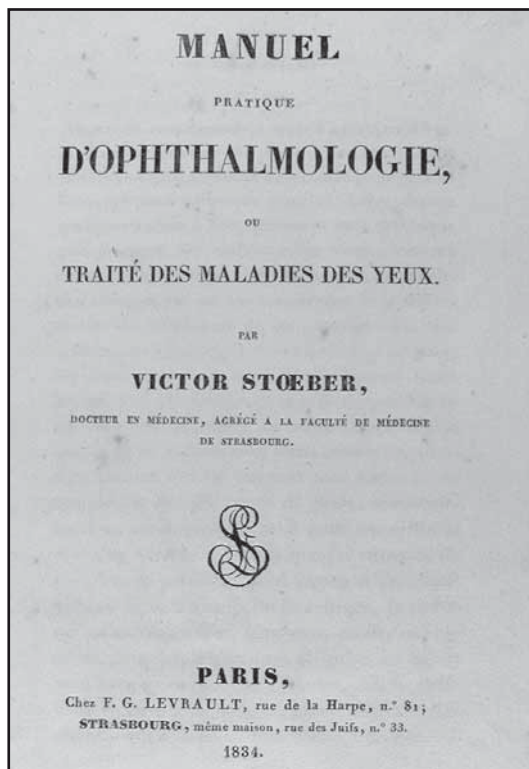


of Helsinki, Finland 1974, and was awarded the Doctorate of Science in 1976. He spent his postdoctoral fellowships with Anders Bill at Uppsala University and Marvin Sears at Yale University. He was an assistant Professor of Ophthalmology and Visual Science at Yale University 1981-1982. He worked at Pharmacia (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. Ophthalmol. 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 Carl Hess and the University Eye Clinic in Bern with Professor Siegrist. 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, Société Française 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



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'Ophthalmologie ou Traité des Maladies des Yeux*" (Paris and Strasbourg, 1830; 2<sup>nd</sup> 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 à Monoyer 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 7017 ; *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'ophthalmologie* , 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 he 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, 2<sup>nd</sup>.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 *Uvêitis 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 70<sup>th</sup> 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 Augenheilkunde 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 Augenarztes ... 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 received 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 actually 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 (1869-1941)** Japanese ophthalmologist, one of the founders of the Japanese Ophthalmological Society, Professor of Tokyo Medical College, son of SUDA Tetsuzo. He graduated from the Second High School, School of Medicine (presently Tohoku University), studied Ophthalmology at Tokyo University under Prof. KOMOTO Jujiro. He further studied during 1892-1896 at Heidelberg University under Prof. Th. Leber. 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

**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. Ophthalmol. 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)



Sadao Suganuma

**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

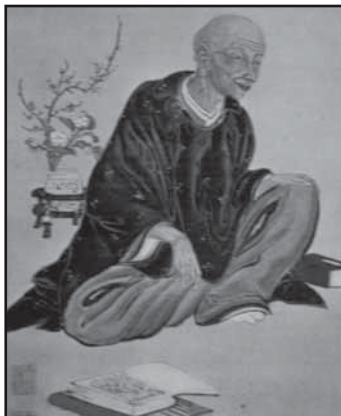
By

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Genpaku Sugita

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 Harry Gradle, 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

**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 Jacob àPlenck 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 (by àOKUZAWA 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. NAKAJIMA 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. Ophthalmol. 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. KONO and K. ISHII 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 Secretary. 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 erupting, he was engaged as military assistant physician. Sulzer published papers mainly on physiology and physiological optics and contributed important articles in the *Encyclopedie Francaise d'Ophthalmologie* 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 iridocyclitis. 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. NAKAJIMA. 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. ITO 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 Recti 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 Szily. 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 Axenfeld, 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. Ophthalm. Intern.*4:59-96; *Klin.Mbl.Augenheilk.*162:107-110; ditto171:816-831; ditto.192:252-255.JPW

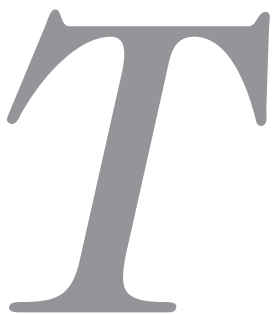
**Szokalski, Victor Felix (1811-1891)**. Polish ophthalmologist. Born in Warsaw, he studied at first in his native city. After a period of active service in the army, he resumed his studies at Giessen where he received his degree in 1832. For the next two years he studied ophthalmology at Heidelberg 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 unioculaire 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 ophthalmologist 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.

