgow 1877 and *On diseases and injuries of the eye; a course of systematic and clinical lectures to students and medical practitioners*. London 1882. Albert

Wolff, Eugene (1896-1954) British ophthalmologist born at Oudtshorn, Cape Province, South Africa. He came over as a boy to University College School, Hampstead, from which he went on to University College, London, and then University College Hospital, where he was awarded the Lister medal for clinical surgery in 1918. In the same year he passed the Final Conjoint examinations, and graduated M.B., B.S. of London University. Then followed a year's service as captain in the South African Medical Corps, during which he gained the affectionate respect of all ranks, because, already, Eugene showed that quality which remained for ever as the hallmark of his professional work-intense concern for the welfare of his patients. After his demobilization early in 1919, Wolff returned to University College, where during the next eight years he pursued the studies which afterwards enabled him to make such rich contributions to the anatomy and pathology of the eye. Soon he was aflame with that passion for microscopy which has fastened upon so many great masters of medicine in the past-notably Allbutt and Osler. These men had already shown, and Wolff showed afresh, that the microscope, so far from encouraging a narrow view of pathology, can augment the range of vision when it is put into the hands of an enlightened man. Meanwhile clinical work was not neglected, and he became house surgeon and afterwards ophthalmic registrar to the late Percy Flemming and Sir John Parsons at University College Hospital. He also gained additional experience as a chief clinical assistant at Moorfields Eye Hospital. Another teacher to whom he repeatedly expressed his indebtedness was the late Professor Elliot Smith, who occupied the chair of anatomy at University College. Although Wolff remained a student, in the best sense of that word, right up to the last, we may look upon 1927, the year in which he became a Fellow of the Royal College of Surgeons, England, as the end of his long and strenuous training in ophthalmology. During most of his years (1919-30) as a demonstrator of anatomy at University College, Wolff found time also to lecture on this subject in the Slade School of Art, and to write his first book, *Anatomy for Artists*, published in 1925. Two more editions appeared between the world wars, and the book was still in demand, for a further reprint of the third edition was issued in 1952. Another work by Wolff, entitled *A Shorter Anatomy*, was published in 1928, but his most important books, which will presently be mentioned, were - not yet ready. They emerged from his steadily growing clinical, anatomical, and pathological experience built up during the ten-year period immediately after his final F.R.C.S. For a short time Wolff was honorary ophthalmic surgeon to the Metropolitan Hospital, but he resigned that post soon after he was elected in 1928 to the honorary staff of the Royal Northern Hospital in succession to Basil Lang. Here he found himself among friends in a most congenial atmosphere, and for the rest of his life gave devoted service to the people of North London. In 1930 he gave up his anatomy demonstratorship at University College on being appointed pathologist at the Royal Westminster Ophthalmic Hospital. Here was a golden chance to follow his bent in a department of his own. Eagerly Wolff embraced the opportunity, so that year after year he was able to deliver beautifully illustrated papers on the normal and pathological anatomy of the eyes and their adnexa. His histological slides, in the preparation of which he was loyally served by Mr. A. McNeil, his laboratory technician, were first-class, and they succeeded in illuminating many a hitherto obscure bypath of ophthalmology. Selected jewels from all this richness adorned the pages of Wolff's *Anatomy of the Eye and Orbit*, which first appeared in 1933, and reached its fourth edition 1954. Scrutiny of the successive editions will convince the most exacting critic that Wolff never regarded his

work as complete. He was constantly on the alert to prune away obsolete material, and to insert new gems from his patient mining. *Anatomy of the Eye and Orbit* is far and away the best ophthalmic anatomy book in the English language. In 1934, only a year after the appearance of his great work on anatomy, Wolff produced his *Pathology of the Eye*, a book full of lucid descriptions and superb pictures. Here again he surpassed himself in subsequent editions, of which the third (1951) stands as a striking monument to his ability and industry. Wolff was elected to the honorary staff of the Royal Westminster Ophthalmic Hospital in 1936, but he continued to hold the post of pathologist, greatly to the advantage of the hospital. In the following year his *Diseases of the Eye* was published. This book contrived in remarkably few words to give a sound introduction to clinical ophthalmology, and its pages, unlike those of many elementary text-books, were large enough to display the illustrations advantageously. The author steadily improved his work in later editions, of which the fourth appeared 1953. At the Institute of Ophthalmology, after the fusion of the three eye hospitals north of the Thames (Royal London Ophthalmic Hospital, Royal Westminster Ophthalmic Hospital, and Central London Ophthalmic Hospital) to form the Moorfields Westminster and Central Eye Hospital in 1946, Wolff continued to lecture as a recognized teacher of the University of London. Here he regularly attended the medical committee meetings of the combined eye hospitals, and when his turn came round to take the chair, he endeared himself more deeply than ever to his colleagues. He had invariably studied the agenda with care before the meeting, and displayed the utmost scruple in seeing that all points of view were represented in discussion. It is good to know that Wolff was honoured by his colleagues in so many different ways *The Ophthalmological Society of the United Kingdom*, the Section of Ophthalmology at the *Royal Society of Medicine*, and the Section of Ophthalmology of the *British Medical Association*, all chose him as a vice-president, and there is little doubt that, if he had lived for a few years more, he would have become President of the *Ophthalmological Society of the United Kingdom*. In 1947 at Glasgow he received the Mackenzie Memorial Medal. Other tributes which delighted him were honorary membership of the *Belgian* and *Greek* Ophthalmological Societies. In 1950 he was appointed a member of the North-West Metropolitan Regional Hospital Board. Wolff's contribution to ophthalmology is established not only through his books and museum specimens, first-class though these undoubtedly are, but also by oral tradition. He was of course a fine lecturer, who delivered words audibly after careful preparation, so that much of his teaching will be remembered. BJO 1954,38:253-255

Wolter, J. Reimer (1924-) American ophthalmologist born in Germany. Wolter received his MD (Dr.med.) at the University of Hamburg in 1949. He was resident, University of Hamburg Augenklinik, 1949-1953. He became research associate in neuropathology, University of Michigan, 1953. Assistant Professor, ophthalmology, 1956; Professor, 1964, with joint appointment in pathology. Chief of ophthalmology, Ann Arbor Veterans Administration Hospital. ABO, 1961. AOS, 1966. He was a founding editor of the Journal of Pediatric Ophthalmology. He was a teacher at Lancaster course, Colby College. Wolter authored about 350 scientific articles and book chapters. He is Professor Emeritus since 1999. His main interests were: ophthalmic pathology, orbital surgery.(James Ravin)

Wong, Doric W.K. (1963-) Singaporean Chinese consultant ophthalmologist at the Vitreo-retinal Department of the Singapore National Eye Centre. Clinical teacher, Faculty of Medicine, National University of Singapore. He graduated in 1987 from the National University of Singapore. He performed his residency in the Department of Ophthalmology of the National University Hospital, obtaining the Master of Medicine (Ophthalmology) and becoming a Fellow of the Royal College of Surgeons of Edinburgh in 1994. He completed a medical and surgical vitreo-retina fellowship in the Singapore National Eye Centre in 1997-1999, during which he spent a year as international fellow in the Manhattan Eye, Ear and Throat Hospital under Dr. Lawrence Yanuzzi M.D. and Dr. Richard Spaide M.D. He has been with the Singapore National Eye Centre since 1996, and entered into his current position in 1999. His clinical interests are in vitreoretinal disorders and phacoemulsification. His research interests are currently in polypoidal choroidal neovascularization. (Dr. Doric W.K. Wong: Singapore National Eye Centre, 11 Third Hospital Avenue, Singapore 168751, Singapore. Phone: (65)2277255; Fax: (65)2277290; e-mail: doric_wong@snec.com.sg) (SM)

Wood, Casey Albert (1857-1942) American ophthalmologist of Canadian birth. He was born in Canada and took his M.D. from Bishop's College, Montreal, in 1877. In those days he was one of Osler's clinical clerks at McGill, and the friendship between them lasted until Osler's death. Casey Wood started practice in Montreal as a physician, but he was always interested in ophthalmology and in 1886 he left Montreal and spent some years in post graduate work in England and on the Continent. In 1890 he settled in Chicago and rapidly developed a large ophthalmic practice. He was professor of ophthalmology at Northwestern University in 1900, and from 1904-1925 at the University of Illinois. Casey Wood was a prolific author. Besides a great many papers of clinical interest he was an editor of the *American Encyclopaedia of Ophthalmology* and also of a system of ophthalmic operations. But probably his best known work was done in comparative ophthalmology: *The fundus oculi of Birds* came out in 1917 and later he issued a large quarto " *Introduction to the literature of vertebrate zoology*". He was a generous benefactor to McGill, and the " introduction " referred to above, is practically a list of all the works on this subject there, many of them donated by himself. After retirement from active practice Casey Wood spent much of his time abroad and worked in Rome at the Vatican Library. His scholarly translation of Benevenutus Grassus on the eye, and the memorandum book of Jesus Hali are well known. His knowledge of the history of ophthalmology was most extensive, while the Blacker Library of Zoology and the Emma Shearer Wood Library of Ornithology at McGill are a lasting memorial of his generosity and ability. His ophthalmological collections also went to McGill Medical Library, and he was the donor of some valuable oriental manuscripts to the Osler Library. McGill gave him the degree of M.D. in 1905 and LL.D. in 1922. BJO 26,287,1942

Wood, Cyril George Russ (1869-1938) British ophthalmologist. Wood´s medical studies were pursued at Bristol University and he obtained his M.R.C.S., L.R.C.P. in 1892, and his F.R.C.S.(Eng.) in 1902. At first his main interests were devoted to the study of pathology but shortly afterwards he came under the inspiring influence of F. Richardson Cross, who turned his thoughts to ophthalmology and led to his appointments as Hon. Ophthalmic Surgeon to Southport Infirmary and Southport Eye, Ear and Throat Hospital. In 1900 he was appointed Hon. Surgeon to the Eye, Ear and Throat Hospital, Shrewsbury, and it is to his lasting credit that in the exceedingly full and busy life that followed he gained his Fellowship though amongst other difficulties it involved a visit twice weekly to Birmingham University for the study of practical anatomy. His services to the Hospital in Shrewsbury were the means of raising its status to a very high level and his name soon became widely known and respected in Shropshire and Mid Wales, not only as an Ophthalmic Surgeon but also as an Oto-laryngologist. He added to his appointments those of Hon. Ophthalmic and Aural Surgeon to the Royal Salop Infirmary, the Shropshire Orthopaedic Hospital, Wrexharn Infirmary, the Montgomery County Infirmary and Much Wenlock and Broseley Hospitals, to all of which he held the position of Hon. Consulting Ophthalmic Surgeon at the time of his death. His association with the British Medical Association dates from 1892 and he was from 1900 to 1931 an active member of the Shropshire and Mid Wales branch, being elected President in 1925. Since the institution of the Oxford Ophthalmological Congress in 1909, Russ Wood, as one of its founders, had always been one of its keenest and most active members. He was elected Hon. Secretary in 1928 and became Master in 1935. He served as President of the Midland Ophthalmological Society, being elected to deliver the Middlemore lecture in 1927, and he was also a member of the General Committee of the British Journal of Ophthalmology. On his retirement from practice in Shrewsbury in 1931 he was elected Assistant Surgeon and Pathologist to the Oxford Eye Hospital and later Consulting Surgeon, while at the same time he became Lecturer in the Oxford Post-Graduate Course in Ophthalmology and Examiner in Ophthalmology to Queen's University, Belfast. BJO 1938, 22: 699

Woodhead, Abraham (1609-1678) Roman Catholic controversialist and author of a treatise on optics, born in Yorkshire, England. Woodhead was educated at Oxford University for a career in the Protestant church but converted to Catholicism about 1645. He spent his later years in retirement at Hoxton, near London, anonymously publishing pro-Catholic polemics and devotional works and pursuing various literary and scientific studies. Most of his writings remained unpublished at his death. He wrote on optics: *Propositions concerning optic-glasses, with their natural reasons drawn from experiment*

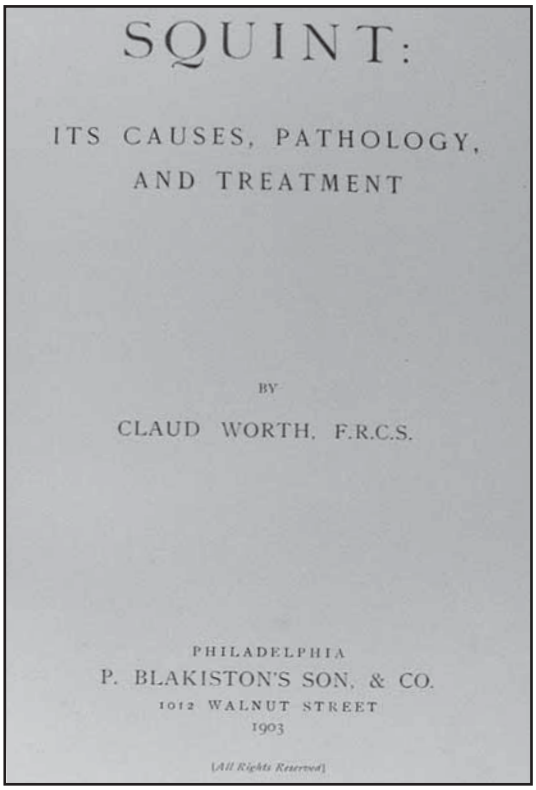
Oxford 1679 [This work was published anonymously and was also attributed to Robert Cooper (1650-1733) and Obadiah Walker (1616-1699)]. Albert

Woods, Alan Churchill (1889-1963) American ophthalmologist, born to a prominent Baltimore medical family. His father, →Hiram Woods, was one of the leading ophthalmologists of his day. From 1887 to 1894, he was professor of Ophthalmology at the Woman's Medical College of Baltimore, and from 1895 to 1920, he was lecturer and later head of the Department of Ophthalmology at the University of Maryland. With this family background, one might have expected Alan C. Woods to have automatically entered the field of medicine. However, after he received his A. B. degree in 1910 from The Johns Hopkins University, he seriously considered taking graduate work in English. This desire was quickly put aside, for he entered the Johns Hopkins University School of Medicine in the same year. After receiving his M.D. degree in 1914, he spent a year under Dr. Henry A. Christian as a house officer in medicine at the Peter-Bent Brigham Hospital in Boston. It was during this year that his lifelong interest in bacteriology and immunology was initiated. The following year he began a two-year fellowship at the University of Pennsylvania under the guidance of Dr. Richard Pearce, professor of research medicine. A few years prior to this, Maurice Arthus had made his classic discovery that repeated injections of horse serum into rabbits created a state of hypersensitivity that led to local tissue reaction when serum was subsequently injected into the skin. One day Dr. Woods was perfusing a sensitized animal with soluble bacterial products to determine their effects on the kidney when he noted an inflammatory reaction in the eye. This turned his attention to uveitis, which was to be the field of his prime research interest throughout his long and fruitful career in ophthalmology. At about this time he decided to make ophthalmology his life's work. George E. de→Schweinitz of Philadelphia was one of the leading ophthalmologists in the world at that time. He was also a good friend of Hiram Woods. Because of this, a close personal relationship developed and Alan Woods spent his afternoons working with de Schweinitz and many of his evenings discussing medical problems with him. A few years earlier, Woods had joined the Medical Reserves of the U. S Army. Because of the American skirmish with Mexico in 1916, he was called to active duty for a period of five months. In August, 1917 he was again placed on active duty for World War I . He was sent to England with the University of Pennsylvania Medical Unit, where he was placed in charge of the laboratory. Fortunately, de Schweinitz was ophthalmic consultant for the American Expeditionary Forces and was able to have him transferred to the British Expeditionary Forces under Sir William Lister. During this time, he learned a great deal about eye surgery and more of the clinical side of ophthalmology. After his discharge from the Army as a major in 1919, he returned to Baltimore to practice with his father. In the mornings he saw his private patients at 842 Park Avenue, and in the afternoons he worked in the clinic of The Johns Hopkins Hospital as an instructor in ophthalmology. In 1922 he was made an associate in ophthalmology and in 1925, when the Wilmer Institute began, he served as assistant director to Dr.→Wilmer. In 1926, he was promoted to associate professor. When Wilmer retired in 1934, he succeeded him as director of the Wilmer Institute and became acting professor of ophthalmology. In 1937, he gave up his city office and established a geographic full time practice at the Wilmer Institute. In 1946, he joined the full-time staff of the university and became full professor of ophthalmology, a position which he held until his retirement in 1955. After his retirement, he maintained an office in the Wilmer Institute and was active in both clinical and experimental medicine until a few weeks before his death. He became a leader in the field of uveitis. In the university, he was an active and influential member of the Advisory Board, and in the Hospital he served as chairman of the Medical Board for nine years. Because of his numerous activities, he received many awards in ophthalmology, such as the Ophthalmological Research Medal of the Section of Ophthalmology of the American Medical Association and the Howe Medal given by the American Ophthalmological Society. He was made a fellow of the Royal College of Surgeons (Edinburgh), the only American ophthalmologist so honored in the history of the society. He was made Honorary Doctor of Laws by Hampden-Sydney in 1951. He gave a lecture as the guest-of-honor of the American Academy of Ophthalmology in 1955. He received the Gonin Medal in 1958 for outstanding contributions to ophthalmology during his generation, and was until that time the only American to have received this award. AJO 1963:842-845; BJO 1963,47:254-256 (by Duke-Elder)

Woods, Hiram (1857-1931) American ophthalmologist, born at Baltimore. Woods was educated in George Carey's private school in Baltimore, and at Princeton University, where he graduated in 1879. His medical education was obtained at the University of Maryland, at which institution he received his MD in 1882. He served one year as interne at Bay View Hospital, after which he was connected with the University of Maryland, first in the department of dermatology and later in the department of ophthalmology and otology. From 1887 to 1894 he was professor of ophthalmology and otology at the Woman's Medical College of Baltimore. In 1895 he returned as lecturer in ophthalmology and otology at the University of Maryland, and he was shortly elected to be head of the department, in which capacity he served until 1920. In this field of endeavor he was especially talented, and he took great delight in demonstrating various lesions to the students. For many years he was surgeon to the Presbyterian Eye, Ear, and Throat Charity Hospital, where his ability as surgeon was utilized by the many seeking relief, and where he often had demonstrations for his students. The meticulous care which he took of his patients in those early days made him stand out among his colleagues. He was elected to many positions of honor. Locally he served on several occasions as chairman of the ophthalmological section, in 1906 he was president of the Maryland Medical and Chirurgical faculty, and later he was chairman of the council. In 1912 he was chosen as chairman of the Section on Ophthalmology of the American Medical Association and in 1919 as president of the American Ophthalmological Society. His many contributions to ophthalmic literature, were of a clinical nature but exceedingly well prepared and of permanent worth. AJO 1931,14:364

Woodward, Julius Hayden (1857-1916). New Yorker ophthalmologist, director of instruction of the eye department of the Post-Graduate Hospital Medical School.

