L

La Chambre, Marin Cureau de (1594-1669) French physician. La Chambre was born at Le Mans, France, and became physician to Louis XIII and advisor to Louis XIV, who valued him for his supposed ability to assess the character and abilities of a person on the basis of physiognomy alone. La Chambre, one of the first members of the Académie Francaise (1635) and of the Académie de Sciences (1666), wrote on a wide variety of medical and non-medical topics, especially psychology; his best-known work is Les caractères des passions (1658-1663). He wrote also : *La lumière* Paris 1657 and *Nouvelles observations et conjectures sur l'iris*. Paris 1662. JPW

La Charrière, Joseph de (? -1690) French surgeon of Annecy, France. He practiced surgery in his native city after some years of training in Paris. His treatises on anatomy and surgery are compilations containing little that is original; the surgical work, however, enjoyed considerable popularity, going through many editions and translations.He wrote: *Nouvelles opérations de chirurgie* Paris: D. Horthemels, 1692 and *Anatomie nouvelle de la tête de l'homme, et de ses dépendances* Paris 1703. JPW

La Harpe, Jean Jacques Charles de (1802-1877) French physician who wrote *De tubuli metallici immissione in cura obstructionis ductus nasalis*. Göttingen 1827. JPW

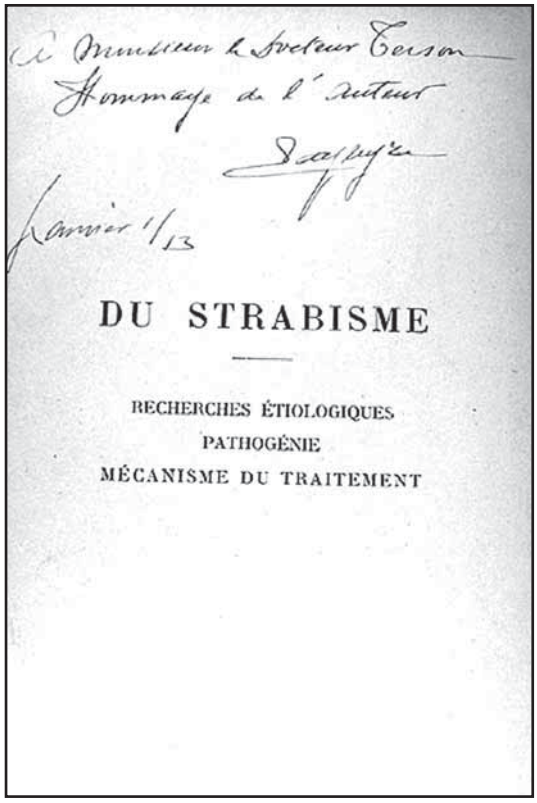
La Hire, Gabriel Philippe (1677-1719) French physician, son of Philippe de La Hire. Little is known about him. In ophthalmology he wrote *Remarques sur la cataracte et la glaucoma* in : *Mémoires de l'Académie royale des sciences pour l'année 1707*, 553-555, Paris 1709. JPW

La Hire, Philippe de (1640-1718) French mathematician, physicist, and astronomer of Paris, whose research and writings encompassed a diversity of theoretical and applied scientific subjects. La Hire was born in Paris. His father, Laurent de la Hire, a famous painter and engraver taught him the principles of his art, but Philippe had already a taste for geometry that had all the time increased during a journey to Italy that he undertook in 1660, because of a failing health. His father was at that time already dead for three years. On his return to France he continued his geometry studies and was soon discovered by Desargues who invited him to finish the second part of his treatise *Traité de la Coupe des Pierres*. La Hire was successively hired by Colbert and Louvois for geodesical works and level surveys. He also worked together with Picard on the map of France and finally executed the high levelling works necessary to bring water of the Eure (a small river) to Versailles. The foundations of La Hire´s reputation as a geometrician was laid with the publication of his *Nouvelle Méthode de Géométrie pour les sections de superficie coniques et cylindriques qui ont pour base des cercles ou des paraboles, des ellipses ou des hyperboles* Paris, 1673. La Hire became a member, in 1678, of the Academie Royale des Sciences, of which publication, the *Recueil* are indebted to him for more than 80 "*Mémoires*" (contributions). He published 1685 in the "Journal des Scavans" (vol.23 :196-200 & 219-224) *Dissertation sur la conformation de l'œil* and in 1694 (in: *Mémoires de mathématique et de physique*) his treatise *Traité des différens Accidens de la Vuë*", reprinted in 1730. La Hire reproduced Jean Méry´s experiment of the immersion of a cat and gives, in *Mémoires à L'Académie des Sciences* (1709), a logical explanation of the neutralization of the corneal optic and about vision of the retina. He published in 1685 his *Sectiones Conicae in norem libres distributae* which was acclaimed in all western European countries. But La Hire was also much interested in the analysis of Descartes theories proven by his three treatise that he published in 1679: 1) *Nouveaux éléments des sections coniques* 2) *Les Lieux Géométriques* 3) *La Construction ou Effection des équations*. Amongst other works he authored we find also: *La Gnomonique ou l'art de tracer des cadrans ou horloges solaires sur toutes sortes de surfaces par différentes pratiques, avec les démonstrations géométriques de toutes les opérations* (1682), *Des Cycloîdes* (1676), *École des Arpenteurs* (1689), *Tabulae Astronomicae* (1702), *Description et explication des Globes qui sont placés dans le pavillon du château de Marly* (1704). He was professor of mathematics at the Collège Royal de France and at the Academy of architecture. Other papers (Mémoires) published by La Hire are: *Explication de quelques faits d'optique et de la manière dont se fait la vision*, (*Registre des procès-verbaux de l'Académie royale des sciences*, 23, 103 r°-113 r°), Paris, Archives de l'Académie des sciences, 1709 ; *Explication de quelques faits d'optique et de la manière dont se fait la*

vision, in *Mémoires de l'Académie royale des sciences pour l'année 1709*, 95-106, Paris, Jean Boudot, 1711. La Hire was twice married and had from these mariages eight children. Two of those (of different mothers) became academicians: Gabriel-Philippe (1677-1719) and Jean-Nicolas (1685-1727). See also: *Œuvres diverses de M. de La Hire*, Volume IX of the *Mémoires de l'Académie royale des sciences depuis 1666 jusqu'à 1699*, Paris, Compagnie des Libraires, 1730. File *«Philippe de La Hire»*, Paris, at the Archives of the l'Académie des sciences.Extracted from Robert Heitz *History of Contact Lenses*, volume 1 (chapter IV), in Hirschberg *History of Ophthalmology*, Vol.XI,3a. Ostend Wayenborgh 2002. JPW

Laaser, Guillaume-Constantin. A French quack of the 18th century, who practised chiefly at Marseilles, Avignon, Aix, and Montpellier. He sold a "*Teinture Anisole*." "*….which cures all sorts of diseases in the eye except the blind [sic] ; it is worth 6 francs an ounce.* " American Encyclopedia of Ophthalmology, Vol.9, p. 6886

Laey, Jean-Jacques *see* **De Laey**


Hommage de l'Auteur
Janvier 1/13
DU STRABISME
RECHERCHES ÉTIOLOGIQUES
PATHOGÉNIE
MÉCANISME DU TRAITEMENT

Lagleyze, Pedro (also Pierre) (?-1916). South American ophthalmologist from Buenos Aires, Professor of clinical ophthalmology in the faculty of medicine of Buenos Aires and President of the Academy of Medicine. Lagleyze was the founder of the ophthalmic society of Buenos Aires. Lagleyze wrote a 409-pages manual on strabismus: *Du Strabisme*, Paris 1913. JPW

Lagrange, Felix (1857-1928) French ophthalmologist, born in Soumensac, a little village in the Gascogne. Being an exceptional pupil at the grammar school, his parents, of modest status, made a financial sacrifice by sending Felix to the college, and later to the Bordeaux University. At the age of only 26 years, he was already a lecturer in Surgery. He was sent by the war minister to Tonkin. Back in France, he found his place occupied by another surgeon, and maybe it was that, that directed him to ophthalmology. As an ophthalmologist, his first interests focused on strabismus and refraction anomalies, which he studied at the children´s hospital. At the same time , he undertook important research on tumors of the eye which he published regularly in ophthalmic journals. After fifteen years of studies on this topic, he published the results in a book that became famous in France: *Traité des Tumeurs de l´Oeil, de l´Orbite et des Annexes*, Paris 1893. He also made studies on the cilliary body and glaucoma. Lagrange was a prolific writer. He authored : *Valeur Therapeutique de l´élongation des nerfs* Paris 1885; *Anatomie Pathologique et pathogénie du chalazion*, Paris 1889 ; *Lecons sur les Anomalies de la Refraction et de l´Examen du Sens Chromatique et du Champs Visuel*, Paris 1890 ; *Traité pratique des Anomalies de la Vision*, Paris 1892 ; *Études sur les tumeurs de I'oeil, de I'orbite et des annexes*. Paris 1893; *Precis d´Ophtalmologie*, Paris 1897 (3rd ed.1907) ; *Traité des Tumeurs de l´Œil*, 2 vols., Paris 1901-1904 ; *Rapport sur le Diagnostic et le Traitement des Tumeurs de l´Orbite*, Paris 1903 ; *Les Fractures des de l´Orbite par des Projectiles de Guerre*, Paris 1917 ; *Atlas d´Ophtalmoscopie de Guerre*, Paris 1918 (French and English text !); *Précis d´Ophtalmologie* of which the 4th ed. appeared 1921; *Glaucome et Hypotonie*, Paris 1922 ; *Traitement du Glaucome Infantile*, Paris 1925 and, finally, he edited, with Valude, the 9-volumes-set of the *Encyclopédie Francaise d´Ophtalmologie*. A selection of his main papers was published by his pupils at the occasion of his 70th birthday: "*Félix Lagrange et ses élèves*, Paris 1927. JPW

Lahav, Moshe (1939-1998) American ophthalmologist of Israeli birth. After he was awarded an MD degree by the Hebrew University and Hadassah Medical Center, Jerusalem, Israel, in 1969, Lahav extended his postgraduate education in the United States, choosing a career in ophthalmology. He applied to Yale University, New Haven, Conn, for a residency position. During his residency he participated in the rotation that the program at Yale University had established in Des Chapelles, Haiti, at what was then

Gwen and Larry Mellon's Albert Schweitzer Hospital, named after the dedicated world leader in Lambaréné, Gabon. After his 3-month rotation in Haiti, the administration was reluctant to let Moshe leave, so strong had been the ties he had created, so loving his compassionate manner under trying circumstances. After completing his residency at Yale University, Moshe Lahav received training in retinal and ophthalmic pathology at the Armed Forces Institute of Pathology, Bethesda, Md, then resumed a faculty position at Yale University for 2 years before returning to the Hadassah Medical Center for 5 years. Here he helped in the development of retinal surgery and gave leadership to the experimental and diagnostic eye pathology laboratory. He subsequently returned to the United States and rose to the rank of professor of ophthalmology at both Tufts University, Medford, Mass, and Boston University, Boston, Mass, where he became director of the Boston Veterans Administration service. Lahav became a member in the American Ophthalmological Society and was also involved in other clinical and research organizations. Arch Ophthal 117,142,1999

Laibson, Peter Robert (1933-) American Ophthalmologist, Professor of Ophthalmology, Thomas Jefferson University School of Medicine, and Co-Director of Cornea Service, Wills Eye Hospital, Medical Director, Lions Eye Bank of Delaware Valley. Graduated from the University of Vermont 1955 with a B.A. cum laude and the State University of New York Downstate Medical Center 1959 with M.D. degree. Ophthalmology training was at the Wills Eye Hospital as a resident (1961 – 1964) and then an N.I.H. Fellowship (1964 – 1965) as a research fellow and a corneal fellow at the corneal research unit, Retina Foundation (with Claes→Dohlman and Saiichi→Mishima) and at Massachusetts Eye & Ear Infirmary (1964 – 1965). He has served in the following positions: Research Associate in microbiology Boston University, (1965–1969), Associate Professor of Ophthalmology Temple University (1966–1971), Associate Professor of Ophthalmology, Thomas Jefferson University (1971–1979) and Professor of Ophthalmology Thomas Jefferson University (1979 to date), Director of the Cornea Service, Wills Eye Hospital (1973 – 1999), currently Co-Director of the Cornea Service, Director, Lions Eye Bank of Delaware Valley (1973 to date), President, Medical Staff, Wills Eye Hospital (1982 – 1984), President, Castroviejo Society, President, International Castroviejo Society (1985 – 1987), Member, Editorial Board, *Archives of Ophthalmology* (1974 – 1984), Member, Editorial Board *Cornea*, *Video Journal of Ophthalmology*, Editor, *Yearbook of Ophthalmology* (1988–1993), Member Board of Councillors, American Academy of Ophthalmology (1986–1992), Member Program Committee American Academy of Ophthalmology (1989-1994), Chairman, Committee on Guidelines for Corneal Fellowship Training, American Board of Ophthalmology (1998-2000). He has been a Member of the following professional and honorary societies: Phi Beta Kappa, Sigma Xi, American Academy of Ophthalmology, American Ophthalmological Society, Pennsylvania Academy of Ophthalmology, ARVO, Castroviejo Society, American Medical Association, Corresponding member of Colombian, Brazilian and Chilean Ophthalmological Societies. He presented 21 named lectures, including The Castroviejo Lecture at the American Academy of Ophthalmology. He is a recipient of Life achievement honor award American Academy of Ophthalmology; October 1999. He is co-author of over 250 articles in refereed journals. As the Director of Corneal Fellowship Program at Wills Eye Hospital, he has trained 115 fellows for a one year training programs at Wills Eye Hospital: 25 of these fellows are overseas and 90 in the United States. Samples of publications are "*Blood viscosity, serum hexosamine and diabetic retinopathy*; Diabetes 10: 393-395, 1961" (with David Cogan and Merola) and "*An evaluation of Double Blind IDU therapy in 100 cases of herpetic keratitis*. Trans. Am. Acad. Ophthalmol. Otolarygol;. Jan-Feb 1964" (with Irving Leopold), "*Reactivation of Herpetic Keratitis in rabbits. Repeated reactivations in the same host.* Arch. Ophthalmol. 1977: 244-248, 1967" (with Sidney Kibrick), "*Corneal Infiltrates in EKC*, Arch. Ophthalmol. 84:36-40, 1970", "*Dystrophic changes in the anterior cornea*. Arch. Ophthalmol. 85: 378-382, 1972" (with JonathanTrobe), "*Disorders of the corneal epithelium: A clinical pathological study of dot geographic and fingerprint patterns*. Arch. Ophthalmol. 92: 475-482, 1975" (M. Rodrigues, B. Fine, and L. Zimmerman). Dr. Laibson and his associates, as well as fellows, published on all of the currently available antiviral medications in the treatment of herpes simplex virus infection. He was part of the

prospective evaluation of radial keratotomy which was conducted by his ex-fellow, George→Waring, and also part of the Herpetic Eye Disease Study, which detailed the ineffectiveness of Acyclovir for stromal keratitis and prophylactic use of oral Acyclovir being effective to prevent recurrent herpes. Dr. Laibson has been interested in ocular viral disease, as well as corneal dystrophies, and corneal transplantation. He has been active in the American Academy of Ophthalmology and in the Corneal Fellowship Program, which the American Board of Ophthalmology is in the process of formalizing. Dr. Laibson has worked with the American FDA and was a member of the original Medical Advisory Board of the FDA when it was first established in 1971 to investigate therapeutic and cosmetic soft contact lenses. His associates, Elisabeth J. Cohen and Christopher J. Rapuano, work with him at Wills Eye Hospital and their Cornea Service has been host to numerous visitors from around the world, in addition to their corneal fellows. (Cornea Service, Wills Eye Hospital, 900 Walnut street, Philadelphia, PA 19107-5598, U.S.A.; Phone: +1-215-928-3180, Fax:+1-215-928-3854;
e-mail: plaibson@SHRSYS.HSLC.ORG) (SM)

Lallemand, Claude-Francois (1790-1853). French surgeon and genito-urinary specialist, of some importance in ophthalmology. Born at Metz, he received his medical degree at Paris in 1819, and at once was appointed to the chair of surgery at Montpellier. His most important writing, and that which rendered him famous was *"Observations sur les Maladies des Organes Génito-Urinaires" (2* parts, Paris and Montpellier, 1825-27) of which there were numerous editions and translations. He was a distinguished operator, and became, in course of time, by far the most celebrated surgeon in southern France. In the above-mentioned work he discussed the ocular disturbances dependent on undue seminal losses and he also wrote an article on the formation of the artificial pupil. In 1845 he removed to Paris, and there remained in philosophic retirement until his death. American Encyclopedia of Ophthalmology, Vol.9, p. 6993.

Lam, Shun-chiu Dennis (1959-) Chinese ophthalmologist, Professor and Chairman, Department of Ophthalmology and Visual Sciences, The Chinese University of Hong Kong (CUHK). He received M.B. and B.S. (1984) and started basic ophthalmic training in Hong Kong and subsequently extended his studies in the U.K.: Diplomate in Ophthalmology (Ireland, 1987; Glasgow, 1988) and Fellow of Royal College of Surgeons (Edinburgh, 1988) and Fellow of Royal College of Ophthalmologists (U.K., 1990). On home coming, he was elected to Fellow of Hong Kong Academy of Medicine (Ophthalmology, 1993) and Fellow of College of Ophthalmologists of Hong Kong (1994). Since late 1998, he has been in the present position as above, and conjointly he serves as Honorary Director of the Joint International Eye Center of CUHK and Shantou Medical College of the People's Republic of China, PRC (1998-), Honorary Chief Service of the Hong Kong Eye Hospital (1999-), Red Cross Hospital of Yunnan Province, PRC (1996-), and Guang Zhou First Municipal People's Hospital (1996). He also serves as Hon. Advisor of the Lions Clubs International "*Sight First China Action*" Project (1999-), Executive Member and an "*Ambassador of Hope*" of the Lifeline Express-Train Hospital for Eye Surgery (1997-), Visiting Professor to Shantou University Medical College (1998-), Shanghai Medical University (1999-) and The Tamil Nadu Dr. M.G.R. Medical University, India (1999-). He is a member of many National and International professional societies, e.g. President of the Asia-Pacific Society of Eye Genetics (2001-), Council Member of the Asia-Pacific Academy of Ophthalmology (APAO, 1999-), Board Officer of the Asia-Pacific Intraocular Implant Association (1998-), Vice-President of the Hong Kong Society of Transplantation (1999-), Medical Advisor of the Lions Hong Kong Eye Bank (2000-), Honorary Secretary of Hong Kong Ophthalmological Society (1989-1995) and Member of Organizing Committee of the XV APAO Congress (1995). He is the founding Editor-in-Chief (1995-1999) and an Advisor (1999-) of *Hong Kong Journal of Ophthalmology* and an editorial board member to *Asian Journal of Ophthalmology* (1998-) and serves as a reviewer to *Eye* (UK), *J. Cat. Refr. Surg*. (USA) and *Ophthalmology* (USA). His main interest in Ophthalmology is anterior segment diseases, and some examples of his many publications are "*Immediate argon laser peripheral iridoplasty as treatment for acute attack of primary angle-closure glaucoma: a preliminary study*. Ophthalmology 1998; 105:2231-6" and "*Management of severe flap*

wrinkling or dislodgment after laser in situ keratomileusis. J. Cataract Refract. Surg. 1999; 25:1441-7" and "*Truncation mutations in the TIGR gene in individuals with and without primary open angle glaucoma*. Invest Ophthalmol Vis Sci. 2000; 41:1386-91". For his outstanding contributions, he received many Awards, that embrace Global Leaders for Tomorrow (2000), Achievement Award of the American Academy of Ophthalmology (2000), Ten Outstanding Young Persons of the World (1995), Ten Outstanding Young Persons of Hong Kong (1994), the Most courteous Doctor of the Prince Wales Hospital (1993 & 1994), Youth Ambassador of Hong Kong (1982 & 1985) and many others. (Dennis S.C. Lam, FRCS, FRCOphth. Chairman, Department of Ophthalmology and Visual Sciences, The Chinese University of Hong Kong, Hong Kong Eye Hospital, 147K Argyle Street, Kowloon, Hong Kong. Tel: (852) 2762 3157, Fax: (852) 2194 1369, email: dennislam@cuhk.edu.hk)

Lambert, Antoine. A 17th century French surgeon of Marseilles, who devoted considerable attention to ophthalmology. Born at Luc, Provence, he was a self-made man, his only instructor having been "*a master surgeon at Marseilles* " who taught him to shave, to bleed and to cup. Settling at Marseilles, he was esteemed especially as an operator on the eye. In his "*Les Commentaires et les Oeuvres Chirurgicales d'Antoine Lambert, natif du Luc, Maitre Chirurgien à Marseille, Divisé en Cinq Parties*" (Marseilles, 1662; 2d ed., Lyon, 1671; 3d ed., Marseilles, 1677) a chapter is devoted to his treatment of fistula lachrymalis, as follows: "Having opened the fistula with the scissors and hollow sound, and having thoroughly explored with a slender probe, which is a trifle curved, the dilated orifice and the open sinus both above and below, we take a little plug, proportioned to the length and width of the fistula, which we fill from its point to its middle with the ointment composed of two parts of the white of Rhazes and one of sublimate made into a powder. One fastens to the plug a thread, of which a certain part should be allowed to hang outside the fistula, for the purpose of enabling the plug to be withdrawn more easily, after its action is finished. The plug having been passed to the bottom of the sinus, is set chiefly under and against the glans [caruncle] between the eye and the orbit, where callous flesh is gathered together." The plug is left in place from 8 to 12 hours; and if, after the fall of the eschar (for the ointment in question was very escharotic) the process could be resorted to as often as might be necessary. The treatment was so painful that the lids swelled enormously (they could not be opened for two or three days), and "vomiting and cardialgias" were also produced. If, after the eschar had been removed, the bone was discovered to be carious, then it was touched a number of times with aquafortis or the spirit of vitriol or of sulphur, which was placed in the bottom of the sinus, by means of a pledget of cotton fastened to the end of a sound by twisting. If this did not suffice, Lambert employed what he called *siringation i*.e., *lavage* with a solution composed of 2 1/2 oz. of alcohol and an equal quantity of *eau de chaux* in which had been dissolved 4 or 5 grains of sublimate. When, however, the caries was deep, the actual cautery was employed. American Encyclopedia of Ophthalmology, Vol.9, p. 6993-6994

Lambert, Johann Heinrich. (1728-1777.) German philosopher and mathematician, who was born at Mülhausen in Upper Alsace. In 1764 Frederick the Great made him a member both of the Council of Architecture and of the Academy of Sciences. Lambert was the first to formulate (in his *"Photometria")* a scientific basis for the measurement of light. He wrote several other scientific and philosophical works. American Encyclopedia of Ophthalmology, Vol.9, p. 6994-6995

Lamorier, Louis (1696-1777). French surgeon born at Montpellier. He studied 1718-20 under Méry at the Hôtel-Dieu, Paris. Returning to Montpellier, he became successively professor at the School of Surgery, surgeon to the Hospital of Saint-Eloi and Fellow of the Royal Society of Sciences. He wrote no books, but a number of excellent articles from his are to be found in the *Memoirs of the Royal Society of Sciences* in the Royal Academy of Surgery at Paris. In 1729 he published in the Memoirs of the latter-named society paper entitled: "*A New Method of Operation for Lachrymal Fistula.*" His method consisted essentially in perforation of the lacrimal bone-a procedure neither new nor useful-though it has been proposed once more, as both, in this, the 20th century.American Encyclopedia of Ophthalmology, Vol.9, p. 6996

Lamure, Francois de Bourguignon Bussière, Seigneur de (1717-1787). A famous French physiologist, who paid considerable attention to the physiology of the eye. Born at Fort Saint-Pierre (Martinique) he received his degree in medicine at Montpellier in 1740. He practised for a time at Montpellier, and became an instructor in medicine. For a time he practised in Paris, but returned to Montpellier, and in 1750, on the death of Rideux, he received a master's chair. He was made a Fellow of the Royal Society of the Sciences, and, shortly before his death, became dean of the Montpellier faculty. He was a ceaseless vivisector, and was widely known as a teacher. His only strictly ophthalmic writing was a thesis, written in competition for the professorship above-mentioned, *Presbytiae Theoriam et Curam Exponere*, in which he takes the position that presbyopia is caused by flattening of the cornea and lens. American Encyclopedia of Ophthalmology, Vol.9, p. 7004

Lancisi, Giovanni Maria (1654-1720) Italian physician , born at Rome, he studied (as happened in the case of so many famous physicians of his day) at first theology, then medicine. He received his medical degree at the Collegio di Sapienza in 1672. In 1684 he became professor of anatomy at the same institution. Among his pupils who afterwards became celebrated were Malpighi and Tozzi. He was finally appointed body physician to Popes Innocent XI and Innocent XII. His general achievements (including a number of important books) do not need to be mentioned here. He is chiefly to be remembered by ophthalmologists because of the fact that he was one of the little band (Valsalva, Morgagni, Benevoli, et al.) who succeeded in securing the acceptance of "*the new cataract doctrine*" in Italy. The history of this new doctrine is, in brief, as follows: Throughout antiquity and the middle ages, and even during the first few centuries of the present period, the belief was universal that a cataract consists of a deposit of corrupt and inspissated "humor" in a (wholly imaginary) space between the pupil and the lens. About 1643, →Quarré, a Frenchman, began to teach that a cataract is really a hardening and opacification of the lens itself. →Rolfinck, a German, in 1656, made actual anatomical demonstration of the truth of this theory. The matter attracted but little immediate attention, and, indeed, was soon forgotten absolutely. Thirty or forty years later, however, two more Frenchmen, →Brisseau and →Maitre Jan, took up the cudgels for the new doctrine, and, after a bitter fight, succeeded in securing its acceptance. To the great →Heister belongs the credit of having carried "the new theory about cataract" into Germany. Lancisi and Valsalva repeated at Rome the experiment of couching a cataract in the dead human subject, and then, by dissection, showing that it was really the lens itself that had been "*dethroned*." American Encyclopedia of Ophthalmology, Vol.9, p. 7004 –7005

Landesberg, Max(? – 1895). Rumanio-Italian ophthalmologist. Born at Jassy, then the capital of, Moldavia in Rumania, he received his medical degree at Berlin in 1865, his dissertation being "*On Conjunctivitis.* ". Having studied ophthalmology with von →Graefe,→Schweigger, →Schelske, and →Waldau, he settled at first in Philadelphia, U.S.A., then moved to New York City, and, finally, to Florence, Italy. American Encyclopedia of Ophthalmology, Vol.9, p. 7006

Landi, Pasquale (1817- ?). Italian physician, who seems to have paid considerable attention to ophthalmology. Born at Porrona, he received the degree of M. D. at Sienna in 1841. He practised in Florence, Sienna and Pisa, and held a number of teaching positions. The date of his death is not known. His only ophthalmologic writing is "*Dell Ottalmia Catarrale Epidemica Nelle Milizie Austriache Stanziate in Firenze*" (Florence, 1851).American Encyclopedia of Ophthalmology, Vol.9, p. 7006-7007

Landolt, Edmond (1846-1926) Swiss ophthalmologist. Landolt was born in Aarau. He received his MD in 1869 in Zürich. He studied ophthalmology under Knapp (Heidelberg), Arlt (Vienna, A.v.Graefe and Helmholtz (both Berlin), under Horn in Zürich and Donders and Snellen in Utrecht. In 1874 Landolt settled in Paris co-directing, with Emil Javal the Laboratoire d´Ophtalmologie, having a private practice and working at the Institut des Jeunes Aveugles. Among his many accomplishments in the field of physiological optics is the discovery of "Landolt's bodies" between the rods and cones of the outer nuclear layer of the retina; he also investigated the functions of the ocular muscles and devised a new

advancement operation. Landolt wrote: *Le grossissement des images ophthalmoscopiques*. Paris: A.Delahaye, 1874 ; *Die Einführung des Metersystems in die Ophthalmologie*. Stuttgart: Ferdinand Enke, 1876. *Lecons sur le diagnostic des maladies des yeux* Paris : A. Delahaye, 1877 ; *Manuel d'ophthalmoscopie* Paris: Octave Doin, 1878 ; *A manual of examination of the eyes. A course of lectures delivered at the "école pratique*" Translation by Swan M. Burnett, Philadelphia 1879; *The artificial eye of Dr. E. Landolt* [translated by E.A. Browne]. London 1879; *The refraction and accommodation of the eye and their anomalies*. Edinburgh 1886. *Uebersichtliche Zusammenstellung der Augenbewegungen im physiologischen und pathologischen Zustande* Breslau: Kern's Verlag (Max Müller), 1887. (→Magnus, *Augenärztliche Unterrichtstafeln*, Heft 3); and with P. Gygax *Therapeutisches Taschenbuch für Augenärzte*. Wiesbaden 1897. With Louis de Wecker he edited the *Traité Complet d´Ophthalmologie* , 4 vols., Paris A. Delahaye, 1880-1889. Landolt designed an ophthalmoscope and a ophthalmodynamometer named after him. JPW

J.-F.-Parfait Landrau

Landrau, J.-F.- Parfait (1797- ?) French ophthalmologist (a quack ?), born in Maule, Pas de Calais, France. Nothing could be found about him, except on the title page and portrait in his booklet published in 1844. It says there that he is an ophthalmologist and director of the Institut ophtalmologique de Lyon, corresponding Member of the Société de Medecine de Niort. He wrote: *De La Kistotomie posterieure ou déchirement de la Cristalloide posterieure après l´extraction etc.* with *Reflexions pratiques sur les diverses méthodes d´opérer la cataracte* Paris & Lyon 1844. JPW

Landrau, Louis. French ophthalmologist. See Rivaud-Landrau.

Lane, Jonathan Homer. (1819-1880) American naturalist born in Geneseo, N. Y., who graduated from Yale and entered the United States, Coast Survey in 1847. After a period of service in the patent-office he returned to the coast survey, and thereafter became connected with the bureau of weights and measures (1869-80). He attained considerable note as an astronomer, being sent on expeditions to observe solar eclipses at Des Moines, Iowa (1869), and Catania, Spain (1870). A member of many scientific bodies, he contributed numerous articles on electricity and astronomy to scientific journals. Among his numerous inventions were a machine for finding the roots of the higher equations, a visual telegraph, and an improved basin for the mercurial horizon. American Encyclopedia of Ophthalmology, Vol.9, p. 7007

Lang, John (1859-1896). Scottish-Canadian ophthalmologist. Born at Dumbarton, Scotland, he became L.R.C.P.(Edinburgh) and L.F.P.S.(Glasgow). In 1884 he was House Physician to the Glasgow Eye Infirmary, then lived in China seven years, being there in charge of the Amoy Mission Hospital. In 1892 he moved to Victoria, B. C., where he practised with great success as ophthalmologist, and was ophthalmic surgeon to the Provincial Royal Jubilee Hospital. He received a number of severe injuries in the Point Ellice Bridge accident, May 26, 1896, and, in consequence, died a few weeks later. American Encyclopedia of Ophthalmology, Vol.9, p.7010

Lang, William (1852-1937) British ophthalmologist, born in Exeter the son of Isaac Lang. He was educated at the Moravian School in Lausanne and acquired a good working knowledge of French and German. In 1870 he entered the London Hospital, at the age of 18, and qualified as M.R.C.S. in 1874. He became F.R.C.S. in 1879. He served as House Physician and House Surgeon, and later on was demonstrator of physiology and anatomy in the Medical College. Here he met J. E.→Adams, and so was directed to ophthalmology. He became Assistant Surgeon to the Central London Ophthalmic Hospital in 1879, Ophthalmic Surgeon to the Middlesex Hospital in 1880, and followed Adams at Moorfields in 1884, to whose practice he also succeeded. He was one of the 113 founders of the Ophthalmological Society. He was senior Vice-President in 1903 and acted as President due to the death of David Little. In 1916 he acted as President of the Ophthalmological Section of the Royal Society of Medicine. Lang was not a prolific writer, nevertheless, his output was considerable, and his more important publications were of great value. From 1881, when he became one of the founders of the Ophthalmological Society, until 1906 the records show that he often brought cases

forward and joined in discussions. In 1882 he published, with W. A. FitzGerald, a paper on the movements of the eyelids in association with the movements of the eyes. This was his first paper of note and in it the action of the inferior rectus muscle in the downward movement of the lower lid is proved. Sir William→Gowers had previously stated that the lower lid was depressed by the pressure of the limbus upon the margin of the lower lid. After the paper had been written the authors discovered that Bonnet and Richet had described the action of the inferior rectus muscle 40 years previously! In 1886 he was a member of the Committee which reported on 211 cases of sympathetic ophthalmitis. In 1887 he published his account of the insertion of an artificial globe into Tenon's capsule after excising the eye. This operation had been independently suggested by Adams→Frost in the previous year. In 1888 he described the condition of the ciliary processes and suspensory ligament of the lens after removal of the iris. In this case the iris had been torn away by an accident, and the eye was otherwise normal. Lang was unable to see any result from the application of atropine or esenne in the eye, although the eserine produced a characteristic pain in the eye. In 1889 he offered an explanation of enophthalmos following a blow upon the eye, which retained full visual acuity, by suggesting that the orbital sac had become herniated into the antrum of Highmore. In 1892 he showed a case of chancre of the semilunar fold of conjunctiva which was followed by interstitial keratitis in the affected eye. In 1895 appeared his only book " *The Methodical Examination of the Eye*." It was put out as Part I of a *Guide to the Practice of Ophthalmology for Students and Practitioners*. At various times in later life he made efforts to write further volumes which were to include one on operative surgery. For this some photographs were taken of him operating. In 1895 he also took part in the discussion on the operative treatment of myopia by removal of the crystalline lens. He pointed out the tendency to detachment of the retina following the removal of senile cataract in myopic patients. It was the experience he gained in needling the lens in high myopia and the subsequent removal of the softened lens matter that led him to devise the incision in the upper part of the cornea midway between the limbus and the centre of the cornea, so as to avoid prolapse of iris and also permit the detachment of any capsular synechia which might follow and for which he devised his well known twin knives in 1889. He was the *first* to prove that the iridescent crystals seen in a senile cataract were typical cholesterin crystals. Lang was for many years the editor of the *Royal London Ophthalmic Hospital Reports*, and he contributed several important papers in collaboration with Sir James Barrett, who was then living in London. The first was in 1886 on *The Refractive Condition of the Eyes of Mammalia*. - A great variety of animals were examined, 185 eyes in all, and the majority were hypermetropic. In the same year appeared a long and elaborate paper on the action of miotics on the accommodation. This was a continuation of Donders' work published in 1864. In 1887 they published a paper that had considerable practical importance, as it is upon the information contained in it that the use of cycloplegics in refraction work is built. This paper was "*The Action of Myotics and Mydriatics on the Accommodation*." It is the record of a patient and careful investigation, and in it was introduced an enquiry into the action of a mixture of homatropine and cocaine (often known as Lang's drops), and of the extremely ingenious oily solution of these alkaloids. It was also shown in this paper how easily and safely the action of these drugs can be controlled by the subsequent use of eserine. The last paragraph in the paper announces " *After paralysis of the sphincter pupillae and ciliary muscle has been effected by the application of homatropine or of homatropine and cocaine, the application of eserine causes a constriction of the pupil, and an approximation of the near point to such an extent that in the great majority of cases the individual can, in a few minutes, resume work of all kinds without inconvenience*.". In 1888 appeared two papers on convergent concomitant strabismus in which were considered the results of treatment of convergent strabismus by the correction of the refraction error with and without tenotomy: the possibility of alteration of vision in the squinting eye: familial tendency to strabismus: age of onset and alleged causes: whether amblyopia is the cause of strabismus, and the influence of atropine on concomitant convergent strabismus. In 1889 Lang published, with Casey A.→Wood, an examination of the patellar tendon reflex in sixty-two cases of interstitial keratitis. It was absent in 10 per cent and "decidedly abnormal" in 30 per cent. Lang improved many of the instruments in common use. The McHardy perimeter, until it was superseded by better models, was improved by him in many ways. Another matter that will always be

associated with Lang's name is the importance of focal sepsis in inflammatory diseases of the eye, and the elimination of focal sepsis as far as possible before operations on the eye are undertaken. Lang's attention was drawn to the consideration of oral sepsis by Afr. William Hern. Mr. Hern had noted the frequent co-existence of oral sepsis and rosacea, and Lang had been one of the earliest to note the connection between keratitis and rosacea. From this hint Lang began to preach the danger of oral sepsis and although others carried the matter to extremes, few will deny how important is focal sepsis in connection with eye disease. BJO 1937,568-572;Lancet 1937,2:224;Brit. Med.J.1937,2:189;Treacher Collins *History & Traditions of Moorfields* 1929.