**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 Electromyography (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. FUJIYAMA 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

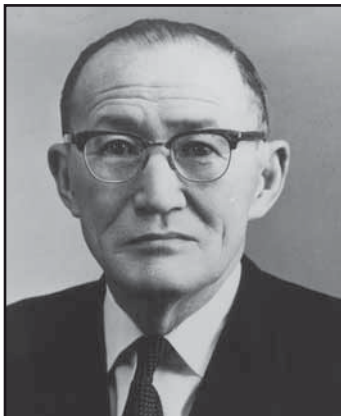
**Takahashi Koshun (1854-1938)** Japanese ophthalmologist, inventor of the *first* Japanese glass prosthesis. Born as the son of an ophthalmologist, he studied Ophthalmology at Himeji Hospital under J. C. Berry, an American Missionary, during 1873-1875. He developed Japan's first glass-ceramic prosthesis 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. Hirschberg 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. HAYASHI 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. He 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. KAGOSHIMA 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. SCRIBA 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. Ohnishi and Dr. S. Kagoshima discussed their recognition of similar cases. Since then, reports of similar cases were added and NAKAJIMA 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. TOBARI 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 : optake@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. KANDORI 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. TASAKI 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, Seiryō 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 17<sup>th</sup> 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. òHNISHI 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 Rockefeller 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 corneal 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. OHASHI 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-Chiryu 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 employees, 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 cytopathological 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 pigment 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. MANABE 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 Graefes 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 1962-1968, 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 l'Opération 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. MOTOKAWA 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 cataracte, 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 the 17th 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. INOMATA 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 Cuproinic 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. Ophthalmiotor 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 Dumfriesshire, 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, A.J.: *The endothelial role in thrombosis induced retinal vasculitis in the living extracorporeal eye*. Invest. Ophthalmol. 10: 481, 1971. " and "Tazawa, Y. & Seaman, A.J.: *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 herniotomist, 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 "*Ottalmoscopia 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 19<sup>th</sup> 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 Incomplète 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, he 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 Strohmeier, 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 l'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 l'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)

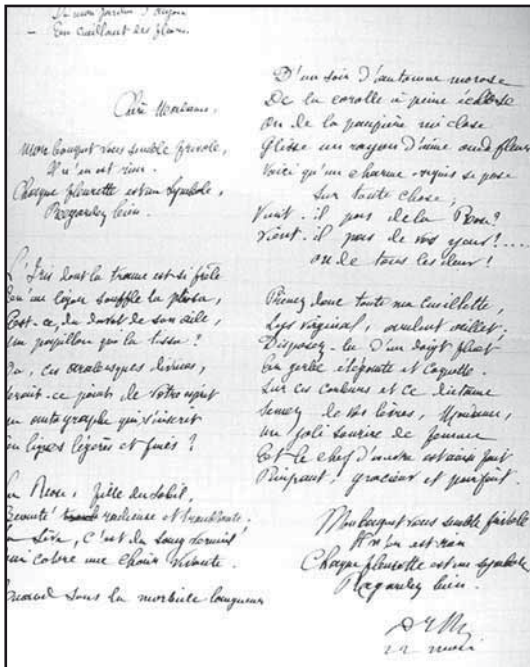
**Terasaki, Hiroko (1954- )** Japanese ophthalmologist, Professor of the Department of Protective Care for Sensory Disorders Nagoya University, Postgraduate School of Medicine. She graduated from Kanazawa University in 1980, studied Ophthalmology at Nagoya University under Prof. ICHIKAWA Hiroshi, and 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 Ophthalmological 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)