Woolhouse, John Thomas (ca.1650-1734) British ophthalmologist born in England to a family of oculists. Woolhouse traveled throughout Europe learning ophthalmologic techniques and in 1688, as oculist to King James II, accompanied him into exile in Paris. There he remained until about 1728, becoming a celebrated practitioner and lecturer on eye diseases; he spent his last years in England. Both a skilled operator and an unprincipled charlatan, Woolhouse claimed to possess secret formulae and techniques which he would disclose to students for large fees. He vigorously opposed Brisseau and Maitre-Jan's new concept of cataract. In 1711 he wrote of the possibility of iridectomy for the formation of a new pupil; it was Cheselden, however, who first performed the operation, in 1728. He authored: *Dissertations ... sur la cataracte et le glaucome de quelques modernes et principalement de MM. Brisseau, Antoine, et Heister* 1717, latin version : *Dissertationes ophthalmicae de cataracta et glaucomate, contra systema sic dictum novum D.N.N. Brissaei, Antonii, Heisterii et aliorum*. Frankfurt/M 1719.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ITS CAUSES, PATHOLOGY, AND TREATMENT

BY

CLAUD WORTH, F.R.C.S.

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Woollard H. H. (?-1938) British Professor of Anatomy in University College, London. He was the author of much research on the anatomy of the central nervous system and contributed a paper on congenital ophthalmia in a puppy to the tenth volume of Brit.J.Ophthalmology. BJO 23,219, 1938

Worth, Claud Alley (1869-1936) British ophthalmologist. Worth was a Lincolnshire man, and was born at Holbeach, the son of Thomas Mordaunt Worth, representative of an ancient Lincolnshire family. He was educated at Bedford and St. Bartholomew's Hospital. He qualified as M.R.C.S., L.R.C.P. in 1893, held house-surgeonship at a hospital in the Midlands, and proceeded to the F.R.C.S. in 1898. Worth began the study of ophthalmology under Henry Power and Bowater Vernon at St. Bartholomew's and joined the practice at Moorfields, where he worked in Holmes Spicer's clinic. He was elected to the honorary staff at Moorfields in 1906 and in due course became consulting surgeon. He was, for many years, ophthalmic surgeon to the West Ham Hospital, now the Queen Mary Hospital for the East End. His work on Squint made Worth's name familiar all over the world. His well-known book, " *Squint, its causes, Pathology and Treatment*"1903, reached its 6th edition in 1935 and has

been translated into many languages. He also wrote with Charles H. May " *A Manual of Diseases of the Eye*" (London 1906), 7th edition 1934. Worth, in the orthoptic treatment of Squint, was essentially a pioneer. Worth joined the Ophthalmological Society of the United Kingdom in 1899, and contributed many papers to its transactions. So far back as Vol. XXI he read a paper on the orthoptic treatment of Squint in Young Children. Worth's amblyoscope and " Fourlight test " are part of the armamentarium of every ophthalmic surgeon, and his advancement forceps was a notable advance over the old-fashioned Prince's forceps. Worth was very successful in handling small children. But, had he not made a name for himself in ophthalmology Worth's name would have been a household word wherever yachts are sailed. His love of the sea dated from childhood, and although he was prevented from entering the Royal Navy, his knowledge of seamanship, currents, harbours and all else that go to make up the science of yachting was immense. In 1926 he sailed his own boat to the Azores. Worth was president of the Little Ship Club, and Vice-Commodore of the Royal Cruising Club, a master mariner and first class pilot. He also wrote books on yacht sailing which are classics. In 1910, "*Yacht Cruising*" was published, and it has reached its fourth edition in 1936. In 1927 he published a companion volume, "*Yacht Navigation and Voyaging*." Some of his boats he designed himself and he proved the practicability of sailing small boats safely in deep water ; insisting that a suitable boat, manned by an efficient crew was perfectly safe, even for long voyages. BJO 1936,20:558-559.The Times June 26, 1936,p.11a; British med Journ 1936,1:51.JPW.

Worthen, David McQuarrie (1936-1988) American ophthalmologist, Assistant Chief Medical Director for Academic Affairs for the Veterans Administration. When he retired because of medical disability in 1987 he was a member of the faculties of the medical schools at Georgetown, Howard, and Johns Hopkins universities. A native of Provo, Utah, he attended the University of Utah through two years of medical school. He graduated from medical school at the University of Minnesota, where he became a member of Alpha Omega Alpha. He interned at the U.S. Navy Hospital in Oakland, California. While in the Navy, he had an intensive course in psychiatry and served two years as a staff psychiatrist before entering an ophthalmology residency in 1964 at the Massachusetts Eye and Ear Infirmary. While residents, he and Richard→Brubaker developed a small, inexpensive instrument for cryoextraction of the lens that was widely used for several years. He remained in Boston until 1970 in a group practice, serving on the faculty of the Howe Laboratory and as a consultant at Peter Bent Brigham and Childrens Hospitals. He became skilled in electron microscopy and did pioneering studies of the anterior segment in glaucoma. In 1970, he joined the faculty of the Department of Ophthalmology at the University of Florida in Gainesville. He became Chief of the Ophthalmology Service at the Gainesville Veterans Administration Hospital. In addition to teaching, medical care, research, and administration, he completed a Master of Arts Degree in Education at the University of Florida. In 1974, he was named head of the ophthalmology program at the University of California in San Diego and became Chief of Ophthalmology at the San Diego Veterans Administration Medical Center. He was named an Associate Examiner for the American Board of Ophthalmology, and assumed responsibility for ophthalmic basic science teaching in several ongoing courses. In 1977, he became Associate Secretary for Continuing Education of the American Academy of Ophthalmology.Under his direction the section of ophthalmology at the University of California expanded. His research interests broadened to include the biochemical function of the trabecular meshwork and he continued clinical studies, started in Florida, on laser treatment for open angle glaucoma. With M. Gary Wickham, he performed the first systematic studies of argon laser trabeculoplasty in the United States. The method they devised is the forerunner of the one used today. Worthen became interested in clinical trials and developed a plan for a multicenter trial to clarify the efficacy and safety of argon laser trabeculoplasty. This study was funded in 1980, but was not implemented because, in that year , he moved to Washington to the central office of the Veterans Administration. His study plan was used in developing the plan for the Glaucoma Laser Trial, an ongoing clinical trial. At the Veterans Administration central office he headed the largest coordinated health care education program in the nation. He managed nearly 1000 cooperative training agreements between the Veterans Administration and dentistry, nursing, schools of medicine, pharmacy, social work, and other associated health professions. He was responsible for continuing education of health professionals and other staff at the 172

Veterans Administration Medical Centers. In 1975, he joined the Ophthalmic Devices Panel of the Food and Drug Administration, which he chaired from 1977 through 1982. He served as a consultant to the panel until 1987. He served on 16 other advisory groups on medical education, government regulation health, and fitness. His contributions have been recognized by commendations from the American Academy of Ophthalmology, the Food and Drug Administration Commissioner, the chief medical director of the Veterans Administration, the Surgeon General, Congress, and the President of the United States. At his retirement, the Veterans Administration established the David M . Worthen Award for Academic Excellence. He died at age 52 of Amyotrophic Lateral Sclerosis. At Georgetown University his contributions have been commemorated by the creation of the David M. Worthen Center for Clinical Studies. At the Wilmer ophthalmologic Institute, a named lectureship and fellowship has been established. David Worthen believed it important for each person to strive to do his best. This is reflected in his work and his commitment to physical fitness. AJO 1988, 106, 375-376; Arch Ophthalmol 1988, 106:733

Wright, Halstead Robert (1875-1918) A young American ophthalmologist of great promise. Born at Coshocton, Ohio, he moved to Columbus with his father's family in 1880. He graduated in dentistry at the University of Ohio in 1895, but after a brief period of dental practice, took up the study of medicine in the same university, where he received the medical degree in 1910. He then located for practice in Columbus, becoming a partner with his father. He was, from 1910 till 1917, instructor in physiology and pathology at his alma mater. He invented a number of ophthalmic instruments, and contributed to "*The Ophthalmic Record*" a number of ophthalmic articles, among which may be mentioned the following: "*The Use of the Snare as the Final Step in the Enucleation of the Eve*"; "*A New Method of Preparing an Eye for Microscopic Sections*"; "*A Rare Intraocular Tumor*," and "*A Rare Tubercular Condition of the Eye*." He became a captain in the Medical Service of the Army, and died at Camp Greenleaf, Georgia.AJO 1919,2:168

Wu, Lezheng (1935-) Chinese ophthalmologist, Professor of Ophthalmology of Sun Yat-Sen University of Medical Sciences (SUMS), Son-in-law of CHAN Eugene and MAO Wenshu. He graduated from the SUMS in 1957 and finished the Postgraduate School of the SUMS in 1962. He then worked at the Department of Ophthalmology of the SUMS in 1957-1972. He carried out research for about 4 years from 1979 to 1982 at Stanford University, Johns Hopkins University and National Institute of Health, U.S.A. He has been in the present position as above since 1985, and served as the Chairman of the Department of Ophthalmology (1985-1996), Deputy Director of Zhongshan Ophthalmic Center of the SUMS (1983-1992), Director of the Eye Research Institute, SUMS (1983-1995) and Director of the National Ophthalmological Laboratory, Ministry of Public Health, China (1991-1995). He is active in many scientific societies and is the Board Member of the International Society for Clinical Electrophysiology of Vision (since 1990), Chinese Ophthalmological Society (1992-1996), Afro-Asian Council of Ophthalmology (since 1992), Consultant to Helen Keller International (since 1988) and a member of the Oxford Ophthalmological Congress (since 1985). His international activities are very extensive and he serves as the President of the 12th Afro-Asian Congress of Ophthalmology, Guangzhou, in 2000, as the Guest Professor to the University Eye Hospital, Munich in 1991 and the Visiting Professor to the University of Sao Paulo in 1996. He was the Co-Founder and the Chief Editor of "*Eye Science*"(Chinese and English Language Journal) during 1988-1992. He has published 250 scientific papers and some examples are "*Characteristics of the capillary-free zone in the normal human macula*, Jpn. J. Ophthalmol. 29, 306, 1985", "*Characteristics of the macular microvasculature*, ibid. 29: 412, 1985", "*Study of aging macular degeneration in China*. Jpn J. Ophthalmol. 31: 349, 1995" and "*Study of pathogenesis of age-related macular degeneration*. Eye Science 12: 58, 1996". Some examples of his books are "*Artificial Vision*" Science Press, Beijing 1980, "*Clinical Electrophysiology of Vision* " Science Press, Beijing 1999 and "*Guide of modern Ophthalmological Surgery in Clinic*" People's Med. Publ. House, Beijing 1995. He has been Guest Lecturer to many international congresses, e.g. 91st Congress of the Japanese Ophthalmological Society (1987), 13th Congress of the Asia-Pacific Academy of Ophthalmology (APAO) (1993), the First International Symposium of Tropic and Subtropics on Ophthalmology, Waterloo, Canada (1994). He is the recipient of APAO

Distinguished Service Award (1991), Distinguished Service Award of the World Eye Foundation, U.S.A. (1982), and Awards of “Advance in Science and Technology” of the National Education Commission and Ministry of Public Health, China, many times during 1987-1993. (SM)

Würdemann, Harry Vanderbilt (1865-1938) American ophthalmologist. He took his M.D. in 1880, but before taking up medicine he had spent four years in an architect's office and as a topographer with the U.S. Geological Survey. After post-graduate study in London and on the Continent he started practice in Milwaukee. He was Professor of Ophthalmology in the Chicago Eye, Ear, Nose and Throat College and was for a time Editor of the *Annals of Ophthalmology*. In 1909 he moved to Seattle. Würdemann is best known in this country for his admirable transilluminator. He brought out a book on " *Injuries of the Eye*" in 1912 and this ran to a greatly enlarged second edition in 1932, which became a recognised textbook on its subject. It was very largely a record of his own cases. BJO 1938,22:508, Am J Opht June 1938.

Wybar, Kenneth(1921-1992). British ophthalmologist. He was an authority on ocular motility.First consultant at the Hospital for Sick Children and at Royal Marsden , he became director of the orthoptic department at Moorfields, High Holborn and subsequently director of the combined school of orthoptics at both branches of Moorfields.He became president of the ophthalmic section of the Royal Society of Medicine and of the Ophthalmological Society of the United Kingdom. He wrote the sections of *Anatomy* and of *Ocular Motility and Strabismus* of →Duke Elder´s *System of Ophthalmology*, he co-authored two other textbooks and wrote: *Concise Textbook of Ophthalmology*.He published countless articles on various subjects of which the latest became more focused on squint management.The Times, London May 16,1992.

X

Xia, Dezhao (1918-) Chinese ophthalmologist, Professor of Ophthalmology, the First Clinical College, China Medical University, Shenyang. He graduated from Man-Zhou Medical University in 1941, studied Ophthalmology under Prof. SASAKI Toichiro and OHISHI Siyozo. He served as the Professor and Chairman of the Department of Ophthalmology of the First Clinical College of the University in 1949—1983. Currently, he serves as the Director of School for Doctor’s degree (1986—1998), and the Editor-in-Chief of *Chinese Journal of Practical Ophthalmology* since 1983. He is a member of the Ophthalmological Society of People’s Republic of China (1954-) and served as a Standing Committee Member in 1985-1995. He wrote “*Ophthalmology*. 3rd Ed. Edition, 1989” and “*Eye section in Surgical Anatomy*, Edition 1992”. (Department of Ophthalmology, China Medical University, Shenyang, China 110001) (SM)

Xie, Lixin (1942-) Chinese ophthalmologist, Vice President (1996-) of the Shandong Academy of Medical Science, Director and President (1990-), Institute of Ophthalmology and Eye Hospital, Shandong Academy of Medical Science, Professor and President of the Affiliated Eye Hospital, Medical College of Qingdao University . He graduated from Shandong Medical University in 1965 and received his postgraduate training at the Shandong Provincial Hospital in 1974-1975. He further studied as a Corneal Research Fellow, LSU Eye Center, New Orleans, USA during 1987-1988. On home coming, he served as the Head and Associate Professor at the Department of Ophthalmology, Weifang Medical College (1987-1988). He has been in the present position as above since 1990, and he conjointly serves as the President and Professor of Ophthalmology of the Affiliated Eye Hospital of the Medical College of Qingdao University (1994-), Visiting Professor to the No.2 Clinical College of Beijing Medical University (1995-) and Visiting Professor to the LSU Eye Center, New Orleans, U. S. A. (1999-). He has been also responsible for Doctor of Medicine training of the Medical College of Qingdao University (1998-) and of the Beijing Medical University (1997-). He is also the Chairman of the China Eye Bank Association since 1985 and is responsible for organizing and supervising nationwide eye bank programs. Other professional positions include Member, Fifth Judgement group of China Natural Science Foundation Vice Chairman, Corneal Disease Symposium of Chinese Medical Association, Member, Cataract Symposium of Chinese Medical Association, Associated Member, Qingdao Branch of Society of Ophthalmology, Chinese Medical Association, Member, Shandong Branch of Chinese Health Rehabilitation Association, Member, Shandong Medical Science Committee, Permanent Council,

Qingdao Branch of Chinese Medical Association. He serves on the Research Board of Advisor: The Board of directors, Governing Board of editors and Publications of the American Biographical Institute and is a member of the U.S. Chinese Medical Association, American Ophthalmology Association, Asian-Pacific Society of Cornea & Refractive Surgery and Board member of International Ocular Surface Society. He works as an editor to *Chinese Journal of Ophthalmology*, *Ophthalmology in China*, *Chinese Journal of Behaviour Medicine*, *Recent Advances in Ophthalmology*, *Chinese Ophthalmic Research*, *Journal of Clinical Ophthalmology*, *Chinese Journal of Strabismus & Pediatric Ophthalmology*, *Journal of Injuries and Occupational Diseases of the Eye with Ophthalmic Surgeries*. He has published more than 200 original papers and some examples of recent articles are " *Evaluation of PKP to fungal keratitis*. Chinese Journal of Ophthalmology. 1999,35:386", "*The advanced understanding of gene therapy for corneal disease*. Foreign Medical Science 1999,23:257", "*Two cases for intraocular lens power calculation error after micro lamellar keratectomy*. Chinese Journal of Ophthalmology. 1999,35:472" and "*The surgical management for the ruptured globes following radical keratectomy* (report three cases). Journal of Injuries and Occupational Diseases of the Eye with Ophthalmic Surgeries 1999,21:553". For the excellence of his scientific contributions, he received many Honor Awards from local, national and international Organizations, e.g. Excellent worker, Chinese Health Bureau (1995), The first class award of the Chinese Ophthalmology Association (1998), The deputy to 9th National People's Congress (1998) and Achievement award, LSU Eye Center (1999). (Director & President, Institute of Ophthalmology & Eye Hospital,Shandong Academy of Medical Science, 5 Yanerdao Road, Qingdao 266071 P.R.China. Phone: +86-532-5896622; Fax. +86-532-5881212; E-mail: lixinxie@public.qd.sd.cn)

Y

Yaguchi, Shigeo (1949-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Showa University Fujigaoka Hospital. He was a graduate of Showa University in the year 1973: he studied Ophthalmology at the Graduate School of Medicine of the University under Prof. FUKADO Yoshinao and completed the course in 1977 with the Doctor of Medical Sciences granted from the University (thesis: *Electron microscopic study of the anterior chamber angle in rabbits with experimental steroid glaucoma*. J. Jpn. Ophthalmol. Soc. 881: 900, 1977). He was promoted to Assistant Professor in 1985 and was appointed to the present position as above in 1991. He has worked extensively in ocular surgery and published more than 180 original articles in the field. Some examples are "*Ocular Surgery Illustrated*. Vol. 2: p.124, *Cataract surgery - Secondary structure of the Intraocular Lens*. Medical View Publ. Tokyo 1991" and "*Ophthalmology Out-patient* series I, Cataract. Medical View Publ. Tokyo 1998". Besides being a member of many National professional Societies, he is a member of American Society of Intraocular Lens Implant and Refractive Surgery. (Department of Ophthalmology, Showa University Fujigaoka Hospital. Fujigaoka 1-30, Yokohama, 227-8501, Japan. Phone & Fax: +81-4-5971-8130)(SM)

Yaisawang, Sudarat (1949-) Thai ophthalmologist, Associate Professor of Ophthalmology, Faculty of Medicine, Chulalongkorn University, Chief of the Strabismus Clinic. She graduated from the Faculty of Medicine, Chulalongkorn University in 1973 and received her M.D. degree. After having completed residency training at Chulalongkorn University, she received the Diploma of the Thai Board of Ophthalmology and extended her studies in Strabismus at the University of Freiburg, Germany (1980-1981) and also at Wills Eye Hospital, Philadelphia, U. S.A. (1994). She has been in the present position since 1977. She served on the Organizing Committee of the 8th Asia-Pacific Academy of Ophthalmology (APAO) in 1981, and as the Head of the Thai Red Cross Eye Specialist Surgical Team to provide medical service to Cambodian refugees (1982-1993). She also served the Royal College of Ophthalmologists of Thailand as the Treasurer (1992-1996) and the Ophthalmological Society of Thailand as the Secretary and Treasure (1994-1995). Some examples of her scientific publications are "*Trachomatous entropion correction, use of orbital septum and levator aponeurosis*. Arch. Ophthalmol. 96: 874, 1978", "*Common intraocular parasites at Chulalongkorn Hospital*, Proc. VIII Congress of APAO p.975, 1981", "*Ophthalmic problems among Cambodian refugees*. Proc. APAO 1991, *Current Aspects in Ophthalmology*, ed. K. Shimizu, Vol. 1: p74, Excerpta Medica, 1992", "*No needle sub-Tenon's anesthesia for strabismus surgery*.