Lange, Otto (1852-1913) Russian ophthalmologist born in St. Petersburg. Lange received his M.D. at Dorpat in 1879. He emigrated to Germany in 1886, becoming ophthalmologist to the government hospital at Braunschweig and professor at that city's university (1904). Lange wrote on the embryology and anatomy of the eye, on glaucoma, and on external eye diseases: *Topographische Anatomie des menschlichen Orbitalinhalts* Braunschweig: A Harald Bruhn, 1887. JPW

Langenbeck, Bernhard Rudolph Konrad von (1810-1887) German surgeon. Langenbeck was born at Padingbuttel, Germany, the nephew of K.J.M. Langenbeck and cousin of M.A. Langenbeck. He received his M.D. in 1835 at Göttingen with a dissertation on the anatomy of the retina. After a few years as lecturer at Göttingen, he became professor of surgery at Kiel (1842) and Berlin (1848-1882); he died at Wiesbaden.Considered the greatest clinical surgeon and teacher of his time in Germany, Langenbeck invented new operations for excising the lower jaw and the joints of the leg and arm, and new methods of plastic surgery. He founded the Archiv für klinische Chirurgie (1861) and the German Society of Surgery. In the second of his two publications on ophthalmology, he was the first to accurately describe the nature of medullary retinal sarcoma. *De retina; observationes anatomico-pathologicae* Göttingen: Dieterich, 1836. American Encyclopedia of Ophthalmology, Vol.9, p. 7007-7008. JPW

Langenbeck, Konrad Johann Martin (1776-1851). German anatomist, surgeon, and ophthalmologist, father of Maximilian Adolf Langenbeck and uncle of the famous Bernhard Rudolph Konrad von Langenbeck. Born at Horneburg, Germany, he received his medical degree at Jena in 1798, presenting as a dissertation *Diss.Inaug. Sistens Paradoxa Medica Secula XVIII.*, He then proceeded to study for a time in Vienna, where his attention was directed especially to ophthalmology by Joseph →Beer. Returning to Horneburg, he practised there for one year; then, having been decreed by the Government a stipend for the purpose, he studied at Würzburg and, once more, at Vienna. In 1802 he became privatdocent at Göttingen, as well as surgeon to the Academic Hospital. Owing, however, to disagreements with →Himly, with whom he was associated in this hospital, he resigned his post in 1807, and founded a Clinical Institute for Surgery and Ophthalmology in a newly constructed surgical hospital in the same city. In 1814 he became full professor of anatomy and surgery, as well as surgeon-general of the Hanoverian army. In 1816 he became an aulic councillor. In 1840 he was made Superior Medical Councillor, but, in 1848, in consequence of certain machinations against him, he was ousted from the surgical chair, though allowed to retain the anatomical. This embittered his life, and, according to Gurlt, did much to hasten his death. He died Jan. 24, 1851, in his 75th year. Langenbeck was a man of impressive presence, brilliant intellect and eloquent speech. He was a rapid and dextrous operator, partly from his very nature, but more, perhaps,, from his absolute mastery of anatomy and of operative technique. He arose early and worked late, and many are the tales of his seemingly inexhaustible energy and patience. Langenbeck's most important ophthalmologic writings are: 1.*Prüfung der Keratonyxis*. (1811. Also, *Bibl. f. Chir.*, 1809, II, p. 537; 1811, ! V, p. 33. *Neue Bibl.*, 1818, 1, and 1820, II, p. 418.) 2.*Ueber Trichiasis und Entropium. (Neue Bibl. f. Chir.und Ophth.*, 1, 3, 415, 1818.) 3. *Künstliche Pupillen-Bildung*. (N. B., 1, 676-736.) 4.*Belladonna Erweitert, erst nach der Blut-Entleerung, die Pupille*. (N.B., 11, 13.) 5.*Ueber Exophthalmos.* (N. B., III, p. 329.) 6. *Ansichten des Baues vom Menschlichen Auge, Welche bei der StarOperation, bei der Pupillen-Bildung und beim Schwarzen Star von Wichtigkeit sind, durch Abbildungen Erläutert*. (N. B., III, 1 and 2.) 7.*Förderung des Ophthalmologischen Studium*. (N. B., Ill, p. 453.) 8. *Ein Neuer Wirkungskreis meines*

Koreoncion.(N. B., IV, p. 98, 1822.) 9. *Der Nervus Sympathicus in der Pathogenie*. (N. B., IV, p. 729, 1828.)-American Encyclopedia of Ophthalmology, Vol.9, p. 7008-7009

Langenbeck, Maximilian Adolf (1818-1877). German ophthalmologist, son of Konrad Johann Martin Langenbeck, and cousin of the renowned Bernhard Rudolph Konrad von Langenbeck. Born at Göttingen, he studied at Göttingen, Paris, Vienna, Berlin, and again at Göttingen at the latter university receiving his medical degree in 1842. The following year he qualified as privatdocent at his alma mater in anatomy, surgery and ophthalmology. In 1846 he was made extraordinary professor, but in 1851, because of the death of his father, he settled in Hannover, where he practised many years. In 1865 he was called to the Upper Medical Collegium, but soon resigned. Maximilian Adolf Langenbeck is chiefly to be remembered as the reinventor and the only effectual introducer of the fixation (fixing) forceps. He was also instrumental in securing the final victory of cataract extraction over the needle operation. In addition to numerous works of a general surgical character, he wrote: 1. *Klinische Beiträge aus dem Gebiet der Chirurgie und Ophthalmologie*. (Göttingen, 1849.) 2. *Die Insolation des Menschlichen Auges, oder Glaskörperstich und die Accomodationsfasern*. (Hannover, 1859.) 3. *Lehre von der Accomodation und ihre Störungen*. (Memorabilien 1870.) American Encyclopedia of Ophthalmology, Vol.9, p. 7008-7010

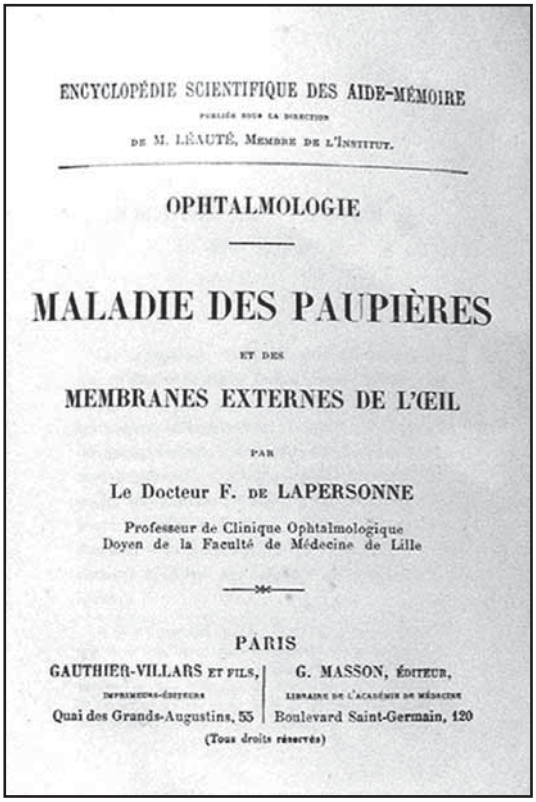
Langguth, Georg August (1711-1782) German anatomist of Leipzig. He received his M.D. at Leipzig in 1738, and from 1742 until his death was professor of anatomy and botany at Wittenberg. He was the author of numerous minor academic dissertations and occasional pieces: *De Luce ex pressione oculi* ... Witemberg: Prelo Ephr. Gottlob Eichsfeld, 1742.

Lannegrace (?-1890). French professor of physiology who devoted some attention to the physiology of vision. The date and place of his birth are not ascertainable. He was made associate professor of anatomy at Montpellier in 1878, and, in 1885, succeeded Rouget in the chair of physiology. In the *Archives de Médecine Expérimentale* (1885) he describes a number of experiments, performed on dogs and monkeys, in which he seeks (1) to establish that cortical lesions in the brain of the dog and of the monkey produce, according to their seat, sometimes homonymous hemianopia, sometimes crossed amblyopia (2) to demonstrate the mechanism by which cortical lesions produce these two kinds of visual detects. American Encyclopedia of Ophthalmology, Vol.9, p. 7011

Lantsheere *see* **De Lantsheere, Joseph**

Lao, Yuan-Xiu (also **Katherine Lao) (1919-)** Chinese ophthalmologist, Professor of Ophthalmology of Peking Union Medical College. She graduated from the Yale-in China Medical College, Hunan, in 1944 and completed Ophthalmology residency at the University Hospital in 1948. Subsequently, she graduated from the Graduate School of Medicine of University of Pennsylvania, U. S. A. in 1950. On home coming, she worked at the Peking Union Medical College, as the Instructor (1953-1956), Associate Professor (1956-1979) and she is currently the Professor since 1979. She has served as a Consultant to the Eye Research Center of the Chinese Academy of Medical Sciences, Editor of the Chinese Journal of Ophthalmology, Member of Ophthalmology Scientific Research Evaluation Committee, Chinese National Science and Technology Committee, Member of the Academic Committee of the Chinese Academy of Medical Sciences, Chairman of the Peking Ophthalmology Society (1964-1982), and Member of the International Perimetric Society. Her main interest has been perimetry, and some examples of her many publications are *Bilateral papilloedema associated with lumbo-sacral intraspinal tumor*. Chinese Medical J. 200; 113(3): 201-205, *Blindness due to sellar region tumor caused apoplexy*. Chinese Medical J. 1980; 93(7): 465-473, *Vascular architecture of the human optic chiasma and bitemporal hemianopia*. Chinese Medical Science, March 1994, Vol.9, No. 1, p. 38-44 and *Visual field defects in 50 cases with supra-chiasmal visual pathway lesions*. J. Appl. Ophthalmol. 1993, 11: 138. She also wrote many books, e.g. *Clinical Perimetry* 2nd ed. 1965 etc. She is a recipient of many Honor Awards from the Ministry of Health, Ministry of Education, and from the National Society of Medicine for her outstanding scientific achievements and for her service in

education. Professor Lao, Peking Union Medical College Hospital, 1 Shuai Fu Yuan, Beijing 100730, P. R. China. phone: +86-10-65296357 (SM)


ENCYCLOPÉDIE SCIENTIFIQUE DES AIDE-MÉMOIRE

PUBLIÉE SOUS LA DIRECTION

DE M. LÉAUTÉ, MEMBRE DE L'INSTITUT.

OPHTALMOLOGIE

MALADIE DES PAUPIÈRES

ET DES

MEMBRANES EXTERNES DE L'ŒIL

PAR

Le Docteur F. DE LAPERSONNE

Professeur de Clinique Ophtalmologique
Doyen de la Faculté de Médecine de Lille

PARIS

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Lapersonne, Félix de (1853-1937) French ophthalmologist. De Lapersonne was born at Toulouse in 1853. His medical studies were carried out in Paris with such distinction that he received an appointment at Lille, where he became Professor of Ophthalmology in 1890. Eleven years later he was recalled to Paris to succeed the great Photinos→Panas. Most of his reports and papers are to be found in the *Bulletin de la Société Française d'Ophtalmologie* and in the French ophthalmological journals. He became a member of the *Académie de Medecine* in 1914, and its President in 1931, in which year he was made a Commander of the Legion of Honor. On the inauguration of the *Association Internationale de Prophylaxie de la Cécité* at the *XIII Concilium Ophthalmologicum* he became its first President. The Association has been organized with great skill and shares offices in Paris with the *International Association against Tuberculosis* . For his work in this direction he received the Leslie Dana Gold Medal in 1934. The combined meetings of the "Association " with the *International Organization against Trachoma* owed a great deal of their success to de Lapersonne's forethought and presidency. Among other monographs, he wrote: *Etude clinique sur la maturation artificielle de la cataracte* Paris 1883 and *Maladie des Paupières et des membranes externes de l´Œil* Paris 1893. BJO 1937,21:525

LaPiana, Francis G. (1937-) American ophthalmologist, Residency Program Director Washington National Eye Center at Washington Hospital Center. Dr.LaPiana received his MD from George Washington University School of Medicine in 1962. His internship (1962-63) and ophthalmology residency (1966-69) were completed at Walter Reed Army Medical Center. He served a fellowship in ophthalmic pathology at the Armed Forces Institute of Pathology from 1970-71 and a preceptorship in oculoplastic and orbital surgery from 1976-77. He retired from service as a Colonel in the United States Army in 1995, having served in Ethiopia and Vietnam. He was chief of the division of ophthalmology, department of surgery, at the Uniformed Services University of the Health Sciences in Bethesda from 1981-1995, and continues to hold an appointment as professor of surgery there. He also served as consultant in ophthalmology to the Army Surgeon General from 1991-1995. He has given more than 125 presentations, and has authored or co-authored more than 70 journal articles, book chapters, book reviews, letters to the editor, discussions, films and posters. He has conducted 19 research projects.Dr.LaPiana joined the staff of the department of ophthalmology at Washington Hospital Center in 1995.(AB)

Laplace, Pierre Simon, Marquis De, (1749-1829), the greatest of French mathematicians, was the son of a farmer at Beaumont near Trouville. He studied at Caen, and at Paris, where he attracted the notice of D'Alembert by a paper on dynamics. When professor in the Royal Military School he acquired a reputation by his mastery of mathematical science and its application to practical astronomy-solving a problem which both Euler and Lagrange had grappled in vain. Associate of the Academy of Sciences in 1773 and member in 1785, he established the generalization that our planetary system is stable, that what had been termed irregularities were not disturbing the general equilibrium, but necessary to it. This solution of the *mechanical problem of the solar system*, as he termed it, has bestowed upon astronomy the *Three Laws of Laplace*. The insight of Laplace as an astronomer was apparent in his explanation of the "secular inequalities" in the motions of the planets Jupiter and Saturn. He was the first to construct a complete theory of the satellites of Jupiter, and his investigation of the tidal theory has been characterized by Airy as "*one of the most splendid works*" in the history of mathematics. After the 18th Brumaire, Bonaparte made him Minister of the Interior. In 1799 Laplace entered the senate, and in 1803 he was appointed chancellor. He was created count under the empire, and in 1815 a peer, in 1817 a marquis, by Louis XVIII. Elected to the Academy in 1816, he was next year president. In his memoir on the

"*attraction of spheroids*" are first set forth the two celebrated means of applying analysis to physical problems Laplace's coefficients and the potential function which are requisite in the theory of attractions and in the more abstruse parts of electrical science. American Encyclopedia of Ophthalmology, Vol.9, p. 7014-7015.

Laqueur, Ludwig (1839-1909). German ophthalmologist, especially renowned for, his studies in glaucoma and sympathetic ophthalmia. Born at Festenburg, Silesia, he studied medicine at Breslau, Berlin, and Paris, receiving the degree of M.D. at Berlin in 1860, and at Paris in 1869. For a time he practised as ophthalmologist at Lyon, France, but, in 1872, was made extraordinary professor of ophthalmology at Strassburg, and, five years later, full professor as well as Director of the University Hospital for Eye-Patients in the same institution. Laqueur is generally given the credit for having introduced physostigmine for glaucoma. He wrote a large number of articles on the subject of glaucoma, and suffered from the disease himself. Operated on by →Horner, he recovered his vision. An abstract of Laqueur's "*An Account of My Own Case: Glaucoma*" was made by H.→Herbert, as follows: *This is the third instance of the publication of a personal experience of chronic glaucoma by an ophthalmic surgeon. There is nothing exceptional in the facts. But eye surgeons must feel an interest in the personal narrative of one of themselves, a trained and accurate observer*. Laqueur, like →Javal, was a Jew, exemplifying the racial predisposition. His case fortunately ended well, like that of W.→Wagner of Odessa, and in contrast with Javal's well-known tragic record. The present account, published after the patient's death, was written in 1902, twenty-two years after a cure, obtained by iridectomy in both eyes. There were thus many years during which Laqueur was able to appreciate the debt which he owed to von→Graefe, who had rendered cure by operation possible. Laqueur states that his eyes were always somewhat sensitive to light. This sensitiveness was increased during numerous recurrences of slight conjunctivitis, which troubled him from the age of 22 onwards so that he frequently had recourse to the use of neutral-tinted glasses. Both eyes were emmetropic until at the age of 33 he acquired a slight astigmatism of the right eye, 0.75 D with the rule apparently from the pressure of a pince-nez with a strong spring, worn during a three weeks' holiday. At 35 years of age the prodromal stages of glaucoma began with the appearance of a mist before the right eye one hot day in July, 1874, as he was returning late to mid-day dinner, very tired. During the meal the mist appeared also before the left eye, and when he turned on a light he saw the ominous colored rings which were to embitter his life in the following years. The hardness of both eyes confirmed the diagnosis. The symptoms passed off in a few hours, and did not return for two or three months. Subsequent seizures were almost all confined to the right eye. Of these there occurred many hundreds, the intervals between them gradually lessening until sometimes three attacks occurred in one day, each lasting an hour or more. Occasionally they occurred even during the night or on awakening in the early morning. (A detailed description of the symptoms was published in v.Graefe's *Archiv.* Bd. XXXI.) The diameter of the halo-figure measured only 8°-9°. In the severer attacks of rather long duration the colours of the rings were paler, and even disappeared altogether at times, thus producing a colourless halo. There was neither pain nor marked injection of the eyes at any time; nor was there any contraction of the visual field, though the visual acuteness sank to 3/4 -1/10 of normal during the attacks of tension. Among the exciting causes of the attacks there came more and more into evidence the influence of the emotions anger, passion, shame, ,and even the pleasurable excitement of stirring music or of a theatrical performance. Want of food, also breathing bad air in close, stuffy rooms, brought on a rise of tension, which, on the other hand, was shortened or ended by exercise in the open air. In 1876 the patient learned the value of physostigmine, and afterwards obtained unfailing relief by it, a single instillation always sufficing. The frequent recurrences, interfering with his work, led him to consult Horner, of Zürich, in December, 1878. The latter advised palliative treatment for a time, with strict dieting and small doses of quinine. But in March, 1880, he iridectomised the right eye. In those days cocaine-anesthesia was not known. The operation was thus performed without an anesthetic, the eye being free from injection or tension at the time. (The visual acuteness and visual field still remained normal.) The incision was made with a keratome, and the pain resembled that of a somewhat severe burn. The healing was uncomplicated. A week later the left eye was similarly operated upon, a warning attack of increased tension having occurred in it.

The operation on this eye was followed by acute pain and injection. The onset of *malignant glaucoma* was feared, but the pain subsided after an injection of morphia, and there was no more trouble. The operations left astigmatism of 0.75 D against the rule in each eye. A year later there was one small recurrence of glaucomatous symptoms. Except for this there was no trace of tension or of its results during the remaining 28 or 29 years of the patient's life. The only troubles were some increase of the old sensitiveness to light, due to the colobomata, and annoyance and worry from the curiosity and ill manners of people who noticed and commented upon the abnormal appearance produced by the iridectomies." Laqueur died of some pulmonary affection. His most important writings are as follows: 1. *Etudes sur les Affections Sympatiques de I'Oeil*. (Paris, 1869.) 2.*Etudes Cliniques sur le Glaucome. (Ann.d'Oculist.,* 1869.) 3.Sur les Changements Brusques de la Refraction. (lb.) 4. Ueber Atropin u. Physostigmin. (v. Graefe's Arch., XXIII.) 5. Das Prodromalstadium des Glaucoms. (lb., XXVI.)American Encyclopedia of Ophthalmology, Vol.9, p. 7015-7017;The Ophthalmoscope 1909,p.518.

Lardner, Dionysius (1793-1859) was a popularizer of physical science; he was born in Dublin, Ireland, and educated at Trinity College, Dublin. He is best known as editor of Lardner's Cyclopaedia, 132 volumes on scientific subjects, published between 1830 and 1844. In 1828 Lardner was professor of Natural Philosophy and Astronomy at University College, London; but in 1840 lost his chair because he ran away with the wife of an army officer, who claimed $40,000 in damages. He then came to the United States, where he made many times over that amount through lecturing. He lived in Paris from 1845-1859, and died in Naples.

Lardner, Dionysius (1793-1859), was a popularizer of physical science; born in Dublin, Ireland, and educated at Trinity College., Dublin. He first attracted attention by a *Treatise on Algebraic Geometry* (1823), and a work on *Differential and Integral Calculus* (1825). He is best known as editor of *Lardner's Cyctopledia,* 132 volumes on scientific subjects, published between 1830 and 1844. Lardner himself wrote the volumes treating of mechanics, hydrostatics, geometry, arithmetic, heat, and electricity. This was followed up by the historical *Cabinet Library* (12 vols. 1830-32) and *Museum of Science and Art* (12 vols. 1854-56). He also wrote handbooks of natural philosophy. Amongst the 132 volumes on scientific subjects there was "*Handbook of Optics*" which went through a few editions (the American edition appeared 1851). In 1828 Lardner was professor of Natural Philosophy and Astronomy in University College, London; but in 1840 lost his chair through running away with the wife of an army officer, who claimed $40,000 damages. Lardner then came to the United States, where he made five times that sum by lecturing. He lived in Paris from 1845 to 1859, and died at Naples.American Encyclopedia of Ophthalmology, Vol.9, p.7017-7018

Laroche, Thomas Michel Antoine Amédée Lattier de *see* **Lattier de la Roche, Thomas Michel Antoine Amédée.**

Larrey, Baron Hippolyte (1808-1895) French military surgeon, son of D.J. Larrey. Hippolyte Larrey was born in Paris, where he received his M.D. in 1832. His career covered both military service and teaching; he became professor at the Faculté de Médecine, Paris (1835), professor of surgical pathology at the French military medical school (1841), and physician-in-chief of the French army (1859

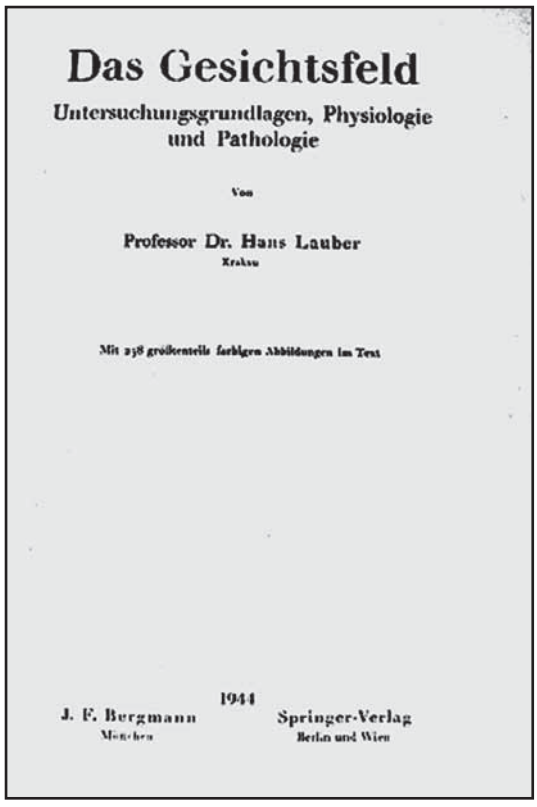
Larrey, Baron Dominique Jean (1766-1842) French military surgeon. Larrey born at Baudean, France, and was trained in surgery by his uncle, Alexis Larrey, in Toulouse. He joined the French military service in 1787 and advancing to the position of surgeon-in-chief during the Napoleonic Wars. Larrey was the inventor of the "flying ambulances," a fleet of light, mobile conveyances that picked up the wounded during a battle rather than after its end, as had been the custom. In addition, he was a master at amputations (he performed 200 in 24 hours at Borodino) and one of the first to amputate at the hip (1803); he provided the first account of "trench foot" (1812); and he was the first to point out the contagious nature of Egyptian ophthalmia (trachoma). Larrey was the author of *Mémoire sur l'ophthalmie règnante en Egypte*. Cairo: Imprimerie Nationale, an IX, 1801 ; *Relation historique et chirurgicale de l'expédition de l'armée d'Orient, en*

Egypte et en Syrie. Paris: Demonville et Soeurs, 1803. *Mémoires de chirurgie militaire* 4 vols. Paris: J. Smith, 1812-1817 (of which an American edition was published: *Memoirs of military surgery, and campaigns of the French army* 2 vols.Baltimore: Joseph Cushing, 1814). A part of his memoirs was translated: *Observations on wounds* Philadelphia 1832; *Surgical memoires of the campaign of Russia, Germany, and France* Philadelphia 1832 (being the translation of volume 4 of the Mémoires de Chirurgie Militaire). Larrey published accounts of several military engagements, from the surgeon's point of view, and treatises on a variety of clinical topics: *De l'occlusion des paupières dans le traitement des ophthalmies et des maladies des yeux* Paris 1856.

Lasnier, Henry (or Rémi). French surgeon, ophthalmologist and cutter for stone, who flourished in the 17th century, dying about 1690. He is often declared to be the first in history to teach the true nature and location of cataract. This, however, is probably a mistake. At all events, the testimony is merely heresay, resting as it does on a statement of →Palfyn (1650-1730) that an old surgeon had told him that Lasnier had told him, etc. The first to teach the true doctrine was, no doubt, →Quarré, and the first to confirm it by anatomical dissection was →Rolfinck. American Encyclopedia of Ophthalmology, Vol.9, p.7019

Lassell, William, (1799-1880), astronomer, born at Bolton, in Lancashire, England. He built a private observatory at Starfield, near Liverpool, about 1820. He also constructed reflecting telescopes of 9 in. aperture and 2 ft. aperture successively. The speculum of the latter was polished by means of a machine of Lassell's own invention. With this telescope he discovered the satellite of Neptune (1847) ; the eighth satellite of Saturn (1848), simultaneously with Professor Bond of Harvard; and two new satellites of Uranus (1851). In 1861 he set up at Malta a reflecting telescope of 4 ft. aperture and 37 ft. focal length, mounted equatorially; and made observations until 1865, chiefly of nebular and satellites. After his return to England he transferred his observatory to Maidenhead. See *Memoirs of Astron.Soc.*, Vol. XXXVI., for his work in Malta, and *Traits. Roy. Soc.* (1874) for a description of his polishing-machine.American Encyclopedia of Ophthalmology, Vol.9, p.7019

Lattier de Laroche, Thomas Michel Antoine Amédée (1785-1836) French quack. He wrote : *Mémoire sur la cataracte, et guérison de cette maladie, sans opération* Paris 1833. A second volume appeared in 1835 under the slightly altered title *Suite au Mémoire sur la Cataracte*…etc..


Das Gesichtsfeld

Untersuchungsgrundlagen, Physiologie und Pathologie

Von

Professor Dr. Hans Lauber

Krakau

Mit 238 größtenteils farbigen Abbildungen im Text

1944

J. F. Bergmann
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Lauber, Hans von (1876-1952) Austrian ophthalmologist. Lauber became professor of ophthalmology in Krakau (Poland). He proposed to the Carl Zeiss Company, in 1929, to make trials with grinded contacts lenses for astigmatismus and myopia. The same year he published the first observation of a corneal neovascularisation under a Zeiss contact lens. He contributed to Graefe-Saemisch *Handbuch der gesammten Augenheilkunde* (2nd edition),vol.1, part 2: *Die mikroskopische Anatomie des Ciliarkörpers, der Aderhaut und des Glaskörpers* and authored an excellent monograph on perimetry: *Das Gesichtsfeld-Untersuchungsgrundlagen, Physiologie und Pathologie* Munich & Berlin 1944 (Vol.3 of *Augenheilkunde der Gegenwart*). Lauber also contributed, with W.Kolmer the anatomy of the eye in Möllendorff´s *Handbuch der mikroskopischen Anatomie des Menschen*. Related to the development of contact lenses, Lauber published following papers: *Randatrophie der Kornea mit hochgradiger Kerectasia peripherica*, Klinische Monatsblätter für Augenheilkunde, 1909, 47: 210; Discussion in Krämer R., *Über die Massnahmen gegen Keratokonus mit besonderer Berücksichtigung der optischen Hilfsmitte, spez. der hyperbolischen Gläser*, (Ophthalmologische Gesellschaft in Wien, 19.06.1923), Zeitschrift für Augenheilkunde 1923, 51: 371-372; *Keratokonus* (Wiener ophthalmologische Gesellschaft, 18.02.1924). Zeitschrift für Augenheilkunde, 1924, 53: 265; *Kontaktglas bei Keratokonus*, (Ophthalmologische Gesellschaft in Wien, 21.11.1927), Klinische

Monatsblätter für Augenheilkunde, 1927, 79: 844; Discussion in AUST, *Ueber einige weitere Arten der Verwendung der Kontaktgläser*, (Ophthalmologische Gesellschaft in Wien, 18.03.1929), Klinische Monatsblätter für Augenheilkunde, 1929, 82: 535; Discussion in DEUTSCH A., *Praktische Durchführung von Myopiekorrektion mit Kontaktgläsern*, (Ophthalmologische Gesellschaft in Wien, 18.03.1929), Klinische Monatsblätter für Augenheilkunde, 1929,82:534-535; *Sechs Jahre getragene Kontaktgläser bei Keratokonus*, (Ophthalmologische Gesellschaft in Wien, 17.01.1930), Zeitschrift für Augenheilkunde, 1930,7:95.

Laugier, Stanislas (1799-1872). French surgeon, of some ophthalmologic importance. Born at Paris, he received his medical degree in 1828, and, next year, was associate professor of the Faculty. In 1831 he was appointed surgeon to the Central Bureau, as well as consulting surgeon to King Louis Phillipe. After this he was on the staff of many hospitals, but the most of his work was done at the Hôtel Dieu, where he served from 1854 until his death about eighteen years. In 1848 he received the full professorship. He was a distinguished teacher and operator, especially renowned for the cataract operation, as well as for the various procedures employed in diseased conditions of the lacrimal drainage system. His writings relate almost exclusively to general surgery. However, in 1845, he, in collaboration with G. Richelot, published a French translation of →Mackenzie's *Textbook of Diseases of the Eye*, with numerous notes. Laugier also published articles in the *Annales d'Oculistique* on the suction operation for cataract, on a depression needle, on false hypopion, and on the symblepharon operation.American Encyclopedia of Ophthalmology, Vol.9, p.7021

Laurence, John Zachariah (also Lawrence) (1830-1874) British ophthalmologist born in Paris. He was educated at University College, London (M.R.C.S., 1854) practiced in London, and in 1857 founded the Ophthalmic Hospital at Southwark, serving on its surgical staff until 1873. He was, with Thomas Windsor, the founder of the Ophthalmic Review which ceased after only three volumes (1865-1867) but was revived in 1881. Lawrence´s writings deal chiefly with optical defects and their surgical correction: *Optical Defects*, 1865. With Robert Charles Moon he wrote: *A handy-book of ophthalmic surgery for the use of practitioners*. London 1866.(This book appeared simultaneously in Philadelphia). Shortly after Giraud-Teulon introduced the *first* binocular indirect ophthalmoscope Laurence collaborated with C. Heisch to produce a new instrument. Schett p.249. American Encyclopedia of Ophthalmology, Vol.9, p.7021-7022; JPW

Laurens, André du (1558-1609). A 16th century professor of anatomy at Montpellier, France, who devoted considerable attention to the anatomy and physiology of the eye. Born at Arles, he studied at Montpellier, and there received his medical degree in 1583. Three years later he succeeded to the chair of anatomy, which had just been made vacant by the death of Laurent Joubert. In 1600 he was called to Paris, there to become physician-in-ordinary to Henry IV. Three years later he was elected chancellor of the University of Montpellier, though still residing at Paris, where, in fact, he continued to live until his decease. Laurens wrote four books, the most important of which is *Historia; Anatomica Humani Corporis* (Erfurt, 1595; Paris, 1589, and various later editions in various cities). Ten chapters, in this book, are devoted to the anatomy and physiology of the eye. The anatomy is merely a rehash of Vesalius, while, on the other hand, the physiology is chiefly concerned with these, questions: Whether vision is caused by emission or reception? Whether anything can be seen within the eye? Why eyes are of different color? On the movements of the eyes: in all of which he merely repeats the theories of Galen and even of Aristotle. Other works written by him were: *Opera Anatomica* Leiden 1593, *Discours de la Conservation de la Vue* Paris 1598 (English edition 1599).American Encyclopedia of Ophthalmology, Vol.9, p.7022

Laurens, Frère. A French empiric of the 18th century, concerning whom we know but little. He was, for a time, a Jesuit priest, then an apothecary at Rhodes. According to the *Courrier d'Avignon* for Oct. 10, 1763, he cured obstructions, jaundice, hydropsia, hysterical vapors and dysentery, and removed spots from the eyes, both drying up their sources and fortifying and clarifying the vision.American Encyclopedia of Ophthalmology, Vol.9, p.7022

Laurent, Torvard C. (1930-) Swedish Biochemist specializing in connective tissue, especially hyaluronan (hyaluronic acid). Laurent studied at the Karolinska Institute, Stockholm, Sweden, and obtained MD in 1958 and PhD in 1957 (Thesis: *Physico-Chemical Studies on Hyaluronic Acid*, Almqvist & Wiksell, Uppsala, 1957). His teachers were Dr. Endre A. Balazs and Bertil Jacobson. After research at the Retina Foundation, Boston, MA, USA 1953-54 and 1959-61 he obtained a position in Ophthalmic Biochemistry at the Swedish Medical Research Council. He held the Chair in Medical and Physiological Chemistry at the University of Uppsala, Sweden, 1966-1996 and is since then Emeritus Professor. Laurent was visiting professor at Monash University, Australia, 1979-1980. Laurent has published about 200 research articles in the field of Physiological Chemistry. Seventy five graduate students and fifty visiting scientists have been trained in his research group. The main achievement of Laurent in the period 1949-1980 concerns the physical-chemical characterization of hyaluronan and other polysaccharides and their physiological function (WD Comper and TC Laurent, Physiological Function of Connective Tissue Polysaccharides, Physiol Rev 58, 255-315, 1978). From 1980-until present the main interest has been in the metabolism of hyaluronan and its role in pathological processes (TC Laurent and JRE Fraser, Hyaluronan, FASEB J 6, 2397-2404, 1992; TC Laurent, UBG Laurent and JRE Fraser, Serum Hyaluronan as a Disease Marker, Ann Med 28, 241-253, 1996; TC Laurent (ed) The Chemistry, Biology and Medical Applications of Hyaluronan and its Derivatives, Portland Press, London 1998). Special research on the eye includes biochemical studies on the vitreous body together with Endre Balazs and Ulla Laurent (J Biol Chem 234: 422-430, 1959; Arch Biochem Biophys 81: 464-479, 1959; Biochim Biophys Acta 42: 476-485, 1960; Exp Eye Res 46: 49-58, 1988) and on corneal polysaccharides together with Arvid Anseth and Inger Marie Dahl (Exp Eye Res 1: 25-38, 99-105, 1961; 34, 83-98, 1982). Laurent has served on various research councils, international organizations, editorial boards and advisory groups. He was President of the Royal Swedish Academy of Sciences 1991-94, a member of the Nobel Committee of Chemistry 1992- and is presently Chairman of the Board of Trustees of the Nobel Foundation. He is also Science Secretary of the Wenner-Gren Foundation which supports international scientific exchange. (Torvard C Laurent: Institute of Medical Biochemistry and Microbiology, University of Uppsala BMC, Box 575, SE-751 23 Uppsala, Sweden Tel. +46-(0)18-471 41 55; Fax. +46-(0)18-51 58 70, e-mail: Torvard.Laurent@medkem.uu.se) (SM)

Laurentius, Andreas see **Laurens, André du**

Laveran, L (1812-1879). French military physician, who devoted considerable attention to ophthalmology. Born at Dunkirk, he studied at Lille, practised for a time in the Hospital at Algiers, in 1841 was professor at the Military Hospital at Metz, returned to Algeria, then became instructor in military diseases at Val-de-Grâce. He has been called the creator of French military epidemiology. Laveran's ophthalmologic writings are as follows: 1. *Note sur la Nature de la Héméralopie. (Rec.de Mém.de Méd.* Mil., 1858.) 2. *Rapport Adressé au Ministre de la Guerre sur les Faits Recueillis au Congres Ophthalmologique de Bruxelles*. (Ibid., 2d series, Vol. XX.)American Encyclopedia of Ophthalmology, Vol.9, p.7023

Lavergne, Gaston (1927-) Belgian ophthalmologist. Lavergne was born in Hodimont (Verviers) and obtained the M.D. degree in Liège in 1952. He was in Bonn in 1952-53 under Müller and in 1958 under Meyer-Schwickerath. He worked in the Department of Ophthalmology of Liège University from 1953 as resident, from 1959 as adjunct departmental head, from 1964 as lecturer and from 1972 as associate professor. He was associated with the Belgian National Fund for Scientifical Research from 1961 to 1970. He specialized in visual functions and more particularly in *fitness of automobile drivers* (1955), *critical flicker fusion rate* (1967), *static perimetry* (1970), *visual evoked potentials* (1980), and, more recently, computerised perimetry. As a member of the Liège school he worked on glaucoma, namely *ocular rigidity* (1958), *functional defects* (1959), *hypertensive uveitis* (1960), *standardization of Schiötz tonometers and biometry* (1961). Other subjects of his studies are endocrine proptosis, nystagmus, photocoagulation and surgery of the lacrymal duct. He is since 1985 the president of the French-speaking section of the Belgian Ophthalmological Society. (Verriest)

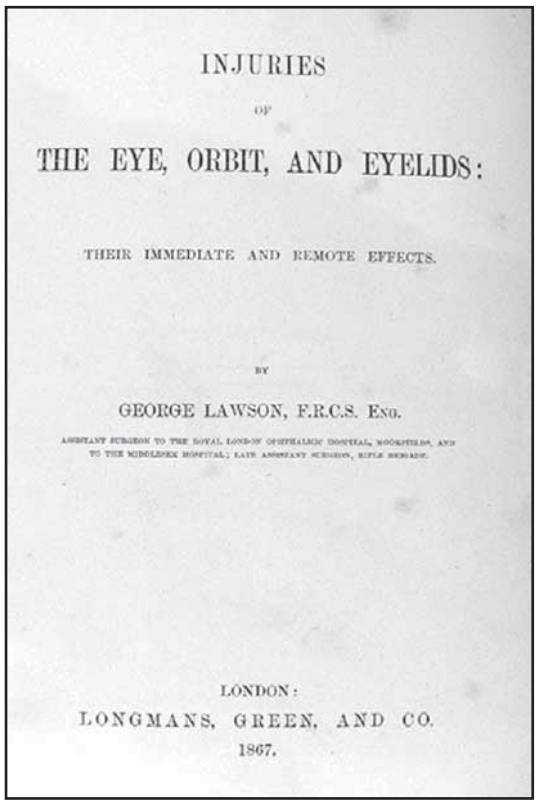
Lawford, John Bowring (1858-1934) British ophthalmologist born in Canada. Born in Montreal, the second child and elder son of Frederick Lawford, architect, and Anne Shaw Low, his wife. He was educated at a private school before entering McGill University, where he graduated M.D. in 1879. He came to London immediately and entered the medical school at St Thomas's Hospital. Having determined from an early period to devote himself to ophthalmology he became clinical assistant to Edward Nettleship, and after acting as assistant house physician at St Thomas's Hospital and resident clinical assistant at Bethlem Royal Hospital he was appointed house surgeon at the Royal London Ophthalmic Hospital, Moorfields, in 1883. He became pathologist and curator of the hospital museum in 1884, assistant surgeon in 1892, surgeon in 1895, and consulting surgeon in 1918. At St Thomas's Hospital he was elected assistant ophthalmic surgeon in 1886, and was surgeon and lecturer on ophthalmic surgery from 1891 until 1915, when he resigned and was made consulting ophthalmic surgeon. At the time of his death he was ophthalmic surgeon to the Medical Appeal Board of the Royal Navy and a member of the Committee for the Prevention of Blindness. He was secretary of the Ophthalmological Society of the United Kingdom 1895-97, and president 1911-13. He was editor of the *Ophthalmic Review* from 1910 to 1916, and was chairman of the editorial committee and afterwards the managing director of the *British Journal of Ophthalmology* from 1917 to 1926. He was also president of the Council of British Ophthalmologists, and during his tenure of the office he arranged with the Ministry of Health for the institutional treatment of children suffering from diseases of the eye. Lawford was a highly accomplished operator who used either hand with equal facility. He was endowed with an exceptional sense of duty and carried out the work of every office he filled with punctilious care. He left one-half of the ultimate residue of his fortune to St Thomas's Hospital and the other half to McGill University, Montreal. A selection of his publications is: *Eye symptoms in insanity* in Tuke's *Dictionary of Psychological Medicine*, 1892 1,485. *Pupil reactions*. Ibid. 1892, 2, 1052. *Diseases of the orbit* in *Encyclopaedia Medica*, 1901, 8, 549. *Ocular lesions in disorders of secretory and excretory organs* in Norris and Oliver *System of diseases of the eye*, 1900, 4, 645. Lawford received following titles: M.R.C.S. 18 November 1879; F R.C.S. 10 December 1885; M.D., M.Ch. 1879; Hon. LL.D. McGill 1921; L.R.C.P. 1880. The Times, 5 January 1934, p. 7d; Lancet, 1934,1:110; Brit. med. J. 1934,1:127.