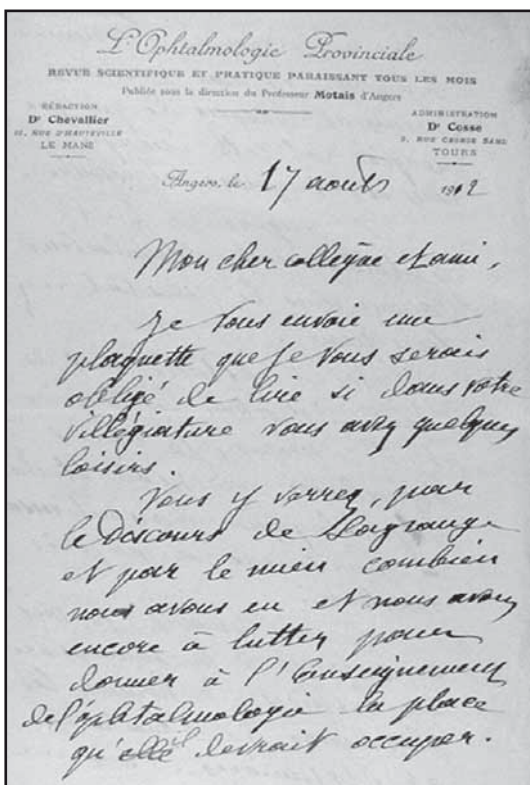
**Terrien, Félix (1872-1940)** French ophthalmologist born in Amiens. Initially, Terrien studied law and became a lawyer. He suddenly abandoned this profession to study medicine, becoming intern at the Paris faculté in 1896 and receiving there his M.D. in 1898. He was named ophthalmologist to the Hopitaux 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 (2<sup>nd</sup> 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 mentioned 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 eminent French ophthalmologist. Terson père was born in Puylaurens, Tarn, France. The name Terson, in his birth place goes back to the 16<sup>th</sup> century, and many Tersons were physicians and pharmacists. Terson studied médecine 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 Montpellier, 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



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



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



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 medical 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 Ahti Tarkkanen. 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; Dursun D, 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 von Textor, 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 Krystalllinse." He afterward studied in Munich, Vienna, Göttingen, 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 Thränendrüse zur Heilung des Thränenträufelns*. (Journ. der Chir. und Augenh., N. Folge, 1846, VI) 2. *Hornhaut-Erweichung nach Star-Operation*. (Ann. d'Ocul., Vol. XVI, 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 Textor, and himself a celebrated surgeon of some ophthalmological importance. Born at Marktflücken,

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*". (2<sup>nd</sup> 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 subspecialty, 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 Krüchmann'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;

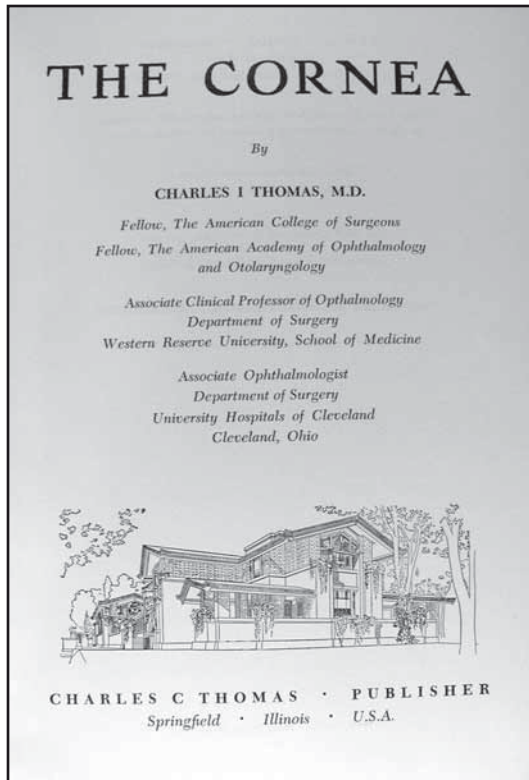
Atlas der Augenkrankheiten Sammlung typischer Krankheitsbilder mit kurzen diagnostischen und therapeutischen Hinweisen Leipzig 1937, 6th edition 1963; American edition, based on the 6th German edition, NY 1963; Therapie der Augenkrankheiten mit diagnostischen Hinweisen. Fibel für Praxis und Klinik. Ergänzt 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 Ophthalmologie: Lecons données à l'Université de Bruxelles etc. Bruxelles 1865-1868. A certain Thiriard (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)