Chula. Med. J. 41: 429, 1997" and "*Inferior oblique myectomy: a simple surgical technique and results*. Chul. Med. J. 37:307, 1993". She received, for her outstanding service, The First International Humanitarian Service Award from the American Red Cross (1988) and Distinguished Service Award of the APAO(1999).(Department of Ophthalmology, Chulalongkorn Hospital Rama IV Road, Bangkok 19500, Thailand; phone: 662-2528290, fax: 662-2528290) (SM)

Yamada, Eichi (1922-) Japanese anatomist and cell biologist, a graduate of Kyushu University, Faculty of Medicine in 1945, studied at the Department of Anatomy of the University and received his Doctor of Medical Sciences in 1950 from the University, and he was promoted to Associate Professor. He was then appointed the Professor of Anatomy of Kurume University in 1956. In 1960 he moved to be Professor at Kyushu University and served for 10 years. In 1970 he was invited to be the Professor of Anatomy at Tokyo University and worked until retirement in 1983, whereupon he was entitled Professor Emeritus of Tokyo University. In 1970-71, he carried out research at the Jules Stein Eye Institute, Los Angeles, U.S. A. and after retirement from Tokyo University, he was asked to be Visiting Professor to Yale University. He was invited to Fukuoka University in 1983 and served until 1993. His research interest was in the fine structure of the retina, and many publications include " *The fine structure of the horizontal cells in some vertebrate retinae*. Cold Spring Harbor Symposium, 30:383, 1965" and "*Morphology of vertebrate photoreceptors*. Methods in Enzymology 81:3, 1982". He has been granted many awards for his outstanding contributions, e.g. *Seto Award* (1958), *Yamaji Award* (1969), *Fujiwara Award* (1992) and *Legiao de Honora Guseppe Garibaldi* (from the Brazilian Government, 1991). In conjunction with the International Congress of Anatomy in 1975, he held a symposium "*The Structure of the Eye* III" and served as the President: the Proceedings edited by him were published by the Japanese Journal of Ophthalmology. He is the member of Japanese Association of Anatomists and Japanese Society of Electron Microscopy and Honorary Member of American Association of Anatomists and of American Society for Cell Biology. (Shin-Koga Hospital, Electron microscopic Laboratory, Tenjin machi Kurume, 830-0003, Japan; phone: 81-9-4238-2222, fax: 81-9-4238-2255, e-mail: kyokokhp@kurume.ktarn.or.jp)(SM)

Kunihiko Yamada

Yamada, Kunihiko (1889-1927) Japanese ophthalmologist, Professor of Ophthalmology of Kanazawa University. He graduated from Tokyo University in 1916 and studied Ophthalmology under Prof. →KOMOTO Jujiro. He was then invited to be a Lecturer at Kanazawa University and was promoted to be Professor in 1921 as the successor of Prof.→TAKAYASU Mikito. He studied in Germany for 2 years in 1921-1923 and on his homecoming he received the degree Doctor of Medical Sciences from Tokyo University (thesis: Studies of autolytic substances in the eye). Unfortunately he died in 1927 at the age of 39.[SM]

Hidetaka Yamaguchi

Yamaguchi, Hidetaka (1866-1916) Japanese ophthalmologist, Founder of Taipei Medical School, presently National Taiwan University. He graduated from Tokyo University in 1889 and was invited to the Taipei Hospital as the First Director in December 1896 and contributed greatly to the hygiene of people in Taiwan. He strongly insisted on the need of a Medical School and established a course for the teaching of Medicine in 1897. This course was officially recognized and the Taipei Medical School was founded in 1899. Due to difference of opinion from those of the Government, he had to leave Taipei in 1901 before the first class of his students graduated from the School. He then went to the University of Freiburg and studied Ophthalmology under Prof.Th.→Axenfeld during 1902-1904. On his homecoming he received the degree Doctor of Medical Sciences from Tokyo University in 1906 (thesis: *Ein Beitrag zur Pathologie des Sehnerven bei Hirnerkrankungen, I: Recidivierende Stauungspapille mit Thrombose der Vena centralis Retinae bei einem Sarkom des Stirnhirns. II: Menstruationstoerungen und Sehnervenatrophie bei basalen Tumoren*. Klin. Mbl. Augenheilkd. 41: 180, 1903.) His contribution to Taiwan was exalted on the occasion of the Centennial Festivities of the National Taiwan University Hospital in 1995.[SM]

Yamakawa, Ryoji (1952-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Kurume University School of Medicine. He was a graduate of Kyoto University in 1979, and he studied Ophthalmology under Prof.

TSUKAHARA Isamu and HONDA Yoshihito: he received his Doctor of Medical Sciences in 1989 (thesis: *Involvement of fibronectin in in-vitro regeneration of retinal pigment epithelium*. Graefe's Arch. Clin. Exp. Ophthalmol. 226: 11-14, 1988). He extended his studies during 1986-1988 at the Doheny Eye Institute of the University of Southern California under Prof. Stephen J. Ryan (thesis: *Investigations on contractile properties of retinal pigment epithelial cells*. Ophthalmologica 199: 165-172, 1989). He worked in 1989-1992 as the Director of the Eye Clinic of Kokura Memorial Hospital in Kitakyushu, in 1992-1996 as the Assistant Professor of Ryukyu University, in 1996-1999 as the Director of the Eye Clinic of Tenri Hospital, Nara. He has been in the present position as above since 1999. He is a Councillor of the Japanese Ophthalmological Society, and a member of many Japanese professional Societies and of international Societies, e.g. International Society for Eye Research, the Association for Research in Vision and Ophthalmology and many others. His research interest is in retinal problems, and his many publications embrace "*Chick retinal pigment epithelium exhibits glutathione requiring prostaglandin D2 systhetase activity*. Invest. Ophthalmol. Vis. Sci. 27: 1058, 1986" and "*Involvement of fibronectin in in-vitro regeneration of retinal pigment epithelium*. Graefe's Arch. Clin. Exp. Ophthalmol. 226: 11-14, 1988". (Department of Ophthalmology, Kurume University School of Medicine, 67 Asahi-machi, Kurume, 830-0011, Japan. phone: +81-942-31-7574, fax: +81-942-37-0324, e-mail: ryamak@med.kurume-u.ac.jp)(SM)

Yamamoto Yukio (1927-) Japanese ophthalmologist and philanthropist. He was a graduate of Tokyo Medical and Dental University in the year 1949 and completed the course of the Graduate School of Medicine under Prof. OHTSUKA Jin in 1952 with Doctor of Medical Sciences granted (thesis: *Studies of myopia and physique*. I, II, III, J. Jpn. Ophthalmol. Soc.(JJOS) 56: 238, 241, 317, 1952). He developed a new electronic tonometer to study microundulation of the intraocular pressure in 1952 (JJOS 57: 881, 1953) and published the World's *first* ultrasonographic measurement of the axial length of the eye (JJOS 64: 1333, 1960). He served the Japanese Society of Ultrasonics in Medicine as Executive Director (1987-) and the President (1987), and he is an Honorary Member of the International Society of Ophthalmic Ultrasound (SIDUO). He served as the Director of the Tokyo Tama Hospital for Senior Citizens (1986-1991). Whilst having busy duties at the Hospital, he has organized every year since 1982, Ophthalmic Teams to the Micronesian Islands (supported by Yomiuri Foundation for Light and Love) and has seen more than 20,000 patients and performed more than 2,000 surgical treatments including cataract. For these philanthropic activities, he received the Exaltation Award from the Ministry of Foreign Affairs of Japan in 1995. In recognition of his meritorious service, the Government of Japan conferred on him the Third Order of the Sacred Treasures in 1997.(SM)

Kakuji Yamamoto

Yamamoto, Kakuji (1923-1986) Japanese ophthalmologist, Professor of Ophthalmology of Kawasaki Medical School. He graduated from Okayama University in 1954, studied Ophthalmology under Prof. AKAGI Goro and received the degree Doctor of Medical Sciences in 1959 (thesis: *Studies of bicarbonate in the aqueous humor and serum*, in 4 papers, J. Jpn. Ophthalmol. Soc.61: 2151,1957; 62: 363, 1958: Folia Ophthalmol. Jpn. 9: 541, 1958: ibid. 9:667, 1958). He was appointed Lecturer of Okayama University in 1959 and Assistant Professor in 1962. He was then invited to Kawasaki Medical School as the Professor of Ophthalmology in 1971 and served until his death. He had joint appointment as the Vice-Director of the Kawasaki Hospital since 1982. He studied in 1970-1971 in Ghent under Prof. J.→Francois. His interest in research covered many areas of Ophthalmology and carried out works on the basis of his biochemical knowledge and skill. He gave a lecture "*Biochemical studies of the causes of retinal pigmentary degeneration*. J. Jpn. Ophthalmol. Soc. 73: 2495, 1969" at the 73rd Congress of the Japanese Ophthalmological Society in 1969, and "*Aging of the human lens and the mechanisms of senile cataract formation – about structural lens crystallin* -, J. Jpn. Ophthalmol. Soc. 86: 1859, 1982" at the 86th Congress of the Society. He also gave a lecture "*Aging of the lens and the mechanism of formation of senile cataract*" at the 34th Congress of the Japanese Society of Clinical Ophthalmology. He was one of the founders of the *Japanese Society of Cataract Research* and organized the 11th Congress of this Society as the President in 1985. In recognition of his contributions to cataract research,

the American Society of Cataract Research granted him the International Award in 1983.[SM]

Yamamoto, Misao (1936-) Japanese ophthalmologist, Professor Emeritus of Kobe University. He is a graduate of Kobe University in 1960, studied Ophthalmology at the Graduate School of Medicine under Prof. →IMACHI Jo and Prof. →ISAYAMA Yoshimasa and completed the course with Doctor of Medical Sciences granted in 1965 (thesis: *Biochemical studies on experimental arachnoiditis,: respiration and glycolysis in the spinal cord of rabbits with talcum arachnoiditis*. J. Jpn. Ophthalmol. Soc. 69: 1618, 1965). He has served as the Professor and Chairman of the Department of Ophthalmology of Kobe University during 1984-1999: he has also served as the Executive Director of the University (1995-1999) and the Dean of the Medical School of the University (1996-1999). He has held many key positions in National professional Societies, e.g. Councillor of the Japanese Ophthalmological Society (JOS) (1985-1999), Executive Director of the Japanese Society of Pediatric Ophthalmology (JSPO) (1981-1999), President of the JSPO (1989), Executive Director of the Japanese Association of Strabismus and Amblyopia (1978-1999), Japanese Society of Ophthalmological Optics (1987-1999), Japanese Society of Ophthalmic Surgeons (1990-1999) and many others. He is the leading specialist of Pediatric Ophthalmology and he served as Visiting Professor to many Universities and as a member of many Government Councils and Committees. He organized, as the President, the 52nd Congress of the Japanese Society of Clinical Ophthalmology (1998) and many Congresses of National Societies. He is on the Editorial Board of many Japanese Journals and of the Afro-Asian Journal of Ophthalmology (1986-). Some examples of his many publications are "*Visual function following congenital cataract surgery*. Jpn. J. Ophthalmol. 42: 411, 1998", "*Differential expression of nitric oxide synthetase isoforms in form-deprived chick eye*. Curr. Eye Res. 17: 586, 1998" and "Editor of *Surgery in Pediatric Ophthalmology*. Nakayama Shoten, Tokyo, 1998". He is an Honorary Member of the JOS and many Japanese Societies and currently serves as the Director of the Hyogo Prefectural Children's Hospital. (Director, Hyogo Prefectural Children's Hospital, Takakura-dai 1-1-1, Suma-ku, Kobe, 654-0081, Japan. phone: +81-7-8732-6961, fax: +81-7-8735-0910)(SM)

Seiichi Yamamoto

Yamamoto, Seiichi (1895- 1977) Japanese ophthalmologist, Professor of Ophthalmology of Kyoto University. He graduated from Kyoto University in 1920, studied under Prof. ICHIKAWA Kiyoshi and received the degree Doctor of Medical Sciences in 1928 (thesis: Effects of removal or stimulation of the sympathetic nerve on the aqueous humor. No.1, J. Jpn Ophthalmol. Soc. 30: 1352,1926, No.2, ibid. 32: 97, 1928, No. 3, ibid. 32: 140, 1928). After having served as the Head of the Eye Clinic of Kitano Hospital in Osaka (1928-1931) and of Osaka Red Cross Hospital (1931-1944), he was appointed Professor and Chairman of the Department of Ophthalmology of Kyoto University in 1944. He maintained the Department during the hard times of World War II and after the War. In spite of the hardship, he carried out research and some examples are as follows: "*A method of improving movement of ocular prosthesis*. J. Jpn. Ophthalmol. Soc. 52: 137, 1948", "*A new finding on the innervation of the oculomotor nerve*. ibid. 53: 130, 1949". Unfortunately, he fell ill in 1949 and resigned from the University in 1957.[SM]

Yamamoto, Toshiyuki (1925-) Japanese anatomist, a graduate of Tohoku University in 1949, studied at the Department of Anatomy. He received his Doctor of Medical Sciences in 1960, by submitting the thesis "*On the innervation, especially sensory innervation, of the pars pylorica, the duodenum and the pancreas in Formosan macaque*. J. Comp. Neurol. 114: 89, 1960". He was appointed the Professor and Chairman of the Department of Anatomy in 1963 and served until retirement in 1989, whereupon he was entitled Professor Emeritus of the University. His many publications include "*Fine structure of the octopus retina*. J. Cell Biol. 25: 345, 1965" and "*Diurnal changes in synaptic ribbons of rod cells of the turtle*. J. Ultrastruct. Res. 86:246, 1984". The Japanese Society of Electron Microscopy granted him the *Sedoh Prize* in 1989 in recognition of his outstanding contributions. He is currently an Honorary Member of the Japanese Association of Anatomists, Councillor of the Japanese Society of Electron Microscopy and of the Clinical Electron Microscopy Society of Japan. (fax: 81-2-2278-0738, e-mail: tyymamo@cocoa.ocn.ne.jp)(SM)

Yamanaka, Akio (1930-) Japanese ophthalmologist, Chairman of the Board and President of the Kobe-Kaisei Hospital. He graduated from Kobe University in 1957, studied Ophthalmology at the Graduate School of Medicine under Prof.→IMACHI Jo and completed the course with Doctor of Medical Sciences granted in 1962. He is a pioneer of Intraocular lenses and vitreous surgery in Japan and has many original articles in the field, e.g. "*Physical and chemical analysis of intraocular lens material*. Am. Intra-Ocular Implant Soc. J. 5: 131, 1979", "*Scanning electron microscopic study on the biodegradation of IOL and suturing*. Trans. Ophthalmol Soc. U.K. 104: 517, 1984", "*Biocompatibility* in (ed.) S.P.B.Percival, *A colour atlas of lens implantation*: 219-222, 1991", "*Epitome and Operation Report of Committee for Intraocular Lens Implant Data System*. IOL & RS. Vol. 12: 111, 1998" and "*Complication of vitrectomy: surgical management of intraocular foreign bodies*. (Ed.) Mizuno, K. Excerpta Medica, International Congress Series, p.239-241, Amsterdam, 1985". His professional activities embrace Councillor (1987-1997,1999-) of the Japanese Ophthalmological Society, Executive Director (1985-) of the Japanese Society of Intraocular Lens Implant and Refractive Surgery, Executive Director (1990-) and the Vice-President (1991-1996), President of the 15th Congress (1993) of the Japanese Society of Biomaterial, Vice-president of the International Intraocular Implant Club (1992-1993) and the President of the Interdisciplinary Club for Biomaterials in Ophthalmology (1996-1999). He also serves as an Expert Member of the ISO 174 (1997-) for international standardization of intraocular lens and intraocular tamponade. He contributes towards education as Visiting Professor of Mie University, Showa University, Kobe University and Hyogo College of Medicine. For the excellence of his works, he received Le Prix de Medaille d'Association Francaise des Implants Intra-Oculaires, Fellowship of Biomaterials Science and Engineering from the International Liaison Committee of multinational societies. (Chairman of the Board and President, Kobe Kaisei Hospital: Shinohara-kita-machi, Nadaku, Kobe, 657-0068, Japan. phone: +81-7-8871-5201, fax: +81-7-8871-5206, e-mail: yamanaka@kobe-kaisei.org)(SM)

Hiroshi Yamane

Yamane, Hiroshi (1895-1945) Japanese ophthalmologist, Professor of Nagasaki University. He graduated from Kyoto University in 1921 and studied Ophthalmology under Prof. ICHIKAWA Kiyoshi. He was invited to be Assistant Professor of Nagasaki University by Prof. ASANYMA Takeo, and served until 1942 when he was promoted to Professor and Chairman of the Department of Ophthalmology. He received the Doctor of Medical Sciences from Nagasaki University in 1932 (thesis: Experimental studies of retinal detachment). He died on August 9th 1945 from the atomic bomb.[SM]

Yamanouchi, Uichi (1925-) Japanese ophthalmologist, Professor Emeritus of Oita Medical University. He graduated from Nagasaki University in 1951, studied Ophthalmology under Prof. HIROSE Kinnosuke and received his Doctor of Medical Sciences in 1960 (thesis: *Sebaceous glands of eyelids in Japanese – A morphologial study*. Nagasaki Medical Journal. 35:958-967, 1960). He was appointed the Lecturer at the Nagasaki University in 1963, and spent one year (1968-1969) at the Bascom Palmer Eye Institute as a visiting Researcher. In1972, he was promoted to Assistant Professor of the Nagasaki University, and in 1979 he was invited to be Professor and Chairman of the Department of Ophthalmology of Oita Medical University and he founded the Department. During his tenure until retirement in 1991, he served to the University as the Director of the University Library (1987-1991). He has served the Japanese Ophthalmological Society (JOS) as a Councillor since 1977 and worked as an Examiner of the Board of the JOS. He is an Honorary Member of the Society. He has published many original works on retinal diseases, and same examples are "*Monocular indirect argon laser photocoagulator*. J. Jpn. Ophthalmol. Soc. 86:2019, 1982", *Clinical application of monocular indirect argon laser photocoagulator*. Acta Med. Nagasakiensia 28: 89,1983", "*Scleral changes induced by instillation of Mitomycin-C*, Acta Med. Nagasakiensia 28:99, 1983", "*Choroidal detachment*. Folia Ophthalmol. Jpn.3 2:22, 1981" and "*Postoperative choroidal detachments development and mechanisms*, Jpn. Rev. Clin. Ophthalmol. (Ganka Rinsho Iho) 80:2365, 1986". He is also an expert on the History of Ophthalmology in Japan and is a member of the Japanese Society of History of Medicine. He is the co-author of the "*History of Ophthalmology in Japan*; Centennial commemorative publication of the JOS, 1997".(SM)