Lawrence, John Zachariah *see* **Laurence, John Zachariah**.

Lawrence, William (Sir William) (1783-1867) British surgeon, a pupil of Charles Bell. Lawrence was born in Cirencester (County of Gloucester) where his father was a successful surgeon. He received a classic education in a school near Gloucester. When he was 16 years old he was placed in London under the tutelage of the famous Abernethy to learn his profession as a surgeon. After three years, his master procured for him the position of lecturer of anatomy at St.Batholomews medical school, which he continued for 12 years. At the age of 22, Lawrence received his degree from the College of Surgeons of London. At 30 he was adjunct surgeon at Bartholomews Hospital and 11 years later he was named Surgeon at St.Bartholomews (known as Barts). In 1814 , Lawrence became surgeon at the Eye Infirmary, later named Royal London Ophthalmic Hospital, Moorfields where he lectured remarkably on the anatomy and on the diseases of the eye. He held this position for many years, until having too much work, he was forced to abandon this. Lawrence became, in 1815, professor of anatomy and surgery at the College of Surgery. He was very successful in this position, but theories he advocated about comparative natural history to human history brought him many enemies. It went so far, that a rival school was formed at Aldersgate Street, where he taught 1826-1827. Lawrence resigned to take over his old master´s chair which he occupied for the next 37 years, having in total spent more than 60 years at St. Bartolomews Hospital. Lawrence translated at the age of 18 a Latin work "*Descriptions of the arteries of the Human Body*" , at 26 he won the Jackson Prize with an *Essay on Hernia*, the same year he translated Blumenbach´s *Comparative Anatomy*. In 1819 he published his famous Lectures on the Anatomy, the Physiology, the Zoology and the Natural History of Man, which provoked a general uproar. Tired of fighting his idea, at the end he bought back all the available copies of his book, but still convinced of his ideas, sent them all to America. In 1830, Lawrence

published his *Treatise on the veneral Diseases of the Eye*. The same year, C. Billard, of Angers (France) published Lawrence´s lectures which had been published previously in *The Lancet* and which represent Lawrence´s lectures given at Moorfields during the years 1825-1826: *Traité Pratique sur les Maladies des Yeux*. The translator added in this book a chapter of his own: "*Précis de l´Anatomie Pathologique de l´Oeil*" . Three years later, the Traité was re-translated into English and published 1833 in London: *A Treatise on the Diseases of the Eye* of which an American edition with 12 plates was published in 1847. Finally, Lawrence published in 1863 his last work: *Lectures on Surgery*. Annales d´oculistique,1867,58:119-126. JPW.

Laws, William George (1862-1936) British ophthalmologist from Nottingham. His father was City Engineer of Newcastle-on –Tyne. Laws was born at Barrasford, Chollerton, Northumberland and was educated at Newcastle Grammar School and Durham University. His medical education was at Edinburgh University and St. Thomas's Hospital; Qualifying M.B., C.M., at Edinburgh in 1888, he came to London and took the F.R.C.S.Eng. in 1892. At St. Thomas's he came under the influence of →Nettleship and Lawford and it goes without saying that he was thus a first class clinician. Laws settled in Nottingham where he was surgeon to the Nottingham and Midland Eye Infirmary for many years and where he acquired a large practice in the city and surrounding neighbourhood. At the time of his death he held the post of Consulting Ophthalmic Surgeon to his old hospital. For many years he was a member of the Editorial Staff of the Ophthalmic Review and he also acted as sub-editor for some years early in the present century. Laws joined the Ophthalmological Society of the United Kingdom in 1889 and served for a period on the Council. He was also at one time a member of the Board of Directors of this journal. Apart from routine editorial work for the Ophthalmic Review he did not write much ; but he was the author of some papers in the Transactions of the Ophthalmological Society, mostly of clinical type. BJO 1936,20:492;Brit med J.1936,1:1185;LFRCS 1930-1951:472


INJURIES

OF

THE EYE, ORBIT, AND EYELIDS:

THEIR IMMEDIATE AND REMOTE EFFECTS.

BY

GEORGE LAWSON, F.R.C.S. Eng.

ASSISTANT SURGEON TO THE ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS, AND TO THE MIDDLESEX HOSPITAL; LATE ASSISTANT SURGEON, RIFLE BRIGADE.

LONDON:

LONGMANS, GREEN, AND CO.

1867.

Lawson, George (1831-1903). English ophthalmologist. Born in 1830, his professional experiences began in the Crimea, where he served as military surgeon. Returning to London in 1855, he at once became a surgeon to the Middlesex Hospital-a position which he held for more than thirty-three years. In 1862 he also became Surgeon to the Royal London Ophthalmic Hospital (Moorfields). In 1852 he was made a Member, in 1857 a Fellow, of the Royal College of Surgeons of England. In 1886 he became oculist to Queen Victoria. His most important ophthalmologic writings are, *On Sympathetic Ophthalmia*. (1865) ; *Injuries of the Eye, Orbit and Eyelids, their Immediate and Remote Effects* (1867); also *A Manual of Injuries and Diseases of the Eye* London 1869 (4th ed., 1880) The same year, in 1869, an American edition was published in Philadelphia..American Encyclopedia of Ophthalmology, Vol.9, p.7025.JPW

Lawson, Sir Arnold (1867-1947) British ophthalmologist who was the fourth of seven sons of George→Lawson (1831-1903). George Lawson was a pupil of Sir William→Bowman at King's College Hospital, and went to the Crimea as an Assistant Surgeon in 1854. In May, 1855, he had a very severe attack of typhus fever that produced a complete paraplegia, and he was invalided out of the Army in January, 1856. He was already an Assistant Surgeon at Middlesex Hospital where he was a colleague of John Whitaker Hulke. George Lawson was elected Assistant Surgeon to Moorfields Eye Hospital in 1862 on the same day as Sir Jonathan→Hutchinson. He became Surgeon-Oculist to Queen Victoria, holding this appointment until her death in 1901. Sir Arnold Lawson was born at 12 Harley Street (into which his father had moved in 1863) and he was destined to spend his whole life there. He was educated at the Merchant Taylors School and in 1886 entered the Medical School at Middlesex Hospital as Senior Entrance Scholar. He did well as a student, winning the Hetley Prize in 1890 and was Senior Broderip Scholar in 1891, in which year he qualified. He graduated as M.D. in 1891 and obtained his F.R.C.S. diploma in 1893. Sir Arnold soon decided to be an ophthalmic surgeon and

joined his father in practice. He was elected to the Paddington Green Children's Hospital in 1896 after having worked with Sir John Tweedy at Moorfields. In 1900, when it was decided to increase the visiting staff at Moorfields from nine to twelve, he was elected Assistant Surgeon together with John Herbert→Fisher and Percy→Flemming. He became full surgeon in 1907 and retired in 1914, becoming Consulting Surgeon in 1923. In 1910 he joined William→Lang at Middlesex as Assistant Surgeon, succeeding him as full surgeon in 1914. In 1932 he was elected Consulting Surgeon. He served as ophthalmic surgeon to the Hospital of St. John and St. Elizabeth, and from 1914 to 1919 was ophthalmic surgeon to King Edward VII Hospital for Officers. For many years up to the time of his death he was Consulting Ophthalmic Surgeon to the Royal Hospital for Incurables at Putney and to the Royal Medical Benevolent College, Epsom. In 1914 began his important work in connection with the founding of St. Dunstan's. He became principal ophthalmic adviser to Sir Arthur Pearson in this connection and remained Chairman of the Ophthalmic Advisory Committee until his death. For this work he was appointed K.B.E. in 1920. In 1940 he was appointed Ophthalmic Consultant to the Navy. Of this he was very proud, refusing to take any fee for his services, saying that it was his contribution to the branch of the Forces in which his son served. He became suddenly ill in 1918 and the nature of the complaint was not diagnosed. He recovered almost as suddenly but in July, 1921, the true nature of his ill health became apparent when he had a serious breakdown and he spent six months in a sanatorium. After his return to work he gave up many of his appointments and for five years attended no meetings where many people were congregated. Sir Arnold became a member of the Ophthalmological Society in 1896 and after serving as a Vice-President became Treasurer in 1919, retaining the office until 1947. Lawson´s literary output was not large. He re-edited and largely re-wrote his father´s textbook on *Diseases and Injuries of the Eye* (6th edition 1903). He published with Sir James Mackenzie →Davidson *The treatment of Eye Disease by Radium* in Brit med J.1910,2:1491and a chapter *Diseases of the Iris* in: Latham & English´s *System of Treatment*, 1912. Lawson also wrote: *War Blindness at St.Dunstan´s* London 1922. BJO 1947,31:251-254;Brit med J.1947,1:161;Lancet 1947,1:198;JPW

Layard, Daniel Peter. A London physician of the 18th century, who seems to have devoted considerable attention to the eye. He wrote *An Extraordinary Case of Diseased Eye* (*Philos.Trans.*, 1758). Am Encyclopedia of Ophthalmology 7025

Lazerme, Jacques (1676-1756) An 18th century physician and surgeon of Montpellier, France, who devoted much attention to the eye. Born at Pouget, diocese of Béziers, in 1676, he received his medical degree at Montpellier in 1703, settled in Montpellier and there succeeded Bézac to the chair of surgery in 1720. He is said to have enjoyed an immense practice. He wrote four books, of which the only one of any ophthalmologic importance is entitled *"Curationes Morborum"* (2 vols., Montpellier , 1750; Paris, 1754). In Vol.1 of this work is a chapter devoted to ocular therapeutics, which is not without value. The literary style of the chapter is really remarkable for its day and time, being simple, clear, concise, and especially devoid of the useless repetitions so characteristic of many of the contemporaries of this writer. The complicated polypharmacy of the time is also conspicuous by its absence. Lazerme, however, had never appreciated the true nature and location of cataract, in spite of the early experiments of Brisseau and Maitre-Jean.American Encyclopedia of Ophthalmology, Vol.9, p.7026

Lazzattin Pietro (1814-1871) An Italian obstetrician, of a little ophthalmologic importance because of his graduation dissertation entitled "*Della Diagnosi della Cataratta e della Scelta del Metodo Operativo*." He was born at Milan, received his medical degree at Pavia in 1836, and settled as obstetrician in Milan. In 1863 he was made physician-in-Chief to the Milan Lying-in Institution, as well m Professor at the Royal Obstetrical College, and later, the President of that institution.

Le Cat, Claude Nicolas (1700-1768) French surgeon. Le Cat was born at Blerancourt, France. He studied medicine in Paris and settled in Rouen, where he became chief surgeon at the Hôtel-Dieu in 1731. In 1736 he established a school for anatomy and surgery, and became in 1744 a founding member of the Rouen Académie des Sciences . Le Cat developed new methods for lithotomy and the treatment of lacrimal fistulae; he wrote

theoretical works on physiology in which he expounded a mechanistic notion of the organism as a hydraulic machine; and on embryology, he published on a wide range of non-medical topics, including geophysics, astronomy, electricity, and archeology. Among those : *Traité des sens*. Rouen 1740; *A physical essay on the senses*. London 1750.

Le Cat, Claude Nicolas *see* **Cat , Claude Nicolas le**

Le Clerc, Sébastien (1637-1714) French engraver, was born at Metz, France, and spent most of his life in Paris, where he won renown both as artist and teacher. Le Clerc made a special study of the science of perspective, and published several influential treatises on the subject: *Discours touchant le point de veue, dans lequel il est prouvé que les choses qu'on voit distinctement, ne sont veuës que d'un oeil*. Paris 1679.

Le Conte, Joseph (1823-1901). Geologist, naturalist, physiologist and philosopher, descendant of an old Huguenot family, was born in Liberty County, Georgia. He graduated at the University of Georgia in 1841 at the age of eighteen, and later at the College of Physicians and Surgeons in New York City. He settled in Macon, Ga., and there practised medicine for several years. In 1850 and 1851 he studied natural history under Agassiz at the Lawrence Scientific School of Harvard, and in the latter year went with Agassiz to Florida on an exploring expedition. Subsequently he held professorships in Oglethorp College, in the University of Georgia and in the University of South Carolina. In 1862 and 1863, during the Civil War, he was chemist in the Confederate laboratory for the manufacture of medicines, and in 1864 and 1865 held a similar position is the nitre and mining bureau. In 1869 he and his brother, John Le Conte, were called to the University of California at Berkeley, Ca., where he occupied the chairs of geology and natural history for thirty-two years until his death. His first published work was not, as might be expected, one relating to pure science, but to religion; i. e., *Religion and Science; A series of Sunday Lectures on the Relation of Natural and Revealed Religion, or the Truths Revealed in Nature and Scripture*. It appeared in 1874, and was followed by *Elements of Geology*, and in 1881 by *Sight, An Exposition of the Principles of Monocular and Binocular Vision*.(N.Y.1881) Later appeared *A Compend of Geology*, *Evolution and Its Relation to Religious Thought*, and a work on *Comparative Physiology and Morphology*. Besides these works he was the author of many papers on animals published in the *Philosophical Magazine;* American *Journal of Science and Arts*, etc., etc. To the ophthalmologist, physiologist and psychologist, Le Conte is best known through his volume entitled *"Sight:An Exposition of the Principles of Monocular and Binocular Vision* New York 1881, a work widely known and quoted here and abroad as an original authority. American Encyclopedia of Ophthalmology, Vol.9, p.7032-7039.

Le Grand, Paul (1914-1966) Belgian ophthalmologist. Le Grand obtained his M.D. degree in Brussels. He wrote papers on surgical problems (as *hyphaema after cataract extraction* in 1953, *lacrymal intubation* in 1955 and 1956, *enzymatic zonulolysis* in 1958 and 1959) and presented in 1963 to the Belgian Ophthalmological Society a report on the *ocular symptoms of cerebral postcommotional syndrome*. (Verriest)

Lebas, Joseph (1895-1975) Belgian ophthalmologist. Lebas obtained his M.D. degree in Leuven in 1921 and specialized in ophthalmology in Leuven and in Paris. He wrote papers on *reconstruction of the orbit with implantation*, on *treatment of strabimus* (1935) and on *optic neuritis* (1936) (Verriest)

Lebas, Pierre (1927-) Belgian ophthalmologist. Lebas obtained his M.D. degree in Leuven in 1951. He wrote on *retinoblastoma*, *avitaminosis A*, *antimalaric keratopathy*, *oculocutaneous syndroms* (a thick report for the Belgian Ophthalmological Society in 1960), *ophthalmic herpes zoster* and *retinal reticulosarcoma*. (Verriest)

Lebensohn James Elzar (1893-1979) American ophthalmologist, a long-time member of the Department of Ophthalmology of Northwestern University. Lebensohn was born in Chicago and took his undergraduate training at the University of Chicago where he also received a Master's degree. In 1917 he received his medical degree from Rush Medical College after which he entered the United States Navy as a Lieutenant in the Medical

Corps. On his return to Chicago he began to practice ophthalmology. After a short hiatus at the Illinois Eye and Ear Infirmary he joined the staff at Northwestern University Medical School as an instructor. He immediately began to develop his major interests in physiology and biochemistry of the eye. In 1935, he was awarded a Ph.D. by Northwestern for his dissertation, *Studies in Biochemistry of the Lens*. (This actually represented about the 50th article that Lebensohn had published.) He continued to write prolifically; the estimate is that he published approximately 350 articles, biographies, clinical notes, and instrument modifications. His curiosity was insatiable, and he wrote about many areas in ophthalmology but most commonly about refraction, physiologic optics, and spectacles. As with many of his colleagues, his career was interrupted by World War II during which he returned to the Navy, this time with the rank of captain. He served with distinction in the South Pacific for six years. In 1946 he returned to Chicago and to Northwestern University where he continued to teach until his retirement as emeritus professor in 1962. Even after his retirement Lebensohn could be found many afternoons in the library as he researched a historical personage or the earliest recording of a particular phenomenon in ophthalmology. He continued to publish and to serve on the Editorial Board of the Journal of Ophthalmology. His range of interests was enormous, and although he published chiefly in the field of optics, his earliest paper, published in 1923, was entitled *The American student in Paris.* Among Lebensohn's many instrumental contributions was the development of a rational near vision chart. This chart, in wide use in this country, has visual acuity units both in the Jaeger system, in the point system, and in approximate equivalents to distant vision. For many years Lebensohn published a column in the *Survey of ophthalmology* entitled *Classics in Ophthalmology*. In 1969 these were collated and published by Williams and Wilkins as *An Anthology of ophthalmic Classics*. AJO 1979,88:792-793.

Leber, Theodor (1840-1917) German ophthalmologist born in Karlsruhe, Germany. Leber received his M.D. in 1862 in Heidelberg, and spent several years in postgraduate ophthalmologic research in various European cities. He worked as von Graefe's assistant from 1867 to 1870. During that time, when Graefe was unavailable because of sickness, he took over his lectures and along with others (W.Kühne, J. Rosenthal, J. Cohnheim) became a member of what was later called the circle of “Raisonneurs”. Leber became professor of ophthalmology in Berlin (1871-1873), moving to Göttingen (1873-1890) and Heidelberg Universities (1890-1910). Leber's research focused on disorders of the ocular circulation, the degeneration of retinal pigment, color vision in diseases of the retina, pathologic changes in the ocular fluids, and diabetic disorders of the eye. He wrote: *Ueber den Einfluss der Leistung mechanischer Arbeit auf die Ermüdung der Muskeln* Leipzig 1863; *Anatomische Untersuchungen über die Blutgefässe des menschlichen Auges*, 1865; *Der Augenspiegel*. Berlin 1872; *Die Entstehung der Entzündung und die Wirkung der entzündung erregenden Schädlichkeiten nach vorzugsweise am Auge* etc. Leipzig 1891. He contributed two important volumes to Graefe-Saemisch´s *Handbuch der gesammten Augeheilkunde*: *Die Cirkulations- und Ernährungsverhältnisse des Auges* (Graefe-Saemisch Vol.2, 2nd Section) 1903 and *Die Krankheiten der Netzhaut* (Graefe-Saemisch Vol.7A,Part 1 & 2) 1915-1916. After Hirschberg´s historical contribution, this was the largest chapter in Graefe-Saemisch, with more than 2000 pages on the retina. Leber received in 1896 the Graefe Medal for his outstanding contributions to ophthalmology. JPW

Leblanc, Urbain (Ulysse) (1796-1871) French veterinarian surgeon, born near Bressuire, France, received his training at the Alfort veterinary school and practiced in Paris. He published extensively on animal pathology. He wrote: *Traité des maladies des yeux observées sur les principaux animaux domestiques* Paris 1824 (see cover of Hirschberg, History of ophthalmology, volume 6). Albert

Leboucq, Georges (1880-1951) Belgian anatomist and ophthalmologist. Leboucq was born in Ghent and died in the same city. He was the son of Hector Leboucq, also an anatomist He obtained at the University of Ghent successively the Ph.D. degree (zoology) in 1901 and the M.D. degree in 1904. He specialized in ophthalmology in Ghent, Vienna, Berlin and Paris, but entered as assistant in his father's department of anatomy. He obtained the special doctorate in anatomy with a thesis on the *lymphatic circulation in the*

eye and in the orbit. Of special interest for ophthalmologists is his important papers on the *histogenesis of the mammalian cones and rods* (1908), on the *external limiting membrane of the avian retina* (1909), on the *circulation of the aqueous humour* (1920) and on a *rudimentary hyaloid organ in the eye of the primates* (1923). He was very interested in the history of medicine and wrote a book on the anatomist Andre Vésale. He was member of the (French) Belgian Academy of Medicine and member of honour of the Belgian Ophthalmological Society. (Verriest)

Lebrun, Pierre Desire(1836-1900) Belgian ophthalmologist, born at Renlies, he studied medicine at Leuven [not at Lyon/France as stated in the American Encyclopedia of Ophthalmology], then ophthalmology at Paris under →Sichel, de →Chassaignac and →Desmarres, in London under →Bowman and →Critchett. He practised at Brussels where he died. Lebrun was the *first* to describe the leucosarcome of the iris. Joseph De Lantsheere and Victor Tonglet were his pupils. American Encyclopedia of Ophthalmology, Vol.9, p. 7032; van Duyse: Histoire de l´ophtalmologie en Belgique,p.49.Verriest

Lederman, Manuel (1911-1984) Famous British radiologist with an interest in ophthalmology. Lederman received his medical training at the Westminster Hospital, where he won the *Sturges Prize* for Clinical Medicine and the *Hanbury Prize* for diseases of the children. He qualified in 1935. Early in his career Dr.Lederman developed an interest in the treatment of diseases of the eye and of the orbit by ionising radiation, and took charge of the x-ray department of Moorfields Eye Hospital in 1941, remaining in charge until 1948 when all radiotherapy was transferred from Moorfields to the Royal Cancer Hospital. He remained honorary consultant radiotherapist to Moorfields and established a flourishing joint Eye Tumour Clinic at both hospitals. Lederman pioneered many techniques of radiotherapy of eye conditions. He received the *Roentgen Award* in 1956, the *Barclay Medal* in 1972, the *Knox Medal* in 1974 and the *Harrison Prize* in 1976. BJO 1985; 69:316.

Lee, Charles George (1852-1913). British ophthalmologist educated at Wesley College, Sheffield and at Guy´s Hospital. He settled in Liverpool in1877, appointed assistant surgeon at Liverpool Eye and Ear Infirmary in 1878 and elected junior surgeon 1885. Few publications between 1886-1908 mostly in *"Liverpool, Med.-Chir.Journal"* . The Ophthalmoscope, London 1913,p. 450.

Lee, Chin Piaw (1951-) Singaporean ophthalmologist, Consultant Singapore General Hospital (SGH) PL and Singapore National Eye Centre. He graduated in 1977 from University of Singapore with M.B., B.S. degree, and extended his studies in U.K. during 1977-1979 and 1980-1982: he received FRCS (Ophth) in Glasgow (1982) FRCOphth (UK) in 1989. He is also a recipient of A.M. (Singapore) in 1987. He worked as a clinical assistant at Moorfields Eye Hospital in 1981-1982, and on homecoming, he became Senior Registrar at the Department of Ophthalmology of SGH in 1985, and has served as a Consultant Ophthalmologist of SGH PL since 1989, and as a Visiting Consultant to the Singapore National Eye Centre. He specializes in cataract and refractive surgery and some examples of his publications are "*Scanning electron-microscopic evaluation of posterior chamber intraocular lenses*. Annales Acad. Med. 18: 178-85, 1989", "*Radial keratotomy-preliminary results in the Singapore General Hospital*. Annales Acad. Med. 18: 141-150, 1989" and "*Capsulorhexis- A 5-year experience*. Eur. J. Impl. Refr. Surg. 2: March, 1990". He demonstrated live-surgery on 5 occasions, presented 19 papers and 28 teaching courses at international Meetings. (Dr. C.P.Lee Suite #10-18 (level 10) Mount Elizabeth Medical Centre, 3 Mount Elizabeth, Singapore 0922. Phone: 65-7371117; Fax: 65-7372122) (SM)

Lee, Edwin (?- 1870) British physician. After receiving his diploma from the College of Surgeons in 1829, Lee spent much of his life on the Continent, practicing at various spas. He published comparative studies of medical practice at these European watering places, as well as works on animal magnetism, homeopathy, nervous disorders, lithotomy, and lithotrity. He is amongst the early authors of books on strabismus: *On stammering and squinting and on the methods for their removal*. London 1841.

Lee, Jaeheung (1936-) Korean ophthalmologist, Professor and Chairman of the Department of Ophthalmology, College of Medicine, Seoul National University. He graduated from the Seoul National University, Faculty of Medicine 1961 and received his M.D. degree, and extended his study at the Postgraduate School of the University and received his Ph.D (thesis: *Experimantal Ocular Siderosis*, J. Kor. Ophthalmol. Soc. 9 (2): 7, 1968). He worked as a Clinical Research Fellow at the University of California, San Francisco in 1970-1971. He worked further at many famous Institutes of the World, i.e., the Massachusetts Eye and Ear Infirmary (1976), Wilmer Eye Institute (1981), Moorfields Eye Hospital, London, University Eye Clinic of Köln, Doheny Eye Institute of the University of Southern California (1984), Wisconsin Medical College (1987), Duke University, Jules Stein Eye Institute (UCLA), Emory University Eye Center (1992), Bascolm Palmer Eye Institute of the University of Miami (l996) and Lions Eye Institute, Perth, Australia. He has served in the present position as above since 1988, and as the Executive Board of Trustees of the Korean Ophthalmological Society (1963-1968) and the President of the Society (1992-1994). His research interest is vitreoretinal disease and its treatment, and he has published 95 articles in this field, e.g. *Ultrastructure of vitreoretinal proliferating membranes*. J. Kr. Ophthalmol. Soc. 225: 14, 1984". He also wrote books *Retinal detachment*, Seoul National University Press, 1996 and *Differential diagnosis by Fundus findings*,. The Seoul National University Press, 1988". (Department of Ophthalmology, College of Medicine, Seoul National University, 28 Yeonkun-dong,Chongro-ku, Seoul 135-010, Korea, phone: 82-2-760-2430, Fax: 82-2-741-3187, e-mail: jaeheung@plaza.snu.ac.kr)(SM)

Lee, Pei-fei (1925-) Taiwanese-American ophthalmologist, a graduate of National Shanxi University in 1949. He received ophthalmology training with Professor Y.F. Yang of National Taiwan University Hospital (1950-1954) and Professor Callahan and Professor Paul of University Alabama Hospital and Hillman Clinics in USA during 1954-1956. He studied Glaucoma at Massachusetts Eye and Ear Infirmary and Howe Laboratory of Ophthalmology, Harvard Medical School with Drs. Trotter, Chandler and Grant (1956-1959). He was appointed Associate Professor of Ophthalmology of National Taiwan University in 1959-1963. During this tenure, he abolished unhealthy traditional "wash eye" custom and established the Glaucoma Service at National University Hospital. He assisted Professor Y.F. Yang and other colleagues in founding the Ophthalmological Society of the Republic of China in 1960. In 1963, he returned to the USA to study Retina and Glaucoma at the Retina Foundation in Boston with Professor C. Schepens, Dr. W.Mc Meel and Dr. R. Field. He was appointed to Assistant Clinical Professor of Ophthalmology and established the glaucoma consultation service at Boston University Hospital in 1967-1971. He was then appointed to Associate Clinical Professor in 1972 and promoted with tenure to Professor of Ophthalmology of Albany Medical College in 1980. He established the Glaucoma Service and the Experimental Ophthalmic Microsurgery Laboratory at Albany Medical College and Hospital. He served as President of New York State Capital District Chapter, Chinese-American Medical Society in 1976-1979 and Member of the New York State Board of Medicine from 1979-1989. He was elected the Vice-President and the President of the Eastern New York EENT Association in 1982-1984. He assisted and founded the Chinese American Ophthalmological Society in 1986, he was elected its first President from 1986-1988. Internationally, he was one of the founding members of the Asia-Pacific Academy of Ophthalmology in 1958 and the President of the First International Symposium of Glaucoma Laser Surgery in 1983. Socially he served as the President of the Greater Boston Chinese Cultural Association. He was also a board member of Chinese Community Center and the Visiting Nurse Foundation in Albany. He is a voluntary physician (ophthalmologist) of Albany County Civil Defense. He is a recipient of the Scientific Award of the Chinese American Society in 1986, the New York State Governor Award for Outstanding Asian-American in 1993 and the Pioneer in Ophthalmology Award, from the Chinese American Ophthalmological Society in 1997. He is an honorary member of the Asian-Oceanic Glaucoma Society and the New York State Ophthalmological Society. He has over one hundred publications related to the field of glaucoma and retina, notably transpupillary cyclophotocoagulation of the ciliary processes, aqueous-venous shunt procedures, refinement in glaucoma microsurgeries and the development of the PF Lee Goniolens for goniotomy and pediatric

ophthalmology, diabetic retinopathy classification and experimental open-sky vitreoretina surgery. He is active in ophthalmology resident and post-resident fellow education both in glaucoma and retina. He lectured widely both in the States and aboard during his tenure. He established Glaucoma Services, P.C. in 1984 and retired from private practice and clinical teaching in 1998. (421 Lincoln Drive, Guilderland, N.Y. 12084-9545, USA. Phone/Fax: (518) 456-0052, e-mail: drpflee@Yahoo.com (SM)

Lee, Seong-Whan (1962-) Korean artificial vision scientist. Dr.Lee received his B.S. degree in Computer Science and Statistics from Seoul National University, Seoul, Korea, in 1984; a M.S. and Ph.D. degrees in Computer Science from the Korea Advanced Institute of Science and Technology in 1986 and 1989, respectively. From February 1989 to February 1995, he was an Assistant Professor in the Department of Computer Science at Chungbuk National University, Cheongju, Korea. In March 1995, he joined the faculty of the Department of Computer Science and Engineering at Korea University, Seoul, Korea, as an Associate Professor. Currently, Dr. Lee is the director of National Creative Research Initiative Center for Artificial Vision Research (CAVR) supported by the Korean Ministry of Science and Technology. Dr. Lee was the winner of the Annual Best Paper Award of the Korea Information Science Society in 1986. He obtained the Outstanding Young Researcher Paper Award at the 2nd International Conference on Document Analysis and Recognition in 1993, and the First Distinguished Research Professor Award from Chungbuk National University in 1994. He also obtained the Outstanding Research Award from the Korea Information Science Society in 1996. He has been the Co-Editor-in-Chief of the International Journal on Document Analysis and Recognition since 1998 and the Associate Editor of the Pattern Recognition Journal, the International Journal of Pattern Recognition and Artificial Intelligence, and the International Journal of Computer Processing of Oriental Languages since 1997. At present (1999), he is the Guest Co-Editor of the Special Issue on Document Analysis Systems of the International Journal on Document Analysis and Recognition. He was the Guest Editor of the Special Issue on Handwriting Recognition of the International Journal on Document Analysis and Recognition in 1998, the Guest Co-Editor of the Special Issue on Oriental Document Recognition of the International Journal of Pattern Recognition and Artificial Intelligence in 1997, and the Guest Editor of the Special Issue on Oriental Character Recognition of the Pattern Recognition Journal in 1996. He was the Program Co-Chair of the 6th International Workshop on Frontiers in Handwriting Recognition, the 2nd International Conference on Multimodal Interface and the 17th International Conference on Computer Processing of Oriental Languages, and the Workshop Co-Chair of the 3rd International Workshop on Document Analysis Systems. At present, he is the Program Co-Chair of the 5th International Conference on Document Analysis and Recognition in 1999 and the Workshop Co-Chair of the IEEE International Workshop on Biologically Motivated Computer Vision in 2000. He served on the program committees of several well-known international conferences. He is a fellow of the International Association for Pattern Recognition, a senior member of the IEEE Computer Society and a life member of the Korea Information Science Society, the International Neural Network Society, and the Oriental Languages Computer Society. His research interests include biologically-motivated computer vision, document image analysis and recognition, content-based image retrieval, and neural networks. He has more than 150 publications on pattern recognition and neural networks in international journals and conference proceedings, and authored two Korean books: *Theory and Practice of Character Recognition*, Hongneung Press(1993) and *Principles of Pattern Recognition*, *Hongneung Press*(1994). Lee co-authored: S.-W. Lee and Y. Nakano(Eds.), *Advances in Document Analysis Systems*, Lecture Notes in Computer Science, Springer Verlag, 1999(To appear). S.-W. Lee(Ed.), *Advances* in Handwriting Recognition, World Scientific Publishing Co., ISBN 981-02-3084-2, 1999. S.-W. Lee, Y.Y. Tang and P.S.P. Wang(Eds.), Advances in Oriental Document Analysis and Recognition Techniques, World Scientific Publishing Co., ISBN 981-02-3744-8, 1998. H.-S. Park, S.-Y. Kim and S.-W. Lee, *Gray-scale Handwritten Character Recognition Based on Principal Features*, *Document Recognition* (Eds. L. M. Vincent and J. J. Hull), SPIE Publisher, ISBN 0-8194-2438-2, 1997, pp. 40-49; H.-S. Park and S.-W. Lee, *A Truly 2-D Statistical Model for Off-line Handwritten Character Recognition*, *Progress in Handwriting Recognition* (Eds. A. C. Downton and S.