**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 role 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-tryed 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 Westminster 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 he 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 Livingstone Thompson, 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 Minnesota 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 Minnesota in 1953;his M.S. at University of Iowa, and his MD 1961 University of Minnesota. His 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: *Medikamentöse Pupillendiagnostik. Die Normale und die gestörte Pupillenbewegung*. Symposium 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, Pillely SFJ, Thompson HS: *Pupillary "dilatation lag" in Horner's syndrome*. Br J Ophthalmol, 59:731-735, 1975, Thompson HS, Pillely 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 Ophthalmol, 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, Pillely SFJ, Thompson HS: *The analysis of anisocoria. The use of photography in the clinical evaluation of unequal pupils*. Can J Ophthalmol, 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 Ophthalmol 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 Ophthalmol, 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 he 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. Thompson. 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 Hartridge 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, Thomson'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 Landolt, 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 College. Bibliography to be found in *Transactions of the Coll. Of Physicians of Phila*, 1909, XXXI and in Kelly Cyclopedia 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 Ho!, 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, Ernest Thomson 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 *The Ophthalmoscope* 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 (2<sup>nd</sup> 1898, 3<sup>rd</sup> 1899, 4<sup>th</sup> 1901, 5<sup>th</sup> 1907, 6<sup>th</sup> 1911; *The Ophthalmoscope and how to use it* London 1906; *Prisms, their Use and Equivalent*s 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 he 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 Nitric 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 of 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. OHTSUKA 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.osaka-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. Quant. 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 Société 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** ( 19<sup>th</sup> 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** (19<sup>th</sup> 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 ophthalmology at the Algiers faculty of medicine in Algeria. Toulant was a pupil, at the begin of the 20<sup>th</sup> 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 taught, not only his Algerian pupils, but also foreign ophthalmologists. His 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 Justus à Radius "*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 ophthalmologist. 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 (Hôpital 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. Cogan at Harvard Medical School; After his return to Belgium he became adjunct head at the Department of ophthalmology of the Brussels University (Prof P. à Danis). 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. à Kuwabara), 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), *Refsun'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 Ophthalmology*. (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.àUthhoff) 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 1941, 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 Astley Cooper, 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, 1813.) 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 Tynau, in 1777 at Ofen, and in 1784 at Pest. He died at Pest May 12, 1791. His chief ophthalmologic writings were "*Historia Ophthalmiae 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 Ophthalm.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'ophtalmologie* Paris 1891; *Traitement des Maladies des Yeux*

Paris 1895 (was translated into Russian) ; *Ophthalmologie: hygiène de l'œil* Paris 1892. He also edited with Truc a *Rapport* for the *Société Française d'Ophthalmologie: 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 Larmolements incoercibles chez les Granuleux*, Paris 1889 ; with Valude : *Nouveaux Elements d'Ophthalmologie*, Paris 1896 (2<sup>nd</sup> ed. in 1908) ; with A. Jalabert and P. Chavernac he edited the second edition of *Catalogue Général des Thèses Françaises d'Ophthalmologie* Montpellier 1904 ; with P. Chavernac : *Hygiène Oculaire et Inspection Oculistique des Écoles*, 3rd ed. 1911 ; with P. Pansier *Contributions à l'Histoire de l'Ophthalmologie Française*, Paris 1907. Truc received on the occasion of his scientific jubilee, May 16<sup>th</sup> 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 Ophthalmologica 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. Invest. Ophthalmol. Vis. Sci. 39: 631, 1998" and "Studies of prevalence of blindness in the Asia-Pacific Region and the worldwide initiative in ophthalmic 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. UEMURA 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 Brasileira 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 Professors YAMAMOTO Seiichi and ASAYAMA 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. Reese. 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. Phillips 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 since 1988, 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 in 1997 (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. MISHIMA 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. Kenyon, 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. ISHIIHARA 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 15<sup>th</sup>, 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 Ophthalmologica 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 für 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 ... autorisirte Deutsche Ausgabe* Braunschweig: Friedrich Vieweg und Sohn, 1895 (2nd 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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**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]



Yukio Uchida

**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. “*Differential 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 Ryukyuu 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<sup>-</sup>dependent p-nitrophenyl- p-hosphatase 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-ultrastructure 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. Niemyer (*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 since 1987. 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 1879 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 Strabismus 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 "*Indocyanine 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 independence 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)



**Vacher, Louis (1852-1929)** French ophthalmologist and otologist, founder of a private eye clinic in Orléans. Vacher was born in Alleverd, Isère, France. He undertook his medical studies 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 World 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 Française d'Ophthalmologie 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'ophtalmologie 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 Usa 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. Impreso en Sevilla, por Diego Perez. Año 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 staphylococccic 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'ophthalmologie, 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'ophthalmologie 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