Yamashita, Hidetoshi (1955-) Japanese ophthalmologist, Professor and Chairman, Department of Ophthalmology of Yamagata University. He graduated from Tokyo University in 1981, studied Ophthalmology at the University under Prof. →MISHIMA Saiichi and received his Doctor of Medical Sciences in 1986 (thesis: *Glial cells in culture of preretinal membrane of proliferative vitreoretinopathy*. Jpn. J. Ophthalmol. 29: 42, 1985; *Microfilaments in preretinal membrane cells of proliferative vitreoretinopathy*. ibid. 29: 394, 1985; *Population and proportion of component cells in preretinal membranes*. ibid. 30: 269, 1986). He extended his postdoctoral study at Ludwig Institute for Cancer research, Biomedical Center, Uppsala, Sweden during 1992-1994. He served as the Lecturer at Tokyo University (1987-1992, 1994-1999) and was appointed to the present position as above in 1999. His interest in research is in cytokines and growth factors in the eye, diabetic retinopathy and cornea, and some examples of his publications are "*Vascular endothelial growth factor in diabetic retinopathy*. Lancet 349: 1520, 1997" and "*Osteogenic protein-1 binds to activin type II receptor and induces certain activin-like effects*. J. Cell Biol. 130: 217, 1995". He delivered a special report to the 101st Congress of the Japanese Ophthalmological Society (*Functions of the transforming growth factor-â superfamily in eyes*. J. Jpn. Ophthalmol. Soc. 101: 927-947, 1997). He is a member of the International Society for Eye Research and Association for Research in Vision and Ophthalmology. (Department of Ophthalmology, Yamagata University, Iida-nishi, Yamagata, 990-9585, Japan. phone: +81-2-3628-5374, fax: +81-2-3628-5376, e-mail: hyama-tky@umin.u-tokyo.ac.jp)(SM)

Yan, Mi (1931-) Chinese ophthalmologist, Professor and Director of the Department of Ophthalmology, The First University Hospital, West China University of Medical Sciences. He graduated from West China University of Medical Sciences in 1956 with an M.D. degree granted. He further extended his study as a Visiting Scholar at Scheie Eye Institute, University of Pennsylvania and Wilmer Eye Institute, Johns Hopkins University during 1982-1983. He has been in the present position since 1987 and he has many conjoint appointments, e.g. Member of Standing Committee of Chinese Ophthalmology Society (1988-), Chairman of Retina Association of Chinese Ophthalmological Society (1992-). Chairman of Sichuan Ophthalmological Society (1993), Vice-Chairman of Chengdu Laser Association (1996-), Vice-chief Editor (1985-1997) and Editor-in-Chief of Chinese Journal of Ocular Fundus Diseases (1997-) and Editorial Member of 8 National Ophthalmological Journals. He has published more than 50 original papers and written many books: some examples are "*Neuro-ophthalmology* in: *Clinical Neurology*, Chengdu, Sichuan People's Publishing House, 1980" and "*Macular Diseases*, in *New Concepts of Ophthalmology*, Beijing, People's Health Publishing House, 1991". He was the editor-in-chief of the *Textbook of Ophthalmology* of the 4th edition, which was published by Beijing, People's Health publishing House in 1966, and he was also the editor-in-chief of the *Neuro-Ophthalmology* of Vol.10 of the *Ophthalmology Encyclopedia*, which was published by People's Health Publishing House, in 1966, in Beijing. He is a recipient of many Honor Awards for his scientific achievements, e.g. Awards from the Ministry of Health (1979,1980,1996-1997) and from Tibet Science and Technology Committee (1989). (Department of Ophthalmology, The First University Hospital, West China University of Medical Sciences, Chengdu Sichuan, 610041, People's Republic of China. phone: +86-28-5422543; fax: +86-28-5422543, e-mail: ophthalm@mcwcums.com)

Yan, Xiaoming (1961-) Chinese ophthalmologist, Associate Professor and Acting Chairman of the Department of Ophthalmology, The First Hospital, Beijing University Medical School. She graduated from Sun Yat-sen University of Medical Sciences in 1984 with M.D. degree granted, and further studied at Beijing University Medical School and received her Ph.D. degree. She worked as a Visiting Scholar at Memphis Eye & Cataract Associates, Memphis, TN in 1996 and at Ophthalmic Pathology Laboratory, UIC Eye Center, Chicago during 1997-1998. She is a member of The Association for Research in Vision and Ophthalmology USA and Chinese Medical Association for Ophthalmology. Some example of her recent publications are "Xiaoming Yan et al: *Ocular calcification: Radio-pathologic correlation and review of the literature*. International Journal of Neuroradiology 1998;4(2):81", "Xiaoming Yan et al: *Matrix metallopreoteinases (MMPs) in glaucoma*. Invest. Ophthalmol. Vis. Sci.1998;39(4):917", "Xiaoming Yan et al: *Clinical research in the treatment of herpes simplex keratitis with gancyclovir*. Chinese Journal of

Practical Ophthalmology. 1997;15(7):426", "Xiaoming Yan et al:*Keratoconus*.Chinese Journal of Practical Ophthalmology 1997;15(5):300" and "Xiaoming Yan et al:*Comment on lomefloxacin eye solution treating bacteria infection in external eyes*. Ophthalmology in China 1997;4(6)210". (Xiaoming Yan, MD, PhD: Acting Chairman, Department of Ophthalmology, The First Hospital, Beijing University Medical School,P.R.China. phone: +86-10-66171122-3418; Fax: +86-10-66176450, E-mail: xymwzhou@bj.col.com.cn)

Yanaura, Saizo (1917-) Japanese pharmacologist working on the eye, Professor Emeritus of Hoshi University of Pharmacy. He is a graduate of Tokyo Medical Collage in 1954 and he studied Pharmacology at the University which granted him Doctor of Medical Sciences in 1959. He has been interested in Ocular Pharmacology and is one of the Founders of the Japanese Society of Ocular Pharmacology and served as the President in 1986-1988. He organized the 4th Meeting of the Society as the Congress President. He carried out many joint projects with the Department of Ophthalmology of Tokyo University. His many publications in pharmacology include "*A method of inducing and recording cough and examination of the action of some drugs with this method"*. Jpn. J. Pharmacol. 9: 46, 1959" and "*Screening method for drug dependence liability using admixed food (DAF) method."* Pharmacol. Therap. 5: 511, 1979". He is the Honorary Member of the Japanese Society of Pharmacology, Japanese Society of Neuropharmacology and Japanese Society of Ocular Pharmacology. He is a recipient of the *Award from the Japanese Society of Pharmacology* and the *Japanese Society of Pharmacists*. (e-mail: yanaura@mb.infoweb.ne.jp)(SM)

Yen-Fei Yang

Yang, Yen-Fei (1922-1997) Taiwanese ophthalmologist, regarded as the father of Ophthalmology in Postwar Taiwan. He graduated from Taihoku Imperial University (now National Taiwan University) under Japanese rule in 1932, and studied Ophthalmology under Prof. A. MOTEGI. After the end of the World War II, he was appointed the Professor of Ophthalmology of the National Taiwan University in 1946 and stayed in this position until retirement in 1981. In 1954, he studied for one year at the Sheie Institute of the University of Pennsylvania. He established the Ophthalmological Society of ROC and served as the President and trained many capable Ophthalmologists in Taiwan and gave distinguished service for the Eye health of the public. During his tenure at the University, he served as the President of the Chinese Medical University at Taichung, and also had joint appointment as the Research full-time Professor of the National Science Council of Executive Yuen. In 1981, he was entitled Professor Emeritus of National Taiwan University. His many publications include "*Surgical treatment of retinal detachment*, Trans. Ophthalmol. Soc. ROC.10: 41,1971, and "*Epidemic hemorrhagic keratoconjunctivitis*. Am. J. Ophthalmol. 80: 192, 1975.(SM)

Yarr, Sir Michael Thomas (1862-1937) British Army Medical Service ophthalmologist. Yarr was an Irishman. He was born at Cloughjordan, Co. Tipperary and was educated in Ireland. He qualified L.R.C.P.L and L.M. in 1882, and twelve years later took the F.R.C.S.I. In 1886, he entered the Army Medical Service and was promoted Surgeon-Major in 1898; Lieut-Col., R.A.M.C., 1906; Colonel, 1915; temporary Surgeon-General, while D.M.S., 1916. He was seconded for service under the Siamese Government from 1895 to 1900, and for service on the staff of the government of Bombay, 1903-1907. Yarr served in the South African War, 1900-1901, and in the Great War as A.D.M.S. and D.D.M.S. to the Mediterranean Expeditionary Force. He was decorated with the C.B. (military) and was made K.C. M.G. in 1917, and was Knight of Grace of the Order of St. John of Jerusalem. In his early years he worked at Moorfields where he held the post of Chief Clinical Assistant and he became a member of the Ophthalmological Society of the United Kingdom in 1896. To its Transactions he communicated important papers on "*Indirect Gun-Shot Injuries*," and on " *Lightning Injuries of the Eye*, 19011902. Besides this he was the author of a *Manual of military ophthalmology*, and he contributed papers to the Brit. Med. J. on the *Ocular Manifestations of Leprosy* and *Trachoma and Race.* BJO 1937,21:333-334.

Yasuda, Kunio (1942-) Japanese biologist, Professor at Graduate School of Biological Sciences, Nara Institute of Science and Technology (NAIST). He graduated from Kyoto University in 1967, studied at the Department of Physics (1966-1971) and received his M.Sc. degree. He further studied at the Department of Biophysics, Faculty of Science of

Kyoto University under Prof. OKADA Tokindo and received his Ph.D. degree in 1979 (thesis: *Transdifferentiation of "lentoid" structures in cultures derived from pigmented epithelium was inhibited by collagen*. Develop. Biol. 68: 618-623, 1979). He has been Research Fellow (1971-1972) at Kyoto University, Instructor in Developmental Biology, Department of Biophysics (1972-1986) and Associate Professor in Molecular Biology (1986-1993) at the Faculty of Science of Kyoto University. He has been in the present position since 1993, Professor in Molecular and Developmental Biology of NAIST. He served as a Senator to NAIST during 1994-1998. He published many original articles in his field and two examples of his publications are "*Tissue-specific expression of a cloned d-crystalline gene in mouse lens cells*. Nature 301, 440-442, 1983" and "*Induction of lens differentiation by activation of a bZIP transcription factor L-Maf.* Science 280: 115-118, 1998". He is a member of the Japanese Society of Developmental Biology, the Japanese Society of Molecular Biology, American Association for Advancement of Science, American Society for Developmental Biology and a foreign Fellow of Indian Academy of Science. (Laboratory of Molecular and Developmental Biology, Graduate School of Biological Sciences, Nara Institute of Science and Technology, 8916-5 Takayama, Ikoma 630-0101, Japan; phone: 81-743-72-5550, fax: 81-743-72-5559, e-mail: kyasuda@bs.aist-nara.ac.jp)(SM)

Yasuhara, Hajime (1945-) Japanese pharmacologist working on drug metabolism and the eye, Professor and Chairman of the Department of Pharmacology of Showa University. He is a graduate of Showa University in 1970 and studied at the Department of Pharmacology of the Graduate School of Medicine of the University: he received his Doctor of Medical Sciences in 1974. He spent 2 years at the Department of Pharmacology and Anaesthesiology of the University of Kansas, U.S.A. (1976-1978) and also at the Department of Clinical Pharmacology of Royal Postgraduate Medical School of the University of London, U.K. (1982-1983). He is active in many professional societies, e.g. he is the Auditor of the Japanese Pharmacological Society since 1999, Board of Directors of the Japanese Society of Ocular Pharmacology since 1994: he served as the President of the 16th Congress of the latter Society in 1996. He is also an active member of many other domestic Societies and of American Society for Pharmacology and Experimental Therapeutics (1985-) and of the New York Academy of Sciences (1985). He is the Editor in Chief of the Showa University Journal of Medical Sciences since 1995 and on the Editorial Board of Biogenic Amines (1985-) and Asia Pacific Journal of Pharmacology (1986-). His publications include "*Ocular hypotensive effects of monoamine oxidase-A inhibitors in the rabbit*. Jpn. J. Ophthalmol. 32:21, 1988" and he edited "*Monoamine oxidase; basic and clinical aspects*" VSP Netherland 1993 and has an article "*Localization and activity of multiple forms of MAO in the human eye*" of 137 pages in this book. (2nd Department of Pharmacology, Showa University Medical School. 15-8 Hatanodai, Shinagawa-ku, Tokyo, 142-0064, Japan; phone: 81-3-3784-8127, fax: 81-3-3784-3200, e-mail: yshajime@med.showa-u.ac.jp)(SM)

Yeo, Kim-Teck (1958-) Singaporean ophthalmologist, Senior Consultant in Vitreoretinal Surgery and Phacoemulsification Surgery Trainer. Graduated from National University of Singapore in 1982. Obtained FRCS (Edinburgh) in 1988. Received training in vitreo-retinal subspecialty at The Moorfields Eye Hospital (Professors Alan Bird & Peter Hamilton) and the University of Nijmegen (Professors August Deutman & F. Hendriske). Dr. Yeo is a founder member of the WorldEyes — a foundation dedicated to the Prevention of Blindness and he is also on the Editorial Board of the Asia-Pacific Journal of Ophthalmology. His main area of work is in the management of vitreo-retinal diseases in particular in the management of diabetic retinopathy, retinal detachment as well as Phacoemulsification and vitrectomies in diabetics. He also has a keen interest in the Prevention of Blindness (POB) particularly from diabetic retinopathy and was instrumental in starting a Retinal Photography Programme with the Ministry of Health to screen for diabetic retinopathy in 1991. This on-going programme in 7 Polyclinics has to-date performed nearly 100,000 screenings, one of the largest programme of its kind worldwide. Publications in the area of POB include "*Meeting the Challenge of Diabetic Blindness in the 90's*" (Singapore Medical Journal June 93 Vol 34) , "*Mass Screening of Diabetic retinopathy in the Prevention of Blindness*" (Asia- Pacific Journal of Ophthalmology Vol 7 No.4 Oct 1995*)* and " *Interview with Professor Arthur SM Lim on*

Mass Cataract Blindness" (Book article - *Vision for the World*, ASM Lim). Dr. Yeo spoke at a symposium on diabetic retinopathy screening at the XXVIIth ICO Conference in Toronto in 1992. Also delivered the Singapore National Report on FOB at a WHO Conference in Japan (1993). Awarded a Best-Poster Prize for the Management of Diabetic Macular Edema in 1995 at the APAO (Asia-Pacific Academy of Ophthalmology) meeting in Hong Kong. Nominated and received an Asia- Pacific Prevention of Blindness Award in Manila at the APAO conference (1999). Appointed to the Review committee on the management of Diabetes Mellitus by the Ministry of Health in Singapore (1999). (Dr. Kim-Teck Yeo: Singapore National Eye Centre, 11 Third Hospital Avenue, Singapore 168751, Singapore. Phone: (65)2277255; Fax: (65)2277290) (SM)

Yeoh, Ronald Lam Soon (1956-) Singapore ophthalmologist, Part-time Senior Consultant, Singapore National Eye Centre. Visiting Consultant and Part-time Tutor, National University of Singapore. Consultant Ophthalmologist, Gleneagles Hospital, Singapore. He graduated from St Bartholomew's Hospital, University of London in 1981 and received his postgraduate training in Ophthalmology at St Thomas' Hospital under Mr Tony Chignell. He received his vitreoretinal training from Mr PK Leaver and Prof Alan Bird in Moorfields Eye Hospital, London 1991. He sits on committees in the Asia-Pacific Academy of Ophthalmology (APAO), Asia-Pacific Intraocular Implant Association (APIIA), National Committee of Ophthalmology, Singapore and the Specialists' Training Committee, Singapore. He is an examiner of the Graduate School of Medical Studies, National University of Singapore and an external examiner for the Royal College of Surgeons, Edinburgh and the University Kebangsaan, Malaysia. He is an active teacher in vitreoretinal surgery and phacoemulsification and has conducted numerous instruction courses all over the world. His publications have been in vitreoretinal surgery and phacoemulsification and include "*The 'Pupil Snap' Sign of Posterior Capsule Rupture with Hydrodissection in Phacoemulsification*. Br. J. Ophthalmol., May 1996, 80:486." He wrote a chapter with Prof Arthur Lim: *Atlas of Ophthalmology*, *Cataract rehabilitation in Asia: the role of extracapsular cataract extraction*. Published by Martin Dunitz Ltd. London 1999. His editorial commitments include: Associate Editor, *Ophthalmologica*, Editorial Board, *Asia-Pacific Journal of Ophthalmology*. He was awarded the APAO Distinguished Service Award in 1995 and the honorary degree of Fellow of the Royal College of Surgeons, Edinburgh (FRCSEd) in 1996. He has also been nominated for the Member of Merit award from the Instituto Barraquer, Barcelona, Spain in 1999. (Dr. Yeoh Ronald Lam Soon: Singapore National Eye Centre, 11 Third Hospital Avenue, Singapore 168751, Singapore.Phone: 65-2277255, Fax: 65-7333360, email: ophyls@leonis.nus.edu.sg)

Yokoyama, Minoru (1923-) Japanese ophthalmologist, Professor Emeritus of Mie University. He graduated from Kyoto University in 1947, studied Ophthalmology at the University under Prof.→ASAYMA Ryoji and received his Doctor of Medical Sciences in 1953 (thesis: *Studies of ocular reflex reactions to various types of injury*. No. 1 - 4. J. Jpn. Ophthalmol. Soc. 57: 285; 836; 1329; 1327, 1953). He was invited to be Assistant Professor of Mie University under Prof.→SUGA Kazuo in 1949 and was promoted to Professor and Chairman of the Department of Ophthalmology in 1974: he served in this position until retirement in 1987. He served as the Dean of the Medical School during 1984-1986. He has been a Councillor of the Japanese Ophthalmological Society (JOS) (1974-1987), Executive Director (1985-1986) and the President of the 90th Congress and the 90th Anniversary of the JOS in 1986. He worked extensively on the Electrophysiology of the visual system, and he received the JOS Award in 1984 (the Award Lecture: *Electrophysiology in the visual pathway and its clinical application*. J. Jpn. Ophthalmol. Soc. 89: 39, 1985). Another example of his works is "*Monochromatic ERGs in a case of progressive cone dystrophy*. Doc. Ophthalmol. Proc. XI ISCERG Symp. 145:-154, 1974". He has been on the editorial board of Folia Ophthalmol. Jpn. (1975-1987) and a guest editor to the Doc. Ophthalmol. (1986). To commemorate his retirement, his students issued No. 1 of the Jpn. J. Ophthalmol. Vol. 31, in 1987 where his selected bibliography can be found. After retirement from the University, he served as the Director of the Matsuzaka City Hospital from 1987 to 1994. He enjoys star watching with his own telescope with the eye of an ophthalmologist: he has confirmed the angle between the Mizar and Alcor of the Ursa major to be 11.8 minutes, and believes the legend that the stars were used to examine vision in ancient times (Burnham's *Celestial Handbook*). (SM)