Impedovo), World Scientific Publishing Co., ISBN 981-02-3084-2, 1997, pp. 153-160; S.-W. Lee, *Principles of Pattern Recognition*, Vol. I, II, Hongneung Science Publisher, Seoul, April 1994(in Korean). S.-W. Lee, *Character Recognition: Theory and Practice*, Vol. I, II, Hongneung Science Publisher, Seoul, April 1994(in Korean). Address: Asan Science Building Room 204, Dept. of Computer Science and Engineering, Korea University, Anam-dong, Seongbuk-ku, Seoul 136-701, Korea, Phone : (+82) 2-3290-3197; Fax : (+82) 2-926-2168 @: swlee@image.korea.ac.kr ; Web : http://image.korea.ac.kr/swlee (AB)

Lee, Y.C., Dato (1942 -) Malaysian ophthalmologist, Chairman of Lee Eye Centre, Ipoh, Perak, Malaysia. He graduated from University of Singapore in 1967, carried out postgraduate studies in Royal College of Physicians, London (1972), Royal College of Surgeons, London (1972), Royal College of Surgeons England (1973) and Royal College of Ophthalmologists (1989): he received degrees including FRCS and FRCOphth. His domestic professional activities include Chairman, Malaysian Association of Small Incision Surgery (1997-1998), Medical Superintendent and Senior Consultant Ophthalmologist of Perak Chinese Maternity Hospital and Senior Consultant Ophthalmologist of Ipoh Specialist Centre. In international organizations, he is a Founder Member of the Asia-Pacific Implant Association (APIIA) and served as Honorary Secretary (1989-1992) and Honorary Treasurer (1993-1999) of the Association. He is a member of American Academy of Ophthalmology, International Intraocular Implant Club, American Society of Cataract and Refractive Surgery, and European Society of Cataract and Refractive Surgery. He gave many courses in Cataract surgery and Intraocular Implant both in domestic and international settings. He delivered the Alim Memorial Lecture *Phacoemulsification – A critical resume* at the 25th Congress of Bangladesh Ophthalmological Society in 1998. He is a recipient of Distinguished Service Award from the APAO and the APIIA. (SM)

Leelawongs, Nisit (1933-) Thai ophthalmologist, President of the Foundation for Prevention of Blindness, Thailand. He graduated from the Medical School, Chulalongkorn University of Medical Sciences, Bangkok, and received his M.D. degree in 1956. He studied Ophthalmology under Prof. PRACHAKVEJASITH, P. and Prof. PROMMINDAROJ K. and was appointed the Lecturer in 1958 and then Associate Professor in 1974. He went to the U.S.A. on a Fellowship of the China Medical Board and studied at Harvard Basic Science Course (1964), at New York Hospital of Cornell Medical Center (1964) and also as a Clinical Fellow of the Retina Foundation, Boston (1964-1965). On return to his home country, he started the Retina Service at the Chulalonkorn Hospital. He served the Ophthalmological and Otolaryngological Society of Thailand as Assistant-Secretary (1970-1971), as the Secretary-Treasurer (1972-1975) and also as the Secretary (1974-1975) and Vice-President (1976-1977) of Chulalongkorn Hospital Medical Alumni. He also served the Ophthalmological Society of Thailand as the Secretary (1981-1984) and the President (1985-1988). He has been the President of the Foundation for Prevention of Blindness, Thailand, since 1995 and practices Ophthalmology at Chaibadh Clinic in Bangkok. He is a recipient of the Distinguished Service Award of the Asia-Pacific Academy of Ophthalmology in 1989 and the Golden Award for Prevention of Blindness from the Ministry of Public Health, Thailand, in 1996. (SM)

Leeuwen, Marie van see **Van Leeuwen, Marie**

Leuwenhoek *see* **Leeuwenhoek**

Leeuwenhoek, Antony van (1632-1723) Dutch scientist of Delft, the pioneer in microscopy. Leeuwenhoek was first a shopkeeper and civil servant for whom the study of natural history started as a hobby. Beginning in 1671, he constructed microscopes of increasing quality, which enabled him to observe and describe microorganisms, spermatozoa, blood corpuscles, and the microscopic structure of plant and animal tissues, including the tissues of the eye. Leeuwenhoek discovered the layer of rods of the retina, the fibrous structure of the lens and the fibro-epithelial layers of the cornea. He communicated his findings mainly through letters to the Royal Society of London, which translated and published them in its Philosophical Transactions between 1673 and 1724. Published

letters are to be found in *Opera omnia* (5 parts) Leyden 1719 and 1732. He also wrote: Epistolae physiologicae super compluribus naturae arcanis Delphis 1719; *The select works of Antony van Leeuwenhoek* London 1800 (contains early descriptions of lens and optic nerve histology.). Albert

Lefébure, de Saint-Ildephont, Guillaume René (1744-1809) French physician, quack and man of letters, born at Sainte-Croix-sur-Ome, France. He served in the army before studying medicine. He practiced and taught in Versailles, becoming court physician; in 1790 he fled revolutionary France, and lived thereafter mainly in Germany. *Black Cataract* he professed to cure by means of a stream of hydrogen gas directed against the eyeball. In 1809 he was practising in Augsburg, Germany, where he had become physician-in-chief to the hospitals. He died of typhus fever the same year. Lefébure wrote a number of works on ophthalmology, which reveal him to have been a quack: *Ueber den schwarzen Staar, und die neu entdeckte Heilart desselben mittelst des Wasserstoffgas* Leipzig 1801; "*Traité de la Paralysie du Nerf Optique..... Mémoire Theoretique et Pratique sur I'Ophthalmie*" (Frankfort-on-the-Main, 1802 ; *Sichere und Kurze Heilart aller Augen-Entzündungen* (1802) ; *Histoire anatomique, physiologique et optique de l'oeil* Paris 1803. JPW

Lehmann, George Karl Henrich (1815-1890) Danish ophthalmologist of Copenhagen. Lehmann received his M.D. in Copenhagen in 1846 with the dissertation *De rationibus physiologicis et pathologicis humoris aquei oculi humani* , completed his ophthalmological studies abroad, under Sichel, Jaeger, Arlt, and von Graefe. He established the first ophthalmic hospital in Copenhagen and served for many years as physician to the Copenhagen Blind, Deaf, and Dumb Institution; his ophthalmologic articles appeared in Danish, English, and German journals. Albert

Leigh, Arthur George (1909-1968) British ophthalmologist. He received his medical education at the University of Liverpool, where he graduated M.B., Ch.B. in 1933. He held the posts of house surgeon and house physician at the Royal Infirmary at Liverpool and then joined the University anatomy department as a research assistant. He proceeded to the M.D. in 1937 and in 1938 became a Fellow of the Royal College of Surgeons of England. He was appointed a house surgeon at Moorfields Eye Hospital in 1938 and this was the appointment which led to his life's work. He joined the R.A.F. at the cessation of his Moorfields appointment and served at the R.A.F. Hospitals at Littleport, Brussels, and Uxbridge. He was demobilized with the rank of Squadron Leader and on his return to London was appointed ophthalmic surgeon to the National Temperance Hospital and to the King Edward Hospital at Windsor. In 1947 he was appointed surgeon to Moorfields Eye Hospital and ophthalmic surgeon to St. Mary's Hospital and at these two hospitals he undertook the routine surgery, the teaching, and the research which made him such a prominent figure in ophthalmology. He had a particular interest in operative ophthalmic surgery in which he was a perfectionist. He made a special study of corneal transplantation and in this subject he was one of the world authorities and received consultation from all parts of the world. He delighted in the training of the Moorfields house surgeons and of the registrars of St. Mary's and he instilled into them those fundamental principles of ophthalmic surgery in which he believed so strongly. He was an enthusiastic lecturer to the postgraduates and a clear teacher of undergraduates. He published "*Corneal Transplantation*" in 1966 and he was to have given the Pocklington Memorial Lecture at the Royal College of Surgeons in 1969. He was a member of the Examining Board for the Diploma of Ophthalmology and for several years had examined the Moorfields nurses in their Diploma examination. He had been Honorary Secretary of the Ophthalmological Society of the United Kingdom and a Vicepresident of the ophthalmic section of the Royal Society of Medicine. He was very proud to have been a foundation member of the Editorial Board of Ophthalmic Literature and his duties to that Board were always carried out with care and without delay. He was a member of various ophthalmic societies in Britain and overseas. He took his part in all the Committee work which comes to any consultant in the National Health Service. He had served as Chairman of the Medical Committee at St. Mary's and at his death was Chairman of the Medical Committees both of Moorfields and of the Western Ophthalmic Hospital. BJO1968,52:791-792

Leinfelder Placidus Joseph (1905-1988) American ophthalmologist, professor emeritus of ophthalmology at the University of Iowa, and known throughout his life as "*P.J.*". Leinfelder had been associated with the Department of Ophthalmology for many years. Born and raised in LaCrosse, Wisconsin, he earned his B.A. and M.D. degrees and completed his internship at the University of Wisconsin, then came to Iowa in 1930 to be one of C S.→O'Brien's ophthalmology residents. He joined the faculty as an instructor in 1934 and became full professor in 1946. When he retired in 1973, he had been seeing eye patients in the department and doing three to five cataract extractions most Friday mornings for longer than anyone else in the department could remember. Leinfelder didn't call himself a neuro-ophthalmologist, but that was clearly where his interests lay. This was acknowledged by O'Brien in 1938 when Leinfelder was named the head of a neuro-ophthalmology section in the department. Leinfelder´s American Ophthalmological Society thesis, accepted in 1938, was on *Retrograde degeneration in the retina and optic nerves*. He gave courses at the Academy on neuro-ophthalmic topics from 1937 to 1969. During the same years his talks to various midwest state medical societies resulted in publications such as *Papilledema and optic neuritis*, *Misconceptions in neuro-ophthalmology*, *Why test visual fields?*, *The diagnosis and treatment of ocular neuroses*, and *The diagnostic significance of some ocular complaints.* Some of Leinfelder's earliest investigative work was in biochemistry (with Peter Salit) and on roentgen-ray cataracts (with H.D.Kerr), and these two subjects came together for him 20 years later in a series of papers on the metabolism of the crystaline lens and on experimentally produced radiation cataracts. This, in turn, led to a period of service on the Advisory Committee to the Atomic Bomb Casualty Commission. He retired at age 68, but he stayed in the department part-time for another five years, taking care of some of his old patients who had known no other ophthalmologist for 30 to 40 years, making himself available to the residents, and serving as the voice of experience at department faculty meetings. AJO 1989,107:198

Lemp, Michael A. (1937-) American ophthalmologist, Clinical Scientist, and Educator. Born in Washington,D.C., Lemp is a graduate of St. Anselm's Abbey School and received a B.S. from Georgetown College in 1958, an M.D. from Georgetown University in 1962 and an M.Sc.(Ophth.) from Georgetown in 1968. He was a medical officer in the U.S. Air Force from 1963 to 1965. He completed his residency in ophthalmology at Georgetown in 1968; from 1968-70 he was a fellow in corneal disease at the Massachusetts Eye and Ear Infirmary and the Retina Foundation under Professor Claes H.→Dohlman. In 1970 Lemp was appointed to the faculty at Georgetown initially as an Assistant Professor. In 1983 was appointed Professor and Chair of the Department of Ophthalmology, a post which he held until 1992. Since then he has been Clinical Professor of Ophthalmology at Georgetown and George Washington Universities and President of University Ophthalmic Consultants of Washington. He has authored 170 scientific papers and four books and served on the editorial boards of the A.M.A. Archives of Ophthalmology (1974-78), Cornea (1989-95), and as a scientific reviewer for Am.J.Ophthalmol., Archiv Ophthalmol., Invest. Ophthalmol. and Vis. Sci., Cornea, Ophthalmology, and the CLAO J. He is the past President of the Internat. Soc. Contact Lens Res.(1990-1993),Executive Secretary-Treasurer of the Castroviejo Soc.(1987-90), Director of the Internat. Soc. Refractive Surg (1996-98). and served as Chairman of the N.E.I./Industry Workshop on Dry Eyes (1993-95). He is a member of numerous state and national organizations. He has been Visiting Professor at 53 universities and has delivered 8 named lectures. Honors include: AOA (1984), American Ophthal.Soc. (1989), Lacrima Award (1984), AAO Honor Award (1982), AAO Senior Honor Award (1993), Berens Medal(1991), Castroviejo Medal(1998). His research interests include tear physiology, ocular surface disease and corneal wound healing. Lemp is active in professional, social and charitable organizations including the Cosmos Club and the Order of Malta. He enjoys golf, food and wine. Some examples of his many publications are Lemp MA, Holly FJ, Iwata S, Dohlman CH. *The precorneal tear film: Factors in spreading and maintaining a continuous tear film over the corneal surface*. Arch.Ophthalmol. 83:89-94,1970, Lemp MA, Dohlman CH, Kuwabara T, Carroll JM, Holly FJ. *Dry eye secondary to mucus deficiency*. Trans Am. Acad. Ophthalmol. Otolaryngol. 75:1223-1227,1971, Lemp MA and Szymanski ES. *Polymer absorption at the ocular surface*. Arch. Ophthalmol. 93:134-136,1975, Holly FJ,

Lemp MA. *Tear physiology and dry eyes*. Surv. Ophthalmol.22: 69-87,1977, Lemp MA, Weiler HH. *How do tears exit*? Invest. Ophthalmol. Vis. Sci. 24:619-622,1983, Lemp MA, Dilly Pn, Boyde A. *Tandem scanning (confocal) microscopy of the full thickness cornea*. Cornea 4:205-209,1985/86, LempMA. *The surface of the corneal graft: in vivo color specular microscopic study on the human*. Trans Am. Ophthalmol. Soc. LXXXVII: 619-657,1989 and Lemp MA. *New strategies in the treatment of dry eye states*. Cornea, in press (Castroviejo Lecture, 1998). (University Ophthalmic Consultants of Washington, 4910 Massachusetts Ave. N.W. Suite 210 Washington D.C. 20016-3208 ; Phone: (202) 686-6800 ; FAX: (202) 686-6668 , email: malemp@bellatlantic.net)(SM)

Lennox, Richmond (1861-1895). American ophthalmologist. Born in Brooklyn, N.Y. he received his education in the arts and sciences at the Brooklyn Polytechnic Institute, and his medical degree, at the College of Physicians and Surgeons in the City of New York. After a brief period of service in the Roosevelt Hospital, he studied ophthalmology and otology in Europe, and, on his return to America, settled as ophthalmologist and otologist in his native city. He died Nov. 14, 1895, aged thirty-four. American Encyclopedia of Ophthalmology, Vol.10, p.7191

Lenoir, Adolphe (1802-1860) French surgeon, born at Meaux, France. Lenoir received his M.D. in 1833 in Paris. He became a renowned professor of anatomy and surgery at the Ecole Pratique (1835). Lenoir wrote mainly on general surgery. On ophthalmology he left us: *Des opérations qui se pratiquent sur les muscles de l'oeil*. Paris 1850.

Lent, Isaac H. (1846-1918) American Middletown, N. Y., ophthalmologist, of considerable local reputation, born on a farm in the Mohawk Valley . He received in 1873 his degree in medicine at the Albany, N.Y., Medical College. For fifteen years he practiced general medicine at Valatie, N.Y. and then studied the eye, ear, nose and throat in New York and Philadelphia. Settling at Middletown, N.Y. he practiced there for the rest of his life. For a number of years he was consulting ophthalmologist to the Thrall Hospital, Middletown.AJO 1919,2:166

Leo, Leopold (1792-1868). Polish physician who paid considerable attention to diseases of the eye. Born at Königsberg, Prussia, he received his medical degree in 1815 at the University in that place. Settling in Warsaw, he practised there for more than 50 years. For a long time he edited at Warsaw (but in German) the *"Magazin für die Heilkunde und Naturwissenschaft in Polen,*" and from 1838-41 he was physician-in-chief at the Warsaw Ophthalmic Institute. American Encyclopedia of Ophthalmology, Vol.10, p.7419

Leonardo da Vinci (1452-1519) Famous Italian painter, sculptor, architect, musician, mechanician, engineer, optician and physiologist, whose writings on the eye and light are of interest to every ophthalmologist ,even at the present day. He, in fact, it was who discovered that the essential organ of vision was not, as had been supposed until his time, the crystalline lens, but the retina. He was born in 1452, the illegitimate son of a Florentine lawyer, by one Catarina, who is said by some to have been a peasant, by others, a woman of gentle birth. Leonardo, who was brought up by his father, developed into a youth of great strength and beauty, charm of manner, and intellectual energy. His ability as an artist was discovered by Andrea del Verrochio, who became his first teacher. Unlike most artists of his day (the Renaissance) da Vinci did not content himself with a mere imitation, or interpretation, of classical models, but developed a high degree of originality. The most important of his pictures are: The Annunciation; The Last Supper; The Virgin of the Rocks; and Madonna Lisa. In his later years, he turned to science more and more, and then it was, apparently, that he wrote most of his works on geography, geology, cosmology, mathematics, astronomy, mechanics, and optics. So far the *American Encyclopedia of Ophthalmology*, Vol. 10, p.7419-7420. Meanwhile, since 1917, it has been "*discovered* " that da Vinci had the first idea for contact lenses. [See: most modern histories of optics]. We take the opportunity of the publication of this book to refute this erroneous theory: R.F.→Heitz and J.M.→Enoch showed that the drawings in MS "D" with immersed head in Folio 3 Verso and heads and eyes in water-mask or shells in Folio 7 Verso are illustrations designed to explain the perception of an upright image by an eye by reinversion of images inside the eye. In the first case, the eye of the head immersed in

a large glass globe, used as an artificial eye, looks into an crystalline lens sphere and suggest that the front of the optic nerve sees the rays. In the Folio 7 Verso, the water-mask and water-shells illustrate the formation of mirror images and propositions for mirroring experiments with curved glass surfaces, as is detailed in the texts, to explain a reinversion by mirroring and reflection from the surface of the uvea. (Advances in Diagnostic Visual Optics, 19-26, 1987) [JPW]

Leopold, Irving Henry (1915-1993) American ophthalmologist, pharmacologist, researcher, and teacher. He was emeritus professor and chairman of the Department of Ophthalmology at the University of California, Irvine, since 1985 and retired senior vice president in charge of Medical Affairs of Allergan, Inc., in Irvine, California, since 1988. Leopold was born in Philadelphia. He received the Bachelor of Science degree from Pennsylvania State College in 1934 and the Doctor of Medicine degree from the University of Pennsylvania in 1938. His internship was at the Hospital of the University of Pennsylvania from 1938 to 1940, and in 1943 he received the Doctor of Science degree in Medicine from its Graduate School of Medicine. Also in 1943 he became a diplomate of the American Board of Ophthalmology. He held a fellowship in ophthalmology at the University of Pennsylvania for the period 1940 to 1946 and faculty appointments beginning in 1941. In 1955, Dr. Leopold became professor of ophthalmology and head of the department in the University of Pennsylvania Graduate School of Medicine, where he continued until 1964. During the war years (1942 to 1945) he served as clinical investigator in chemical warfare for the United States Office of Scientific Research and Development and as a member of the Committee on Medical Research of the National Defense Research Council. From 1946 to 1964 Leopold held surgical and clinical appointments at Wills Eye Hospital, becoming director of the Research Department in 1949 and the first ophthalmologist-in-chief and medical director in 1961. In 1964 Leopold moved to New York as director of the Department of Ophthalmology at Mount Sinai Hospital and became the first professor and chairman of ophthalmology at the Mount Sinai School of Medicine in 1966. Between 1964 and 1967 he also held an appointment as clinical professor of ophthalmology at the College of Physicians & Surgeons, Columbia University. In 1974 Leopold spent his sabbatical leave from Mount Sinai at the Allergan Pharmaceutical Company in Irvine and accepted the position as chairman of their Scientific Advisory Committee. The following year he left New York to become professor and chairman of ophthalmology at the California College, University of California, Irvine, retiring from that post in 1985. Throughout his academic career Dr. Leopold held consultant appointments at several other institutions. They include Episcopal Hospital (1948-1950), the Albert Einstein Medical Center (1959-1964), and St. Joseph's Hospital (1959-1964) in Philadelphia, and Manhattan Eye, Ear, and Throat Hospital (1965-1975) and Beth Israel Medical Center (1967-1975) in New York. United States government agency consultantships included the Chemical Warfare Medical Research Division (1950-1953), Surgeon General, Public Health Service Training Grants (1952-1958), the National Institutes of Health (1959-1970), the Department of Health, Education, and Welfare (1963-1964, 1971-1973), and the joint National Institutes of Health-Health, Education, and Welfare Advisory Eye Council (1981-1985). Between 1981 and 1985 he served on the Advisory Committee to the director of the National Institutes of Health. Since 1981 he remained active as a consultant for the Army Medical Research and Development Command in Chemical Warfare. Leopold held membership in some 50 local, state, national, and international professional societies. His important offices included chairman of the Committee on Drugs of the American Association of Ophthalmology and Otolaryngology (1963-1975), chairman of the Association for Research in Vision and Ophthalmology (1965), and various committees of the American Medical Association including Interspecialty Committee (1976), Residency Review Committee for Ophthalmology (19601967; chair, 1967), and the Council on Drugs (1970-1973). He served on various committees of the National Academy of Science (1966-1968) and the National Society for the Prevention of Blindness (1974-1981). Service projects in which Leopold participated include the Pennsylvania Lions Club Sight Conservation and Eye Research Project (1958), the Seeing Eye, Inc., Grants Advisory Committee since 1967 (Board of Trustees, 1974), and ORBIS (1974). Leopold had been on the Editorial Board of the *American Journal of Ophthalmology* from 1965 to 1990. He

was an associate editor of the *Archives of Ophthalmology* from 1974 to 1981. Leopold was also editor-in-chief of the *Survey of Ophthalmology* in 1958 and subsequently served to 1962 as contributing editor. He was associate editor of Ocular Inflammation and Therapeutics in 1981. He served on numerous editorial boards including the *American Journal of Diabetes, Investigative Ophthalmol*ogy, the *Journal of Ocular Pharmacology*, and *JAMA*. He served intermittently between 1950 and 1980 on committees involving revision of the United States Pharmacopeia. Additionally, he was author or coauthor of some 25 editorials, 75 book chapters and books, and nearly 400 journal articles. Leopold's distinguished career includes some 30 honorary lectures. International lectures include the Walter Wright Lecture, University of Toronto (1969); the Richardson Cross Lecture for the Royal Society of Medicine, Bristol, England (1970); the Doyne Memorial Lecture, Ophthalmological Society of the United Kingdom, Oxford (1971); the First Ticho Memorial Lecture, Hebrew University of Hadassah Medical Center, Jerusalem (1971); the First Walter S. Atkinson Lecture, International Eye Foundation, Athens (1973); and Distinguished Visitor at the University of Würzburg, Germany, Moorfields Hospital, London, and the University of Helsinki, Finland (all in 1980).Other honorary lectures include the Proctor, University of California (1962); Edward Jackson Memorial, American Academy of Ophthalmology and Otolaryngology (1965); Gifford Memorial, Chicago (1967); Edwin B. Dunphy, Harvard University (1968, 1975); Honored Guest, American Academy of Ophthalmology (1971, 1975); De Schweinitz Memorial, College of Physicians, Philadelphia (1972); Charles H. May, New York Academy of Medicine (1973); Verhoeff Memorial, American Ophthalmological Society (1973); Jules Stein, University of California, Los Angeles (1974); Bedell, Wills Eye Hospital (1975); C. S. O'Brien, Tulane University (1979); Francis Heed Adler, University of Pennsylvania (1980); Distinguished Visitor, Wills Eye Hospital and Jefferson Medical College (1980); Everett R. Veirs, Texas A & M University (1982); and the first lecture endowed in honor of Dr. Leopold at Wills Eye Hospital (1987). Other awards included the Friedenwald Medal, Association for Research in Ophthalmology (1960); the Lucien Howe Medal, American Ophthalmological Society (1974); the Physician's Recognition Award, American Medical Association (1980, 1981); and the Sir Stewart Duke-Elder Award and Lederle Medal, International Glaucoma Congress VI (1982). As an educator Irving Leopold participated in the development of the American Academy of Ophthalmology and Otolaryngology Home Study Course (1945-1959) and in numerous presentations as visiting professor to other universities. As a member of the American Board of Ophthalmology he was active on the Oral Examination Committee and chaired the Written Examination Committee (1969-1972), also serving on the Executive Committee and the Board of Trustees (vice chairman, 1971; chairman, 1972). AJO 1993,116:660-662.

Leplat, Georges (1890-1985) Belgian anatomist. Leplat was born in Liège as the son of Lucien →Leplat. He specialised in anatomy already during his student's years (from 1908) and obtained his M.D. degree in Liège in 1914, just in time for serving as battalion physician during the first World War. He was resident of the Department of Embryology of the Liège University from 1919 and obtained in 1925 the special doctorate in ophthalmology with a thesis devoted to *the effects on both eyes of an unilateral eye contusion*. In 1930 he became professor of splanchnology and of anatomy of the sense organs. He made a parallel career as ophthalmologist in the English public assistance hospital, where he entered in 1920 and became departmental head in 1928. He retired from the University in 1965. His papers concern anatomy and embryology of the vertebrates (1911-1914), iris circulation and intraocular pressure regulation (preparing his 1925 thesis). Thereafter he wrote on retinal vein pressure, on the structure of the vitreous body, on collagene and on the structure of tendon fibres and sheaths. Its principal achievement is his participation to the 1958 report on embryology and teratology of the eye for the French Ophthalmological Society: he wrote in this report the parts on the *first stages of ontogenesis*, on the *embryology of orbit ocular membranes and adnexa*, on *chronology* and a large part of the chapter of *teratology*. He was member of the (French) Belgian Academy of Medicine and was its president in 1966. He has been president of the Professional Association and was member of honour of the french-speaking section of the Belgian Ophthalmological Society. (Verriest)

Leplat, Lucien (1859-1946) Belgian ophthalmologist. Leplat was born in Huy (province of Liège) and died in Liège. He obtained the M.D. degree in Liège in 1882 but worked already before in the Department of Ophthalmology with Borlée. He was resident from 1883 to 1889 under Fuchs and under Nuel. He remained in contact with Fuchs and in 1894 he translated in french, with Camille Lacompte, the second edition of Fuchs' *Lehrbuch der Augenheilkunde*. Moreover he published many papers as on the *syphilitic nature of keratitis parenchymatosa* (1884), *preservation of the macular area in embolism of the central artery* (1885), *regeneration of the aqueous humor after experimental paracentesis* (1887) and *experimental contusion of the eye* (1890). He was one of the founders of the Belgian Ophthalmological Society. (Verriest)

Lerebours Noel Paymal (1807-1873) French inventor of optical instruments in Paris. He was the son of the inventor Noel Jean Lerebours, whom he assisted in devising astronomical telescopes for French government observatories. He wrote a number of treatises on microscopy and photography: *Description d'un microscope achromatique simplifié* [Paris]: Lerebours; Bachelier, 1839.

Leslie, Sir John (1766-1833), British natural philosopher, born at Largo[the place from where Daniel Defoe´s Robinson Crusoe was supposed to have sailed -JPW], Fife, Scotland, was variously employed in scientific writing or traveling on the continent of Europe, with pupils, but all the while engaged in experimental research. The fruits of his labours during this period of his career were a translation of Buffon's *Natural History of Birds*, the invention of a differential thermometer, a hygrometer, and a photometer. He also published an important Experimental Inquiry *into the Nature and Propagation of Heat.* In 1805 he obtained the chair of mathematics at Edinburgh. In 1810 he invented the process of artificial refrigeration. In 1819 he was transferred to the chair of natural philosophy, where his peculiar talents found their proper sphere. American Encyclopedia of Ophthalmology, Vol.9, p. 7437

Lesshaft (1861-1909). German ophthalmologist of Görlitz, Germany. He was at one time assistant to Albrecht. v. →Graefe. American Encyclopedia of Ophthalmology, Vol.10, p. 7437

Letchworth, Thomas Wilfred (1874-1954) British ophthalmologist, born at Brighton and educated privately at Emmanuel College, Cambridge, he studied medicine at St. Bartholomew's Hospital and qualified in 1898. He was admitted F.R.C.S. in 1909, having begun to specialize in ophthalmic surgery soon after his graduation. He held appointments at the Royal Westminster Ophthalmic Hospital, where he worked under Brewerton, and at the Central London Ophthalmic, and Royal Eye Hospitals. From 1919 he was a surgeon at the Royal Eye Hospital; he retired on reaching the age limit in 1934, but with great humility and helpfulness he remained to act for some time as honorary clinical assistant. He continued in consulting practice until 1951, when he still kept on a small amount of work-*to keep his hand in* -. He had a deep interest in mathematical matters, and this precision of thought he carried into his ordinary life. He was fond of refractive work, which he could execute with unrivalled accuracy at prodigious speed. He was a pioneer worker on muscle-balance, and invented a rotary prism of variable strength which he would demonstrate to admiring but not fully comprehending house-surgeons. He was interested in nystagmus, and it was characteristic that he trained himself to demonstrate voluntary nystagmus in an amazing fashion. To crown his academic career, at the age of 73, and after two cataract operations, he wrote an original thesis for his M.D., and took his degree on the same day that his son took his M.A. at Cambridge. He was particularly proud of this distinction and was seen only a fortnight before his death wearing his gown at a public function at the Royal Eye Hospital, to the delight of his old colleagues. BJO1954,38:640

Leuw, Friedrich Hermann de (1792-1861). German ophthalmologist, who wrote very little, but whose operative skill was very great. Born of Dutch ancestry at Dinslaken, near Wesel, he received but little early education. When seventeen years of age, however, he began to study in the Düsseldorf Military Hospital, and saw much service later in the battles of Leipsic and Hanau. Becoming sick, he was left in the house of a Dr. von den

Steinen, who dwelt in the village of Gräfrath, near Solingen. In this village he afterwards settled and practised for a number of years. In 1823, however, he received his medical degree at Giessen. Making a specially of ophthalmology at Gräfrath, he became exceedingly successful, small as the hamlet was, because of his, extraordinary operative skill. He executed every year hundreds of cataract operations, together with numberless others, often twenty to twenty-five per day. His assistant was his son, Dr. Louis de Leuw, and, after the son's death, Dr. Meurer. De Leuw's personality exercised a truly great influence. He spoke fluently Dutch, French, Italian, English. To the needy he sacrificed himself devotedly. In his honour was founded, Aug. 1, 1854, an institution for the blind, known as the 'De Leuw Institute." In 1820 he published a report on the contagious character of *the Egyptian ophthalmia* (trachoma) which he addressed to the Royal Prussian Administration in Düsseldorf. This was before his graduation, which, as stated, occurred in 1823. He recurred to the subject in his graduation dissertation, and in 1824, at Essen, and published a tiny work thereon-his only book. American Encyclopedia of Ophthalmology, Vol.10, p. 7443-7444

Levis, Richard J (1827-1890). American surgeon and ophthalmologist, inventor of the Levis wire-loop for the extraction of cataract. Born in Philadelphia, he received his medical degree in 1848 from Jefferson Medical College. Settling in Philadelphia, he soon acquired a high reputation both in the general and in the special field. He was surgeon to the Philadelphia Hospital and to the Pennsylvania Hospital, and an attending surgeon at, the Wills Eye Hospital. He was one of the founders of the Philadelphia Polyclinic, and for many years taught ophthalmology and Otology at the Jefferson Medical College.American Encyclopedia of Ophthalmology, Vol.10, p.7446

Lewis, Francis West (1825-1902). American general practitioner and ophthalmologist, founder of the Children's Hospital on Twenty Second St., Philadelphia. He received his medical degree at the University of Pennsylvania in 1846. Nine years later he became a Fellow of the College of Physicians. For about two years he studied ophthalmology in Dublin (under Sir William →Wilde) and in Paris. Returning to Philadelphia, he soon had an excellent practice, both in the general and in the special field. American Encyclopedia of Ophthalmology, Vol.10, p.7446-7447

Lewis, Frank Newell (1857-1910). American ophthalmologist of New York. Born at Burlington, Vermont, he received the degree of A.B. in 1879 at the University of Vermont, and the degree of A.M. and M. D. at the same institution in 1882. Serving for a number of years in the Mary Fletcher Hospital, Burlington, the Brooklyn Eye and Ear Hospital, and the New York Eye and Ear Infirmary, he studied ophthalmology and otology in London, Paris, Berlin and Vienna. Returning to New York City in 1888, he settled there as ophthalmologist and otologist, and soon was widely known as operator and as writer. At the Manhattan Eye and Ear Hospital he served successively as clinical assistant, assistant surgeon, surgeon, and director. He also became Professor of Diseases of the Eye in the New York Post-Graduate Medical School. He was a member of the American Ophthalmological Society from 1898 until his death. American Encyclopedia of Ophthalmology, Vol.10, p.7447 The Ophthalmoscope, 1911,p.228.