Daizo Yonemura

Yonemura, Daizo (1923-1992) Japanese ophthalmologist, Professor Emeritus of Kanazawa University. He graduated from Kanazawa University in 1946, studied Ophthalmology under Prof. KURACHI Yoshi and received the degree, Doctor of Medical Sciences in 1952 (thesis: *Studies of flicker fusion frequency*, a series of articles in J. Jpn. Ophthalmol. Soc. 55: 244, 1952; ibid. 56: 513, 1233, 1246, 1265, 1953). He worked as the Professor and Chairman of the Department of Ophthalmology of Kanazawa University from 1971 to his retirement in 1988: he served as the Director of the University Hospital in 1980-1982. His research interest was electrophysiology of the eye. He discovered Oscillatory Potential of ERG which was reported at the 66th Congress of the Japanese Ophthalmological Society (J. Jpn. Ophthalmol. Soc. 66: 1576, 1962). He made a report of this discovery at the First Symposium of International Society for Clinical Electroretinogram held in New York in 1962 and J. H. Jacobson invited him to work at the New York Eye and Ear Infirmary for one year. The results of his research for many years were summarized in his Special Lecture "*Studies of the human electroretinogram*" at the 81st Congress of the Society (J. Jpn. Ophthalmol. Soc. 81: 1632, 1977). He developed many ingenious techniques of recording the early receptor potential and of detecting abnormality of retinal layers (*Electrophysiological study on activities of neuronal and non-neuronal retinal elements in man with reference to its clinical applications*. Jpn. J. Ophthalmol. 22: 195, 1978). Other professional activities include being the Chairman of the Exhibition Committee of the 23rd International Congress of Ophthalmology, President of the 92nd Congress of the Japanese Ophthalmological Society, Special Lecture at the 16th Congress of the International Society for Clinical Electroretinography (ISCERG) in 1978 (*Study of human electroretinogram. New approaches to ophthalmic electrodiagnosis*). He received The Culture Award of the City of Kanazawa in 1982. In recognition of his outstanding contributions, the Government conferred on him the posthumous decoration of The Third Order of the Rising Sun.[SM]

Bong Hun Yoon

Yoneya, Shin (1947-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Saitama Medical College. He graduated from Iwate Medical Collage in 1973, and studied Ophthalmology at the Graduate School of Medicine of Gunma University under Prof. →SHIMIZU Koichi. He completed the course with the Doctor of Medical Sciences granted in 1977 (thesis: *Studies of retinal photocoagulation: relationship between the specificity of laser source and the effects of coagulation*. J. Jpn. Ophthalmol. Soc. 81: 829, 1977). He extended his studies in 1979-1981 at the University of Illinois where he studied pathology under Dr. M.O.M. Tso and published "*Angioarchitecture of the human choroid*. Arch. Ophthalmol. 105: 681, 1987". He has been in the present position as above as the successor of Prof.→NOYORI Kimiharu since 1997. His special interest is in vitreoretinal diseases, lasers in Ophthalmology and Ophthalmic pathology: he has many original articles in the field, and an example of his recent publications is "*Binding properties of indocyanine green in human blood*. Invest. Ophthalmol. Vis. Sci. 39: 1286, 1998". He is a Councillor of the Japanese Ophthalmological Society. He is a member of the American Academy of Ophthalmology, The Macular Society, the Association for Research in Vision and Ophthalmology, International Society for Eye Research and European Association for Vision and Eye Research. (Department of Ophthalmology, Saitama Medical College, Moro-Hongo, Saitama-ken, 350-0495, Japan. phone: +81-4-9276-1248, fax: +81-4-9295-8002, e-mail: shin@saitama-med.ac.jp)(SM)

Won Sik Yoon

Yoon, Bong Hun (1907-1995) Korean ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Seoul National University. He graduated from Kyongsong Imperial University Faculty of Medicine (now Seoul National University) as the first alumnus. He was appointed the Lecturer of the Department of Ophthalmology of Seoul National University College of Medicine in 1945 and the Chairman of the Department of Ophthalmology of Seoul National University in 1946 until he had retired in 1949. He served as the first President of the Korean Ophthalmological Society. (SM)

Yoon, Won Sik (1919-1979) Korean ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Seoul National University. He graduated from Kyongsong Imperial University (now Seoul National University) in 1943. He was appointed the Lecturer of the Department of Ophthalmology of Seoul National University College of Medicine in 1946, and as the Chairman of the Department of Ophthalmology of Seoul

National University College of Medicine in 1961 until he had retired in 1971. He became the Professor of Seoul National University in 1964. He wrote the first Korean Textbook "Ophthalmology" in 1964 and participated as the representative of the Korean Ophthalmological Society to the 22nd Concilium Ophthalmologicum Paris in 1974. His special interest was immunology in Ophthalmology. He served as the President of the Korean Ophthalmological Society from 1964 to 1966. He also served as a councillor on Medical Affairs of the Ministry of National Defense in 1974.(SM)

Yoshida Akitoshi (1952-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Asahikawa Medical College. He was a graduate of Asahikawa Medical College in 1979, studied Ophthalmology under Prof. →HOSAKA Akio and received his Doctor of Medical Sciences in 1986 (thesis: *A study on blood-retinal barrier in myopia -Analysis employing vitreous fluorophotometry and computer simulation*. J. Jpn. Ophthalmol. Soc. 90: 527, 1986). He was promoted to Lecturer of the College in 1979, and then extended his studies at the Schepens Eye Research Institute and worked with Drs. McMeel W. and Feke, G.T. (1980-1983), and in 1989 he came to Boston again to continue their cooperative work. Some publications during these periods are "*Retinal blood flow alterations during progression of diabetic retinopathy*. Arch Ophthalmol. 101: 225, 1983" and "*Retinal circulatory changes after scleral buckling*, Am. J. Ophthalmol. 95: 182, 1983". On homecoming, he was promoted to Assistant Professor in 1988, and then to the present position in 1992. His research interest is in retinal circulation, vitreo-retinal diseases, blood-ocular barrier etc. and he has 293 original papers. Some recent papers embrace "*Inward and outward permeability of the blood-retinal barrier in experimental myopia*, v. Graefe's Arch. Clin. exp. Ophthalmol. 234: 239, 1996" and "*Radiating retinal folds detected by scanning laser ophthalomoscopy using a diode laser in a dark field mode in idiopathic macular holes*, v. Graef's Arch Clin. exp. Ophthalmol. 336: 445. 1998". On the basis of his expertise, he has been an invited Lecturer to many Universities, Symposia and Congresses. He serves as a Councillor to the Japanese Ophthalmological Society (JOS), (1992-), as Secretary to the International Society of Ocular Fluorophotometry, and he is a member of the Club Jules Gonin (1998) International Society of Telemedicine (1998-), International Ocular Inflammation Society (1999), the Retina Society (1999). He also serves on the Editorial Board of the Folia Ophthalmol. Jpn. (1990-), Ophthalmic Surgery and Lasers (1996-) and of the Jpn. J. Ophthalmol. (1997). For the excellence of his research, The Retina Research Foundation, Houston, Texas, granted him the Paul Kayer International Award of Merit in Retina Research in 1999. He has been elected as Special Reporter at the 104th Congress of JOS in 2000 (Macular Disorders - basic and clinical study). (Department of Ophthalmology, Asahikawa Medical College, 2-1 Midorigaoka higashi, Asahikawa, Japan 078-8510. phone: +81-1-6668-2540, fax: +81-1-6668-2549, e-mail: pyoshida@asahikawa-med.ac.jp (SM)

Yoshiji Yoshida

Yoshida, Yoshiji (1891-1959) Japanese ophthalmologist, Professor Emeritus of Nagoya City University. He graduated from Kyoto University in 1917, studied Ophthalmology under Prof. ICHIKAWA Kiyoshi and received Doctor of Medical Sciences in 1925 (thesis: Pigmentation of the ligamentum pectinatum. J. Jpn. Soc. Ophthalmol. 29: 755, 1925). He was made the Professor and Chairman of the Ophthalmology Department of Nagoya Women's Medical School in 1943. The Medical School became the Faculty of Medicine of Nagoya City University in 1950, and he continued to serve as the Professor until his retirement in 1958. His study covered many fundus diseases and he gave a special lecture "*Problems in fundus diseases - Causes of central serous retinopathy*" at the 62nd Congress of the Japanese Ophthalmological Society in 1958 (J. Jpn. Ophthalmol. Soc. 62: 914, 1958).[SM]

Tadasu Yoshimoto

Yoshimoto Tadasu (1878-1973) Japanese philanthropist, founder of the Japan Association of the Blind and Pioneer of Welfare for the Blind. He graduated from Tokyo College of Commerce (presently Hitotsubashi University). He suffered from low vision in both eyes since his youth and the vision gradually deteriorated and he became blind in the 1940s. While he was studying at the College, he devoted himself to the welfare of the blind. He was impressed by the British activities for the welfare, and he decided to study in England and majored in the divinity, education and welfare of the blind at Oxford University during 1900-1906. On return home, he became a lecturer at Waseda University. While

teaching the English language at the University, he founded the *Japan Association of the Blind* in 1906. He came to England again in 1908 and started a trading company with the help of Mr. Pauling; he was married to his daughter Elsie Margaret, and he settled in England from then. Although his company had to go through hardship many times and he had to travel very often between Japan and England, he devoted his lifetime to the welfare of the blind. He began publications in Braille in 1917 and completed 31 volumes of the *New Testament* in Braille: a lifework over 20 years. He published a book "*The blind in Japan and England*" which introduced the advanced state of the welfare of the blind in England to the Japanese Society in 1913-15. Acupuncture and massage are recognized as the occupation for the blind in Japan, and his activities greatly contributed to this. He also initiated the basis for the *Mainichi Braille Newspaper* that started in 1922. He gave support to Japanese people, e.g. Iwahashi Takeo, Nakamura Kyotaro (Chief-Editor of Braille Mainichi) to study in England. He represented Japan at the International Meeting of the Welfare of the Blind in 1949. In the postwar Japan, he continued granting scholarships for higher education of blind students, donation of funds and books to many schools of the blind and welfare institutions. In recognition of his distinguished service, he received the first Mainichi Braille Culture Award in 1964, and in 1967 the Government of Japan conferred on him the Third Order of the Sacred Treasures.(SM)

Yoshimura, Nagahisa (1952-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Shinshu University. He graduated from Kyoto University in 1977, studied Ophthalmology at the University under Prof.→TSUKAHARA Isamu and received his Doctor of Medical Sciences in 1985 (thesis: *Calpain and calpastatin in porcine retina*. Identification and action on microtubule-associated proteins. Biochem J. 223:47-51, 1984, with Tsukahara,I. and Murachi T.). He has been in the present position as above since 1997. His research interest is in vitreoretinal diseases, ocular cell and molecular biology and some examples of his many publications are " *Photocoagulated human retinal pigment epithelial cells produce an inhibitor of vascular endothelial cell proliferation*. Invest. Ophthalmol. Vis. Sci. 36: 1686, 1995" and "*Expression of cell cycle-related genes in dying cells following retinal ischemic injury in the rat.* Invest. Ophthalmol. Vis. Sci. 39: 610, 1998". He is a section editor for the Japanese Journal of Ophthalmology and on the editorial board for Investigative Ophthalmology and Visual Science. He serves the Japanese Ophthalmological Society as a Councillor and is a member of the American Academy of Ophthalmology, International Society for Eye Research and Association for Research in Vision and Ophthalmology. (Department of Ophthalmology, Shinshu University School of Medicine. Asahi-machi, Matsumoto, 390-8621, Japan. phone: +81-2-6337-2662, fax: +81-2-6332-9448, e-mail: nagaeye@hsp.md.shinshu-u.ac.jp)(SM)

Yoshioka, Hisaharu (1925-) Japanese ophthalmologist, Professor Emeritus of Kurume University. He graduated from Kyushu Medical school (now Kurume University School of Medicine) in 1947, studied Ophthalmology at Nagasaki University under Prof. HIROSE Kinnosuke and received his Doctor of Medical Sciences in 1955 (thesis: *Studies of premature infants*. I. J. Jpn. Ophthalmol. Soc. 58: 879, 1954; II. *ibid*. 58: 893, 1954; III. *ibid*. 59: 945, 1955). He was promoted to Lecturer (1952) and Assistant Professor (1957) of Nagasaki University. He was invited to his Alma Master in 1963 as the Assistant Professor under Prof. MASUDA Yoshiya and then promoted to Professor and Chairman of the Department of Ophthalmology of Kurume University in 1973: he served in this position until retirement in 1990. During his tenure, he served as Vice-Director of the University Hospital (1979-1981) and Vice-president of the Kurume Medical Association (1979-1981). He organized, as President, the 41st Congress of the Japanese Society of Clinical Ophthalmology in 1978. He worked extensively on retinal diseases, and some examples of his many publications are "*Experimental central serous chorioretinopathy in monkey eyes: Fluorescein angiographic findings*. Ophthalmologica 185: 168, 1982" and "*Experimental Central serous Chorioretinopathy*. I. *Clinical findings*. Jpn. J. Ophthalmol. 25: 112-118, 1981.II. *Further clinical findings*. Kurume Med. J. 25: 189-196, 1981. III. *Ultrastructural findings*. Jpn. J. Ophthalmol. 25: 397-409, 1982". He gave a special lecture at the 52nd Congress of the Middle Section of the Japanese Ophthalmological society (JOS) in 1986 (New findings of central serous chorioretinopathy). For his lifetime work, the JOS granted him the Society Award in 1991

(The Award Lecture: *The etiology of central serous chorioretinopathy*. J.Jpn. Ophthalmol. Soc. 95: 1181, 1991). He served the JOS as a Councillor (1973-1993) and is an Honorary Member of the JOS and also Consultant to the Japanese Vitreoretina Society.(SM)

Yoshizawa, Toru (1927-) Japanese scientist specializing in Biochemistry of the Retina. He is a guest Professor of Osaka Sangyo University. He graduated from the Faculty of Science of Osaka University, and finished the Postgraduate School at the Department of Biology of the University. He was granted the Doctor of Science in 1961, with the thesis "*Studies of photobleaching process of rhodopsin*". He carried out postgraduate works during 1961-1964 at the Biological Laboratories of Harvard University in Cambridge MA, U.S.A., under Prof. George Wald. In 1971 he was invited to be the Professor of the Department of Biophysics of Kyoto University where he worked until retirement in 1991. During his tenure, he was visiting Professor to Princeton University and guest Scientist of Bell Laboratories in 1976-1978. After retirement from Kyoto University he was entitled the Professor Emeritus of the University, and he served as a Professor at The University of Electrocommunication (1991-1993). He then served as the Professor of Osaka Sangyo University (1993-1998) and as the Director of Information Science Center of the University (1995-1998). He works as an editor of many scientific Journals, e.g. "*Comparative Physiology and Biochemistry*", "*Photobiochemistry and Photobiophysics*" and many other international Journals. He served as the President of many organizations, e.g. President of the International Society for Eye Research, Japanese Chapter in 1981-1983, President of the Association Internationale de Photobiologie in 1988-1992, and many others. His publications on photobiochemistry of the Retina totals 220 which includes "*Behaviour of visual pigments at low temperatures*, *Handbook of Sensory Physiology* VII/7, Springer-Verlag, 1972, and "*Primary photochemical events in the rhodopsin molecules*. *Progress in Retinal Research*, The Rockefeller University Press, 1992. He is a recipient of many awards from various scientific societies. (e-mail: toruyosh@rb3.so-net.ne.jp)(SM)

Youn, Dong Ho (1930-) Korean ophthalmologist, Professor Emeritus of Seoul National University. He graduated from the College of Medicine Seoul National University in 1954 and studied Ophthalmology at the Graduate School of Medicine of the University and received his Ph.D. He worked in 1977 as a Clinical Fellow at Washington University, St Louis MO, U. S. A. He served as the Professor and Chairman of the Department of Ophthalmology of Seoul National University from 1978 to 1988. He served as the Director of Seoul Borame City Hospital in 1990-1994 and since 1995 he has been Director of Eul Ji General Hospital, Eul Ji Medical Center Seoul. He is the Founder of the English Language " Korean Journal of Ophthalmology" and served as the Chief-Editor in 1987-1997. His professional activities include Director of Executive Committee of the Korean Ophthalmological Society in 1978-1980, Founder and the President (1984-1994) of the Korean Glaucoma Society, President of Korea-Japan Joint Meeting of Ophthalmology in 1988-1992 and the President of the 12th Congress of the Asia-Pacific Academy of Ophthalmology in 1989. He is a recipient of the *Distinguished Service Award* of the Asia-Pacific Academy of Ophthalmology, and he is the Honorary President of Korean Glaucoma Society and an Honorary Member of the Asia-Oceanic Glaucoma Society. He wrote a *Textbook of Ophthalmology* and a *Textbook of Glaucoma*, both books being widely referred to in Korea. In recognition of his meritorious service, the Government of Korea conferred upon him *The Order of National Service Merit* (*Pomegranate Medal*) in 1995. (Director, Eul Ji Meddical Center, No Won Eul Ji General Hospital, 280-1 Hagye 1-Dong, Nowon-ku, Seoul 139-231, Korea, Phone: 82-2-972-0062, Fax:82-2-972-0555, e-mail: ydh4101@eulji.or.kr)(SM)

Young, George (1875-1935) Ophthalmic Surgeon to the Essex County Hospital, born in Bucharest, where his father, Dr. Young, was attached to the Court in a medical capacity. He was educated at Zürich and studied medicine there and in Philadelphia, taking his M.D. Zürich in 1901. In 1902 he came to England and took his M.R.C.S., L.R.C.P. He worked in the Ophthalmic Department at the London Hospital under Roxburgh and also at Moorfields, where he became a clinical assistant. He also studied under Professor Fuchs in Vienna. In 1908 Young went to the United States, qualifying there by obtaining the M.D., New. York State, and he practised in New York until 1914. He was Assistant Surgeon to the New York Eye and Ear Infirmary and Ophthalmic Surgeon to the Central and

Neurological Eye and Ear Infirmary, and did much work in association with Marple. On returning to England in 1914 he immediately volunteered for the Army, but was not accepted, so he settled in Colchester, where he was appointed Ophthalmic Surgeon to the Essex County Hospital and he did much valuable work amongst the soldiers during the war. As can be gathered from his professional record, he was an extremely good linguist, and a man of very wide experience. In his professional work the subject that probably interested him most was the treatment of glaucoma. He was very enthusiastic about the miotic treatment of suitable cases, and he worked out with the tonometer how frequently pilocarpine had to be used to keep the tension within normal limits and found that he was able to control cases satisfactorily by this method. For those requiring surgical treatment he devised the operation known as double, sclerectomy and published his first results in the Trans. Ophthal. Soc. U.K., in 1924, and he described the operation again with his latest modifications at the meeting of the Oxford Ophthalmological Congress in 1934. He became a memher of this in 1917 and never missed a meeting. He was a great lover of Oxford and to show his appreciation, wished to take the Diploma in Ophthalmology of that University, but he was persuaded instead to undertake the task of giving the lectures on physiological optics, which he did in spite of indifferent health and often at considerable inconvenience to himself. He worked for hours endeavouring to perfect his lectures and took an immense amount of trouble in making them as helpful to his audience as possible. BJO 1935,19:700-701