Li, Chen (1916-) Chinese ophthalmologist, Professor Emeritus of Jinan University. He graduated from Taipei University Medical School in 1940 and studied Ophthalmology at the University under Prof. Akira Motegi and received M.D. degree in 1945. He served as the Professor of Ophthalmology and Vice-President of Jinan University (1979-1988) and subsequently he works as the Professor and Advisor of the University. His many publications include *An Atlas of Ophthalmic Surgery*, 1977, *A Japanese-Chinese Medical Dictionary*, 1987"and *Eye Bank*, 1998. In the professional societies, he holds the positions such as Senior Membership of Chinese Medical Association, Honorary Editor-in-Chief of Chinese Ophthalmic Research, Representative of the 4-8th National People's Congress, Vice-President of 5-7th Canton Provincial Committee of Chinese People's Consult Conference. For the excellence of his work, he received First Class Prize issued by the Ministry of Education under the State Council for *Experimental studies on heterotransplantation of the Cornea* (1991) and *Experimental research on immune rejection of corneal transplantation* (1998). (Executive Office, Jinan University,

Guangzhou, China. Fax: +86-20-85221417)

Li, Feng-Ming (1915-) Chinese ophthalmologist, Professor Emeritus of Beijing Medical University. She graduated from West China Medical University in 1941 and studied at the *Eye and ENT Hospital*, Cheng-due under Prof. Eugene →Chan and received her M.D. degree in 1941 from University of New York (thesis: *Eye symptoms and signs of vitamin A deficiency*). She further received DOMS in London in 1949. She has served as the Professor and Head of the Department of Ophthalmology of Beijing Medical University (1958-1987), and she is currently serving as Advisor to the Eye Center of the Beijing Medical University, Advisor of several Journals of Ophthalmology in China and Chief-Editor of the Chinese Edition of Archives of Ophthalmology. She has written more than 20 papers, e.g. *Analysis of Trachoma among Children in Beijing*, *Analysis of Injuries of the Eye* , *Xeroderma pigmentosa* and *Melanocytoma- case report*. She worked as the Chief Editor of *Chinese System of Ophthalmology*, 3 Volumes People's Health Publisher, Beijing 1996, Co-editor of *Practical Ophthalmology*, 2nd Edition and as Co-Editor of several Books on Ophthalmology. She is a recipient of many Honor Medals, e.g. Golden Apple Prize from the American Chinese Ophthalmology Society (1992), Peach-Plum Prize from Beijing Medical University (BMU)(1990), First Prize from Health Bureau (1998), Special Citation Prize from BMU (1999), Distinguished Service Award from the Asia-Pacific Academy of Ophthalmology (1999) and Honorable Special Prize the Chinese Ophthalmology Association (1999). (Department of Ophthalmology, Third Hospital, Beijing Medical University, Beijing, P.R.China.) (SM)

Li, Mei Yu (1929-) Chinese ophthalmologist, Professor of Ophthalmology, at Beijing Medical University. She graduated from Beijing Medical University in 1954 and received her M.D. degree. She studied Ophthalmology under Prof. Bi Hua-de and extended her study as a visiting Scholar at the Eye and Ear Infirmary in Pittsburgh, U. S. A during 1982-1983. On home coming she has held the following positions: Attending doctor 1957, Associate Professor 1980, Professor 1985, Tutor of doctoral student 1990, and Vice chairman of Department of Ophthalmology, First Teaching Hospital, Beijing Medical University (1959-1982) and Chairman of Department of Ophthalmology, First Teaching Hospital, Beijing Medical University (1983-1994). In the professional societies, she has held the following positions: Committee member and Vice President of Beijing Society of Ophthalmology (1978-1995), Member of Standing Committee and Secretary of Chinese Society of Ophthalmology (1984-1988) and Vice President of Chinese Society of Ophthalmology (1988-), Editor-in-Chief of Chinese Journal of Ophthalmology(1988-) , Vice President of Chinese Society of Glaucoma (1978-1992), President of Chinese Society of Glaucoma (1992-), Vice President of Chinese Society of Cataract and Intraocular Lens (1990-1997) and Committee member of Chinese Society of Cataract and Intraocular Lens (1997-). She is also an editor of the *International Glaucoma Review* since 1999. Her main interest is glaucoma and cataract. She has published many original papers and some examples are *Argon Laser Trabeculoplasty for Primary Open Angle Glaucoma*. Chin. J. Practical Ophthalmol. 1986; 12: 44, *Posterior Chamber Intraocular Lens Implantation*. Chin. J. Ophthalmol. 1987; 23: 257, *The Significance of Retinal Nerve Fiber Layer Examination in the Diagnosis of Glaucoma*. Chin. J. Ophthalmol. 1990; 26:340, *Goniotomy for Congenital Glaucoma*. Chin. J. Ophthalmol. 1990; 26: 340, *Neuroretinal Rim Area in Early Glaucoma*. Chin. J. Ophthalmol. 1992; 28: 199, *A Study on the Structure of Human Lamina Cribrosa Sclerae*. Chin. J. Ophthalmol. 1994; 30: 369, *The Structure of Connective Tissue Fiber in Normal Human Eye Lamina Cribrosa*. Chin. J. Ophthalmol. 1995; 31: 98, *Culture of Human Trabecular Meshwork Cells and the Cell Characteristics of Immunohistochemical Studies*. Chin. J. Ophthalmol. 1998; 34: 280, *The Regulating Effects of Dopamine Receptor on the Level of Adenosine 3,5-cyclic Monophosphate in Bovine Trabecular Cells in Vitro*. Chin. J. Ophthalmol. 1998; 34: 379, *Influence of Transforming Growth Factor- ?1 on Actine in Cultured Human Trabecular Cells*. Chin. J. Ophthalmol. 1999; 35:186, *Influence of Growth Factors on Transferrin Gene Expression of Human Lens Epithelial Cells in Culture*. Chin. J. Ophthalmol. 1999; 35: 287 and *Transforming Growth factor-?1 Induced Cultured Human Trabecular Cells to Produce Elastin*. Chin. J. Ophthalmol. 1999; 35: 383. She also wrote many books, e.g. *System of Ophthalmology*: Editor in Chief of Vol. 6, *Glaucoma and Hypotension*, People's

Medical Publishing House, 1996, *Practical Ophthalmology*: Vice Editor in Chief People's Medical Publishing House, 1st ed.1984, 2nd ed.1999, *Modern Ophthalmology*: Vice Editor in Chief People's Medical Publishing House, 1st ed.1993, 2nd ed.1997, *Progress of Glaucoma Research*: Editor in Chief Qingdao Ocean University Publishing House, 1994, *Diagnosis and Treatment of Emergency Ophthalmology*: Editor in Chief Chinese Science and Technology Publishing House, 1996, *Modern Ophthalmology*: Editor Beijing Science and Technology Publishing House, 1996, *Intraocular Lens Implantation*: Editor People's Medical Publishing House, 1st ed.1994, 2nd ed.1997 and *Textbook of Ophthalmology*: Editor People's Medical Publishing House, 4th ed.1996. For her scientific achievements, the Government of China conferred on her the Award of Achievements in Scientific Research. (Department of Ophthalmology, First Teaching Hospital, Beijing Medical University, mailing address:8 Xi Shi Ku Street,Beijing,China 100034 telephone number: 008610 - 66171122 ext.3396 and fax number: 008610 - 66176450, e-mail: leecai@public2.east.cn.net) (SM)

Li, Shaozhen (1932-) Chinese ophthalmologist, Professor of Ophthalmology, Zhongshan Ophthalmic Center (ZOC), Sun Yat-sen University of Medical Sciences (SUMS), Member of Chinese Academy of Engineering. She graduated from Huanan Medical College (now SUMS) in 1954 and extended her study at Zhongshan Medical College (present SUMS) as a postgraduate of Ophthalmology (1959-1962). She took a research fellowship at Proctor Foundation of the University of California, San Francisco (1980-1981) and at the Department of Ophthalmology, Baylor University, U.S.A. (June 1981-Sept. 1981). She has been Professor of Ophthalmology as above since 1985, after having served as Associate Professor (1979-1985) and Deputy Director of the ZOC (1982-1983). Her joint appointments are Director, Eye Hospital and ZOC (1991-1996), Deputy Chief Editor (1984-1994), Chief Editor (1994-), Country Advisor of Helen Keller International (1998-), Vice-President, Chinese Ophthalmological Society, Vice Editor of *Chinese Journal of Ophthalmology* and Advisor *Hong Kong Journal of Ophthalmology* (1997-). She served as the Chief Editor of *Ophthalmic Surgery* (1997), and *Uveitis* (1998) and contributed chapters to 5 other books and published more than 150 original papers, which include *Cataract extraction by phacoemulisification using in situ nuclear fracture technique*. Chin. J. Ophthalmol. 1996, 32:92 and *A Survey of Blindness and Cataract Surgery in Doumen County*, China. Chin. J. Ophthalmol. 1999, 106:1602. In recognition of her contributions, she received many honor awards from many organizations, e.g., National Distinguished Teaching Award (1993), The 2nd Degree Prize on progress in Science and Technology by National Education Commission (1995), (1997-1998), 3rd degree prize on National Progress in Science and Technology (1996 and 1998) (Study of Prevention and Treatment of Cataract and Series of Experimental Study in Pathogenesis of Uveoretinitis), 2nd Degree prize on progress in Science and Technology from the Public Health Ministry (Chief-Editorship of Ophthalmic Surgery, 1999) and Distinguished Service Award from the Asia-Pacific Academy of Ophthalmology (1999). She is a member of the American Academy of Ophthalmology, Association for Research in Vision and Ophthalmology and World Eye Surgeons. (Zhongshan Ophthalmic Center, 54 S. Xianlie Road, Guangzhou 510060, P. R. China, phone: +86-20-87333209; fax: +86-20-87333271, e-mail: zoc@gzsums.edu.cn)

Li, Zi-liang (1935-) Chinese ophthalmologist, Director and Senior Researcher, Eye Institute of Xuzhou, Vice President, First Hospital of Xuzhou, Professor of Ophthalmology, Xuzhou Medical College. He graduated from Shanghai Medical University in 1956 and studied Ophthalmology as a Clinical Fellow at the First Hospital of the Shanghai Medical University. He extended his study as a Researcher Associate and Post-Doctoral Fellow at the Eye Center, University of Illinois at Chicago, U.S.A.(1985-1987) and he completed the Course of Community Ophthalmology, Institute of Community Ophthalmology, Moorfields Eye Hospital, London, England (1996). He has had the following professional activities: Council Member, 19th, 20th., 21st and 22nd Sessions of Chinese Medical Association, (1984-2003), Vice President, Chinese Ophthalmological Society (CMA), (1988-2000), Member, Advisor Committee, International Council of Ophthalmology (1996-2000), Vice Editor-in-Chief, Chinese Journal of Ophthalmology, (1996-2000), Deputy Editor, Chinese Language Edition of

AMA Archives of Ophthalmology, Member, International Advisory Board, Hong Kong Journal of Ophthalmology, Member, Advisory Committee, The Optometry Research Centre of Ministry of Health. P.R. China ,Member, Academic Committee, Ophthalmologic Lab of Ministry of Health, P.R. China and Member, National Committee of Appraising Scientific and Technical Achievement. P.R.China. Some examples of his many original articles are *A stereoscopic localization method for intraocular foreign body*. Chinese Journal of Medicine 49:193-195,1963. *Contusional cleavage of ciliary body* . Chinese Journal of Ophthalmology 13:316-318,1966 , *Laser Slit-lamp Biomicroscope. Its design, trial manufacture and clinical application*. Chin. J Ophthalmol 14:92-95,1978. *Clinical Observation of bulbar conjunctival vasculature*. Chinese J Medicine (English Edition) 96:355-360,1983, *Retinal injury induced by near-ultraviolet radiation in aphakic and pseudophakic monkey eyes*. Retina 10:301314,1990, *Dominantly inherited cystoid macular edema*. Ophthalmology 99:1385-1392, 1992, *The changing of procedures in cataract extraction in our hospital during past two years, a review of 870 operations*. Jiangsu Medicine 19:85-86, 1993 and *A research of Lycium Barbarum L.; In rescue of retina from photic injury in rats*. Chin J Fundus Diseases. 11:31-33, 1995, *Slit-lamp Biomicroscopy* A teaching VCD. Video-audio Publisher, Chin Med Association. He has also written many books, e.g. *Textbook of Ophthalmology*. 3891 pp, People's Hygiene Publisher, 1997 and *Chinese Translation of BCSC*, American Academy of Ophthalmology, 1995-2000. (Eye Institute, First Hospital, 15 N. Zhong-shan Road Xuzhou, Jiangsu 221002 , People's Republich of China. phone: +86 516 5745053 ; fax: 86 516 5747452; e-mail: ziliang@public.xz.js.cn) (SM)

Liang, Shu-Jin (1916-) Chinese ophthalmologist, Former Professor and Chairman of the Department of Ophthalmology, Second Affiliated Hospital of Hebei Medical University. She graduated from National Kueiyang Medical College of Western China Medical University and received her M.D. degree in 1944. She studied Ophthalmology at the University Hospital and the Chengdu E.N.T. Hospital. She served as the Lecturer and Physician in charge at the Department of Ophthalmology of the National Zhejiang University School of Medicine during 1947-1951 and then she was invited to Hebei Medical University where she served as Professor and Chairperson of the Department of Ophthalmology of the Second affiliated Hospital from 1951 to 1988. Her professional activities include Member of Ophthalmology Society of the Chinese Medical Association (1956-1986), Chairman of Hebei Ophthalmological Society (1954-1986), Editor of *Chinese Journal of Ophthalmology* (1953-1994) and Editor of *Chinese Ophthalmic Research* (1983-present). Some examples of her many publications are *Proliferative membrane formation and its ultrastructure in experimental proliferative vitreoretinopathy*. Chin. Ophthalmic Research, 1993, 11: 213, *The study on improved cryopreservation technique of the ultrastructure of corneal endothelial cells*. Eye Science 1994, 10: 13, *Interpretations of fundus fluorescein angiography*, Hebei People Publishing House, 1980 and the *Chinese Medical encyclopedia* (Ophthalmology), co-editor, Shanghai Scientific and Technological Publishing House, 1982. Department of Ophthalmology, the Second Affiliated Hospital, Hebei Medical University, 203# Hepingxi Street, 050000 Shijiazhuang, Hebei, P.R. China. (SM)

Libert, Jacques (1946-) Belgian ophthalmologist. Libert was born in Mons. He obtained at the University of Brussels his M.D. degree in 1970 and the special doctorate in ophthalmology in 1979. He works in the Department of Ophthalmology of the Brussels University (St Pierre and Brugmann hospitals) since 1971, he became adjunct departmental head in 1981 and departmental head in 1985. Meanwhile he has been in 1977 research fellow at the Laboratory of ocular pathology of the Wilmer Institute in Baltimore. Libert is a well-known specialist of the metabolic diseases, more particularly of the lysosomal diseases and of their diagnosis by means of the assay of tear enzymes and the ultrastructural analysis of conjunctival biopsy. He has written also on surgery of the vitreous body and on laser trabeculoplasty. He was a reporter at the 1984 meeting of the European Society of Ophthalmology in Helsinki. (Verriest)

Lichter, Paul (1939-) American ophthalmologist, F. Bruce Fralick Professor of Ophthalmology and Visual Sciences; Chair, Department of Ophthalmology and Visual Sciences, University of Michigan; and Director of the University's W. K. Kellogg Eye

Centre. He is a native of Detroit and completed his undergraduate degree (1960), medical school degree (1964), ophthalmology residency education (1968), and Master of Science degree (1968) at the University of Michigan. He obtained his glaucoma fellowship training (1969) at the University of California, San Francisco, under Robert N. Shaffer, MD. From 1969-71 he was Staff Ophthalmologist at Bethesda Naval Hospital, and in 1971 he returned to positions at the University of Michigan as Assistant Professor of Ophthalmology (1971-75), Associate Professor of Ophthalmology (1975-78) and Professor and Chair of Ophthalmology (1978-present). His first priority as Chair was to develop a first-rate eye center, to bring the department together into one complex and to expand its role in clinical care, teaching, and research. This concept was realized in 1985 at the dedication of the W.K. Kellogg Eye Center, at which time Dr. Lichter was named Director. In 1990, the Paul R. Lichter Endowed Professorship in Ophthalmic Genetics at the University of Michigan was established by an anonymous donor. Dr. Lichter's research and clinical interests involve glaucoma, genetics, and clinical applications of ultrafast laser technology. In particular, he is Chair of the Collaborative Initial Glaucoma Treatment Study (CIGTS), a National Eye Institute (NEI)-sponsored 14-center clinical trial. CIGTS is comparing in newly diagnosed patients with open-angle glaucoma the effect of initial medication versus initial filtering surgery on visual function and quality of life. Dr. Lichter is a co-investigator on two NEI-sponsored grants involving the genetics of glaucoma. In addition to serving as the 100th President of the American Academy of Ophthalmology in 1996, Dr. Lichter is also a Past President of the Association of University Professors of Ophthalmology and a Past Chair of the American Board of Ophthalmology. He currently is President of the Pan American Association of Ophthalmology and President of the American Ophthalmological Society. He is also a member of the International Council of Ophthalmology. Dr. Lichter is immediate past Editor-in-Chief of the *Journal Ophthalmology* and has delivered more than 20 named lectures. The named lectureships include the 50th de Schweinitz Lecture (1987); the Gifford Lecture (1992); the 50th Edward Jackson Memorial Lecture (1993); the Dunphey Lecture (1993); the Melvin Rubin Lecture (1998); and the H. Saul Sugar Lecture (1999). He has to his credit over 170 publications including scientific articles, editorials, and book chapters. Representative publications include Lichter PR and Anderson DR, eds. *Discussions on Glaucoma*. New York: Grune & Stratton, 1977; *Honoring the history of the Edward Jackson Memorial Lecture*. The L Edward Jackson Memorial Lecture. Part 1. Am J Ophthalmol 1994;117:699; *Genetic clues to glaucoma's secrets.* The *L Edward Jackson Memorial Lecture*. Part 2. Am J Ophthalmol 1994;117:706; "*Genetic heterogeneity of open-angle glaucoma*." Ophthalmology 1994;101:63; "*Confusing licensure with education: medicine's slippery slope*" [editorial]. Ophthalmology 1994;101:1767; "*Juvenile glaucoma linked to GLC1A in a Panamanian family*." Trans Am Ophth Soc 1996;335; "*Cosegregation of open-angle glaucoma and the Nail-Patella Syndrome*." Am J Ophthalmol 1997;124:506; "Centennial President's Address: *Putting Patients First-A 100-Year Tradition*." Ophthalmology 1997;104:347; "*The Collaborative Initial Glaucoma Treatment Study - Study design, methods, and baseline characteristics of enrolled patients*." Ophthalmology 1999;106:653; "*Pitfalls in mutation screening for TIGR/MYOC*." Glaucoma Update VI, 2000:57. (Chairman, Department of Ophthalmology and Visual Sciences, University of Michigan, 1000 Wall Street, Ann Arbor, MI 48105-1912; and Director of the W. K. Kellogg Eye Center, 1000 Wall Street, Ann Arbor, MI 48105-1912, U.S.A.; phone: 734-764-6468; fax 734-647-0247; email: plichter@umich.edu) (SM)

Lieberkuehn, Nathanael (1822-1887). German chemist, physiologist, and veterinarian, of a slight ophthalmologic importance because of his *"Ueber die Entwicklungsgeschichte des Wirbelthierauges"* (Cassel 1872). Born at Barby on the Elbe, he studied at Berlin, where in 1857 he was made Prosector, and in 1862 Extraordinarius in Anatomy. In 1867 he was called as Professor of Anatomy to Marburg. There he became Privy Medical Councillor. American Encyclopedia of Ophthalmology, Vol.10, p.7462

Liebermann, Charles H. (1813-1886). American surgeon and ophthalmologist, the *first* to perform the strabismus operation in the United States. Born at Riga, Russia, the son of a military surgeon, he lost his father in very early childhood. He received, the degree of

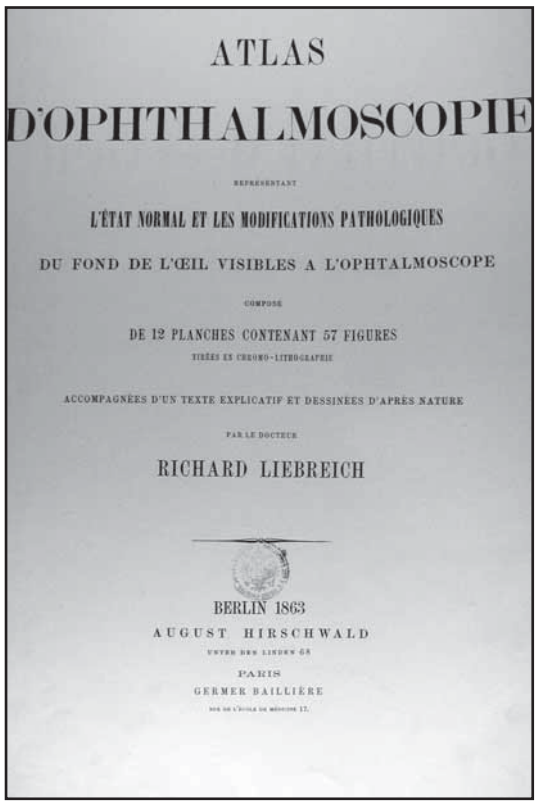
M.A. at Dorpat in 1836, and that of M.D. at Berlin about 1839. He was for a time a pupil both of →Dieffenbach and von →Graefe.. He moved to the United States in 1840, landing in Boston, but settling very shortly afterwards in Washington. Here he repeated the Dieffenbach operation for strabismus in 1840. He was for many years surgeon, afterwards consulting surgeon, to the Providence Hospital, and was one of the founders of the Medical Department of the University of Georgetown. American Encyclopedia of Ophthalmology, Vol.10, p.7462

Liebermann, Leo (1882-1938). Hungarian ophthalmologist. Leo Liebermann was born in Budapest. He was the son of the professor of hygiene of the same name. He studied medicine in Budapest and after his graduation, joined the staff of Professor→Grosz's eye clinic in Budapest. In 1914 he was appointed Privatdocent, and Associate Professor in 1916. In the same year he was appointed Head of the Eye Department in the St. Rochus' Hospital, where he continued to work for 22 years, until his death in 1938. His scientific work covered a very wide range. He showed marked interest in operation techniques and was himself a skilled surgeon, especially in glaucoma, cataract and strabismus operations. He was the first in Hungary to introduce Heine's cyclodialysis. Liebermann was deeply interested in therapeutic problems as well, and contributed many articles on trachoma. He was also the first in Hungary to introduce Sweet's X-ray localisation of foreign bodies which method he had learnt during a study trip in the United States in 1910. Beside articles on ophthalmology, he also wrote on hygiene and medico-social problems. He was an active member of the Hungarian Ophthalmological Society and its Chairman between 1930 and 1934. Magda Radnot: *Famous Hungarian Ophthalmologists* (Budapest, 1970)

Liebig, Justus, Freiherr von (1803-73). German chemist born at Darmstadt. Humboldt secured for Liebig the appointment of professor of chemistry at the University of Giessen. This chair he exchanged in 1852 for the corresponding one at Munich. Liebig was one of the most illustrious and fruitful chemists of his age, not less renowned for his investigations and discoveries in pure chemistry than for his researches in applied chemistry. As the inventor of the extract of beef and the prepared infant food, his name is known almost everywhere throughout the civilized world. He was the founder of agricultural chemistry. Among the practical discoveries and applications of Liebig may be mentioned the invention of silver-coated mirrors, an easy method for the preparation of potassic cyanide, now so largely used in electroplating, his plan for making unfermented bread, and his methods for analysing mineral waters. American Encyclopedia of Ophthalmology, Vol.10, p. 7462-7463

Liebold, Carl Theodor (1831-1885) American of German origin. From 1868 to 1885 one of the leading ophthalmic surgeons of the homeopathic school and profession in the New York Ophthalmic Hospital. He was born in Neu Dietendorf, Thüringen, and came as a young man to the United States of America, finally studying medicine four years with Dr. Otto Füllgraf in New York. In 1858 he entered the University of Berlin, receiving in due course its degree and a certificate of attendance upon von Graefe's clinics. Returning to America about 1861 he served as resident army surgeon at Point Lookout Hospital, where he showed marked ability. After returning to New York, at the close of the war, he devoted himself to his speciality and became the chief surgeon of the New York Ophthalmic Hospital in 1868, when its administration was transferred to the homeopathists a position he held until his death. For years he lectured in the New York Homeopathic Medical College, but this teaching was transferred to the New York Ophthalmic Hospital in 1880, when, in accordance with a charter amendments the latter was empowered to confer the degree *0. et A. Chir.* and a graded course, clinical and didactic, was instituted for graduates in medicine. Dr. Liebold was a member of the American Institute of Homeopathy and the Homeopathic Medical Society of the State of New York, whose *Transactions* were enriched by his contributions. American Encyclopedia of Ophthalmology, Vol.10, p. 7463

Liebreich, Richard (1830-1917) German ophthalmologist in Paris and later in London. Liebreich was born in Königsberg and received his medical degree in Halle in 1853 with the thesis *De Ichthyosi Intrauterina*. He was von Graefe´s assistant in Berlin from 1854 to 1862. After this he practiced in Paris and after the outbreak of the war in London where


ATLAS
D'OPHTHALMOSCOPIE
REPRESENTANT
L'ÉTAT NORMAL ET LES MODIFICATIONS PATHOLOGIQUES
DU FOND DE L'ŒIL VISIBLES A L'OPHTALMOSCOPE
COMPOSÉ
DE 12 PLANCHES CONTENANT 57 FIGURES
TIRÉES EN CHROMO-LITHOGRAPHIE
ACCOMPAGNÉES D'UN TEXTE EXPLICATIF ET DESSINÉES D'APRÈS NATURE
PAR LE DOCTEUR
RICHARD LIEBREICH
BERLIN 1863
AUGUST HIRSCHWALD
UNTER DEN LINDEN 68
PARIS
GERMER BAILLIÈRE

he became oculist to St.Thomas´ Hospital. Liebreich modified Helmholtz´s ophthalmoscope into a handy apparatus and learned to recognize and interpret the appearances till then entirely unknown, of the normal and diseased fundus. He presented to the world, in French and German text the very *first* atlas of ophthalmoscopy. Before that he published "*Handleiding tot het onderzoek van het oog met den oogspiegel"* Utrecht 1859; "*Atlas der Ophthalmoscopie*" Berlin & Paris 1863. He wrote among others: "*Eine neue Methode der Cataract-Extraction*" Berlin 1872 and "*School life in its influence on sight and figure...*"London 1878.AJO,1:295-296, Archiv. d´Opht.vol.38,p.508.Albert:Source Book of Ophthalmology,p.201. He also invented a stand microscope which he described 1855 in Archiv für Ophthalmologie,Vol.1,Abth.II,p.348-349 (Schett/Keeler: *The Ophthalmoscope* , vol.1,p.45.

Lim, Arthur S. M. (1934 -) Singaporean ophthalmologist, Clinical Professor and Head of the Department of Ophthalmology, National University of Singapore (NTJS). He graduated from University of Malaya at Singapore in 1956, studied Ophthalmology at the Institute of Ophthalmology, Moorfields Eye Hospital, University of London, England where he received the Diploma of Ophthalmology and became Fellow of the Royal College of Surgeons of England in Ophthalmology by examination in 1962. In 1962, he was appointed Senior Registrar Eye Department, Ministry of Health, Singapore. From 1963 - 1965, he was the Acting Consultant in Ophthalmology, Ministry of Health, Singapore. Meanwhile, he was also the President of Government Medical and Dental Association. From 1965 to present, he has bean managing various roles as Ophthalmic Surgeon at Gleneagles Hospital in Singapore; Chief, Department of Ophthalmology, National University Hospital; Chief Examiner, Conjoint M Med (Ophthalmology) FRCS (Edinburgh) Examination, Graduate School of Medical Studies, NUS; Course Director, Advanced Two-Week Course in Ophthalmology, Graduate School of Medical Studies, NUS; Director and Chairman, Singapore Eye Research Institute, Emeritus Senior Consultant, Singapore National Eye Centre. His research interests are extensive: Microsurgery; Cataract Extraction; Intraocular Lens Implant Surgery; Laser and Public Health Ophthalmology. Over the years, he has been elected to various prestigious international bodies. In 1971, he was elected Fellow of the Royal Australian College of Surgeons; in 1980, Fellow of the American Academy of Ophthalmology; in 1984. Member of the Academia Ophthalmologica Internationalis for outstanding contributions to world ophthalmology, in 1986, Member of the International Council of Ophthalmology; in 1990, Fellow of Royal College of Surgeons in Edinburgh, in 1991, Honorary Member, Honorary Committee, Centro de Oftalmologia Barraquer, Barcelona, Spain; in 1992, Honorary Fellow, International College of Surgeons. He has chaired various committees and organisations: Singapore Society of Ophthalmology (1979 -1985); Committee for Signboards and Nameplates, Singapore Medical Council, Ministry of Health (1982); Singapore Eye Foundation (1981- present); Committee for Ophthalmology, Graduate School of Medical Studies, National University of Singapore (1988- present); Fund Raising Committee, Universities Endowment Fund (1991-1996) & National University of Singapore Endowment Fund (1996 - present); President, Medical Alumni Association (1995-1996 and 1998-1999); Regional Chairman, South East Asia International Agency for the Prevention of Blindness (1977- 1986); President, Asia-Pacific Academy of Ophthalmology (1985-1987), Founding President, Asia-Pacific Intraocular Implant Association (1987 -1998); Secretary-General, Asia-Pacific Academy of Ophthalmology (1993- present); Founding President, World Eye Surgeons Society (1994- present) and Honorary Life President, Asia-Pacific Intraocular Implant Association (1998). Key meetings that he has chaired include: General Scientific Meeting, Royal Australian College of Surgeons (1973); Symposium on Recent Advances of Ophthalmology, International Agency for the Prevention of Blindness (1979) and XXVI International Congress of Ophthalmology (1990). He sits on various editorial boards, locally and overseas, and some of these include Editor-In-Chief, Asia-Pacific Journal of

Ophthalmology, Singapore; American Journal of Ophthalmology, USA (he has contributed 2 editorials), Ophthalmology Times, USA; Ocular Surgery News (International Edition) USA, Guest Editor, Eye Science, People's Republic of China; Hong Kong Journal of Ophthalmology; Ophthalmologica, Switzerland. He is also the recipient of several International Awards: Royal Australian College of Surgeons Medal (1979); Distinguished Service Award Asia-Pacific Academy of Ophthalmology (1981); the prestigious Jose Rizal Medal, Asia-Pacific Academy of Ophthalmology for excellence in ophthalmology in the countries of Asia and the Pacific (1983); Chu-Hsin Yi medal, Tianjin Medical College, Tianjin People's Republic of China (1987); Javal Gold Medal, International Contact Lens Council of Ophthalmology (1990); Friendship Medal, State Bureau of Foreign Experts, Beijing (1996); International Science and Cooperation Award (State Science and Technology Commission), China (1997). Ernest T. Stewart Award for Alumni Volunteer Involvement, The Council for Advancement and Support for Education (CASE), USA (1999); On the home front, he received the Public Service Star (1990) in recognition of his special contributions to the development of Ophthalmology in Singapore. In 1999, he was made Honorary Doctor of Medicine, National University of Singapore. Of the named lectures ho has delivered, the following stand out: AIim Chowdury Memorial Lecture, Bangladesh (1979); Foundation Lecture, Ceylon (1985); Holmes Lecture (1987), Keynote Speaker, American College of Eye Surgeons Annual Meeting (1991); Ninth Lions Eye Bank Lecture, Australia (1992); Malik Oration, India (1992), Steve Charles Gold Medal Oration, Sri Lanka (1992), First Susruta Lecture, Bangladesh (1993); First Keshmahinider Singh Oration, Malaysia (1997); Barraquer Gold Medal Lecture, Spain (1997) and Eugene Chan Memorial Lecture, Hong Kong (1999). More than 350 scientific papers and 20 books have been written in the past 40 years. "*The Colour Atlas of Ophthalmology*" has a print run of 43,000 copies in 9 languages - English, Malay, Spanish, Italian, Chinese, French, Finnish, German and Portuguese. It is now used as a highly recommended textbook for undergraduates in many countries. Indefatigable in his efforts to impact his skills, both locally and overseas, his latest 'live' surgery on implants was transmitted in Milan, Europe an 23 October 1998. In addition to these live demonstrations, he has also convened various teaching and live surgery courses in Pakistan, Malaysia, Thailand, Hong Kong, Beijing and Tianjin,Xiamen, People's Republic of China, Myanmar, France, India, Indonesia and Sri Lanka. Currently, he devotes his time between his private practice, Eye Clinic Singapura, Gleneagles Hospital, Singapore, Chief of the Department of Ophthalmology, National University Hospital; Director and Chairman, Singapore Eye Research Institute and his role as Honorary Director of the International Intraocular Implant Centre, Tianjin, People's Republic of China and his various other teaching, professorship and international appointments. (Arthur SM Lim, Clinical Professor and Head, Department of Ophthalmology, National University of Singapore: Eye Clinic Singapura, #02-38 Gleneagles Annexe Block Gleneagles Hospital, 6A Napier Road, Singapore 258500. Phone: (65) 4666 666; Fax (65) 733 3360; e-mail: limsiewming@pacific.net.sg & eyeclinic@pacific.net.sg) (SM)

Lim, Li (1963-) Singapore ophthalmologist, Consultant Ophthalmologist in the Singapore National Eye Centre, Clinical teacher in ophthalmology, National University of Singapore. She completed her undergraduate medical school (MBBS) at the National University of Singapore in 1987 and obtained her Master of Medicine in Ophthalmology from the same university in 1993. Also received the Fellowship of the Royal College of Surgeons of Edinburgh in 1993. Trained in the field of corneal and external eye diseases in the Singapore National Eye Centre from 1995 to 1997 and at Flinders Medical Centre, Adelaide, South Australia in 1997. Member of Editorial Board, Asia-Pacific Journal of Ophthalmology. Publications include "Comparison of Argon Laser Iridotomy and Sequential Argon-YAG Laser Iridotomy in Dark Irides. Lim Li / Steve KL Seah/ Arthur SM Lim. Ophthalmic Surgery and Lasers 1996 27(4),285-288"; "*Accurate intraocular pressure measurements in contact lens wearers*. Lim Li /Tze Pin Ng / Donald TH Tan. The CLAO Journal 1997, vol 23 (2): 130-133"; "*The surgical management of an advanced pterygium involving the entire cornea*. CCYip / Lim Li / Donald Tan. Cornea 1997, vol 16 (3): 365-368*"; "Changing Indications for penetrating keratoplasty: A newly developed country's experience*. TY Wong / C Chan / Lim Li / TH Lim / Donald TH Tan. Australian and New Zealand Journal of Ophthalmology 1997,25: 145-150"; "*Conjunctival*

Rotation Autograft for Pterygium, an alternative to conjunctival autografting. A Jap, C Chan, Li Lim, DTH Tan. Ophthalmology 1999,106:67-71". Her clinical and research interests are in corneal and external eye disease, contact lenses and refractive surgery. (Dr Lim Li, Singapore National Eye Centre, 11, Third Hospital Avenue, Singapore 168751, Singapore. Phone: 65-2277255; Fax: 65-2277290; e-mail: snecll@pacific.net.sg) (SM)

Lincke, Karl Gustav (1804-1849). German otologist, of some importance in ophthalmology. Born at Kosmin, in the province of Posen, he received his medical degree at Leipsic in 1828, presenting as dissertation "*De Fungo Medullari Oculi*," Part 1. In 1834, he published at Leipsic a remarkably excellent amplification of his graduation thesis under the title "*Tractatus de Fungo Med.Oculi*," which Hirschberg calls "*das erste in Deutschland erschienene Werk, welches die krankhaften Geschwülste des Sehorgans einigermassen befriedigend dargestellt hat."(*The first book published in Germany, which describes more or less correctly, the malign tumors[JPW] American Encyclopedia of Ophthalmology, Vol.10, p. 7487

Lindberg, John Gustaf (1884-1973) Finnish ophthalmologist, Helsinki, Finland. He graduated from the University of Helsinki in 1914, but he had already before graduation started his research work in Ophthalmology. His project was based on →Axenfeld' s hypothesis that there is a decrease of anterior segment pigmentation of the eye with cataract formation. As no slit lamp biomicroscopes were available, Lindberg constructed his own and learned to use it without any teaching. While working on his project his attention was drawn to greyish-white flakes on the pupillary border and the anterior surface of the lens. He became very interested in this phenomenon and in his thesis he pointed out that the phenomenon was age-dependent, becoming more prevalent with increasing age. He saw it on patients with cataract and also on controls as well as on 50% of patients with chronic glaucoma. This was the *first* description of *Exfoliation Syndrome* and even his conclusion of this phenomenon proved to be correct. He presented his thesis in 1917 at the University of Helsinki (*Kliniska undersökningar över depigmentering av pupillarranden och genomlysbarhet av iris vid fall av åldersstar samt i normala ögon hos gamla personer*). This work was later translated into English (*Clinical Investigations on Depigmentation of the Pupillary Border and Translucency of the Iris in Cases of Senile Cataract and in the Normal Eye of Elderly Persons*. Acta Ophthalmol 66: Suppl. 190, 1989). Lindberg distributed his thesis in 1917 in a regular way to his colleagues and gave also a personal copy to Prof. A→Vogt from Zürich, Switzerland, while Lindberg was working at Axenfeld's Clinic in Freiburg, Germany 1920-1921. Both Malling from Norway and Vogt published papers on exfoliation in 1923 without referring to Lindberg's work at all, but Lindberg undoubtedly was the *first* in the world to discover exfoliation. After specialization Lindberg served at the Helsinki University Eye Department, but his main clinical appointment was the director of the Helsinki City Eye Department 1935-1951. Lindberg was known as a skilled clinician, surgeon, teacher and administrator. He also carried on with his large private practice. Throughout his career he attended regularly international congresses and travelled in all Scandinavian countries, Germany, Switzerland and the United States of America. [by Ahti→Tarkkanen]

Lindner, Karl (1883-1961) Austrian ophthalmologist. Lindner was Professor and Director of the Vienna ophthalmic Clinic. He inspired, in 1929, Deutsch´s work about the use of contact lenses for keratoconus to correct strong myopia. In a reply to Proksch, he claims the priority of the use, since 1924, of contact lenses blowed by Müller for the correction of the keratoconus. During a presentation by Hartinger, he intervened claiming that the contact of contact lenses is sometime so strong that it becomes impossible to take them off! On contact lenses, Lindner published the following papers: *Bemerkungen zu der Arbeit von Frau Dr.Deutsch "Ueber Verwendung von Kontakgläsern usw." und zu der "Berichtigung" von Frau Dr Proksch. - Offene Korespondenz*, Klinische Monatsblätter für Augenheilkunde, 1929, 82:830-831; Discussion in Aust, *Ueber einige weitere Arten der Verwendung der Kontaktgläser* (Ophthalmologische Gesellschaft in Wien, 18.03.1929), Klinische Monatsblätter für Augenheilkunde, 1929, 82: 535; *Ueber das Einlegen von Kontaktgläsern*, (Ophthalmologische Gesellschaft in Wien, 18.03.1929), Klinische Monatsblätter für Augenheilkunde 1929,82:534; Discussion p.198 in: Hartinger Hans, *Zur Berichtigung der Fehlsichtigkeiten mittels der geschliffenen Zeißischen Haftgläser*,

Bericht der 48. deutschen ophthalmologischen Gesellschaft (13.06.1930), 1930, 189-201. He wrote following monograph: *Lehrbuch der Augenheilkunde*. Wien und Innsbruck, 1952. Annales d´oculistique, 1962,195:382. BJO 1961,45:638. JPW

Ling, Yvonne Li-Fang (1956-) Singapore ophthalmologist. She graduated from University of Singapore in 1979 and was awarded Fellow of the Royal College of Surgeons of Edinburgh, 1986, and Fellow of the Royal College of Ophthalmologists, United Kingdom, 1989. She was trained in ophthalmology at the Department of Ophthalmology, Singapore General Hospital, 1983-1985, and Moorfields Eye Hospital, London, United Kingdom, 1985-1986. She received advanced surgical training in paediatric ophthalmology between 1990-1991 under Prof John Pratt-Johnson at the British Columbia's Children's Hospital, Vancouver, Canada, and under Prof J. Bronwyn Bateman, Dr Sherwin Isenberg and Dr Arthur Rosenbaum at the Jules Stein Eye Institute, Los Angeles, U.S.A. Her current professional appointments: Senior Consultant and Head, Paediatric Ophthalmology and Strabismus Service, Singapore National Eye Centre; Fellow of the Academy of Medicine, Singapore; Part-time Clinical Teacher, Faculty of Medicine, National University of Singapore. She sits on committees in the Singapore Association of the Visually Handicapped and Singapore School for the Visually Handicapped. One of her recent publications is "*A Review of 5 Years' Experience in the Use of Botulinium Toxin A in the Treatment of Sixth Cranial Nerve Palsy at the Singapore National Eye Centre*", Singapore Medical Journal, 1999 Jun; 40(6):405-9. (Dr. Ling Yvonne Li-Fang. Singapore National Eye Centre, 11, Third Hospital Avenue, Singapore 168751, Singapore. Phone: (65) 2277255, Fax: (65)2277290, e-mail: snecyl@pacific.net.sg)(SM)

Linhart, Wenzel von (1821-1877). German surgeon of some importance in ophthalmology. Born in Seelowitz, in Moravia, the son of a surgeon of much local reputation, he received his medical degree in 1844 at Vienna, and then proceeded to study operative surgery with von Wattmann. For a time he taught surgical anatomy and operative surgery in Vienna, and in 1852 qualified as privatdocent in the University. In 1856 he moved to Würzburg, in order to accept the chair of clinical surgery in the University at that place. While here it was that he lectured on the eye, and also gave a number of practical courses in ophthalmic surgery. None of his writings, however, fall within the special field of ophthalmology. His masterpiece was "*Compendium der Chirurg.Operations-Lehre"* (1856, 4th ed.,1874).American Encyclopedia of Ophthalmology, Vol.10, p.7488

Linksz, Arthur (1900-1988), American ophthalmic biochemist of Czech origins.Linksz was born in a part of Hungary that is now Czechoslovakia. In his younger years he wanted to be a poet. Political conditions after the First World War forced him to leave Hungary. He studied medicine in Prague, received his medical degree in Kiel, worked in Munich, and wanted to embark on a scientific university career. He moved back to Budapest and became a successful practitioner. He emigrated to the United States in 1939 and served as an instructor at Dartmouth Medical School with Prof. Alfred→Bielschowsky and Prof. Hermann→Burian.. He became an American citizen in 1944. He published the "*Physiology of the Eye, Volume I, Optics*" in 1950, and "*Physiology of the Eye, Volume II, Vision*" in 1951. His book, "*An Essay on Color Vision and Clinical Color Vision Tests*," published in 1964, is a classic. "*On Writing, Reading, and Dyslexia*," published in 1973, is the story of his profound love affair with the English language. His Hungarian autobiography, "*Visszanezck*," was published in 1977, and its English translation, "*Fighting the Third Death*," in 1986. He delivered the Edward Jackson Memorial Lecture in 1958. He was a member of the American Ophthalmological Society and of the Academy of Ophthalmology. He lectured and wrote extensively on topics of color vision, aniseikonia, vision screening, vision in the newborn, aphakia, and ophthalmodynamometry. "*An Ophthalmologist Looks at Art*" was published in 1980, a unique and marvelous book of a scientist who, at the same time, has profound understanding of artistic techniques and of the artists themselves. His thesis for the admission to the American Ophthalmological Society concerned the horopter. He also published a number of papers in German and in Hungarian concerning ophthalmic biochemical and clinical problems. AJO 1988,106:114-115

Lint, Auguste van (1877-1959) *see* **Van Lint**

Lipp, Eduard (1831-1891). Austrian dermatologist, and, to a certain extent, ophthalmologist. Born in Wundschuh, near Leibnitz, Steiermark, the son of a surgeon, he received the degree of M.D. at the University of Vienna. After a brief period of service as assistant physician in the Wiedener hospital at Vienna, he became, in 1861, chief physician to the General Hospital in Graz. Four years later he was privatdocent for dermatology and syphilis at Graz. Though ill at the time, he was president of the German Dermatologic Society, at its third assembly, in Leipsic, 1891. His chief ophthalmologic article was entitled, "*Ueber Pemphigus Vegetans und Pemphigus Conjunctivae*" (1891).American Encyclopedia of Ophthalmology, Vol.10, p.7496

Lisch, Karl (1907-1999) Austrian ophthalmologist, father of Walter Lisch, professor of ophthalmology in Hanau, Germany. Karl Lisch was born as son of a general practitioner in Kirchbichl, a village in North Tyrol, Austria. After completing his schooling in Kufstein, he visited the universities of Vienna, Zurich, and Innsbruck to study medicine. Lisch graduated from the University of Innsbruck in 1931. He began his residency in ophthalmology at the First University Eye Clinic in Vienna (chairman: J.→Meller) in 1931 and continued at the University Eye Clinic Innsbruck (Chairman: R. Seefelder). From 1935 to 1945, Lisch worked as an assistant and later as senior physician at the University Eye Clinic in Munich, Germany (Chairmen: K.→Wessely and W.→Meisner). He there became in 1941 lecturer in ophthalmology with the thesis "*Die Veränderungen der peripheren Sehbahn bei multipler Sklerose*".Karl Lisch revered above all the memory of his two teachers, Joseph Meller and Karl Wessely, with whom he carried on an intensive correspondence up to the time of their death. In 1947, he became Chief Physician of the Eye Department of the hospital of Wörgl, a small town near his birth place. He remained in this position until his retirement in 1980. Besides general ophthalmology, Lisch was interested in ophthalmic research. Lisch published more than 120 papers, mostly in German ophthalmic literature. He is remembered for the description of the iris nodules of neurofibromatosis type I, now termed '*Lisch nodules*'. In 1937, in the Zeitschrift für Augenheilkunde (from 1938 *Ophthalmologica*, Basle), vol.93, he published *Ueber Beteiligung der Augen, insbesondere das Vorkommen von Irisknötchen bei der Neurofibromatose (Recklinghausen)*. In his article, Karl Lisch acknowledged prior observations of Gabrielides and the use of the term 'Warzeniris', meaning multiple nodules or warts of the iris, by Waardenburg. Van der Hoeve in his Doyne Memorial Lecture in 1932 presented a family observed by Waardenburg to have neurofibromatosis and iris tumors. Fuchs, Goldstein, Snell, Treacher Collins,Wexler and particularly Tsuya→Sakurai (Kitagawa) (1911-1995) in 1935 had also reported pigmented nodules on the iris surface in patients with neurofibromatosis before publication of Lisch's paper in 1937. In his work on four types of phakomatoses in 1942, Lisch described changes in the eye in neurofibromatosis. Once again, he pointed out that iris nodules might in fact be a constant sign of neurofibromatosis and that a diagnosis of neurofibromatosis can be presumed from the mere presence of the nodules. His observations seem all the more remarkable today when we realize that the usefulness and prevalence of nodules in neurofibromatosis type I was first investigated in 1981 in a prospective study by Lewis and Riccardi.They found *Lisch nodules* in 92% of 77 patients aged six or older. Interestingly, the suggestion to designate iris nodules in neurofibromatosis as '*Lisch nodules*' was probably made by the late Frederick C.→Blodi (according to W. Lisch, Hanau, Germany). Karl Lisch received many awards, most notably the title of Senior Advisor in Medical Affairs (Obermedizinalrat) from the President of Austria in 1989 in recognition of his outstanding work as a physician. In 1992, he received the Medal of Honor of the American Neurofibromatosis Society and the First Class Cross Honor for Science and the Arts of the Austrian Ministry for Science and the Arts. JPW

Lisch, Walter (1941-) German-Austrian ophthalmologist, son of Karl Lisch. Walter Lisch was born in Munich, Germany. After completing his schooling in Kufstein, Austria, he visited the universities of Vienna and Innsbruck to study medicine. Lisch received the degree of M.D. at the University of Innsbruck in 1969. He began his residency in opththalmology at the Eye Department of the Hospital of Wörgl, Austria (Head: K. Lisch) in 1971. From 1975 to 1982, Lisch worked as an assistant and later as senior physician at

the Department of Ophthalmology, City Hospital of Dortmund, Germany (Chairman: K. Ullerich). From 1982 to 1991 Lisch was leading senior physician at the University eye clinic in Tübingen, Germany (chairman: H.J. Thiel). In 1983 he became lecturer in ophthalmology with the thesis *Hereditäre vitreoretinale Degenerationen*. In the same year this work was published as a monograph under the title: *Hereditary vitreoretinal degenerations* in *Developments in Ophthalmology* (Vol. 8, Karger, Basel – New York), translated from German into English by the late Frederick C.? Blodi, Iowa. In 1989 Lisch became Professor of Ophthalmology from the University of Tübingen. From 1991 until now, he is chief physician of the Department of Ophthalmology, City Hospital of Hanau, Germany. Besides general ophthalmology, Lisch is interested in ophthalmic research. Until now he published about 160 scientic papers and contributions in handbooks concerning genetical, clinical and surgical problems in ophthalmology. In 1981 Lisch published together with Albert Franceschetti, Geneva and Klaus Ullerich, Dortmund a chapter in the handbook *Der Augenarzt*, Vol. II, Thieme, Leipzig, titled *Augenveränderungen bei Schädeldysostosen.* In 1984 he organized together with Wolfgang Hammerstein, Düsseldorf, a symposion of the German ophthalmological society; *Ophthalmological Genetics*. In 1985 Hammerstein and Lisch edited the monograph *Ophthalmologische Genetik* (Bücherei des Augenarztes, Vol. 105, Enke, Stuttgart). In 1992 he presented a new dystrophy of the corneal epithelium which is now known as *Lisch corneal dystrophy* (American Journal of Ophthalmology 2000; 130:461-468). Corneal metabolic disorders are of Lisch's special clinical and scientical interest.(AB) JPW

Lister, A.E.J. (?- 1943) British ophthalmologist. Lister studied medicine at St.Bartholomew´s Hospital and in Vienna, and passed the M.B., B.S. London and conjoint examinations in 1900, held the Brackenbury Scholarship in Surgery in 1901, and at the Netley Army Medical School gained prizes in hygiene, clinical medicine and surgery. Lister was on active (army) service in East Africa and Somaliland and also served during the 1914-18 war. Before the first World War he was Ophthalmic Sureon to the King George´s College at Lucknow, and also Hon. Surgeon to H.E. the Viceroy. Lister was the author of the Ophthalmic Section of the Medical Annual, 1922-1929; appendix in Smith´s extraction of cataract; two papers in *„Archives of Ophthalmology"* 1908 and in *Indian Med. Gaz.* 1920; etc. Due to his poor health he left the Service in 1920 and settled in Bristol where he was appointed Hon. Consulting Surgeon to the Bristol Eye Dispensary. BJO 1944; 27:153-154.

Listing, Johann Benedict (1808-1882). German ophthalmologist, of Hungarian descent, inventor of the expression, " entoptic phenomena" (*entoptische Erscheinungen*), well known for his researches in physiological optics. Born at Frankfort a. M., he was doubly orphaned at an early age. From 1829-1834 he studied at Göttingen, making a specialty of mathematics and graduating in the last named year. After a number of "wanderjahre"(years of travelling-JPW), he began teaching mathematics and mechanics at the higher tradeschools in Hanover. In 1839 he was made extraordinary professor, in 1842 full professor of mathematical physics and optics at Göttingen. Most of Listing's writings relate to mathematics. He wrote, however, an article on "*The Path of The Light Rays in the Eye*" for Vol. IV of Wagner's famous *"Handwörterbuch der Physiologie"* and a very useful "*Beitrag zur Physiologischen Optik*" (in Göttinger Studien, 1845). He also contributed several articles to the *"Göttinger Nachrichten,"* and to Poggendorff's"*Annalen der Physik u. Chemie*." American Encyclopedia of Ophthalmology, Vol.10, p.7498

Liston, Robert (1794-1847) English surgeon of little importance ophthalmologically except for the fact that he assisted in introducing into England the strabismus operation of →Stromeyer and →Dieffenbach *(Brit. and For. Med. Review*, May 6, 1840, Report by W. R. Ancram; and Liston, Lancet, *1*, 433, 1844). Liston was born , in Linlithgow, West Lothian, Scotland, studied at Edinburgh and London, and settled first at Edinburgh, where he was widely known both as author and as operator. In 1833 he was called to London as Professor of Clinical Surgery at the University College. Here he laboured with very distinguished success until his death. American Encyclopedia of Ophthalmology, Vol.10, p.7499

Littell, Squier (1803-1886). American ophthalmologist, author of the once well known "*Manual of Diseases of the Eye.* (Philadelphia 1837)" Born at Burlington, N. J., he lost both parents while still a small child. He was, however, adopted by his uncle, Dr. Squier Littell, of Butler Co., Ohio, and, in this county, received his early education at the public schools. Turning his attention to medicine, he studied at first with his uncle, then with Dr. Joseph Parrish, of Philadelphia, and finally, at the University of Pennsylvania, at which institution he received his degree in 1824. For a time he attempted to practise in Buenos Ayres, but soon returned to Philadelphia. He practised there for very many years both as general physician and as ophthalmologist. In addition to the above-mentioned volume he wrote a considerable number of journal articles, and edited *"The Monthly Journal of Foreign Medicine*." Littell edited Walton´s *Manual of the Diseases of the Eye*. Late in life he suffered from choroiditis, and soon was nearly blind. American Encyclopedia of Ophthalmology, Vol.10, p.7500

Little, David (1810-1902). British ophthalmologist. Born in Lockerbie, Dumfriesshire, Scotland, he studied at Edinburgh, and, in 1863, became house physician at the Ophthalmic Institute, Manchester. In 1878 he was made instructor in ophthalmology at Owen's College, a position which he held for 21 years In 1901 he was president of the Ophthalmological Society of the United Kingdom. He wrote little, but was widely known as an operator. Little's ophthalmic writings are as follows. 1. *On the Operation for Lamellar Cataract*. 2.*On the Extraction of Senile Cataract, with the Results of 1248 Extractions. (Br.Med.J.,* 1889.) 3. *Sarcoma of the Iris. (Trans.Oph.Soc.* III, 215.) 4. *Intoxication Amblyopia*. *(Trans.Oph.Soc.U. K.,* VII, 73.). 5. *Clinical Experience with Chronic Primary Glaucoma, and the Value of Iridectomy*. (*Trans.Oph.Soc.U. K.,* XXII, 1, 1902.) American Encyclopedia of Ophthalmology, Vol.10, p.7500-7501

Littmann, Hans (1908-1991) German scientist, employed by Carl Zeiss, Oberkochen,Germany. Littmann was born in Hamburg and studied physics in Stuttgart, Göttingen and Jena. After having received his degree in physics he became employed by Carl Zeiss in Jena. At the end of the second war, he was brought to Heidenheim (American occupation zone, south Germany) by the American troops, along with other leading personalities of the Zeiss company, where he helped to rebuild the company in Oberkochen. He was from 1946 to 1973 technical director of the medical optical division of Zeiss and for a while also directing the section of spectacles glasses. Later on he became, for a time, lecturer at the Tübingen University. Littmann developed very successful instruments which marked an epoch in medical optics, such as the slit lamp microscope with moving slit lamp (1950) , the ophthalmometer (1950) , the fundus camera with flash light. With his operation microscope (OPMI I) 1953 , he opened the door to a worldwide development of micro-surgery. This instrument can be seen as the “father” of many operation-microscopes for ophthalmology, otology and other medical fields. His light coagulator [Xenon], based on an idea from →Meyer-Schwickerath , became a corner stone in medical history. Littmann wrote about 58 papers in international journals of ophthalmology and on optics. This is a selection: Littmann: *Die Reflexion an absorbierenden Medien*. Ann.Physik (5) 38: 139,1940; *Die Grundlagen der Skiaskopie, eine quantitative Theorie*. Graefes Arch.ophthalm.148: 658, 1948; *Foveale Präzisionsskiasopie* Graefes Arch.Ophthal. 149:520, 1949; *A new slitlamp apparatus*. Am. J. Ophthalmol. 33:1863-1870, 1950; *Die Zeiss Funduskamera*. Ber. deutsch. Ophthalmol. Ges., Heidelberg 59: 318-321, 1955; *Ein neues Operations-Mikroskop*. Klin. Monatbl. Augenheilkd. 124:473-476, 1954; *Das Zeiss-Ophthalmometer* Zeiss-Werkzeitschrift 25: 80, 1957; *Der Zeiss Lichtkoagulator nach Meyer-Schwickerath mit Xenon-Hochdrucklampe*. Ber. deutsch. Ophthalmol. Ges. Heidelberg 61:311-314,1957. Littmann received a MD Honoris Causa from Bochum University and was a Corresponding Member of the Sociedad Mexicana de Otorrinologia and, 1990, he received an Award from the American Otolaryngological Society for his outstanding contributions to the development of medicine. Hans Littmann was a member of Deutsche Gesellschaft für angewandte Optik, Deutsche Ophthalmologische Gesellschaft (DOG), Société Française d´Ophtalmologie, Jules Gonin Society, Honorary Member of the Panamerican Ophthalmological Society and Member of the Barraquer Institute, Barcelona, Spain. (Zeiss Company, SM)

Liu, Jiaqi (1909-) Chinese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Beijing Medical University. He graduated from the Peking Union Medical College (now Beijing Medical University) in 1937 and received his M.D. degree from the University of the State of New York. He studied Ophthalmology under Prof. P.C.→Kronfeld at the University of Chicago and under Prof. Bi Hua-de and Prof. Luo Zongxian at the Peking Union Medical College. He served at the Beijing Medical University as the Assistant Professor (1945-1950) and has been Professor and Chairman since 1950. He is the founder of Pediatric Ophthalmology in China and established the first Department of Pediatric Ophthalmology at Beijing Medical University. In the professional society, he has served as Vice-President of the Chinese Ophthalmological Society, Vice-Editor-in-Chief of the *Chinese Journal of Ophthalmology*, Vice-Editor of the *Chinese Medical Encyclopedia-Ophthalmology Section*, Vice-Editor of the *Foreign Medical Abstract-Ophthalmology* Section and a member of the Advisory Council of the International Biographical Centre, Cambridge, England. Some examples of his many publications are "*Causes of blindness - a study of 2087 cases*", "*Investigation on the clinical and developmental mechanism of amblyopia and strabismus*", "*Textbook of practical Ophthalmology*, 2nd ed. People´s Medical Publishing House 1998" and "*System of Ophthalmology*, Vol. IX, *Strabismus and Amblyopia*. People´s Medical Publishing House 1997". He received many Awards, e.g. from University of California, Berkeley (Lecture: Present status of amblyopia therapy in China. 1982), National Education Bureau (1984), National Public Health Ministry (1985), State Department (1990) and Chinese Medical Association (1995). (SM)

Liu, Jorn-Hon (1938-) Taiwanese ophthalmologist, Clinical Professor and Chairman of the Department of Ophthalmology, National Yang-Ming University School of Medicine. He graduated from Kaohsiung Medical College in 1965, studied Ophthalmology under Prof. Chen Chen Wu and then received residency training at Taipei Veterans General Hospital under Dr. Lin Ho-Ming, the Chairman of the Department of Ophthalmology. He extended his higher studies, as a Fellow in the subspecialty of retina and vitreoretina, at the Wilmer Institute of the Johns Hopkins University in 1971 and also at the Massachusetts Eye and Ear Infirmary of Harvard University in 1975. He served as the Chairman of the Department of Ophthalmology, Taipei Veterans General Hospital (1982-1998), and as Associate Professor of Ophthalmology of the National Yang-Ming University School of Medicine (1982-1991). He has been in the present position as above since 1991. He has a joint appointment as the Deputy Director of Taipei Veterans General Hospital since 1998. He served as the President of the Ophthalmological Society of the Republic of China (ROC) (1993-1996). His special interest in clinical research is in the field of vitreo-retinal diseases and published many scientific papers, e.g. "*Laser photocoagulation for proliferative diabetic retinopathy*. Trans. Ophthalmol. Soc. of ROC 21: 40, 1982" and "*Surgical treatment for macular hole retinal detachment – Comparison of simple drainage, macular buckling and vitrectomy techniques*. Chin. Med. J. 40: 275, 1987". He is a recipient of the Distinguished Contribution Award, Executive Yuan of ROC (1982) and Honor Award for distinguished service from the American Academy of Ophthalmology (1998).(Veteran General Hospital – Taipei, fax: 886-2-28735875) (SM)

Lloyd, Eusebius Arthur (1795-1862) British ophthalmologist of London. Lloyd was educated at St. Bartholomew's Hospital, chiefly under John Abernethy. He became M.R.C.S. in 1817, established a successful London practice, and from 1824 to 1861 was on the staff of St. Bartholomew's. Lloyd introduced several surgical innovations and contributed frequently to medical journals. He wrote: *A treatise on the nature and treatment of scrophula describing its connection with the diseases of the spine, joints, eyes ... to which is added, a brief account of the ophthalmia so long prevalent in Christ's Hospital*. London 1821, for which he received the Jackson Prize.

Lloyd, Humphrey (1800-1881) Irish physicist of Dublin, writer on optics and terrestrial magnetism. Lloyd was educated at Trinity College (M.A., 1827), where he became professor of natural and experimental science (1831), senior fellow (1843), and provost (1867). Lloyd's optical discoveries gave new support to the wave theory of light and expanded knowledge of the properties of reflection and refraction. At least as productive was his research on the earth's magnetic field: he helped establish a system for simultaneous

measurements at observation posts worldwide, demonstrated the existence of electrical currents in the earth's crust, and calculated their effect on the daily variation in the magnetic field. Lloyd wrote: *A treatise on light and vision*. London 1831; *Lectures on the wave-theory of light* Dublin 1841; *Elements of optics*. Dublin 1849.

Lloyd, Ralph I. (1875-1969) American ophthalmologist, born in Poughkeepsie, New York. He graduated from the Poughkeepsie High School in 1892 and from the New York Homeopathic Medical College in 1896. He was house physician at the Brooklyn Homeopathic Hospital for 18 months and received an additional year of training at the Pittsburgh Homeopathic Hospital. He returned to the New York Ophthalmic College where he studied for eight months and then began the practice of ophthalmology in Brooklyn in 1899. He was lecturer in anatomy at New York Homeopathic College in 1900 and was later assistant professor and professor of ophthalmology at his alma mater. Lloyd was surgeon at the New York Ophthalmic Hospital from 1915-1929 and assistant in ophthalmology at Cumberland Hospital from 1900-1930 and later consultant there. He was ophthalmologist at the Brooklyn Nursery and Infants Hospital from 1901-1941 and was consultant ophthalmologist at Peck Memorial Hospital, Prospects Height Hospital, Brooklyn Cancer Institute, Long Island College Hospital and Brooklyn Eye and Ear Hospital. Dr. Lloyd was an excellent lecturer and served in that capacity at the New York University Medical School, postgraduate division, from 1937-1942. He was honored with a Gold Medal by the Long Island College Hospital in March, 1959, for his service and devotion to medicine.He had a strong desire to foster scientific advances in ophthalmology and was one of the founders of the Brooklyn Ophthalmological Society. He later served as president of the society and in 1967 its members established the Ralph I. Lloyd lectureship in his honor. In 1942 he served as president of the American Academy of Ophthalmology and Otolaryngology. He was a member of the Kings County Medical Society, New York State Medical Society, American Medical Association, American Ophthalmological Society and American College of Surgeons. Lloyd was interested in many areas of study, although his writings related particularly to embryologic anomalies and macular degenerations. He presented a course at the Academy for many years on diseases of the cornea. He devised the Lloyd stereo campimeter. He served as a member of the editorial board of the American Journal of Ophthalmology during its early years. AJO 1969,68:953-954

Löbenstein-Löbel, Eduard Leopold (1779-1819) German physician, born at Lübben, Germany. He received his M.D. in 1802 at Jena, settling in that city as general practitioner and becoming professor of medicine at the university in 1811. Löbenstein-Löbel wrote: *Grundriss der Semiologie des Auges für Aerzte*. Jena 1817.

Lobstein, Johann Friedrich Daniel (1777-1840). A Strassburg (now in France) ophthalmologist of the early 19th century. Born at Strassburg, the son of Johann Friedrich Lobstein, he was deprived of his father by death when only seven years of age. He studied at Strassburg and Paris, was for many years a military surgeon, and at length, in 1815, settled in Strassburg. He seems to have given much attention to Ophthalmology, but never to the total exclusion of other forms of practice. According to Gurlt (German surgeon and historian-JPW), he led, at least in Strassburg, a dissolute life, became bankrupt, fled to New York, where he lived in wretched circumstances till his death. His only ophthalmologic writing was: *Tableau de la séméiotique de I'Oeil d l'Usage des Medecins* (1818).[in fact only a translation of →Loebenstein-Loebel´s work-JPW] American Encyclopedia of Ophthalmology, Vol.10, p.7502-7503. JPW

Lobstein, Johann Friedrich (1736-1784). The father of Johann Friedrich Daniel →Lobstein, and an ophthalmologist of some repute. Born at Lampertsheim, Alsace, the son of a German surgeon, he received his medical degree at the University of Strassburg in 1760, travelled in many lands, and began to practise general medicine at Strassburg in 1762. Gradually he turned his attention more and more to ophthalmology, but never to the total abandonment of other practice. He became especially famous for cataract extraction, and was often called in consultation to distant lands. In 1764 he became prosector at the University of Strassburg, and in 1778 professor of anatomy and surgery. His chief ophthalmologic writing was *"Suffusiones Secundariae*," etc. (1779).American Encyclopedia of Ophthalmology, Vol.10, p.7502

Loche (fl. 1750-1791) Nothing is known yet about the author of :*Précis sur le nouveau traitement des maladies des yeux*. Londres 1783 and *Précis sur le nouveau traitement des maladies des yeux Nouvelle édition, suivie des nouvelles observations de l'auteur sur les mêmes maladies, & des certificates des cures opérées par son eau ophtalmique*. Londres 1785. He probably was a quack.

Locke, John (1792-1856). American, born at Fryeburg, Me., graduated in medicine from Yale in 1819, and became geologist on the United States survey of the North-West territories and Ohio. From 1836 onwards he was professor of chemistry in the medical college of Ohio, and was a pioneer in scientific research. He invented and improved many instruments for use in optics, physics, electricity, and magnetism, notably the gravity escapement for regulator-clocks (1844), and his electro-chronograph, purchased for the United States naval observatory for $10,000. He contributed largely to the proceedings of various scientific societies and to the *American Journal of Science*, besides publishing text-books on botany and English grammar. American Encyclopedia of Ophthalmology, Vol.10, p.7533

Loe, Fred (1884-1965) American physician. Fred Loe was born on a farm in Mercer County, Missouri, and the story of his becoming a physician is surely "the American story." As a boy he had to help make ends meet in a large family that had fallen on hard times in the depression of 1890. To do so he helped on the farm, worked for the neighbors, and held down a job in the local doctor's office. Here he read the doctor's medical books, went with him on his house calls, and determined that come what might he himself would one day be a doctor. His education and medical training had to be acquired the hard way and with interruptions. Quite literally he worked his way through medicine, much of the time as a shoe salesman on a night shift while going to school, and for two years as a professional baseball player. He worked, scrimped, saved and studied, and, finally, in 1908, the St. Louis College of Physicians and Surgeons, later to become part of Washington University, awarded him his M.D. degree. His first venture in medicine was as a private Practitioner in Oklahoma. Soon, however, he began his long, useful career as a general physician in the Bureau of Indian Affairs. Specialists were unheard of in the Indian Service at that time, and like many a modern medical missionary, the physician serving the Indian was called upon for a wide variety of skills. On occasion he might even have to extract teeth! Not afraid of work, however, and with good training behind him, a lively curiosity and an ingenious turn of mind, Dr. Loe proved to be an extraordinarily adept self-teacher. He mastered the techniques of many major surgical procedures and, in the ophthalmological field, attained a high degree of skill in the surgical management of such problems as trichiasis and entropion, cataract and glaucoma, and ocular muscle dysfunction. He acquired particular skill in making plastic repairs of the numerous injuries around the eyes that were sustained by the Indians in the course of their traumatic lives. Loe *first* demonstrated the efficacy of the sulfonamides in the treatment of trachoma and thus opened the way at last to the possibility of controlling this very old and crippling eye disease. He made this therapeutic breakthrough in the winter and spring of 1937-1938 while stationed on the Sioux Reservation at Rosebud, South Dakota, where he was serving as a medical officer in the Bureau of Indian Affairs. The results of these first therapeutic trials were reported at the June, 1938, meeting of the Section on Ophthalmology of the American Medical Association and were soon confirmed. A sulfanilamide campaign against trachoma was promptly instituted by Dr. Harry S.→Gradle, then consultant on trachoma for the Bureau, Dr. J. G. Townsend, the Bureau's Director of Health, and Dr. Polk Richards, the Bureau's trachoma control officer. This campaign was waged from 1938 to 1942 and was remarkably successful. AJO 1966,61:1555-1558

Loebenstein-Loebel, Eduard Leopold (1779-1819). German physician of Jena, Saxe-Weimar, who seems to have devoted considerable attention to diseases of the eye. Born at Lübben, lower Lausitz, he received his degree in medicine at Jena in 1802, and settled at once as general practitioner in that city. In 1811 he became extraordinarius, and, in 1814, medical councillor. His only ophthalmologic writing was *" Grundriss der Semiologie des Auges für Aerzte*. . (Jena, 1817; Fr.Transl.by →Lobstein, Strassburg, 1818.) American Encyclopedia of Ophthalmology, Vol.10, p.7534

Loeser,Leo (1869-1909) German ophthalmologist born at Meiningen. He worked with →Schweigger and →Silex and was for a long time correspondent to J.→Hirschberg´s *Centralblatt für praktische Augenheilkunde*. American Encyclopedia of Ophthalmology, Vol.10, p.7534;The Ophthalmoscope 1909,p.518.

Loewenstein, Arnold (1882-1952) British ophthalmologist of Austrian birth. Loewenstein was born in 1882 at Carlsbad, at that time a part of the Austro-Hungarian Empire, and died in Glasgow. He was educated in Prague where he graduated M.D. in 1906; as a young student he was drawn to the biological sciences and he received part of his training at the world famous marine biological station in Naples. His early papers were upon botanical and anatomical subjects, but after qualifying in medicine he was attracted to the study of ophthalmology, and in this he was influenced by an uncle who was a practising ophthalmologist in Prague. He wrote extensively and widely upon many aspects of his chosen specialty, his early papers being written while he was assistant to Professor Fick in the Department of Anatomy in the German University in Prague. In 1908 he became clinical assistant to Professor Elschnig in Prague and he continued to work there for 30 years. In due course he became a senior assistant privat-docent, and he received the title of Professor-Extraordinarius in 1924. By that time he had made over sixty contributions to the literature, including his well-known monograph on tuberculosis of the eye, and he had also collaborated with Professor Kahn of the Department of Physiology in work on electroretinography, which is still referred to in the literature of electrophysiology. The many years which he spent upon laboratory work stood him in good stead when circumstances compelled him to seek refuge in Great Britain. He became a whole-time research assistant in the department of Ophthalmology in the University of Glasgow, where he worked for over 12 years. Shortly after the war he became a British citizen. He continued to devote all his energies to study and research and many contributions by him have appeared in the BJO and in the Transactions of the Ophthalmological Society of the United Kingdom. The joint work which he carried out with Ballantyne and Michaelson is amongst his most interesting and important. BJO 1952,36:707-708

Logetschnikoff, S. (? – 1911) Russian ophthalmologist, president of the Moscow Ophthalmological Society. The Ophthalmoscope, 1911,p. 390.

Logger, Johannes.(? – 1841) A Dutch surgeon who devoted considerable attention to the eye. Born in Dordrecht, he studied at Leyden, where he practised until his death in 1841. He wrote *"Over de Zwarte Staar*" (Amsterdam, 1812).American Encyclopedia of Ophthalmology, Vol.10, p.7535

Loh, Robert Choo Kiat (? -) Singaporean ophthalmologist. He graduated in 1949 from Bombay University, and extended his studies at Institute of Ophthalmology in London (1952-1954) and also at Moorfields Eye Hospital (1952-1954). On returning home, he was appointed the Senior Registrar of the Department of Ophthalmology of Singapore General Hospital (SGH) (1954-1959) and Senior Ophthalmic Surgeon and Head of the Department of Ophthalmology (1959-1969) and then Honorary Consultant of the Department of Ophthalmology, Ministry of Health (1970-1995). He also has served as Senior Visiting Consultant to the Singapore National Eye Centre since 1990 to the present and Lecturer in Ophthalmology of the University of Singapore (1958-1969). He is the Founder and President (1963-1976) of the Singapore Society of Ophthalmology. He served the Asia-Pacific Academy of Ophthalmology (APAO) as the Vice-President (1964-1972) and 3rd Congress President of APAO (1968). He is a Master Member of Academy of Medicine (1976-1979). He has written numerous articles on glaucoma, retinal detachment, corneal grafting, cataract surgery and the use of laser. He edited the Transactions of the 3rd Congress of APAO 1968. For his excellence, he was awarded by the Government of Singapore, BBM for Contribution to medicine and Ophthalmology in Singapore, and BBM(L) for contribution to social services in Singapore. (Dr. Robert C. K. Loh: Eye Centre and Surgery, 6 Napier Road #05-05, Gleneagles Medical Centre, Singapore 258499. Phone: 65-2354224; Fax: 65-7337941) (SM)

Löhlein, Walther (1882-1954) German ophthalmologist. Löhlein was born in Giessen the son of a gynaecologist. He studied medicine like his father and his brother, the

pathologist Max Löhlein. He went first to Bonn, then to Giessen and received his medical degree in 1905. He became now assistant at the institute for pathology in Leipsic, clinic for internal medicine in Giessen, institute for Bacteriology in Giessen and in Greifswald. He worked for a few years at the ophthalmic institute of Greifswald under professor Römer and became 1909 lecturer, and 1914 professor of ophthalmology. He was a voluntary physician at the front during the first World War. After the war, in 1918 Löhlein received the directorship of the eye clinic in Dorpat. He became 1921 full professor, and, the same year he became successor of Professor Römer in Greifswald. He followed a call to the Jena University in 1924 and, in 1932, succeeded Axenfeld in Freiburg. Finally he accepted the chair of ophthalmology in Berlin and remained there until 1949. From 1950 to 1953 he was honorary professor for ophthalmology a the new West Berlin "Freie Universität". Löhlein published many papers and contributed chapters to: Axenfeld/Hertel *Lehrbuch und Atlas der Augenheilkunde* 8th edition, Jena 1935; Henke, F. & O.Lubarsch *Handbuch der spez.pathol.Anatomie und Histologie* Vol.11: *Das Auge* edited by K.Wessely, Berlin 1928-1937; Hans Auler and Heinrich Martius *Diagnostik der bösartigen Geschwülste. Leitfaden für den praktischen Arzt* München 1941. He also edited: (with W. Wegner) *Zeitfragen der Augenheilkunde. Vorträge vom augenärztlichen Fortbildungskurs Freiburg 1934* Stuttgart 1938; (with E.Engelking, O.Marchesani and A.Pillat) the series: *Augenheilkunde der Gegenwart*. Löhlein, further wrote: *Die Entwicklung des Sehens*. Jena 1931 (*Jenaer akademische Reden*, number 13). *Rede gehalten bei der Feier des 50jährigen Bestehens des Ärztevereins zu Gera* Jena 1928. JPW

Lohnstein, Th. (?- ?) German physician who practiced in Berlin. Lohnstein was himself suffering from a bilateral keratoconus that he corrected, in 1896, with water spectacles of his invention that he named hydrodiacope.He published the following papers regarding contact lenses and his hydrodiascope: *Zur Gläserbehandlung des unregelmässigen Hornhaut-Astigmatismus*, Klinische Monatsblätter für Augenheilkunde, 1896, 34:405-420; *Nachtrag: Zur Gläserbehandlung des unregelmässigen Hornhaut-Astigmatismus*, Klinische Monatsblätter für Augenheilkunde, 1896,34: 420-423; *Kritische Bemerkungen zu den hyperbolischen Gläsern*. Klinische Monatsblätter für Augenheilkunde, 1897,35:97-108; *Erwiderung auf die vorstehende Bemerkung des Herrn Dr. E.A. Fick in Zürich zu meinem Hydrodiaskop*, Klinische Monatsblätter für Augenheilkunde, 1897,35:132-134; *Die Berechnung der Planconvexlinse des Hydrodiaskops*, Klinische Monatsblätter für Augenheilkunde, 1897,35:266-271. see Robert Heitz *History of Contact Lenses* in Hirschberg *The History of Ophthalmology*, vol.11/3b, Ostend, Wayenborgh 2002. JPW

Loiseau Jr., Constant (1838-1890) Belgian ophthalmologist, son of Constant Loiseau Sr. (founder of the Namur Institut Ophtalmique). Loiseau was born in Namur. He was part of the military health corps, when he turned his interests to ophthalmology. Loiseau published from 1877 to 1879 important papers on the *measurement of ametropias by mean of his optometer derived from the discoveries of Donders and Giraud-Teulon* . Loiseau brought the government to discard conscripts with more than 6 diopters hypermetropia or myopia, but to tolerate otherwise the use of spectacles. Loiseau´s main interest was the construction of an optometer. He contributed many papers on this topic to the Annales d'Oculistique (1877-1881). In 1882 he was named corresponding member of the Académie Royale de médecine de Belgique. (Verriest). Annales d´oculistique 1891,105:71-80. JPW

Lolley, Richard M. (1933-2000) American vision scientist, professor at the Keck School of Medicine at the University of Southern California and the Doheny Eye Institute (Los Angeles, California), and whose early research helped to found the field of neurochemistry. Lolley was born in Blaine, Kan, on May 25,1933, earned a bachelor's degree in pharmacy from the University of Kansas, Lawrence, in 1955, and set out to be a drugstore pharmacist. He switched fields and went on to earn a PhD in physiology and biochemistry from the University of Kansas in 1961, and soon chose to focus on cyclic GMP. The discovery by Lolley and his colleagues, in the early seventies of the twentieth century, that cyclic guanosine monophosphate (GMP) was of crucial importance in vision formed a basis for understanding the mechanisms that result in diminished vision and blindness. He served as trustee and president of the Association for Research in Vision and Ophthalmology (ARVO) from 1991 to 1992. He was awarded ARVO's Proctor Medal

in 1994, the Jules Stein Living Tribute Award from Retinitis Pigmentosa International in 1985, the Alcon Institute Award for Excellence in Vision Research in 1991, and the R. S. Dow Neurological Sciences Award in 1992. Before joining the University of Southern California 1994 as a professor of cell and neurobiology and ophthalmology, and as the associate Dean for Scientific Affairs, Lolley had served for 30 years on the faculty at the University of California at Los Angeles, where he was chair of the Department of Anatomy and Cell Biology. His laboratory was in the Sepulveda Veterans Affairs Hospital in Los Angeles, where he pioneered a research career track followed by hundreds of PhD scientists. Lolley intended to develop vision as a model for the study of neurochemistry. Some dismissed his early findings, but he persisted and developed microassays in a model system to track the biochemical signalling pathway in the retina of mice. He was the first to identify the defect in cyclic GMP that leads to inherited blindness. This led ultimately to the cloning of the gene responsible for inherited retinal degeneration in mice and dogs, and provided insights into the mechanisms responsible for human retinitis pigmentosa. Throughout his scientific career, he was funded by the National Institutes of Health and held one of the first grants, "*Maturation and Metabolism of Dystrophic Retina*," reissued by the National Eye Institute when it was founded in 1970. Besides his initial insights into vision at the molecular level, he discovered genes important in the functioning of the photoreceptors in the retina, naming "phosducin," which regulates phototransduction. Throughout the years, he has published more than 60 scientific papers and dozens of book chapters. Arch Ophthal 2000,118:1471

Lombard. French ophthalmologist of the early nineteenth century, who seems to have been a charlatan. Neither the places nor the dates of his life or of his death are now known. He practised first at Antibes, then at Montepellier, finally (perhaps) at Paris. He published a little book which was filled with ignorance, superstition and quackery, and which bore the title, *" Considerations et 0bservations sur la Guérison des Cataractes et des Affections de la Cornée par une Méthode Resolutive et de Fistules sans Opérations"* (Paris 1839).American Encyclopedia of Ophthalmology, Vol.10, p.7535.