Young, Thomas (1773-1829) British physician, physicist, and Egyptologist, born in Milverton, England. Young was largely self-taught in natural philosophy and in ancient and modern languages (he knew at least a dozen). Between 1792 and 1799 he studied medicine in London, Edinburgh, and Göttingen. He settled in London from 1800 and until his death he maintained a part-time medical practice, but devoted most of his energies to scientific research. Young demonstrated that accommodation of the eye is due to change of curvature in the crystalline lens (1793); gave the first description of astigmatism (1801); first stated the theory that color vision is due to retinal structures corresponding with red, green, and violet (1801); advanced a wave theory of light (1801-1803) and demonstrated its application to crystalline refraction and dispersion phenomena (1809). He made important advances in mechanics as well. Finally, it was Young who provided the key to understanding Egyptian hieroglyphic writings: he translated the demotic characters on the Rosetta Stone, making the important discovery that these characters were not alphabetic, but rather symbols derived from the hieroglyphs on the stone. He wrote: *Observations on vision* London 1793; *Light, colour, optics*. London 1802-1804; *A course of lectures on natural philosophy and the mechanical arts* 2 vols., London 1807. Works of Young: *Miscellaneous works of the late Thomas Young, M.D., F.R.S.* ... [edited by George Peacock] [edited by John Leitch] London 1855; *Oeuvres ophtalmologiques traduites et annotées par M. Tscherning ... et d'une préface par Émile Javal* 1894. Albert

Yuan, Jia-Qin (1919-) Chinese ophthalmologist, Professor of Ophthalmology, Tianjin Medical University, Honorary Director of Tianjin International Intraocular Implant Training Centre (IIITC). She graduated from Kweiyuang Medical College in 1943, received Residency training at Chungking Central Hospital (1943-1946) and served at the Department of Ophthalmology of Tianjin General Hospital in 1946-1957 first as the Chief Resident and then Deputy Director. She served as the Professor and the Chairwoman at the Department of Ophthalmology, Tianjin Medical University Hospital during 1957-1989. She established the IIITC at the University and served as the Director from 1989 to 1995. She has held more than 36 training courses of Cataract and Implant surgery, 21 at the IIITC and 15 areas throughout China, and she trained more than 2000 Ophthalmologists who have spread all over China and are performing cataract-implant surgery to eradicate blindness due to cataract. She also has built up a system of sending a team to rural hospitals for training of local doctors, and she herself traveled many times throughout the Country. She retired as Director in 1995 and continues to serve as the Honorary Director. She is also a pioneer in establishing Research in Industrial Ophthalmology in China and serves as the Editor and Honorary Editor of "*Journal of Injuries and Occupational Diseases of the Eye*" since 1979. Her professional activities extend over many Societies, e.g. Vice-President of the Asia-Pacific Intraocular Implant Association (1998-), Vice-President of the Chinese Ophthalmological Society (1980-1984), Member of Honorary

Board of the World Eye Surgeons (1994-) and member of many National and International Societies. She serves on the Editorial Board of the *Chinese Journal of Ophthalmology* and *Asia-Pacific Journal of Ophthalmology*. She published 133 scientific papers and 7 books, and wrote chapters in 7 books. Some examples of the books are "*Eye care in Industry*" The People's Medical Publ. House, Beijing, 1956, "*Slit-lamp Microscopy of the eye*" the same publishing Co. as above, 1982 and "*Spreading lights across China*" World Sci. Publ. Co. Singapore, 1996. In recognition of her meritorious service, 14 organizations granted her Honor Awards including the Ministry of Health of China, International Congress of Ophthalmology, Asia-Pacific Academy of Ophthalmology, Chinese Medical Association, Asia-Pacific Intraocular Implant Association and many others. (International Intraocular implant Training Centre Tianjin China, Tianjin Medical University, No. 22 Qi Xiang Tai Road, Tianjin 300070, People's Republic of China. fax: +86-22-23346434) (SM)

Tsunekazu Yuge

Yuge, Tsunekazu (1906-1987) Japanese ophthalmologist, Professor Emeritus of Kyoto Prefectural University of Medicine. He graduated from the University in 1930, studied Ophthalmology under Prof. FUJIWARA Kenzo and received the degree Doctor of Medical Science in 1936 (thesis: *Studies of the lacrimal gland cells*. J. Jpn. Ophthalmol. Soc. 37: 1069, 1933; 38: 835, 1934; 38: 2040, 1934; 39: 508, 1935; 39: 1826, 1935; 40: 889, 1936). He served as the Assistant Professor (1936-1947) and as the Professor and Chairman of the Department of Ophthalmology of Kyoto Prefectural University of Medicine during 1947-1968: he served as the Director of the University Hospital in 1956-1958. He was elected to be President of the University in 1959 and served until 1962. He worked further as the Director of Kyoto City Hospital in 1968-1976. He published many works on Sympathetic Ophthalmia with Prof. K.→Fujiwara, and they wrote "*Sympathetic Ophthalmia*, Handbook of Ophthalmology Vol. 20 of the Japanese Ophthalmological Society" in 1955. He is also the author of the book "*Diseases of the lacrimal apparatus*" Vol. 15 of the Handbook. He was the leader in Strabismus research in Japan and delivered a lecture "*Treatment of Strabismus*" at the 62nd Congress of the Japanese Ophthalmological Society in 1958 (J. Jpn. Ophthalmol. Soc. 62: 2030, 1958), and he organized the International Strabismus Symposium in Kyoto in 1972 (Jpn. J. Ophthalmol. 17: 1-99, 1973). He also served as the President for the 54th Congress of the Japanese Ophthalmological Society in 1950. He was a Founder of the Japanese Society of Strabismus and Amblyopia and was the President in 1972-1978; on the basis of his donation the Society created the *Yuge Award* to be granted to outstanding researchers in the field. In recognition of his distinguished service, the Government conferred on him the Third Order of the Rising Sun in 1979.[SM]

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Zadunaisky, Jose A. (1932-) Physiologist and neuroscientist of Argentina established in the USA who has made significant contributions to the Physiology and Biophysics of the cornea, the retina pigment epithelium and the ciliary epithelium in the areas of cellular mechanisms of active ion transport principally his demonstration of active chloride secretion. His studies also extended to the field of marine species in the comparative function of the eye and of the gill of fish. At present he is Professor of Marine Biology (RSMAS) and of Ophthalmology (Bascom Palmer) at the University of Miami, in the USA. After receiving his Medical degree from the University of Buenos Aires (UBA) in 1956 he did doctoral work in Physiology with Eduardo Braun Menendez in the Institute of Physiology of UBA under the direction of Bernardo A.Houssay (Nobel price winner, 1947) and was awarded a degree of Doctor in Medicine. (Thesis, University of Buenos Aires,"*The influence of the thyroid on the kidney and experimental hypertension* " 1959). He specialized in membrane biology in the laboratory of biochemistry of E.J.Conway at the National University of Ireland in Dublin (1958-1959) and in the Department of Biochemistry of the University of Copenhagen, Denmark with Hans H.Ussing (1959-1960). Returning to Buenos Aires, he established a successful laboratory in the Department of Biophysics of the School of Medicine of UBA (1960-64) and was sponsored by the Rockefeller Foundation, the National Institute of Health of the USA and the National Research Council of Argentina. His studies demonstrated in model epithelia that chloride was not a passively transported ion, but it was a sodium dependent actively transported one. In this period he trained numerous younger fellows in this, then, new field of research. His studies were received with great interest at the Congress of

Physiological Sciences in Leyden,Holland in 1961(Nature, l95:l004, l962, J. Gen. Physiol. 47:393-402, l963.) Werner Noell the retina physiologist introduced him to eye research during his visit to Argentina in 1962 and more definitively,Hugh Davson, then of University College London, who attracted him to collaborate in the establishment of the Eye Research Laboratory of the University of Louisville, KY in USA(1964-1967) There as Associate Professor of Ophthalmology and Physiology(1964) and later as Director of Research (1965), he applied the basic knowledge of membrane biophysics to the problem of corneal hydration and transparency explaining the origin of the corneal electrical potential on the basis of the secretion of chloride ions of the corneal epithelium (Nature 209:1136-1137, l966 ; Am. J. Physiol. , 2ll:506-511, l966). This work initiated a long list of publications from his laboratory, his students and other laboratories on this subject. This research established the existence of transporters and channels of chloride that later were found in all other organs besides the corneal epithelium and are relevant to the etiology of diseases such as cystic fibrosis, alterations of kidney function, the understanding of cholera and for normal neurotransmission. In 1967 he moved to Yale University, Departments of Ophthalmology and Physiology and continued his studies on the cornea and epithelia in general. In 1973 he became Professor of Ophthalmology and Physiology at New York University Medical Center in New York city, and in 1981 Director of the Sackler Institute of Basic Biomedical Sciences .In this period he and associates described to the activation of active chloride secretion by catecholamines and cAMP(Invest. Ophthal. ll: 644-650, l972) the understanding of the cellular models of the epithelia of the eye (In: *Membrane Transport in Biology, Transport in eye epithelia*: Vol. III, G. Giebisch, D. Tosteson, H.H. Ussing (Eds.), Springer-Verlag, Berlin, pp.307-335,and 337-354 l978) With his associates he described the model for ion transport in the retina pigment epithelium (Exp. Eye Res., 37, 409-420 1983) and with M.Wiederholt the cellular model for the ciliary epithelium (Pflügers Archiv. 407:(suppl 2) S112-S115,1986; see also Membrane Transport in Ocular Epithelia in "*Barriers and Fluids of the Eye and Brain*", M. Segal (ed.) CRC Press, New York, l992.) With colaborators K.Karnaky and K.Degnan he discovered the mechanism of ion secretion in the mitochondria rich cells of the gill epithelium of teleost fish. Also there a current of chloride secreted ions, is the mechanisms for salt homeostasis in the plasma of fish (Science: 195: 203-205, 1977, J.Physiol. (London) 271,155,1977; see also *Fish Physiology*, Vol. XB, Academic Press, New York, l984, pp.129-176). His book "*Chloride Transport in Biological Membranes*" published in 1982 (Academic Press) summarizes the field. In a symposium in honor of Hugh Davson the work in all the epithelia of the eye was again defined (in "*Barriers and Fluids of the Eye and Brain*", M. Segal (ed.) CRC Press, New York, l992). From 1975 to 1999 he was a Principal Investigator during summer sessions at the Mount Desert Island Biological Laboratory in Salsbury Cove Maine, were he worked in Comparative Physiology. In 1996 he moved to the University of Miami. At present he has some papers in the process of publication (J.membrane biol. 2000 in the press). Dr Zadunaisky attracted many students to his laboratory and they have become academic ophthalmologists or physiologists. He educated many generations of medical students teaching Physiology, Cell Biology and Ophthalmology and contributed to the Visual Science community by being an Executive Editor of the journal Experimental Eye Research for 20 years, Editor with Hugh Davson of Current Topics in Eye Research for Academic Press, and editing other books such us "*Toxins, Drugs, and Pollutants in Marine Animals*" (L. Bolis, J. Zadunaisky, R. Gilles (eds.), *Proceedings in Life Sciences*, Springer-Verlag, New York, 1984) and publishing numerous monographs and book chapters. He was a founder member of the International Society of Eye Research (ISER), Council member and Secretary (1976-1980) and its President from1980 to1984 .In the Association for Research in Vision and Ophthalmology (ARVO) he was a member of the organizing committees and Chairman of the Physiology and Pharmacology Section (1969-72 and again in 1993-96). In the American Physiological Society he organized a symposium on chloride transport that resulted in his book of 1982. At the National Institutes of Health he was a member of the Visual Science Study Section from 1976-1980 and of the Behavioral Science Study Section 84-88. He was Director of Training Grants of the National Eye Institute at NYU for 15 years. He was also an originator of the Transport Club of New York and ran it for 14 years. At NYU Medical Center he was President of the Faculty Council and held other administrative or faculty positions.He is a member of the board of reviewers for the FONCYT of Argentina

(Fondo de Ciencia y Tecnica) and has been a member of the committee for the appointment of the Professor at the UBA Medical School.Dr Zadunaisky was made a Fellow of the New York Academy of Sciences in 1977; received the Alcon Award in 1984 and the Endre Balacz Award of ISER for Distinguished Contributions to Eye Research in 1992. From 1989 to 1993 he was an invited Scholar in Residence at the Fogarty International Center of the National Institutes of Health. At present he continues his research in the eye and the gill. (Jose A.Zadunaisky,Section of Marine Biology,Rosensteil School of Marine Sciences , University of Miami , 4600 Rickenbacker Causeway, Miami Fl. 33149 U.S.A. Tel: +1-305 856 4178.; Fax: +1- 305 856 6322.; e-mail Josezad@AOL.com)

Zagórski, Zbigniew (1942-) Polish ophthalmologist, Professor of ophthalmology in Lublin (Poland). Z. Zagórski received his medical education at the Faculty of Medicine, Lublin Medical University (1959-1965) He received his degree MD in 1974 at Lublin Medical University and was a fellow 1975/76 of the Ophthalmic Clinic, University of Ghent, Belgium and 1985/86 and 1991 at University of Erlangen, Germany.He received his habilitation in 1980 and became Professor in 1992. Zagorski received his ophthalmic education under Prof. Tadeusz→Krwawicz (Lublin, Poland), Prof. Jules→François (Ghent, Belgium) and Prof. Gottfried →Naumann (Erlangen, Germany). His Academic path was : Dept.of Ophthalmology, Medical University, Lublin: Assistant 1968-1970, Senior assistant 1970-1976, Adjunct 1976-1983, Docent 1983-1991, Chairman from 1991, Professor extraordinarius 1991-1998, Professor ordinarius from 1998. **Bibliography** ***A***: Published Books: *Current Problems in Ophthalmology* (Proceedings of the 1st Polish-Ukrainian Ophthalmological Conference, Lublin, 1997) *Tadeusz Krwawicz Foundation*, Lublin 1999; ***B***: Co-author:1) Zagórski Z: *Replication capacity of the regenarating human corneal endothelium in organ culture*. In : Naumann GOH, Gloor B: *Wundheilung des Auges und ihre Komplikationen* (Bergmann, München 1980) pp 223-225;2)Zagórski Z: Ruprecht KW, Naumann GOH: *Corneal endothelialization in experimental anterior synechias and rubeosis iridis*. In: BenEzra D, Ryan S, Glaser BM, Murphy RP: *Ocular circulation and neovascularisation*, (M Nijhoff/Dr W Junk Publishers, Dordrecht 1987) pp 367-371;3) Zagórski Z: *Uber die Proliferation des Hornhautendothels*. In: Lang GK, Ruprecht KW, Jacobi KW, Schott K: *2. Kongress der Deutschen Gesellschaft für Intraokularlinsen Implantation* (Enke, Stuttgart 1989) pp 230-231; 4)Zagórski Z., Rakowska E., Haszcz D. *Combined Cataract, Glaucoma and/or Keratoplasty Procedures*. In: Bavishi AK, Nagpal PN, Khamar BM: *Cornea & Refractive Surgery* (Ahmedabad Academy of Ophthalmology, 1997) pp 71-73; 5)Zagórski Z., Sergienko N., Solodkii N., Toczolowski J. *The Ukrainian Technique of Radial Keratotomy*. In: Bavishi AK, Nagpal PN, Khamar BM: *Cornea & Refractive Surgery* (Ahmedabad Academy of Ophthalmology, 1997) p.105; 6)Zagórski Z., Schotzer-Schrehardt U., Rummelt V., Naumann G.O.H. *Epithelial Ingrowth - Pathogenesis and Treatment* In: Bavishi AK, Nagpal PN, Khamar BM: *Cornea & Refractive Surgery* (Ahmedabad Academy of Ophthalmology, 1997) pp 94-99; 7)Zarnowski T., Kardaszewska A., Kwietniewska M., Rakowska E., Zagórski Z.: *Clinical evaluation of penetring keratoplasty for keratoconus* In: Süveges I, Follmann P: *XI th Congress of the European Society of Ophthalmology*, (Monduzzi Editore 1997) pp 273- 277; 8)Haszcz D., Zarnowski T., Zagórski Z. *Corneal topography of keratoconus*. In: Süveges I, Follmann P: *XIth Congress of the European Society of Ophthalmology*, (Monduzzi Editore 1997) pp 165-170; 9)Machowicz-Matejko E., Zarnowski T., Zagórski Z. In: Süveges I, Follmann P: *XI th Congress of the European Society of Ophthalmology*, (Monduzzi Editore 1997) pp 105-109; 10)Biziorek B., Zagórski Z., Jedrzejewski D. *Clinical study of ocular borreliosis in mid-eastern region of Poland*. In: Süveges I, Follmann P: *XIth Congress of the European Society of Ophthalmology*, (Monduzzi Editore 1997) pp 687-689; 11)Zagórski Z, Schlötzer-Schrehardt U, Naumann GOH, Szczesny P: *Epithelial ingrowth*. In: Süveges I, Follmann P: *XIth Congress of the European Society of Ophthalmology*, (Monduzzi Editore 1997) pp 267-272; ***C***: Published papers: 1.*J Chromatog* (1964) 17:288-294, 2.*Gen Pol* (1969) 11:155-159, (1971) 12:587-592; 3.*Pol Tyg Lek* (1970) 25:201-204, 4.*Humangenetik* (1970) 10:340-343; 5.*Cytobios* (1972) 5:249-256; 6.*Klin Oczna* (1972) 42:527-531;1311-1315;45:733-737; (1978) 48:97-99; 399-401;48:605-606; (1979) 81:171-173,317-319; (1980) 82: 13-15, 171-172, 565-567; (1981) 83: 477- 478; (1982) 84: 109-110; (1983) 85: 197-199; (1984) 86: 77-79; (1985) 87: 370-372; (1986) 88: 241-244; (1987) 89: 405-407; (1989) 91: 73-75,89-91,180-181;(1990) 92:

31-32,154-155,184-185,186-187; (1991) 93:54-62,129-131,226-228; (1994) 96:110-111; (1995) 97: 64-65; (1996) 98: 125-127, 357-359;(1997) 99:21-24,313-315; (1998) 100: 1-4,11-14,235-237; 7.*Pol Med Sci Bull* (1976) 15:253-259, 8.*Ophthalmic Res* (1977) 9:357-365, (1989) 21: 440-442; (1990) 22:51-56; 9.*Am J Ophthalmol* (1978) 86:233-238; (1979) 88: 396-401, 10.*Ceskoslov Oftalmol* (1979) 35:81-84,85-88; 11.*Bull Soc Belge Ophtalmol* (1987) 224:15-21; 12.*Klin Mbl Augenheilk* (1988) 192: 23-26,192: 365-366;193:16-20; 13.*Curr Eye Res* (1989) 8: 649-659; 14.*Fortsch Ophthalmol* (1989) 86: 581-583; 15.*Graefe's Arch Clin Exp Ophthalmol* (1990) 228:55-57; 16.*Doc Ophthalmol* (1990) 73:285-289; 17.*Lens and Eye Toxicity Res* (1991) 8:311-318; 18.*Acta Ophtalmologica* (1992) 70: 366-370. Zagorski is member of the Polish Ophthalmological Society; the German Ophthalmological Society (DOG); ARVO;American Academy of Ophthalmology; European Ophthalmic Pathology Society; International Ocular Surface Society. Phone/fax: +48 81 5324827 email: zagorski@panaceum.am.lublin.pl (JPW)

Zahn, Johann (1641-1707) German philosopher who belonged to the Premonstratensian Order at Herbipolis (Würzburg). Zahn displayed a detailed knowledge of vision, the properties of light, and the structure of the eye. He authored the first complete history of early microscopes: *Oculus artificialis teledioptricus sive telescopium* Würzburg 1685-1686 (2nd ed 1702). Albert

Zanen, André (1940-) Belgian ophthalmologist. Zanen was born in Ixelles (Brussels). He is the son of Jules Zanen (born in 1904), also an ophthalmologist. He obtained the M.D. degree at the Brussels University in 1964, and after a 12 months stay in Geneva under →Babel he became simultaneously assistant at the Department of Ophthalmology (Professor P.→Danis) and research-worker at the Laboratory of physiopathology of the nervous system (Professor J.E. Desmedt) of the Brussels University. He obtained in 1973 in the same University the special doctorate in ophthalmology with an electrophysiological study of the *normal photoreceptoral mechanisms*. From 1977 he progressively left the St. Pierre hospital for the Erasme hospital. At Erasme he organized the department of ophthalmology and became its head in 1979. He has taught at the Brussels University since 1982. André Zanen's first papers concern local adaptation (with Liliane Conreur and Guy Meur, 1966). From 1969 he studied (with Julien Debecker) the *fast photovoltage of the human eye*, in which he analyzed the (photopic and scotopic) visual pigments and melanin contributions. He contributed to Francois' 1974 report on electrodiagnosis for the Belgian Ophthalmological Society. He also wrote on other visual functions as colour vision (1978) and visual evoked potentials (1982). In 1982 he organized for the French section of the Belgian Ophthalmological Society an excellent symposium on the visual and motor symptoms of multiple sclerosis. In 1985 he reported for the main Belgian Ophthalmological Society on informatics in ophthalmology. He also wrote on clinical subjects as *retinal embolism by cardiac myxoma* (1974), *Wernicke's encephalopathy* (1979) etc. André Zanen is the present secretary of the French-speaking section of the Belgian Ophthalmological Society. (Verriest).