Longino, Roy Richard (1888-1918) American Texas specialist on the eye, ear, nose and throat who received the medical degree at Tulane University, New Orleans, in 1911. AJO 1919,2:166

Longmore, Thomas (Sir Thomas) (1816-1895), of London, military surgeon, received his medical training at Guy's Hospital and joined the army, serving as surgeon in various posts and campaigns, which took him to North America, the Crimea, India, and elsewhere. He was made Surgeon General in 1872 and was knighted in 1886. Longmore was one of the founders of the Geneva Convention (1864), and afterward represented the British government at a number of international conferences on aid to the sick and wounded in wartime. Of several treatises he published on military medicine, there were two addresses on ophthalmology: *The Army Medical Officers´ Ophthalmic Manual* London 1863 (2nd edition 1875) and *The illustrated optical manual or handbook of instructions for the guidance of surgeons in testing quality and range of vision* of which the 4th edition was published in London 1888. American Encyclopedia of Ophthalmology, Vol.10, p.7536

Lopacki, Stanislaus Anton (? – 1738). Polish physician, botanist and pharmacologist, who devoted considerable attention to the eye. He studied at Cracow and Padua, settled in Cracow, and there, in 1691, became Professor of Botany and Pharmacology. His only writing, ophthalmologic or general, is entitled *"Questio de Ophthalmia*" (Cracow, 1691).American Encyclopedia of Ophthalmology 10,p.7536

Lopez, Fernando (?-1924) Mexican ophthalmologist of Mexico City. Lopez was a well known operator and had an extensive practice in Mexico City for many years. He was one of the founders of the Mexican Ophthalmological Society and contributed several important papers to the literature of ophthalmology. He was one of the first to use fat transplantations after enucleation and evisceration, with very gratifying results. In 1901, he advocated the use of local anesthesia for all ocular operations. For many years, Dr. Lopez was Director of the Military General Hospital in Mexico City where a school of medicine was established for the training of military surgeons.AJO,7:487-488

Lorch, Leo Hugo (1808-1835). German ophthalmologist. Born at Mayence, he received there his medical degree in 1830. After a year of further study in France, he settled as ophthalmologist at Mayence. Here, in 1834, he founded an ophthalmic institute, which, however, in the following year, burned down. Before he could re-erect the structure, he died, Nov. 12, 1835, only 28 years of age. Lorch's only writing was *"Makrobiotic der Augen,"* which was published posthumously in Mayence, 1837.American Encyclopedia of Ophthalmology, Vol.10, p.7536-7537

Lordat, Jacques (1773-1870). French anatomist and physiologist, who devoted considerable attention to the eye, especially the theory of vision. Born at Tournay (Hautes-Pyrénées) he received the medical degree at Montpellier in 1796, and, for the next three years, was physician in the military hospitals at that place. In 1799 he began to give instruction in anatomy and physiology, and in 1802 was elected prosector at the medical school. Two years later he was chief of the anatomical department. In 1811 he obtained by competition the chair of operative medicine, and, two years later, that of physiology, which he held for nearly fifty years. He resigned in 1860. His writings are mostly in the general field. One article he wrote, however, within the limits of our specially: "*Réflexions sur quelques Points de la Théorie de la Vision*" *(Ephémérides Méd. de Montp.,* 1828, Vol. VI, pp. 340-376.)American Encyclopedia of Ophthalmology, Vol.10, p.7537

Loring, Edward Greely (1837-1888). American ophthalmologist, inventor of the *Loring ophthalmoscope [*see *Schett & Keeler/The Ophthalmoscope, Vol.1:p.328ff & Vol.2:p.6-9]* and author of the well-known*"Textbook on Ophthalmoscopy."* Born in Boston, he began to study medicine at Florence, Italy, in 1859. Later he studied at Pisa, and, returning to Boston in 1862, he entered the Harvard Medical School in that city, and received the degree of M. D. in 1864. Deciding to become an ophthalmologist, he secured an appointment as externe to the Ophthalmic Clinic of the Boston City Hospital, and, later, at the Massachusetts Charitable Eye and Ear Infirmary. In 1865 he settled in Baltimore, Md., but, next year, moved to New York, where he formed a partnership with Dr. Cornelius Rea →Agnew. He was surgeon to the Brooklyn Eye and Ear Hospital, the Manhattan Eye and Ear Hospital, and to the New York Eye and Ear Infirmary. He also wrote: *Determination of the refraction of the eye by means of the ophthalmoscope*. New York 1876. He was a member of numerous medical societies.American Encyclopedia of Ophthalmology, Vol.10, p.7537-7538

Louis, Antoine (1723-1792) French physician, writer on medical jurisprudence, born at Metz, France, where he studied under his father, a military surgeon, before completing his training in Paris. Louis settled in Paris and was appointed professor of physiology of the Académie de Chirurgie in 1749 becoming permanent secretary of the Académie in 1764 editing and contributing substantially to its Mémoires. Louis wrote valuable reports on the treatment of lacrimal fistulae (1753) and on enucleation (1774)-he devised special scissors for the latter procedure-but is best known for his works on the differential signs of murder and suicide (1763) and other aspects of forensic medicine. He wrote:*Lettres sur la certitude des signes de la mort* Paris 1788.

Lovibond, Joseph Williams (1833-1918) author of numerous works on color and the inventor of the tintometer, was born and died in England. He joined the rush of gold seekers to California in 1849 but soon returned to England and became manager of a brewery. He wrote books on "*Light and Color Measurements*," "*Color Phenomenon*," and "*Color Theories*," and many papers with regard to color. The tintometer, a color scale for comparison, has been widely used in the arts and for blood testing.AJO 1919,2:166

Low, Cze-Hong: (? -) Singaporean Senior Consultant Ophthalmologist, Visiting Professor , Tianjin Medical University. Medical Director, AM Eye Centre, Medical Director and Chairman, C H Low Specialist Eye Surgical Centre, Director, Singapore National Eye Centre (SNEC) Board of Directors, Senior Advisor SNEC Department A, Chairman, Excimer Laser Committee, SNEC and Mt Elizabeth Hospital, Singapore. He graduated from the University of Singapore in 1971 and received the Bachelor of Medicine and Bachelor of Surgery (MB,BS) in 1971 and studied ophthalmology in the Singapore General Hospitals Eye Department under Drs Robert Loh, K H Lim, C Y Khoo,

Prof. A S M Lim ,S K Leong, H N Tong, Victor Yong, B C Mg. His further studies in subspecialties in ophthalmology was in Britain under the Commonwealth Scholarship from the British Council, 1975 - 1977. His training was at the Moorfields Eye Hospital, Institute of Ophthalmology, Guys and St George's Hospitals, London and at the Royal Victoria Eye Infirmary, Newcastle upon Tyne, England where he served as clinical assistant, registrar and senior registrar. His mentors included Prof. John Gloster, Prof. Alan Bird, Rolph Blach, Redmond Smith, James Hudson, Stephen Miller (Oculist to Her Majesty the Queen), Gordon Catford, Patrick Holmes-Sellors (Oculist to Her Majesty's Household and subsequently Her Majesty the Queen), Prof. E S Perkins and Barry Jay while his contemporaries at Moorfields included Roger Hitchings. In 1976, he received the FRCS England, FRCSE and FRCSG Ophthalmology from the Royal Colleges of Surgeons of England, Edinburgh and Glasgow by examination becoming the first and only Singaporean to do so. He was also awarded the FICS without examination by the International College of Surgeons in 1977. Founding and incumbent Chairman, Excimer Laser committee, SNEC 1991 - to 1999. Senior Consultant Ophthalmologist and Chairman, C H Low Eye Surgical Centre, 1983- 1999. Medical Director, AM Eye Centre, AsiaMedic Specialist Medical Centre, 1998- 1999. Member, National Committee for Ophthalmology, Singapore 1998-1999. Member, Medical Advisory Committee on Ophthalmology to the Ministry of Health, Singapore 1999 - 2001. Member, New York Academy of Sciences, 1997-98 ISRS International Council Member, International Society of Refractive Surgery, 1997-2000. He is also Fellow of the American Academy of Ophthalmology, Fellow of the American Society of Cataract and Refractive Surgeons and Fellow of the American College of Surgeons, 1998. Alternate Specialist Member, Civil Aviation Medical Board, Singapore, 1981-1983. He fulfills many hospital duties and they are Medical Director and Senior Consultant Ophthalmologist, AM Eye Centre, AsiaMedic Specialist Centre ,1998-2000. Chairman and Medical Director, C H Low Specialist Eye Surgical Centre, 1983 - 2000. Director, Board of Directors, Singapore National Eye Centre, 1991-2000. Chairman, Excimer Laser Committee, SNEC and Mt Elizabeth Hospital, 1991 - 2000. Visiting Professor, Tianjin Medical University ,1996 - 2000.Senior Consultant Ophthalmic Surgeon, Mt Elizabeth Hospital, Gleneagles Hospital, Eastshore Hospital, Mt Alvemia Hospital, HMI Balestier Hospital and Thomson Medical Centre 1983-2000. Member, Medical Advisory Board, Singapore National Eye Centre, 1991-2001 Ophthalmology Specialty Group Representative, Mt Elizabeth Hospital, 1994-1996, 1999 - 2001. Founding member, Medical Advisory Board, Mt Elizabeth Hospital, 1983-1987 and Member, 1999—2001. Member, Medical Advisory Board, Eastshore Hospital, 1984 - 1986. Member, Finance committee, SNEC, 1991 —2000. Senior Advisor, SNEC 1996 — 2000. Member, Quality Assurance Committee, Mt Elizabeth Hospital, 1999-2001. Chairman, Credentials Committee, Mt Elizabeth Hospital, 1996 -1997, Exco member 1998 -1999, Member 1999-2001. Honorary Consultant, St Andrew's Mission Hospital, 1994-2000. Academic Roles he has played are Member, Committee on Ophthalmology, National University of Singapore, 1992-1998. Internal Examiner in Ophthalmology, Master of Medicine in Ophthalmology Postgraduate Medical School, National University of Singapore (NUS), 1992-1999. External Examiner, Royal College of Surgeons of Edinburgh, UK 1991-1999. Member, Specialist Training Committee in Ophthalmology, Graduate School of Medical Studies, NUS and Specialist Accreditation Board of the Ministry of Health and the Academy of Medicine, 1998 -1999. Part-time teacher, NUS 1977- 1999. He also has served as President, Singapore Society of Ophthalmology, 1985 - 1987, Honorary Secretary cum Treasurer 1984, Member 1972 to 1999, and he is a member of many National and International organizations. He is a recipient of many Honor Awards including President, Singapore Society of Ophthalmology, 1985 -1987, Honorary Secretary cum Treasurer 1984, Member 1972 to 1999. Member of Merit, Instituto Barraquer, Barcelona, Spain, 1999 and Visiting Professor, Tianjin Medical University, China, 1996-1999. He is a pioneer of many Ophthalmological and Medical undertaking in Singapore. His role as a leader embraces Founding Member, Medical Board, SNEC 1991-1999, Founding member, National University of Singapore Eye Department, from inception till 1996, Founding Member and Director, Board of Directors, Singapore National Eye Centre 1991- 1999, Consultant in charge, Corneal Service, National University Hospital Eye Department, inception till 1996, Consultant in charge, National Eye Bank, Singapore. 1991- 1995. Founding and incumbent Chairman, Excimer

Laser committee, SNEC 1991-1999, Senior Consultant Ophthalmologist and Chairman, C H Low Eye Surgical Centre, 1983-1999, Medical Director, AM Eye Centre, AsiaMedic Specialist Medical Centre, 1998-1999, Member, National Committee for Ophthalmology, Singapore I 998-1999, Member, Medical Advisory Committee on Ophthalmology to the Ministry of Health, Singapore 1999-2001, Member, New York Academy of Sciences, 1997-98, ISRS International Council Member, International Society of Refractive Surgery, 1997-2000 and Alternate Specialist Member, Civil Aviation Medical Board, Singapore, 1981-1983. His selected publications are "Low, C H, Ho, S H, Chong, J *The Impact of affluence on the major causes of blindness in Singapore over four decades*, Asia Pacific J. Ophthalmol. 2: 7-9, 1990", "Low, C H., Lim, AT H et al. *Subjective Visual Experience during phacoemulsification under topical anaesthesia versus retrobulbar anaesthesia*. Merit Research Prize in Ophthalmology and Visual Sciences, 1998" and "Chan TK, Low, C H: *The role of pediatric lasik in the treatment of amblyopia*, Ophthalmology Times 1997". (Dr. Cze-Hong Low: Specialist Eye Centre,3 Mt Elizabeth #16-01/02, Mt Elizabeth Hospital, Singapore 228510 Telephone: 65-7346684 ; Fax 65-734 3189; e-mail: chlow@newspage.com.sg)(Address 2: AsiaMedic Eye Centre, 350 Shaw Centre #08-00, Singapore, Telephone 65-789-8888; e-mail Iasik@magix.com.sg)

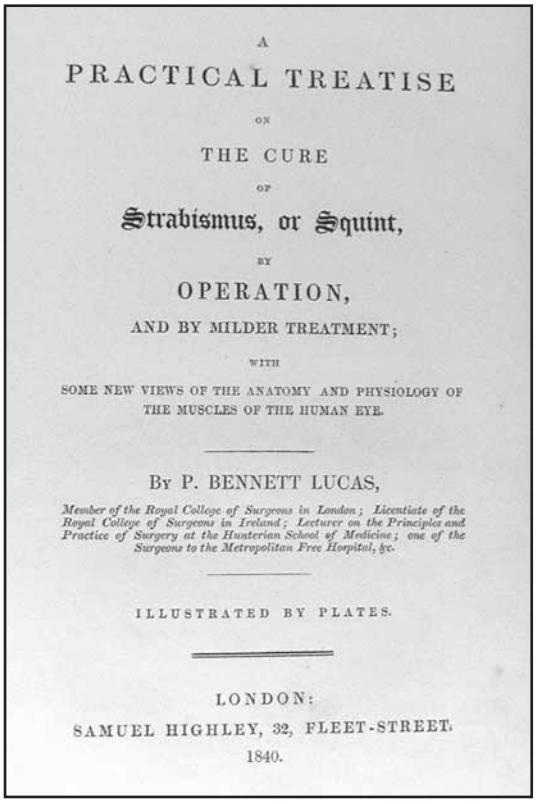
Lowe, Ronald Francis Hinde (1913 - 1998) Australian ophthalmologist. Lowe was Dean of the Clinical School of the Royal Victorian Eye and Ear Hospital 1962-68, and published widely in the field of ophthalmology but with particular emphasis on glaucoma. Educated Melbourne College of Pharmacy (PhC 1934) and University of Melbourne (MB, BS 1939, DO 1945, MD 1966). Australian Army Medical Corps 1941-46; Honorary Ophthalmic Surgeon, Royal Victorian Eye and Ear Hospital 1955-73, member, Board of Management since 1955, Dean Clinical School 1962-70, Officer in Charge, Glaucoma Unit since 1963; private ophthalmological practice. President, Australian College of Ophthalmologists 1972-73; president, Asia-Pacific Academy of Ophthalmology 1968-72, chairman, Ophthalmic Research Institute of Australia 1980-86. Royal Australian College of Ophthalmologists' medal 1996. Victorian Eye and Ear Hospital Medical Library named the Ronald Lowe Library in 1982.

Lowenstein, Otto (1889-1965) American Neurologist with important contributions to neuro-ophthalmology. Creator of pupillography. Lowenstein was born in Osnabrück, Germany and studied philosophy and mathematics at the University of Göttingen and went on to procure his medical degree at the University of Bonn in the fateful month of August, 1914. In the early year of his career he fell under the influence of A. Westphal (1863-1941), who was interested in the "catatonic pupillary immobility" of the schizophrenic. Lowenstein found the explanation of this phenomenon in a hyper-reaction to sensory stimuli. Having his attention attracted to pupillary action, he soon noted pupillary abnormalities to be among the earliest and most constant signs of neurosyphilis, preceding by years the appearance of subjective symptoms. His mathematical background made him conscious of the value of graphic representation of observable facts, and he pondered on how he could have such records of his observations so that, at a later date, he could analyze his findings at his leisure and determine their significance. Thus was born his brain-child, pupillography. First through motion pictures of the reaction of the pupil to light and various stimuli with X15 magnification and later, in 1957, through electronic control utilizing scanning and other modalities, he brought order out of chaos and finally concluded that, of the thousands of references to the pupil by other observers, only 10% were wholly correct. It is only in recent years that pupillography has been recognized as a method of unusual delicacy and accuracy for the localization of functional or organic change within the upper brainstem and the afferent and efferent pupillary pathways. Working on patients with glaucoma, he soon found curves that were characteristic of this disease and by localization studies in monkeys and cats pinpointed the pathologic process that gives rise to the pupillographic curve. From here he went on to study thyroid disease and found a characteristic pattern which aided differential diagnosis of exophthalmos of local cause and central sympathetic disturbances. This was of much aid to the ophthalmologist. He published over 100 articles on varied topics, at least 50% dealing with the pupil. In 1931 be was named professor of neurology and psychiatry at the University of Bonn. As director and founder of the Rheinische Landesklinik für

Jugendpsychiatrie" he found an urge to do more for the young psychiatric patient. The Rhinish Psychiatric Children's Clinic, which he also founded in Bonn, became the first clinical-diagnostic center of its kind in Europe. Forced to leave his country by the political developments of 1933, he continued his studies abroad. In spite of the loss of his instruments, his manuscripts and all the scientific materials assembled over many years, he rebuilt his laboratory twice, unaided, each time in a new country. He was made consultant in psychiatry at La Metairie in Nyon, Switzerland (1933-1938) and came to America in 1939. He served as clinical professor of neurology at New York University Medical School until 1947 and then at Columbia University and later as research associate in ophthalmology until retirement in 1962. In 1964 he received from his former University in Bonn an Ph.D. *honoris causa*. A bust of Lowenstein was unveiled during his visit in the Rhinish Clinic. He was a diplomate of the *American Board of Neurology* and a member of the *American Academy of Neurology* and the *Academy of Sciences*. AJO 1965, 60:155-156

Lowne, Benjamin Thompson (1839-1925) British surgeon and naturalist. Lowne was educated at St. Bartholomew's Hospital (M.R.C.S.in 1861). He lectured on anatomy and physiology at the Middlesex Hospital Medical School (1871-1895) and at the Royal College of Surgeons (1876-1880, 1890-1893), and in 1876 became ophthalmic surgeon to the Great Northern Hospital. Lowne was interested less in clinical medicine than in research on comparative anatomy, physiology, and embryology. He wrote extensively on the development and physiology of the sensory organs in insects and vertebrates. He published the following books: *Teratological Catalogue of the Museum of the Royal College of Surgeons* (1872) and *A manual of ophthalmic surgery* London 1876.

Lowry, William Herbert (1880-1942) Canadian ophthalmologist. Born in 1880, the son of a doctor, he graduated M.D. at Toronto in 1901. Almost immediately he decided to practice ophthalmology, and after post-graduate study in London and Birmingham he was appointed to the staff of the Hospital for Sick Children, where, in 1919, he became chief ophthalmic surgeon. Ten years later he succeeded MacCallum as Professor of Ophthalmology at the University of Toronto. Resigning the post in 1941 through ill-health he was elected Emeritus-Professor. He served in the last Great War in England and Salonika and rose to the rank of Lieutenant- Colonel. He was an earnest and painstaking teacher, particularly interested in undergraduate training. BJO 27,96,1943



A

PRACTICAL TREATISE

ON

THE CURE

OF

Strabismus, or Squint,

BY

OPERATION,

AND BY MILDER TREATMENT;

WITH

SOME NEW VIEWS OF THE ANATOMY AND PHYSIOLOGY OF THE MUSCLES OF THE HUMAN EYE.

By P. BENNETT LUCAS,

Member of the Royal College of Surgeons in London; Licentiate of the Royal College of Surgeons in Ireland; Lecturer on the Principles and Practice of Surgery at the Hunterian School of Medicine; one of the Surgeons to the Metropolitan Free Hospital, &c.

ILLUSTRATED BY PLATES.

LONDON:

SAMUEL HIGHLEY, 32, FLEET-STREET.

1840.

Lubarsch, Otto (1860-1933) German pathologist born in Berlin. He received his M.D. in 1883 in Strasbourg and after postgraduate study in pathologic anatomy in various European cities, became director of the pathology research facilities at Posen (1899-1905) and Zwickau (1905-1907), and professor at the medical academy at Düsseldorf (1907-1913), the University of Kiel (1913-1917), and the University of Berlin (1917-1929). Lubarsch published major works on infection and inflammation. He edited with R. Ostertag the *Ergebnisse der allgemeinen Pathologie und pathologischen Anatomie des Menschen und der Tiere*. (36 vols.) München 1894-1943 and with F. Henke the famous 12-volumes treatise *Handbuch der speziellen pathologischen Anatomie und Histologie.* Berlin 1924-1952.

Luca, Domenico di (1820-1887). Italian ophthalmologist. He became assistant to →Castorani and afterwards extraordinary professor of ophthalmology at Naples. He wrote a few articles and a small handbook on diseases of the eye: *Elementi di Ottalmiatri* (2nd.edition 1873).American Encyclopedia of Ophthalmology, Vol.10, p.7541

Lucas, Philip Bennett (1804(?)-1856) British surgeon who wrote the first treatise on the strabismus operation in Great Britain. He practiced surgery in London, lectured on surgery at the Hunterian School of Medicine, and was president of the Harveian Society (1843-1844), before losses in a disastrous financial speculation forced him to flee to Boulogne, France, where he built up a highly successful practice. He published articles and monographs on infectious diseases, vascular anatomy, and strabismus. He

wrote: *A practical treatise on the cure of strabismus, or squint, by operation, and by milder treatment* London 1840 being the first treatise on strabismus published in England. JPW

Ludwig, Christian Gottlieb (1709-1773). German surgeon of some importance in ophthalmology. Born in Brieg, Silesia, he received his medical degree at Leipsic in 1737. In 1740, he became extraordinary professor of medicine at his *alma mater,* then, successively at the same institution, professor of anatomy and surgery in 1747, professor of pathology in 1755, and of therapeutics in 1758. In the last named year he was also made dean of the faculty. Among his most important writings may be mentioned six successive volumes of *"Institutiones,"* which appeared from 1752 to 1765, and all of which became well known authorities. These were the Institutiones *"Physiologicce..... Medicinae, Clinica," "Chirurgicae," "Pathologicae..... Therapiae Generatis"* and *"Medicinae Forensis."* The *"Institutiones Chirurgicae"* (Leipsic, 1764) contains some sixty or seventy pages on diseases of the eye, the matter contained in which was, for many years of high authority among specialists as well as among general practitioners.American Encyclopedia of Ophthalmology, Vol.10, p.7542-7543.

Lund, Andreas (1772-1832). Danish physician who devoted considerable attention to ophthalmology. Born in Copenhagen he there received his medical degree in 1797. In 1812 he was made Professor at the University, and in 1813 Fellow of the Sanitary College. In 1832 he became chief court physician. His only ophthalmologic writing was *"Exophthalmus utriusque oculi"*American Encyclopedia of Ophthalmology, Vol.10, p.7547

Lundsgaard, Konrad Kristian Karl (1867-1931) Danish ophthalmologist, born in Silkeborg (Jutland) . At the conclusion of his medical study at the university Prof. Oscar Wanscher, at the time surgeon and oculist at Copenhagen, advised young Lundsgaard to take up ophthalmology. After a short stay as a volunteer assistant with Hansen Grut and Bjerrum he became a clinical assistant with Christensen (1897-1902) and after this, from 1902 to 1904, he served as a reserve-surgeon to the surgical-ophthalmological department of the Frederiks Hospital under Professor Wanscher. Having concluded this specialized training he started in practice and at the same time became head of the Frederiks Hospital Clinic and oculist to the Finsen Institute. Both positions he kept until he was appointed professor in 1925.In about seventy scientific publications Lundsgaard proved his interest in all branches of ophthalmology. Apart from this professional study, public life never ceased to attract him. His membership in many professional associations and scientifical societies is a striking corroboration of this inclination. The gold medal of the Copenhagen University awarded to him for his treatise on "*The inflammation of the eye of new-born infants both from a pathogenic and a therapeutic point of view*" proves that his scientifical work was highly appreciated. This was followed in 1900 by his thesis "*Bacteriological studies on conjunctivitis*." Bacteriology henceforth captivated his attention. His publications on the flora of the conjunctiva give evidence of this, and it was on this account that he was invited, in 1927, to deliver the "Doyne Memorial Lecture" at Oxford. He published clinical papers on "*Hemeralopia in alcoholics*". "*Refraction anomalies in case of diabetes*". "*Paralysis of eye muscles in infants*", and others. He also worked in the field of surgical ophthalmology and among other things constructed a trephine for sclerectomy and a keratome. As regards therapeutics, he specially occupied himself with optochin treatment and with the effects of parenteral milk injections. He did epoch-making work with light treatment in ophthalmology, having been the first to apply the Finsen method in diseases of the eye and he constructed the necessary set of instruments for this treatment. The history of ophthalmology also attracted his attention. He was a collector of old spectacles and wrote a monograph on the history of these useful instruments. In the year 1929 a Scandinavian *Manual of Ophthalmology* published his study on the affections of conjunctiva and orbit. His collaboration with others resulted in the foundation of the journal "*Dansk Klinik*" and from 1919 to 1925 he was co-editor of "*Nyt Medicinsk Aarskrift*" and of "*Hospitals Tidende*". He deserves much credit for starting the "*Acta Ophthalmologica*", which periodical has since attained great popularity in Scandinavian countries and abroad. As a professor he succeeded Tscherning, who however, on Lundsgaard's request continued his labors in the laboratory for physico-ophthalmologic

research. Traveling was among his hobbies and during his trips he came in touch with many of his colleagues abroad. So he became a co-editor of the journal "*Klinische Monatsblätter f. Augenheilkunde*" edited by Axenfeld. Apart from his work, art and especially plastic art, attracted him and more than one of his articles sets forth the relation between the eye and artistic perception. The great confidence his colleagues put in him became apparent when, at the first international conference of ophthalmologists after the great war (1927) he was appointed vice-president of the International Council, founded on that occasion, and was elected president in 1929. During the XIIIth International Congress of Ophthalmology 1929, in Amsterdam, as a collector of old spectacles, he was invited, with C. Greef and others to organize a display of old spectacles and edited with Greef, Hallauer and others: *Katalog einer Bilderausstellung zur Geschichte der Brille* (Amsterdam 1929) AJO 1931,14:1272-1274. JPW.

Lundy, Charles J (?-1892). American ophthalmologist of Detroit, Mich. The date and place of his birth are not procurable. He received, however, the degree of M.D. at the University of Michigan in 1872, and the same degree *ad eundem* at Bellevue Medical College in 1875. For the next three years he studied ophthalmology. Returning to Detroit in 1878, he was soon recognized as an expert operator. He became professor of ophthalmology at the Detroit College of Medicine, President of the Michigan State Medical Society and a collaborator on the American *"Journal of Ophthalmology.* American Encyclopedia of Ophthalmology, Vol.10, p.7547-7548.

Luntz, Maurice Harold (1930-) American ophthalmologist (formerly South African ophthalmologist), Clinical Professor of Ophthalmology, Mount Sinai School of Medicine, New York, NY; Director of Glaucoma Services, Manhattan Eye, Ear & Throat Hospital, New York, NY. He studied ophthalmology at St. Mary's Hospital, London, U.K., under Drs. Redmond Smith, Alex Cross and George Leigh from 1958 to 1960. Between 1960 and February, 1961, he was in private practice as an ophthalmologist in Cape Town, South Africa. In February, 1961, he was appointed Lecturer in Ophthalmology at the University of Oxford, England, attached to Baylor College. He remained in Oxford until the end of 1963, when he returned to private practice in Cape Town, but, in July, 1964, he was appointed Professor of Ophthalmology and Chairman of the Department of Ophthalmology at the University of the Witwatersrand in Johannesburg, South Africa. He remained in this position until the latter half of 1978, when he emigrated to the U.S.A. and took up the post of Director of Ophthalmology at Beth Israel Medical Center, New York, NY, and Professor of Ophthalmology at Mount Sinai School of Medicine, New York, NY. In 1989, he left Beth Israel Medical Center and entered private practice but continued in the position of Chief of Glaucoma Services at Manhattan Eye, Ear & Throat Hospital and Clinical Professor of Ophthalmology at Mount Sinai. From 1990 to 1995, he was a Surgeon Director of MEETH. From 1992 to 1995, he was President of the Board of Surgeon Directors of MEETH. He obtained his medical degree (M.B., Ch.B.) at the University of Cape Town, South Africa, in 1952. In 1957, he became a Fellow of the Royal College of Surgeons of Edinburgh. In 1974, he was awarded the M.D. (Doctorate of Medicine) degree — the highest academic degree in medicine offered by the University — of the University of the Witwatersrand. His thesis was entitled, "*Studies in Uveitis and Glaucoma*" and described his research in these two areas. In 1999 he was awarded an Honorary Fellowship of the College of Medicine of South Africa. His research interests have centered around glaucoma and, in particular, its surgical management, introducing many modifications to improve surgical techniques. His research in this area led to the publication of his book *"Glaucoma Surgery"***,** written jointly with Dr. R. Harrison, the first edition published by Williams & Wilkins, Baltimore, MD, U.S.A., in 1984, and the second edition published by Scientific Publishing Co. & P.G. Publishing in 1994. His research interests have also included uveitis. While in private practice in Cape Town, he collaborated with the Pathology Department at the University of Cape Town and published some of the earliest work in the detection of immune complexes in patients with uveitis. In 1982, Williams and Wilkins, Baltimore, MD, published his book in joint authorship with Alan H. Friedman and Walter L. Henley entitled, "*Diagnosis and Management of Uveitis*"**.** He has published nine books, 44 chapters in books and 105 journal articles in peer review journals. He has received a number of academic awards — e.g., the Sam and Dora Cohen

Medal from the University of the Witwatersrand, Johannesburg; the Gold Medal from the University of Rome; and the Honor Award of the American Academy of Ophthalmology. He was Guest of Honor at the IV International Symposium on Immunology & Immunopathology of the Eye in Padua, Italy; Guest of Honor at the XXI Alumni Meeting in Venezuela Symposium on Glaucoma in Caracas; Guest of Honor at the Beijing Ophthalmological Branch of the Chinese Medical Association and the Beijing Institute of Ophthalmology; and Guest of Honor of the University of Rome. In 1974, he established the National Eye Bank Foundation of South Africa and remained a Trustee of the Eye Bank until 1978. In 1964, he established the South African National Ocular Tumor Registry and was Chairman of the Registry from 1964 to 1976. He has been active in regional ophthalmological activities in New York as Chairman of the Ophthalmology Section of the New York Academy of Medicine from 1989 to 1990; Chairman of the Medical Advisory Board of the New York Eye Bank for Sight Restoration from 1989 to 1991; and President of the New York Intra-ocular Lens Society from 1995 to 1997. In international ophthalmology, he was Chairman of the First and Second South African International Ophthalmological Symposia in Johannesburg (1968, 1973), and Chairman of Glaucoma International, New York, NY, in 1986. He served as a Member of the International Council of Ophthalmology from 1972 to 1980, and as Chairman of the International Committee on Teaching and Education in Ophthalmology from 1980 to 1991. He is a Founding Member of the Academia Ophthalmologica Internationalis and served as First Vice—President from 1994 to 1998. He is a Serving Officer of the Order of St. John of Jerusalem. He has been designated Visiting Professor by invitation in 16 ophthalmology departments world-wide and has been a Guest Lecturer at 150 ophthalmology departments world-wide. He received an Honor Award from the Helen Keller Services for the Blind, Manhattan League, and is a Member of Honor of the Barraquer Institute in Barcelona, Spain. (The Mount Sinai School of Medicine and Director of Glaucoma Services at Manhattan Eye, Ear & Throat Hospital, New York, NY.U.S.A.: phone: +1-212-751-3301; fax: +1-212-223-2881)(SM)