Zanen, Jules (1904-1992) Belgian ophthalmologist, father of André Zanen. Zanen obtained his M.D. degree in Brussels in 1929 and specialized in ophthalmology with Léon→Coppez. He did early research in *acquired colour vision defects*, which he studied by means of the measurements of *foveal achromatic and chromatic thresholds for monochromatic flashes* and on which he wrote a report for the Belgian Ophthalmology Society in 1953. He did with René Hermans an experimental work on *visual performance* in 1963. Among his clinical papers we have surely to mention the *first description* of *vitelliform macular dystrophy* in 1950 (with G. Rausin). (Verriest)

Zarrin-Dast *see* **Abu Ruh. Bin Mansur bin Abi Abdallah bin Mansur alyamani.**

Zehender, Karl Wilhelm von (1819-1916) German ophthalmologist, founder of the still existing *Klinische Monatsblätter für Augenheilkunde*. Von Zehender was born in Bremen the offspring of an old Bern patrician family in Switzerland. He studied in Halle and Göttingen, receiving at the latter his *Dr.med.* in 1845. He practiced for a time in the Oldenburg region, was military physician during the war against Danmark and afterwards undertook scientific journeys, staying in Paris, Prague and Vienna. He was assistant to Friedrich Jaeger in Vienna, later to Albrecht von Graefe in Berlin, becoming ophthalmologist to the *Erbgrossherzog* (Duke) in Streulitz , Medical Council (Medicinal-

Rath) and Fellow of the Medical College. In 1862, von Zehender received a call to be Professor of ophthalmology in Bern, a call which he accepted. A few years later, in 1866, he received an invitation from the Rostock University and he went back to Germany to fulfil his new obligations. It was during his tenure in Bern, that he founded the *Klinische Monatsblätter für Augenheilkunde*. Most of von Zehender´s papers are to be found in the first 10 volumes of *Graefe´s Archiv für Ophthalmologie*, later in his own Journal. von Zehender wrote *Anleitung zum Studium der Dioptrik des menschlichen Auges*, Erlangen 1856; *Eine Missgeburt mit hautüberwachsenen Augen. Gratulationsschrift im Namen der medicinischen Facultät zu Rostock*. Rostock, Adler, 1872. He edited the 2nd edition of Eugen →Seitz 1855 treatise *Handbuch der gesammten Augenheilkunde* in 1869 and later re-wrote and enlarged it into two volumes (Erlangen 1874-1876). Other books authored by von Zehender are: *Lehrbuch der Augenheilkunde für Studirende* Stuttgart 1879; *Über den Beruf der Frauen zur Studium und zur praktischen Ausübung der Heilwissenschaft*, Rostock 1875; *Über den Einfluss des Schul-Unterrichts auf Entstehung der Kurzsichtigkeit*, Stuttgart 1880. von Zehender was the inventor of two ophthalmoscopes in 1854 and an auto-ophthalmoscope in 1863 all of which bear his name .Hirsch 6:362; BMC; Albert;C.R.Keeler, JPW

Zeis, Eduard (1807-1868) German pioneer plastic surgeon, born in Dresden, Germany. Zeis received his M.D. at Leipzig in 1832 and practiced general surgery in his native city before becoming professor at Marburg (1844-1850); he returned to Dresden as chief surgeon of the new city hospital (18501868). Zeis, who introduced the term *plastic surgery* in his *Handbuch der plastischen Chirurgie* (1838), wrote extensively on the history of and contemporary developments in this field, and himself performed blepharoplasty and strabismus operations with great skill. He authored: *Abhandlungen aus dem Gebiete der Chirurgie* Leipzig 1845.Albert

Zeiss, Erich (1894-1975) German ophthalmologist. Zeiss was born in Dresden-Loschwitz, Germany. He studied medicine in Zurich, Kiel, Munich and Jena, receiving at the last named, in 1923, his medical degree. Zeiss spent a practical year in 1924 at Halle University Clinic under Schieck and at the Knappschaft Hospital under Hartung. In 1925 he received at Jena his doctoral title with the thesis *Zur Entstehung der Gliomrosetten*. Zeiss became 1925 assistant at the Halle Ophthalmic University Clinic under Clausen and remained in this popsition until 1928. The same year he moved to Leipzig to work, as assistant, under professor Hertel, remaining there until 1935. In the meantime, in 1934, he was promted first assistant and became lecturer with the thesis *Vergleichende Untertageuntersuchungen über den Bergarbeiternystagmus*. Zeiss now went to Würzburg to work as first assistant (Oberarzt) under professor Schieck (1935-1938) and became professor extraordinarius in the same university. He then moved to Münster to work under Marchesani at the University Eye Clinic (1938-1940). Zeiss was in the German army from 1940 to 1945. On his return to Münster, he was named adjunct Director to the Münster University Eye clinic, a position he held until 1947. From 1947 to 1960 he was head of the City Eye Clinic of Dortmund. Zeiss was particularly interested in the nystagmus of miners. He wrote *Das Augenzittern der Bergleute* Leipzig 1936; a chapter in *Handbuch d.ges. Arbeitsmedizin*: *Das Augenzittern der Bergleute* Munich 1961; a chapter *Bau und Wirkungsweise des menschlichen Auges* in : *Handbuch der Lichttechnik* Berlin 1938. Zeiss did pioneer work on the influence of high frequence ultra sounds on animal eyes (1938) and discovered that these sounds clouded the lens. Zeiss , whose grandfather was Carl Zeiss, was very interested in optics and developed many ophthalmic optical devices. See: Fischer *Die Geschichte der Augenheilkunde in Würzburg* (Thesis) Würzburg 1968; Klin.Mbl.f.Augenheilk. 1975,167:148ff. JPW

Zhang, Chengfen (1925-) Chinese ophthalmologist, Professor of Ophthalmology, Peking Union Medical College (PUMC). She graduated from Shanghai Medical College in 1951 with MD degree granted. Subsequently, she completed her Ophthalmology residency at the PUMC Hospital, and she was promoted to Clinical Associate Professor (1962-1979), Associate Professor Deputy Chief (1979-1981). She extended her study as a Research Associate at the Eye Research Institute of Retina Foundation, Harvard Medical School in 1981-1982. On home coming, she served as the Professor and Chairperson of the Department of Ophthalmology of PUMC Hospital and Eye Research Center from 1983 to 1989. She was a visiting Professor in 1987 to the Department of Ophthalmology of West

Virginia University, U. S. A. Currently, she works as Professor and Director of Retina-Vitreous Service of PUMC (1990-) and Consultant to Suiyi Eye Center Hospital (1997-). Her editorial activities include *Foreign Medicine in Ophthalmology* (1979-), *Chinese Academy of Medical Sciences* (1983-1992), Vice-Chief Editor of *Ocular Fundus Journal* (1985-), *Chin. J. Ophthalmol.* (1979-), *Chinese J. of Medical laser*, *Chinese J. of Pediatric Ophthalmology and Strabismus*, *The Eye Journal*, *J. of Eye Research* and *J. of Eye and ENT*. She has more than 100 original scientific papers and has been guest lecturer on more than 25 occasions. Some examples of her publications are "*Textbook on eye fundus diseases*, Beijing People Health Publ. House, 1998", *Fluorescein angiography and indocyanine green angiography study on age-related macular degeneration*. The Proc. the First Global Chinese Ophthalmic Conference, Beijing 1999" and "*Age-related macular degeneration in two sibling cases*. Chin. J. Eye Fundus, 1999, 15: 120". She is a recipient of many Honor Awards that include Award from Chinese Academy of Medical Sciences (1980), Ministry of Public Health (Prize A, 1981), National Award for Advance of Science and Technology (1991) Golden Key Award by Chinese American Ophthalmologic Society (1998) and many others. (Professor, Department of Ophthalmology, Eye Research Center, Peking Union Medical College Hospital and Chinese Academy of Medical Science, 1 Shuai Fu Yuan, Beijing, 100730, P. R. China. phone: +86-10-65296355) (SM)

Zhang, Hui-rong (1931-) Chinese ophthalmologist, Professor at the Department of Ophthalmology, Third Hospital, Beijing Medical University. She graduated from the Faculty of Medicine, West China Union University, Si Chuan, in 1953 and studied Ophthalmology in the Postgraduate School of Medicine of Beijing Medical University with Doctor of Medicine granted in 1959. She extended her study as an Exchange Scholar at the Pacific Medical Center, San Francisco, U. S. A. (1983-1984). She has served as Vice-Chairman, Associate Professor (1961-1983) and Professor and Chairman (1983-1993) and Professor and Supervisor of Postgraduate School and Member of Scientific Committee of the Third Hospital of Beijing Medical University. Her professional activities embrace Executive Member of the Standing Committee of the Society of Ophthalmology, Chinese Medical Association (1982-), Vice-Chairman, Beijing Society of Ophthalmology (1980-1996), Vice-Chairman, and member, The Ocular Fundus Group (1982-) and of the New Technical and Therapeutic Group (1980-1997) of the Society of Ophthalmology, and also editor to the *Chinese Journal of Ophthalmology* (1989-), *Chinese Journal of Ocular Fundus Diseases* (1986-), *Journal of Foreign Medicine*, Ophthalmological Section (1980-), *Journal of Ophthalmology in China* (1986-), *Journal of Practical Ophthalmology in China* (1991-), *Journal of Pediatric Ophthalmology and Strabismus in China* (1993-), *Archives of Ophthalmology* (Chinese edition)(1988-1998) and *Ophthalmology Times*, U.S.A.(1986-1996). Her research interests cover ocular vascular structures, retinal vascular diseases, cell culture and growth factors, light damage of the eye, etc. and some examples out of 120 papers are "*Scanning electron microscopic study of corrosion casts on retinal and choroid angioarchitecture in man and animals* In: *Progress in Retinal and Eye Research*, ed. Osborne, N. N et al. Vol 13, pp 243, Pergamon Press, 1994", "*The characteristics of macular branch retinal vein occlusion*. Chin. J. Ophthalmol. 1996, 32: 441", "*Suppressive effects of 8-chloroadenosine on growth factor-induced vascular endothelial proliferation*. Chin. Ophthalmic Res. 1999, 1: 11" and "*Protective effect of anisodamine in light damaged rat retina*. Ophthalmol in China. 1996, 5: 44". She has written 11 monographs and books, e.g. "*Ocular microcirculation and its relative disease*. Beijing Medical University and Union Medical University Combined Publishing House, 1993". For the excellence of her works, she has received many Honor Awards, that include The Science and Technology Prize of the Ministry of Health (1991). (Department of Ophthalmology, Third Hospital Beijing Medical University, 100083, People's Republic of China. phone: 010-62017691-2775; fax:+86-010-62017700; e-mail: huirong@public.fhnet.cn.net) (SM)

Zhang, Shi-yuan (1929-) Chinese ophthalmologist, Professor of Ophthalmology, Beijing Institute of Ophthalmology. He was born in Shandong Province, the eastern part of China, and graduated from Shandong Medical University in 1953, and then workcd as a resident at the Department of Ophthalmology of Shanghai Guangei Hospital, Shanghai Second Medical College (University). At the beginning of 1954 and up to now, he worked at the Department of Ophthalmology of Beijing Tong Ren Hospital and Beijing

Institute of Ophthalmology as the resident, visiting doctor and Professor of Ophthalmology of Capital University of Medical Sciences. From 1983 to 1984, he stayed in London, Institute of Ophthalmology of London University as a visiting scholar and received the Diploma of preventive Ophthalmology and ocular microsurgery. He was invited as the distinguished guest, on behalf of the Chinese Ophthalmological Society to participate in the 90th, 100th anniversary celebration academic meeting of the Japanese Ophthalmological Society and 50th anniversary celebration academic meeting of the Korean Ophthalmological Society. From 1985, he served as the Director of Beijing Institute of Ophthalmology until 1995, then he was appointed as the Honorary Director of the Institute. During 1987 - 1990, he also served as the Executive Vice-Director of Tong Ren Hospital. In 1988 he was elected the President of the Chinese Ophthalmological Society at the 4th National Congress of Ophthalmology, and reelected as the 5th (1992-1996) and the 6th (1996-2000) President of the Society at the National Congresses of Ophthalmology. He has served as the Chief-Editor of the *Journal of Ophthalmology in China*, the *Journal of Foreign Medicine Section of Ophthalmology*, and the Deputy Chief Editor of the *Chinese Journal of Ophthalmology*. Under the leadership of the Ministry of Health, the National Committee for Prevention of Blindness was established in 1984, and he has served as the Vice-Director of the Committee from 1986 to the present. Since 1988, the Beijing Institute of Ophthalmology was designated as the WHO Collaborating Center for Prevention of Blindness by the World Health Organization. He has served as the Director of the Center from 1992 to the present and as a member of the WHO Expert Advisory Panel on Prevention of Blindness and Trachoma from 1993 to 1999. He was in charge of a national epidemiological survey of blindness and low Vision in 1987, and served as the Chairman of the 2nd International Ophthalmic Conference China (1995) and of the First Global Chinese Ophthalmic Conference (1998) Beijing. He was a member of the Advisory Council of World Cataract Lens Project, USA, the honorary member of SCOPE International USA. More than 20 papers have been published and he is author or co- author of the books e.g. "*The Manifestations of the Ocular Fundus of Patient with Tubercolosis Meningitis* (Beijing 1959), *Ocular Fundus Diseases* (Beijing 1977), *Eye Related Syndroms* (Beijing 1978), *China Encyclopedia of Medicine*, Section of Ophthalmology, (Shanghai 1979), *China System of Ophthalmology* (Beijing 1996), *Present Status of Ophthalmology in China* (Asia Leaders of Ophthalmology (Singapore 1989) and the *Development of Ophthalmology in China* (Ophthalmology Awakens in Asia, Singapore 1999). He received Awards for his clinical and research works and service: Award from Beijing Council of Science and Technology (1992,93,94), Distinguished Service Award of the Asia-Pacific Academy of Ophthalmology (1991) and the Asia-Pacific Intraocular Implant Association Award (1999).(Beijing Institute of Ophthalmology, Beijing 100005, P. R. China. fax: +86-10-65125617) (SM)

Zhang, Xiaofang (1920-) Chinese ophthalmologist, Professor of Ophthalmology, Henan Medical University, Zhengzhou. He graduated from Henan University Medical College in 1945, and studied Ophthalmology at Henan University Medical College and Henan Provincial Hospital under Dr. Sun Kaiyuan, and received his Master degree in 1947. He has been the Professor of Ophthalmology of the Henan Medical College since 1978, served as the Director of the Department of Ophthalmology (1949-1985) and is the Honorary Director of Henan Eye Trauma Institute since 1981 and Honorary Director of Henan Provincial Hospital of Ophthalmology since 1988. The positions he has held in professional societies include Executive Committee Member of Chinese Ophthalmological Society (1979-1992),World Eye Foundation, Member of the Executive Council and Director of China Branch (1983-), International Eye Trauma Council Executive Member (1991-), Vice Director of National Cataract (Sight Restoring) Technology Guiding Group (1992-), Sightfirst China Action, Chinese Consultation Committee Member (1998-), and Science and Technology Commission of the Minstry of Health, Managing Director and Honorary President of Henan Provincial Society of Ophthalmology and Honorary Vice-Chairman of the Henan Provincial Federation of Handicapped. He has many editorial assignments, e.g. *Journal of Injuries and Occupational Diseases of the Eye with Ophthalmic Surgery*, *Chinese Journal of Ophthalmology*, *Chinese Journal of Practical Ophthalmology*, *Chinese Journal of Ocular Fundus Diseases*, *Journal of Ocular Trauma* (U.S.A.), *Chinese Ophthalmology Research*, *Clinical Ophthalmology*, *Clinical Medicine* and *Henan Medical University Journal*. Among many of his publications, some examples

are "*Posterior Chamber IOL implantation in traumatic cataract with injured complications*. Eye Science, 8: 11, 1992", "*Clinical observation of lensectomy, vitrectomy with anterior capsule preserved*. Chinese J. Ophthalmol. 33: 414, 1997" and "*The influence of macrophage on the proliferation of cultured human epithelial cells in vitro*. J. Injuries and Occupational Diseases of the Eye with Ophthalmic Surgery, 20: 407, 1998". He has written 12 books that include "*The Localization and extraction of intraocular foreign body*. The People's Health Publ. House. P. R. China 1976" and "*Ocular Toxicology*, Plenum Publ. Hose New York (co-editor), 1995". He is a recipient of many honor awards, e.g. Outstanding Achievements, United States Eye Injury Registry, 1996, National Award of Science and Technology Achievement, China, 1994, National Excellent Science and Technology Worker, China, 1997, and Meritorious Worker of Science and Technology, Henan Provincial Government, 1998. Besides his teaching activities, he has fostered to establish 16 Ophthalmic Hospitals and Ophthalmic Institutes throughout the Country. (SM)

Xiao-lou Zhang

Zhang, Xiao-lou (1914-1990) Chinese ophtha1mologist, Professor of Ophthalmology, Peking Union Medical College (PUMC), one of the discoverers of trachoma pathogen, clamydia trachomatis. He was born in Hebei Province, ZhengDing County, and graduated from Peking Union Medical College in 1940 and was at service as an ophthalmologist for 2 years. He returned for a short period to serve in his native Hebei Province as a hospital doctor, but soon he was invited to Beijing Tong Ren Hospital as an Eye Specialist and the Director of the Eye Department in 1946. He was the founding director of Beijing Institute of Ophthalmology (1959). He succeeded in 1954, in cooperation with virologist Prof. Tang Fei-fan, in cultivating trachoma pathogens in chick embryo: this was the major break-through in the research of trachoma. In recognition of this outstanding work, he received many International and National awards, e.g. Award of Merit, National Symposium of Science and Technology, 1978, Gold Medal from the International Agency Against Trachoma (1981), Distinguished Service Award of the Asia-Pacific Academy of Ophthalmology (1981) and the Award from the Natural Science Academy of China. He has published more than 90 original scientific papers. He served as the Chief-Editor of the *Chinese Journal of Ophthalmology* and editor of the *International Metabolism and Child Eye Disease Journal*. He was a senior member of the Chinese Medical Academy, President of the Chinese Ophthalmological Society, Honorary Director of the China Medical Association, Deputy Chairman of the National Committee for Prevention of Blindness, Consultant to the World Health Organization and American Sight and Eye Research. His interest in technical information and development led him to work as the Editor of international Eye General Ophthalmology and Digest on Chinese Ophthalmology.(by Zhang Shi-yuan) (SM)

Zhao, Dong-shen (1913-) Chinese ophthalmologist, Professor and Chief of the First People´s Hospital of Shanghai. He studied at the Army Medical College in China, and then studied at the University of Berlin and graduated from the University of Innsbruck, Austria, in 1939 with MD degree granted (thesis: *Ueber metastatische Entzuendungsherde in Gebiet Opticusstamm*. A. von Graefe Arch Ophthalmol. 143: 239,1941). He then worked as an assistant at the 1st Eye Clinic and the Pathological Laboratory of University of Vienna, during 1939-1942, under Prof. J.→Meller, and Prof. J.→Bock. He extended his study during 1943-1944 at the University of Budapest under Prof. M.→Radnot. On his home coming, he was appointed the Professor of Ophthalmology at Jiang-su and Tong-Ji Medical University in 1945, Professor and Chief of the 1st People's Hospital, the Teaching Hospital of Shanghai Medical University since 1949. He has served as the Vice-Chairman of the Ophthalmological Society, Shanghai Branch of the Chinese Medical Association, and as an Editor to the Chinese Journal of Ophthalmology. Some examples of his many papers and books are "*Retinal detachment operation* (New China 10 years), 1959, Chin. J. Ophthalmol" , "*Classification of membrane formation of retinal detachment and ultrastructure study*, Eye Science, 1986" ," *Ophthalmic Surgery*" ,Wen Tung Publishing Co. Shanghai, and *Retinal detachment operation including vitreous surgery*, 1999 ,Shanghai Science and Technology Publishing Co. Shanghai. He is a recipient of Certificate of Award from the National Science Conference, 1978 and National 5.1 Labor Medal, 1986. (The First Peop1e's Hospital of Shanghai, 85 Wu Jin Road, Shanghai 200080, P. R. China) (SM)

Chenghu Zhou

Zhou, Chenghu (1896-1978) Chinese ophthalmologist. Born in Zhejiang province (China), he studied in Wen Hua University and Xiang Ya Medical College in Hunan province in 1914. In 1926, he was awarded a Rockefeller Fund Scholarship and studied at Vienna University and London University. After coming back in 1927, he became an assistant teacher in Peking Union Medical College and an attending doctor in the Department of Ophthalmology. From 1929, he was successively appointed to be a lecturer, vice professor, professor, educational director and a committee member of the Chinese Ophthalmological Society when he was working in Shanghai Medical College. He established Zhuji Hospital between 1945 and 1949 with the help of the United Nations general relief headquarters. From 1950, he was successively appointed to be a director in the Department of Ophthalmology in Shanghai Sixth People's Hospital, Ophthalmic consultant of Shanghai Health Bureau, Vice-president of Shanghai Health Care Training College, President of Shanghai Medical Training School and Vice-president of Chinese Medical Association Shanghai branch. Professor Zhou Chenghu had taken charge of scientific research, teaching, clinical works in Ophthalmology for more than fifty years. He published numerous original papers in academic journals at home and abroad. He enjoyed great prestige in academic circles. Not only was he a deputy director of the Ophthalmic Society attached to Chinese Medical Association, but also a deputy Editor-in-chief of the *Chinese Journal of Ophthalmology*. In 1958, he attended the first Asia-Africa Academic Conference in Ophthalmology and was elected as a member of the Asia-Africa Ophthalmic Association. He was a man of rich clinical working experience and was very active in guiding how to prevent and treat different kinds of eye diseases, especially fundus diseases, myopia, eye fatigue, trachoma and trauma. He also trained many excellent medical staff in Ophthalmology.(SM)

Ziauddin Ahmed (1949-) Pakistani Ophthalmologist, see **Shaikh, Ziauddin Ahmed**

Ziegler, Lynn Richard (?-) American Researcher in human vision, visual perception, cognitive psychology, and cognitive neuroscience. Experienced with visual psychophysics and quantitative modeling, specializing in studies of binocular vision and stereopsis. He received his Ph.D. at the University of Texas at Dallas (1993) (Human Development and Communication Sciences, Cognition and Neuroscience Track. Elective courses in optics, biochemistry, artificial intelligence, neural network modeling, and mathematical methods of physics.) Ziegler received a M.S.,1976 at the University of Texas at Dallas (Mathematical Sciences, Statistics Track) and a B.A., (Physics) at Austin College (1972). He advanced to Senior Scientist, Lockheed, NASA Space Center Houston, and Palo Alto (1974-79) ; to Electronics Applications Specialist, Information Systems Design, Sunnyvale, California (1979-80) became consecutively Electronics Engineer, Storage Technology, Sunnyvale, California (1980-81); Computer Software Consultant, SolarTek, Davis, California (1982-83); Robotics Engineer, Adaptive Technologies, Sacramento, California (1983-85); Teaching and Research Assistant, The University of Texas at Dallas (1985-93); Post-Doctoral Fellow, Montreal Neurological Institute, McGill University (1993-96); Post-Doctoral Fellow, McGill Vision Research, McGill University, Montreal, Canada (1996-Present) Ziegler published following papers: Ziegler, L. R., Kingdom, F. A. A. & Hess, R. F. (In Press). Local luminance factors that determine the maximum disparity for seeing cyclopean surface shape. *Vision Research 40*(9), 1157-1165; McColl, S. L., Ziegler, L. R. & Hess, R. F. (In Press). Stereodeficient subjects demonstrate non-linear stereopsis. *Vision Research*; Hess, R. F. & Ziegler, L. R. (In Press). What limits the contribution of second order motion to kinetic depth? *Vision Research*; Kingdom, F. A. A., Ziegler, L. R. & Hess, R. F. (Submitted). Luminance spatial frequency differences facilitate stereoscopic depth segmentation; Ziegler, L. R., Hess, R. F. & Kingdom, F. A. A. (2000). Global factors that determine the maximum disparity for seeing cyclopean surface shape. *Vision Research*, 40(5), 493-502; Ziegler, L. R. & Hess, R. F. (1999). Stereoscopic depth but not shape from second-order stimuli. *Vision Research*, 39(8), 1491-1507; Hess, R. F., Ziegler, L. R. & Kingdom, F. A. A. (1999). The linkage between the spatial channels for luminance and disparity modulation. *Vision Research*, 39(3), 559-568; Ziegler, L. R. & Hess, R. F. (1998). Depth perception during diplopia is direct. *Perception*, 26, 1225-1230; Ziegler, L. R. & Roy, J. P. (1998). Large scale stereopsis and optic flow: Depth enhanced by speed and opponent-motion. *Vision Research*, 38(9), 1199-1209; Ziegler, L. R. & Dowling, J. (1995). The hierarchical nature of perceiving direction of motion in depth from optic flow. *Vision*

Research, 35(10), 1435-1446; Ziegler, L. R. & Dorf, R. C. (1987). Applications of an analysis of the geometry of light-striping vision systems. *Robotics*, 3, 167-173; Ziegler, L. R., Hess, R. F. & Kingdom, F. A. A. (1999). The relationship between luminance spatial frequency and d_{max} for shape-from-stereo. *Investigative Ophthalmology & Visual Science*, 40(4), S420; Ziegler, L. R., Hess, R. F. & Kingdom, F. A. A. (1998). Factors that determine the maximum disparity for stereoscopic shape perception. (Presented at 21nd ECVP, Oxford, August 1998.) *Perception*, 27 Supplement, 109b; McColl, S. L., Ziegler, L. R. & Hess, R. F. (1998). Linear and non-linear stereopsis in individuals with stereodeficiencies. *Investigative Ophthalmology & Visual Science*, 39(4), S556; Kingdom, F. A. A., Ziegler, L. R. & Hess, R. F. (1998). Luminance spatial frequency differences facilitate stereoscopic depth-segmentation. *Perception*, 27, Supplement, 21b; Hess, R. F. & Ziegler, L. R. (1998). Shape from linear but not nonlinear motion. *Perception*, 27, Suppl., 4b; Ziegler, L. R. & Hess, R. F. (1998). Why is there depth but no shape from uncorrelated micropatterns? *Investigative Ophthalmology & Visual Science*, 39(4), S615; Hess, R. F., Ziegler, L. R. & Kingdom, F. A. A. (1997). The linkage between the spatial channels for luminance and disparity modulation. *Investigative Ophthalmology & Visual Science*, 38(4), Vol. I, S954; Ziegler, L. R. & Hess, R. F. (1997). Linear and non-linear stereoscopic contributions distinguished by task. *Investigative Ophthalmology & Visual Science*, 38(4), Vol. II, S906; Ziegler, L. R. & Roy, J. P. (1996). Perceiving depth in large-field, high-disparity stereomotion displays (Talk given at ARVO 1996). *Investigative Ophthalmology & Visual Science*, 37(3), S685; Ziegler, L. R. & Roy, J. P. (1995). Does perceived 3D surface orientation alter the displacement limit of apparent motion? *Investigative Ophthalmology & Visual Science*, 36(4), S363. Ziegler wrote book reviews for: *Vision Research*, *Proceedings of the Royal Society*, and *Journal of Experimental Psychology: Human Perception and Performance*. He received the Winner of Outstanding Achievement Award for contributions to a NASA project (1977). Personal Interests: Art, photography, mathematics and science in general, classical literature and music, history, religion and philosophy. Address: McGill Vision Research, McGill University, 687 Pine Avenue West, Room H4-14, Montreal, Quebec H3A 1A1 phone: Royal Victoria Hospital: (514) 842-1231, Extension 5913 Fax: (514) 843-1691 E-mail: zieg@vision.mcgill.ca

Ziegler, S. Lewis (1861-1926) American ophthalmologist. Ziegler was born in Lewisburg, Pa., and received his preliminary schooling there and then entered Bucknell University from which he was graduated with the degree of A. B. in 1880. He came to Philadelphia in 1882 and matriculated in the Medical School of the University of Pennsylvania, and was graduated in 1885, then serving as interne at the Germantown and Episcopal Hospitals, and finally at the Wills Eye Hospital, in which he later became attending surgeon and subsequently executive medical officer. In 1889, he organized the eye clinic at St. Joseph's Hospital and remained a member of the staff up to the time of his death. In recognition of his work, he subsequently received his M.A. from Bucknell, and had the honorary degrees of Sc.D. and LL.D. conferred on him by Bucknell and Lafayette respectively. A close observer, of keen and analytic mind, he studied his cases with an untiring exactitude which generally brought him to conclusions. logically correct and sometimes at variance with the usually accepted theories of etiology and pathology. His treatment, always rational and often original for difficult and obscure cases, has, in many instances, become accepted as most efficacious. His ingenuity in devising and supervising the making of new instruments in ophthalmic practice, was of absorbing interest and genuine pleasure, to him, and some of his special operations have received well merited international recognition and adoption. Ziegler took the keenest interest in the new developments in the general field of medicine, and his activities outside his own specialty were evidenced by his valuable work in the local chapter of the American Red Cross, and his successful administration as Director of the Bureau of Health and Charities of the City of Philadelphia. For some years Ziegler had been writing and collecting material for a monumental work upon the surgery of the eye. He spent much time in the great libraries of Europe consulting original authorities and having photographic copies made of the portraits of the most noted ophthalmic surgeons from the earliest times. These portraits, together with reproductions of an admirable set of drawings of operations made under his directions, would have been the illustrations for the text, still unfinished, which it was the ambition of his life to complete. AJO 9,1926:689-690

Zimmerman, Lorenz E. (1920-) American ophthalmologist. Born to German and Swiss immigrant parents in Washington, DC in 1920, Lorenz Zimmerman received his medical degree from George Washington University. His residency training at Walter Reed Army Hospital was interrupted by the Korean War, during which he commanded a mobile medical laboratory. Returning after the war to the Armed Forces Institute of Pathology (AFIP), he pursued his first love, ophthalmic pathology, chairing the department for 29 years. Rather than directly treating patients, ophthalmic pathologists study tissues and cells of the eye to improve the scientific understanding of eye disease. At AFIP, Zimmerman established training programs and encouraged young ophthalmologists to go into this important research field. JPW

Zinn, Johann Gottftied (1727-1759) German anatomist, born in Ansbach, Germany. Zinn studied under Albrecht von Haller at the University of Göttingen, where he received his M.D. in 1749. After several years of botanical and anatomical studies in Berlin, he became professor of medicine at Göttingen and director of the city's botanical gardens (1753-1759). Zinn made important discoveries concerning the iris, ciliary body, lens, and ophthalmic nerves; for him are named the annulus of Zinn and the zonule of Zinn (the latter not discovered, but first fully described, by him). He authored the *first* complete anatomy of the eye: *Descriptio anatomica oculi humani iconibus illustrata* Göttingen 1755; *Observationes quaedam botanicae et anatomicae de vasis subtilioribus oculi et cochlea auris internae ... illustern Paulum Gottlieb Werlhof* Göttingen 1753. Albert

Zuo, Ke-Ming (1900-) Chinese ophthalmologist, former Professor, Chief Physician and the Director of the Department of Ophthalmology of Beijing Hospital. He graduated from Liaoning Medical College in 1926. Subsequently, he worked as resident Ophthalmologist and assistant doctor in Shenyang Ophthalmology Hospital (1926-1931), Chief of the Department of Ophthalmology in Shenyang Ophthalmology Hospital (1930), Chief physician and the Director of the Department of Ophthalmology in Tongren Hospital of Beijing (1930-1942) and Professor, Chief physician and the Director of the Department of Ophthalmology of Beijing Hospital (1949-1984). In 1950-1984, he served as a member of the Committee of the Chinese Ophthalmological Society and of the Editorial Board of the *Chinese Journal of Ophthalmology* for 39 years (1949-1989) and of the *Chinese Medical Journal*. He has been appointed a member of the Central Committee of Chinese Minjin Party for 12 years. He has been engaged in clinical research in Ophthalmology and clinical service for 60 years, and published many original papers in the *Chinese Journal of Ophthalmology*: some examples are "*Statistics and analysis of gonococcal conjunctivitis in North area of China* (1938)", "*Ocular Shingles* (1952)", "*Early diagnosis of glaucoma in Chinese elderly, an analytical study of optical conditions of the elderly* (1987)". He participated in compilation of "the *System of Ophthalmology*", "*Chinese Medical Encyclopaedia*" and "*Geriatrics*" and many others.(SM)

Romano, Paul Edward (1934-)) American Pediatric Ophthalmologist and Strabologist, born In New York, New York. Romano received his A.B. from Cornell University, Ithaca, New York, New York (1955), his M.D. from Cornell University Medical College. New York, New York. (now Weill Medical Center of Cornell University) (1959). After a surgical internship and a year of surgical residency at Albany, New York, Medical Centre Hospital (1960-61) he served three years in Würzburg, Germany as a general medical officer with the U.S. Army (1961-1964). He then completed an ophthalmology residency at Georgetown University Medical College, Washington D.C. (1967) receiving an M.S. (with Distinction) in Ophthalmology. He served an Ophthalmic Pathology Fellowship at the Armed Forces Institute of Pathology, Washington D.C. (1967) and then a two year Strabismus and Ocular Motility Fellowship under Gunter K. von Noorden at the Wilmer Institute of the Johns Hopkins Hospital, Baltimore Maryland (1967-1969). After marrying an orthoptist, Judith Ann Robinson, whom he met during his fellowship, they moved to Chicago and took over the eye service at the Children´s Memorial Hospital of the Northwestern University Medical School. After a highly productive decade, in 1980 he was strenuously recruited to Gainesville, Florida to assume the title of full Professor of Ophthalmology and Pediatrics and responsibility for the pediatric ophthalmology and strabismus service at the University of Florida until 1989, when they took what turned out to be an early retirement to devote themselves to their journal. He was a charter member of the American Association for Pediatric Ophthalmology and Strabismus (1974). His 400 published papers (as of 2002) have been published widely in ophthalmic and other books and journals since 1966. His many contributions to medical science include first

describing: the invalidity of Knapp´s Law in clinical axial ametropias; aqueous LDH isoenzyme test for retinoblastoma diagnosis; technique of intraoperative adjustment of eye muscle surgery for increased accuracy of correction; iris lesions in tuberous sclerosis; pneumatosis oculi; method of photogrammetric diagnosis of optic nerve hypoplasia; method of measuring strabismus of far gaze using light reflections; the central form of ocular sighting dominance. He first defined vision requirements for lip-reading. He confirmed and popularized the use of systemic steroids to eliminate rebleeding in traumatic hyphema. He designed the right angle dual caliper (with Campos) for use in strabismus surgery, the variable aniseikonometer and the Active Feedback Distance Ocular Fixation Target. As an avocation for over 30 years from 1956 to 1988 he also owned, built (including engines), maintained and successfully drove and raced a series of sports cars and sedans in amateur and professional sprint and endurance races, winning a number of amateur championships. He also won the Grand Prix of Panama in 1985. He is the founder of the POMMM (Pediatric Ophthalmologists for the Medical Management of Myopia) and SASS.O5 (Scientists for the Abrogation of "Statistical Significance=P .05"). To-day he continues as the Founding Editor and Publisher, since 1985, of the Indexed journal Binocular Vision & Strabismus Quarterly. His wife Judy continues as General Manager. After retiring from private practice in 1989, he became an investor and as a result was able to become a modest ophthalmologic philanthropist, making donations to the Wilmer Institute of Johns Hopkins Hospital to fund fellowship work in the Krieger Children´s Eye Center and to the Library which was renamed the Friedenwald-Romano Library; to Baylor University in Houston, Texas to honor his mentor, Dr.Gunter K. von Noorden; and to open space preservation efforts in the Rocky Mountains where they presently live. Address: 740 Piney Acres Circle, Box 3727, Dillon, CO 80435-3727, USA. e-mail: perxbvq@colorado.net