Luo, Chengren (1923-) Chinese ophthalmologist, Professor at West China University of Medical Sciences, Chengdu. He graduated from West China Union University, School of Medicine in 1950, studied Ophthalmology under Eugene →Chan at the University and received his M.D. degree in 1950 from New York University. He served at Sichuan Medical College as an Instructor (1954-1979) and Associated Professor (1980-1982) and then was appointed the Professor of Ophthalmology at the West China University of Medical Sciences in 1983 and works in this position to the present. In the professional societies, he worked as the President, Academy of Ophthalmology of Sichuan (1990-1994), President of the Academy of Ophthalmology of Chengdu (1990-1994) and Director of Academy of the Ocular Fundus Diseases (1983-1995) in Chinese Association of Ophthalmology. He serves as the editor to ten professional journals, e.g. *Recent Advances in Ophthalmology* (1979-), Editor- in- Chief of the *Ocular Fundus* (1985-1993) and of *Chinese Journal of Ocular Fundus Diseases* (1993-1998), *Chinese Journal of Medical Genetics* (1984-), *Chinese Journal of Ophthalmology* (1989-1998), *Ophthalmology in China* (1990-), *Chinese Ophthalmic Research* (1990-) and *Chinese Journal of Practical Ophthalmology* (1990-). Among many of his original papers, some examples of his recent publications are " *Influence of aldose reductase inhibitor of myo-inositol on contents of glucose, sorbitol and myo-inositol of diabetic retinal tissue in rat*. Chin J Ocular Fundus Dis, 1997, 13:75 ", " *Heterotransplantation of retinoblastoma cell line into the vitreous cavity of nude mice*. Chin J Ocular Fundus Dis 1998, 14:144 " and " *Experimental research on in vivo gene therapy of retinoblastoma*. Chin J Med Genet, 1999,16:211 ". He has written 6 books, e.g. " *Clinical and basic research in retinal diseases*. Shanxi Science and technology Publishing House, 1995 " and " *Diseases of Uvea, Retina and Vitreous* in *System of Ophthalmology*, Vol. 7, The People's Medical Publication House, 1996 ". He is a recipient of the Golden Key Award 1996 from American-Chinese Academy of Ophthalmology (Award Lecture: The advances in researches of ocular fundus diseases in China). (Department of Ophthalmology, West China University of Medical Sciences, Chengdu 610041, Sichuan, People's Republic of China. fax: +86-28-5577707; e-mail: luochren@mcwcums.com) (SM)

Tsung-Hsien Luo

Luo, Tsung-Hsien (1905-1974) Chinese ophthalmologist, Former Professor of Ophthalmology of Peking Union Medical College and Former Director of the Institute of Ophthalmology, Beijing. He graduated from Shanghai University in 1927 with BS in biology and then from Peking Union Medical College in 1932 with MD degree granted. He studied in the U. S. A. during 1940-1941. On his return home, he served at the Peking Medical College as the Assistant Professor of Ophthalmology (1940-1942), Acting Chairman of the Department of Ophthalmology (1941-1942) and Professor and Chairman of the Department of the College (1948-1974). Conjointly, he served as Clinical Professor of Ophthalmology at Peking University School of Medicine (1942-1947), Consulting Ophthalmologist, Hopkins (Tongren) Hospital, Beijing (1947-1974), Chief, Department of Ophthalmology, Chung Ho Hospital, Beijing (1942-1952) and the Director, Institute of Ophthalmology, Beijing (1958-1975). His professional activities included Editor of the *Chinese Medical Journal*, *Chinese Journal of Ophthalmology*, Vice-President of thee Chinese Ophthalmological Society and Editor of the *American Journal of Ophthalmology* (1946-1949). He is the author of "*Diseases of the Fundus*, People´s Publishing House, 1979". (SM)

Luo, Wen-Bin (1916-) Chinese ophthalmologist, Former Chief of Sichuan Provincial People's Hospital, Chengdu, Sichuan. He graduated from the Medical College of West China Union University in 1943 and was granted the M. D. degree from New York State University. He studied Ophthalmology at the Eye and ENT Hospital of West China Union University under Prof. Eugene Chan. He served as the Chief Ophthalmologist of Sichuan Provincial People's Hospital from 1949 to 1996. In academic societies, he has been on the Committee of the Chinese National Ophthalmological Society (1952-1984), on the Editorial Board of the Chinese Journal of Ophthalmology (1956-1996), and on the Chinese National Committee for Prevention of Blindness (1984-) . He is an expert on diseases of lacrimal apparatus, and he is the author of the chapter of lacrimal apparatus of The System of Ophthalmology, The People Press of Health, Beijing, 1996. His many papers embrace "*Etiology and therapy of acute retrobulbar neuritis*, Am. J. Ophthalmol. 3: 1309, 1948", "*Dacryocystorhinostomy*. Chin. J. Ophthalmol. 9: 16, 1959" and "*The epidemiological survey of blindness and low vision in Sichuan Province*. Eye Science 3: 223, 1987" (Sichuan Provincial People's Hospital, Chengdu, 610072, Sichuan, P. R. China)

Lusardi, Christophe Mathieu (1778- ?) Italian ophthalmologist(?) probably born in Italy, received medical degrees at Duisburg and Montpellier, and settled in Paris about 1820, as a specialist in ophthalmology and particularly cataract surgery. He moved later to Lille (Northern France) where he became honorary oculist to the Arch Duchess Marie-Louise, Duchess of Parma. He published numerous articles and treatises, which reveal him to have been a skilled operator but also, a quack: *Traité de l'altération du cristallin et de ses annexes ... sur la pupille artificielle*. Paris 1819 (2nd ed.1821) ; *Mémoire sur la cataracte congéniale*. Paris 1823, 3rd ed.1827 (translation into Dutch by P.J. van Wageninge, Rotterdam 1828) ; *Essai physiologique sur l'iris, la rétine et les nerfs de l'oeil*. Paris 1831 ; *De l´Ophtalmie Contagieuse* Paris 1831 ; *Hygiène oculaire* Paris 1831 ; *Nouvelles recherches sur l'ophthalmie contagieuse qui règne dans les armées* Bruxelles 1838 ; *Préjugés sur l'opération de la cataracte* Paris 1839 ; *Mémoire sur les fongus hématode et médullaire de l'oeil et sur les tumeurs dans la cavité orbitaire*. Paris 1846. Lusardi also wrote a book about deafness: *Opuscules, ou Essais sur la Surdité etc.* Paris 1831. He translated, with P. Bernard, Turnbulls´ *Treatment of the Diseases of the eye* (1843) with the altered title: *Traitement de la Cataracte, et de quelques autres maladies des yeux, sans operations Chirurgicales* Paris 1844. American Encyclopedia of Ophthalmology, Vol.10, p.7554-7555

Luy, Hoang Thi (1929 -) Vietnamese ophthalmologist. She graduated from Hanoi Medical College in 1960, and received the specialization of second degree in 1981. She has been Associate Professor since 1991. She worked at National Institute of Ophthalmology from 1954 to 1965 and she also was vice head of Trauma, Retinal Department. She was director of Dong da General Hospital, as Head of Hanoi Eye Station from 1967 to 1975, Director of Dien Bien Phu Hospital and Ho Chi Minh City Eye Centre from 1978 to 1994. Now, she is the Head of Eye Department of Ho Chi Minh City

Medical Training Centre. She is Vice-President of Vietnamese Ophthalmological Society, President of Ho Chi Minh City Ophthalmological Society. She was very active on Prevention of Blindness. She wrote articles on plastic surgery of Eye lid and Orbit, xerophthalmia, survey on blindness. (SM)

Lyle, Herbert Willoughby (1870-1956) British ophthalmologist. He commenced the study of ophthalmology in 1893, attracted by the work of another great teacher, Professor McHardy. He was appointed to the Royal Eye Hospital in 1903, where he became Dean; he started ophthalmic teaching there, and had considerably developed the school until his work was unfortunately interrupted by the 1914-18 war. He was appointed as assistant ophthalmic surgeon to King's College Hospital in 1910 becoming full ophthalmic surgeon in 1917. His appointment as Dean of King's in 1911 soon took up more and more of his time so that he had little chance after the war to resume postgraduate ophthalmic teaching. He did, however, examine for the first part of the D.O.M.S. when this diploma was first started in 1921. His early interests were in anatomy and in physiology with zoology and biology as a sideline. He developed an intensely individual teaching technique which quickly made him famous as a coach. His classes for the Primary Fellowship examination were very widely known and attracted the keenest personalities of his day. Later he examined for 10 years in physiology for the Primary Fellowship of the Royal College of Surgeons. His *Manual of Physiology* (written with Dr. David de Souza) was a most popular text-book, helpful to students by reason of its concise arrangement and easy didactic style. A later edition, titled *Applied Physiology of the Eye*. was edited by his son T. Keith Lyle in London 1958. As an ophthalmologist he was careful and precise. He had a real love of refractive work and managed to instil interest in this subject into his students. He was a good operator, particularly successful in his treatment of chronic glaucoma for which he employed a filtration operation of his own which anticipated the principles of iridencleisis. He had a deft touch and his main operative interests lay in intra-ocular work. King's students were fortunate in his amusing and colourful ophthalmic teaching. He had the rare art of concocting catchwords which would make his pupils remember the salient features of such a disease as glaucoma. It was largely due to his work that so many King's men have become ophthalmologists. These include among others his two sons Keith and Eric, G. T. W. Cashell, T. H. Whittington, and J. M. Bickerton. He developed a large consulting ophthalmic practice of his own. His main life work was undoubtedly the building up of the King's College Hospital medical school, where he worked for so many years with incredible energy and assiduity. After his retirement he received the unique recognition of being made Dean Emeritus and Emeritus Lecturer in Ophthalmology to the Medical School. In the midst of his crowded and active life he found unlimited time to attend to the affairs of the students. AJO 1956,40:255-256. JPW

Lynn, Beatrice Helena (1899-1966) Irish ophthalmologist. Born in Londonderry she qualified in medicine in the Queen's University of Belfast in 1923. After qualification she decided to follow her interest, and to specialize in ophthalmology. With this end in view she studied in Vienna and later took a post as clinical assistant in Edinburgh Royal Infirmary, here she became a Fellow of the Royal College of Surgeons of Edinburgh. She then returned to Belfast where she joined the staff of the Belfast Ophthalmic Hospital, the Ulster Hospital for Women and Children and the Ards Hospital, Newtownards. Until her retirement in 1964 she served these hospitals devotedly. Mrs. Lynn was a Past-president oft the Irish Ophthalmological Society. Her presidential address on retrobulbar neuritis reflected her long-continued interest in neuro-ophthalmology and her other particular interest was in strabismus and orthoptics. Brit.J.Ophthal. 1966, 50:504

Lythgoe, R. J. (?-1940) British scientist who made extensive research of vision under different conditions of illumination. Lythgoe took up these problems at the outset of his work as a Beit Research Fellow. That he was able to devote himself unremittingly to them to the end of his life is due to the encouragement he received from the Medical Research Council, and the permanency of tenure of his post under their aegis. His paper on " The adaptation of the eye: its relation to the critical frequency of flicker" in 1929, embodying the results of experiments conducted with the help of his future wife, Miss K.Tansley, revealed new facts in a domain already thoroughly exploited by physicists. Facts heartily,

accepted by them owing to the care and accuracy of his physical measurements. The same accuracy and originality were displayed in his paper on " *The measurement of visual acuity*," also published in the Special Report Series of the Medical Research Council, in 1932. Both these papers mark new stages in the history of the scientific investigation of visual capacity. During the last few years Lythgoe was engaged in collaboration with Goodeve and others in an exhaustive investigation of the physical and chemical properties of visual purple and its decomposition products under the influence of light. These researches have been published in the Proceedings of the Royal Society and the Journal of Physiology. They too reveal a stride forward in ophthalmic knowledge. BJO 24, 199-200, 1940

Ma, Jingxue (1960-) Chinese ophthalmologist, Professor and Director of the Department of Ophthalmology, the Second Affiliated Hospital Hebei Medical University. He graduated from Hebei Medical University, P.R.China, and then from the University of Hamburg, Germany in 1995 and received D. med. in 1995 (Thesis: *Histopathologic analysis on 701 choroidal malignant melanomas and correlation of a/b and g/d -receptor positive T-cell infiltrations in 113 necrotic choroidal melanomas with patients' life span*.). On his home coming, he learned Ophthalmology from Prof. Shu-Jin Liang at the Hebei Medical University. He has held the following positions: Lecturer and Physician in charge at the Teaching Hospital, Chengde Medical College (1983-1988), Associate Professor in Qinhuangdao Hospital, Hebei, China (1989 - 1992) and he has been in the present position as above since 1996. Conjointly, he also serves as the Director, Hebei Eye Research Center. His editorial assignments include Editorial member of Journal of Hebei Medical University (1996-), Editorial member of the *Chinese Journal of Ophthalmology* (1997-), Editorial member of *Chinese Journal of Ocular Fundus Diseases* (1997-) and Editorial member of *The Practice Journal of Ophthalmology* (Chinese) (1998-) . His research interest has been glaucoma, vitreo-retinal diseases, vascular changes etc. and he has published more than 22 original papers in international journals, and some examples are "*a/b and g/d-T-cell-receptor positive lymphocytes in healthy and inflamed conjunctiva*. Graefe's Arch Clin Exp Ophthalmol 1996; 234: 467~470" , "*Clinical observations of idiopathic senile macular hole*. Chin. J. Ophthalmol. 1998; 14: 222~225", "*Pre- papillary and retinal vascular loops*. Chin. J. Ocular Fundus Diseases 1999; 15; 9~11" , "*Ocular histopathologic changes following intravitreal silicone oil injection*. Chin. J Ophthalmol. 1999; 15: 169-172" and "*a/b and g/d TCR+ lymphocyte infiltration in necrotising choroidal melanomas*. Br. J. Ophthalmol. 1999; 83: 1069-1073". (Department of Ophthalmology, The Second Affiliated Hospital, Hebei Medical University, 203# Hepingxi Street, 050000, Shijiazhuang, China, phone: +86-311-7046901-2025, fax:+86-311-7821022; e-mail: jxma@sj-user.he.cninfo.net) (SM)

MacCallan, Arthur Ferguson (1873-1955) British ophthalmologist. MacCallan was born in 1873, the son of the Reverend J. Ferguson MacCallan, M.A., who had left Northern Ireland to settle in Nottinghamshire. He was educated at Charterhouse, Christ's College, Cambridge, where he secured the Darwin Prize, and St. Mary's Hospital, London, which he entered as a University Exhibitioner. He was for some years a keen soccer player, but his athletic career was cut short by a serious accident to his knee while at Cambridge. In 1899 he obtained the Cambridge M.B. and F.R.C.S. (England), and he proceeded M.D. in 1913. Early in his career MacCallan decided to specialize in ophthalmology. As a student he had been taken to Moorfields by Silcock, and shortly after qualification he was appointed house surgeon to that hospital, and later worked there as chief clinical assistant. The scourge of eye disease in Egypt was an age-old problem, which had received particular recognition in Europe since the return of troops from the Napoleonic Wars. At the turn of the century Sir Ernest Cassel, who had been interested in the construction of the Nile dam at Asswan, was moved by the prevalence of blindness in Egypt to donate a sum to further the education of Egyptian medical men in ophthalmic diseases. As a first step it was decided to establish a mobile hospital, and to the charge of this MacCallan was appointed in July, 1903. From this beginning he evolved, by prodigious work and the help of Government and private funds, a vast organization, ultimately comprising base ophthalmic hospitals in each of the capital towns of the fourteen Egyptian provinces, six travelling hospitals and numerous subsidiary clinics. The

training of Egyptian ophthalmic surgeons received prior consideration, and regular courses of lectures and clinical instruction were provided. Research facilities were at first established in small centres, but these were superseded some years later by the magnificent Ophthalmic Laboratory at Giza, near Cairo, built as a memorial to the men of the Egyptian Camel Corps and Labour Corps, who had been killed in the war. No less important was the provision of ophthalmic treatment in all Government primary schools throughout Egypt, an innovation which was at first received with some hostility. Lord→Kitchener was particularly interested in these activities, and at his suggestion MacCallan undertook a programme of clinical research in ankylostomiasis and bilharziosis, for which four large tented hospitals were established. MacCallan was in England at the outbreak of the 1914 war, but at once returned to Egypt were he concentrated the travelling and tented hospitals at Alexandria as a general hospital for British and Australian sick and wounded. The static eye hospitals throughout the country were used for convalescent cases, though their out-patient departments were maintained as ophthalmic centres. Later in the war MacCallan served as surgeon at a base hospital in Mersa Matruh, with the rank of Major, R.A.M.C. In 1920 he was made a C.B.E. His work in Egypt provided MacCallan with unparalleled experience in the study of tropical diseases of the eye, and in particular of trachoma, on which he became a recognized world authority. In addition to many articles in the medical press, covering a wide field, he wrote a standard text-book on trachoma (***Trachoma and Its Complications in Egypt.Cambridge. 1913.***) and it was a fitting tribute to his work and to all that he had done to meet the ravages of this disease, that he was elected President of the International Trachoma Organization. From this position he only retired in September, 1954, after presiding over its activities during the XVII International Congress. In 1923 MacCallan resigned from the service of the Egyptian Government. His great contributions to medicine in that country were recognized by two Egyptian decorations, and by the unique distinction of a bust of himself, presented by the ophthalmic surgeons of Egypt, which was unveiled by the High Commissioner in 1931. Returning to England MacCallan proceeded to shape for himself a career as an ophthalmic surgeon in London. It was a striking tribute to his status, which he was proud to acknowledge, that in middle-age he was welcomed to the consulting staff of the Westminster Hospital and of the Royal Eye Hospital, to both of which, and to his private practice, he applied himself with customary zeal and enthusiasm. On reaching the age of retirement he continued research work at Westminster Hospital, and he resumed full clinical responsibility there during the war years. BJO 1955,39:319-320

MacGillivray of MacGillivray, Angus (1865-1947) Scottish ophthalmic surgeon from Dundee. He was ophthalmic surgeon to the Dundee Royal Infirmary for over 30 years, and surgeon to the Dundee Eye Institution for 45 years. On his retirement from the latter post in 1937 he was presented with a portrait bust by Benno Schotz, R.S.A., in appreciation of his eminent services. In 1935 he retired from the post of Reader in Ophthalmology at the University of St. Andrews and later received the honorary degree of LL.D. He was for many years eye specialist to the education authorities of Dundee, Angus and Fife. During the 1914-18 war, after long service in the Territorial Army, he acted as consulting ophthalmic surgeon with the rank of major, being awarded the T.D. Angus MacGillivray after taken an honours medical degree at Aberdeen University, worked under Priestley Smith in Birmingham and was English Secretary at the IXth International Ophthalmological Congress in Utrecht. In Dundee his work quickly gained for him an outstanding reputation throughout the East of Scotland as well as further afield. He developed unusual skill as an operator, and was a pioneer in cataract extraction under a conjunctival bridge and in the use of retrobulbar anesthesia. As a teacher of his subject his clarity of mind and enthusiasm inspired many of his students to take up the study of ophthalmology, and several of them have attained distinction in the specialty. Born at Abriachan, he was the 28th Chief of the clan MacGillivray, and an enthusiastic of things Celtic and archaeological, having published several books and articles on these subjects. He was Chief of the Dundee Highland Society in 1912. He also took a leading part in many other activities. In 1898 he was Secretary of the Section of Ophthalmology at the Annual Meeting of the B.M.A., and in 1902 Vicepresident. In 1924 he was elected President of the Dundee Branch. For 13 years he acted as county controller and director of

the Dundee Branch of the British Red Cross Society. Latterly he gave several years of useful service as a member of the Court of St. Andrews University.BJO 32,61-62,1947

Machemer, Robert (1933-) American ophthalmologist of German origin, Prof. Emeritus of Duke University, North Carolina. Born in Germany, he graduated as Dr. med. from the University of Freiburg in 1959. He then took the Fellowship in general pathology under Prof. F. Büchner in Freiburg and residency in Ophthalmology under Prof. W. Hallermann at the University of Göttingen. His interest in research and retina let him accept in 1966 Fellowship in the United States at the Bascom Palmer Eye Institute of the University of Miami, Florida under the tutorship of Prof. E. W. D.→Norton. He was offered a faculty position and stayed at the Institute until 1978 when he was recruited as Chairman for the Department of Ophthalmology at Duke University, North Carolina. After 13 years he relinquished this position and retired in 1998. During his professional career Dr. Machemer has pursued three major interests: 1) The study and treatment of retinal detachment and proliferative vitreoretinal diseases, 2) the development and refinement of vitreous surgery, and 3) the development of surgical instrumentation. Dr. Machemer is the first to establish an experimental model of retinal detachment. He was thus able to study in detail the developing pathology of retinal detachment and the reversal of this pathology with retinal reattachment. He used this model to analyze a major complication of retinal detachment called proliferative vitreoretinopathy (PVR). PVR is an excessive proliferation with membrane formation of mostly pigment epithelium and retinal glia derived cells. He has developed surgical therapies for the removal of these membranes. In animal experiments he has shown that steroid therapy is a successful means of suppressing this proliferation. His work is the basis of today's understanding of this disease. Dr. Machemer is best known for his development of pars plana vitrectomy. There are many eye diseases which afflict the posterior part of the eye. One of the best examples is diabetic retinopathy with intraocular hemorrhages and scar tissue formation. By developing a host of instruments and surgical techniques, which allowed surgery inside the closed eye, it became possible to remove the diseased vitreous and the intraocular scar tissue. Patients that so far were considered untreatable suddenly had a chance for rehabilitation. Vitreous surgery is now a technique, which is established all over the world. The most commonly treated diseases are: diabetic retinopathy, complicated retinal detachments with and without PVR, severe ocular injuries. Recently he has made a proposal for the treatment of age-related maculopathy. By surgically translocating the fovea and moving it into a new position the area of best vision is placed on healthy pigment epithelium. This operation allows recovery or maintenance of visual acuity. First successes are reported. He was a member of the following organizations: Bascom Palmer Eye Institute, Alumni Association, Miami, FL., 1968; German Ophthalmological Society, 1970; American Medical Association, 1970; Club Jules Gonin, 1972; Dade County Medical Association, 1973 - 1978; Florida Medical Association, 1973 - 1978; American Academy of Ophthalmology and Otolaryngology, 1976; Pan American Society of Ophthalmic Microsurgery, 1977; Pan American Association of Ophthalmology, 1977; American Ophthalmological Society, 1977 - 1992; Retina Society, 1977; Association for Research in Vision and Ophthalmology, 1978; North Carolina Medical Society, 1978; North Carolina Society of Ophthalmology, 1978; Durham-Orange County Medical Society, 1978; Alpha Omega Alpha, 1988; Peruvian Ophthalmological Society, Corresponding Member, 1988; Duke Eye Center Alumni Association, Durham, NC, 1989; Academia Ophthalmologica Internationalis. His editorial assignments are for Ophthalmology; *American Journal of Ophthalmology*; *Albrecht von Graefe's Archive*; *International Ophthalmology* and *German Journal of Ophthalmology*. He is on the following Councils and Committees: Policy Advisory Group, Diabetic Retinopathy Vitrectomy Study NEI; Diabetic Retinopathy Vitrectomy Study: Executive Committee, NEI; Early Treatment Diabetic Retinopathy Study: Data Monitoring Committee, NEI; Member of Study Section, NEI; Retina Society: Committee for Classification of PVR; Association for Research in Vision and Ophthalmology (ARVO): Awards Committee; International Council of Ophthalmology: Gonin Medal Selection Committee; Club Jules Gonin: Member of board and President. In recognition of his outstanding contributions, he received many Honor Awards, i.e., Hermann Wacker Award of the Club Jules Gonin, 1972; Research to Prevent Blindness, Inc. - Trustees Award for outstanding ophthalmic

achievement. American Academy of Ophthalmology, 1978; Award of Merit in Retina Research from Retina Research Foundation, 1980; von Graefe Prize, Deutsche Ophthalmologische Gesellschaft, 1981; Helena Rubinstein Foundation Professor, 1983; Golden Wesseley Medal, 1986; Proctor Medal and Lecture. Association for Research in Vision and Ophthalmology; 1988; Ernst Jung Prize for Medicine from Jung Stiftung für Wissenschaft und Forschung (Jung Foundation for Science and Research), Hamburg, 1993; Alexander von Humboldt Stiftung: Senior Distinguished US Scientist Award, 1993; Howe Medal of the American Ophthalmological Society. 1996; Helen Keller Prize for Vision Research, 1997; Jules Gonin medal and prize, 1998; Alcon Research Institute Award, 1999. He has been granted Honorary degrees from University of Göttingen, Germany: Dr.med.; Thomas Jefferson University, Philadelphia: Dr. sci.. He has delivered 34 special lectures that embrace Jackson Memorial Lecture, 1984; Bjerrum Lecture, 1986; Donders Lecture, 1988; Proctor Lecture 1988. He has published over 300 original articles and books: some examples are "*Vitrectomy*" Grune and Stratton,1975, 1979; Machemer, R. and Norton, E. W. D.: *Experimental retinal detachment in the owl monkey*. I. *Methods of production and clinical picture*. Am. J. Ophthalmol. 66:388-396, 1968. Machemer, R.: *Experimental retinal detachment in the owl monkey*. II. *Histology of the retina and pigment epithelium*. Am. J. Ophthalmol. 66:398-410, 1968. Kroll, A. J. and Machemer, R.: *Experimental retinal detachment in the owl monkey*. III. *Electron microscopy of the retina and pigment epithelium*. Am. J. Ophthalmol. 66:410-427, 1968. Machemer, R.: *Experimental retinal detachment in the owl monkey*. IV. *The reattached retina*. Am. J. Ophthalmol. 66:1075-1091, 1968. Kroll, A. and Machemer, R.: *Experimental retinal detachment in the owl monkey*. V. *Electron microscopy of the reattached retina*. Am. J. Ophthalmol. 67:117-130, 1969. Machemer, R., Buettner, H. and Norton, E. W. D.: Vitrectomy: *A pars plana approach*. Trans. Am. Acad. Ophth. Otol., Las Vegas, 1970. 75:813-820, 1971. Machemer, R.: *A new concept for vitreous surgery*. II. *Surgical technique and complications*. Am. J. Ophthalmol. 74:1022-1033, 1972. Machemer, R. and Norton, E. W. D.: *A new concept for vitreous surgery*. III. *Indications and results*. Am. J. Ophthalmol. 74:1034-1056, 1972. Machemer, R. and Laqua, H.: *Pigment epithelial proliferation in retinal detachment (Massive periretinal proliferation)*. Am. J. Ophthalmol. 80:1-23, 1975. Laqua, H. and Machemer, R.: *Glial cell proliferation in retinal detachment (massive periretinal proliferation)*. Am. J. Ophthalmol. 80:602-618, 1975. Machemer, R. and Allen, A. W.: *Retinal tears l80 degrees and greater: Management with vitrectomy and intravitreal gas*. Arch. of Ophthalmol. 94:1340-1346, 1976. Machemer, R.: *Massive periretinal proliferation: A logical approach to therapy*. Tr. Am. Ophthalmol. Soc. 75:556-586, 1978. Machemer, R.: *The importance of fluid absorption, traction, intraocular currents, and chorioretinal scars in the therapy of rhegmatogenous retinal detachments*. XLI Edward Jackson Memorial Lecture. Am. J. Ophthalmol. 98:681-693, 1984. Machemer, R.: *Description and Pathogenesis of late Stages of Retinopathy of Prematurity*. Ophthalmol. 92:1000-1004, 1985. Machemer, R., Steinhorst, U.H.: *Retinal separation, retinotomy, and macular relocation*: II. *A surgical approach for age-related macular degeneration*? Graefe's Arch. Clin. Exp. Ophthalmol 231:635-641, 1993. (Office mailing address: 1532 Pineccrest Rd, Durham, NC, 27705; tel. and fax: +1-919-493-6080; e-mail: mache001@aol.com) (SM)

Mackenzie, Davidson, Sir James (1856-1919), English ophthalmologist, inventor of the cross-thread method of localising foreign bodies by means of the X-rays, and the foremost radiologist of the United Kingdom, was born at Estancia, Santo Domingo, Buenos Aires. He received a liberal education at the Scottish School in that city. His medical training was had at Edinburgh, Aberdeen and London. His degrees in medicine and surgery (M. B. and C. M.) were received at Aberdeen in 1882. For a time he was assistant in surgery at Aberdeen, but in 1886 succeeded Prof. Dyce Davidson as ophthalmic surgeon at the Aberdeen Royal Infirmary. This position he held till 1895. He was also ophthalmic surgeon to the Royal Infirmary and the Royal Sick Children's Hospital, Physician to the Blind Asylum, etc. In 1897 he removed to London, and from that time on devoted exclusive attention to the X-rays. He had, in fact, already, in 1896 -the year after the rays were discovered- gone to Würzburg there to talk with Roentgen about his new discovery. In the July, 1897 number of the "Archives of the Roentgen Ray," he published a cut of a bladder stone radiograph, and from that time forward was one of the foremost workers in

the world on the subject of radiography. He became Consulting Surgeon to the X-ray Department Charing Cross Hospital; X-ray surgeon in charge of X-ray Department, Moorfields; president of the Roentgen Society; president of the Radiology Section of the 17th International Medical Congress; a Fellow of the Physical Society, etc. For the last three years of the war, he was consulting radiologist to the military hospitals of the London district. He was knighted in 1912. Among his more important Publications may be mentioned: "*The Electric Light Applied to the Ophthalmoscope*," Lancet, 1886; "*Localization of Foreign Bodies in Eyeball and Orbit*," Trans. IX Internat. Oph. Congress, Utrecht. Many of his articles appear, in the Transactions of the Ophthalmological Society of the United Kingdom.AJO 2:769-770

Mackenzie, Sir Stephen (1844-1909). A brother of the famous rhino-laryngologist, Sir Morrell Mackenzie, and a general physician, dermatologist and ophthalmologist of considerable importance. Born, the son of a physician, he studied at the London Hospital and at the University of Aberdeen, where he received the degree of M.B. in 1873. In 1874 he was a Member of the College of Physicians of London and in 1979 became a Fellow of the same body. He was for a time assistant physician at the London Hospital, in charge of the skin department and, later, was lecturer on medicine and pathology at the London Hospital Medical College. He was also for some years physician to Moorfields Hospital. He was a charter member and the first Honorary Secretary of the *Ophthalmological Society of the United Kingdom*. He was knighted in 1903, and died at Dorking, Surrey. Among his ophthalmologic writings are*:Glycosuric Retinitis (Roy.Lond.Ophth.Hosp.Rep.*,IX) and *On the Immediate Causation of Optic Neuritis (Brain*, I].) American Encyclopedia of Ophthalmology, Vol.10, p.7569

Mackenzie, William (1791-1868) British ophthalmologists, founder of the Glasgow Eye Infirmary and author of the celebrated text-book, *A Practical Treatise, on the Diseases of the Eye*. Born at Glasgow, he studied in the Glasgow Grammar School and also in the School of Arts at Glasgow University. For a time, intending to become a minister, he studied at Divinity Hall, but, in 1810, deciding to be a doctor, he entered the Royal Glasgow Hospital. From 1815 to 1818 he studied ophthalmology in London, Paris, and, Vienna, as well as a number of places in Italy. Returning to England, he settled as ophthalmologist in London, but, it seems, without success. Even his work, entitled *"Essay in the Excreting Parts of the Lachrymal Organs,"* attracted no attention. His waiting-room was always empty, and London permitted, without a remonstrance, the greatest British ophthalmologist of his time to remove to Glasgow. In Glasgow he was almost immediately successful, and there he practised till the day before he died. He never entirely abandoned general medicine or surgery, but he gave to ophthalmology the greater portion of his time. In the Andersonian University he lectured on anatomy, materia medica and medical jurisprudence. In 1824, together with Dr. George Monteith, he established the Glasgow Eye Infirmary. In 1827 or '28 he was appointed instructor on diseases of the eye in Glasgow University, receiving as emolument the funds of the Waltonian lectureship. This position he held for more than forty years, until his death. For two years he edited the *Glasgow Medical Journal,* to which he contributed freely, especially on ophthalmic subjects. In his later years he was appointed surgeon-oculist to the Queen in Scotland. He had an enormous practice, many of his patients arriving from Continental Europe and America. Dr. Mackenzie was hard at work the day before his death . He was somewhat conservative toward innovations (as, for example, the strabismus operation, the ophthalmoscope, and iridectomy for glaucoma) he would finally yield, when the proof adduced was very strong, and acknowledge himself to have been in error. In addition to numerous journal articles, Mackenzie wrote the following: *1.Introduction to a Course of Lectures on the Diseases and Operative Surgery of the Eye*. (1824.) *2.Practical Treatise on the Diseases of the Eye*. (1830; later Eds., 1835, 1839 and 1854; two or three American editions; numerous German and French translations). According to Julius→Hirschberg, "This textbook was decidedly superior not only to such English works as had appeared during the first third of the 19th century→Saunders, 1811; →Vetch 1820; →Travers, 1820; →Watson, Edinburgh, 1830 but the best in general since that of Joseph →Beer [1813-1817] ; it is the first English text book on ophthalmology which belongs to the literature of the world. *3. Physiology of Vision.* (1841.) American Encyclopedia of

Ophthalmology, Vol.10, p.7567-7569; Thomson, A.M.Wright: *The Life and Times of Dr.William Mackenzie* (Private print) Glasgow 1973. JPW

Mackenzie, William (1791-1868), Scottish ophthalmologist of Glasgow. Mackenzie studied medicine at the Royal Glasgow Hospital (1810-1815) and ophthalmology in London, Paris, Vienna, and several Italian cities (1815-1818), before establishing a successful Glasgow practice in general medicine, surgery, and especially ophthalmology. In 1824, he founded the Glasgow and Eye Infirmary, and from 1827 to 1868 he taught ophthalmology at Glasgow University. In addition to his celebrated *Practical Treatise on the Diseases of the Eye* (1830), which went through many editions and translations, and *Physiology of Vision* (1841), Mackenzie published numerous journal articles. An acute and painstaking observer, he was among the first to point out the increase of intra-ocular pressure characteristic of glaucoma, and to describe sympathetic ophthalmitis in detail. His works are: *A practical treatise on the diseases of the eye*. London 1830 (2nd edition 1835, 3rd ed. by Thomas Wharton Jones, London 1841). An American edition was published in 1833 in Boston. *The cure of strabismus by surgical operation* London 1841; *The physiology of vision*. London 1841 ; *Traité pratique des maladies des yeux*. Paris 1844. (French translation of *Practical treatise on the diseases of the eye*, with additions and notes by S. Laugier and G. Richelot. Mackenzie, in the foreword of the 4th edition, complains bitterly about the fact that Laugier and Richelot omitted to take over the authors references cited in the first edition). Based on the 4th English edition, E. Warlomont and A. Testelin published a new French translation in two volumes and a supplement: *Traité Pratique des Maladies de l´Oeil*, Paris 1856-1865. *see* A.M. Wright Thomson *The Life and Times of Dr. William Mackenzie* (JPW)

Mackmurdo, Gilbert (? - 1869) An English ophthalmologist, the date of whose birth is not known. He was, for a short time, surgeon to St. Thomas's Hospital, London, and also instructor in anatomy and physiology at this institution. From 1830 to 1856 he was surgeon to Royal London Ophthalmic Hospital (from 1900 renamed Moorfields Eye Hospital). In 1843 he became a Fellow of the R. C. S. of England, and, a little later, a Fellow of the R. S. American Encyclopedia of Ophthalmology, Vol.10, p.7569

MacLaurin, Colin (1698-1746) Scottish mathematician, born at Kilmodan, Scotland. MacLaurin was educated at the University of Glasgow (M.A., 1715), and became professor of mathematics at Marischal College, Aberdeen (1717-1722), and the University of Edinburgh (1725-1746). A friend and zealous disciple of Isaac Newton, Maclaurin in his major works *Geometria Organica* (1720), the *Treatise of Fluxions* (1742), and *An account of Sir Isaac Newton's philosophical discoveries* (1748, 3rd ed. by Patrick Murdoch 1775) developed and defended Newtonian methods; in addition to his teaching and theoretical work, he devised a number of mechanical appliances, made valuable astronomical observations, did actuarial computations for insurance companies, and improved the science of cartography.

Maclean, Hector (1937-) Australian ophthalmologist, professor of ophthalmology in East Melbourne, Australia. Maclean studied at St.Andrews University (Scotland) and specialised at the University of Dundee (Scotland) and Melbourne (Australia). He specialised in ophthalmology under respectively Alistair A. Douglas, William A. Haining and Gerard W.→Crock. Maclean worked at Dundee Teaching Hospitals (Scotland) and at the Royal Victorian Eye and Ear Hospital (Australia). Became Associate Professor (Clinical) in 1988. Particular interests are in paediatric ophthalmology, in ocular pharmacology and therapeutics. He works at the Centre for Eye Research at the University of Melbourne. Current address: Professor Hector Maclean, Centre for Eye Research, University of Melbourne, Locked Bag 8 , East Melbourne 8002 , Australia. Phone + 61 3 9929 8350 ; Fax +61 3 9662 3859 ; email: hmaclean@cera.unimelb.edu.au (AB)

MacNab, Angus (? - 1914). Scottish ophthalmologist, inventor of the *MacNab Retinoscope*. He was of Scottish descent, and was born in New Zealand, where his brother was once Minister of Agriculture. He studied in the Universities of Otago, Edinburgh, Freiburg and Vienna. He graduated B. A. (N. Z.) in 1895, and in the following year took the degree of B.Sc. In 1901 he proceeded to the degrees of M.B. and Ch.B. in the

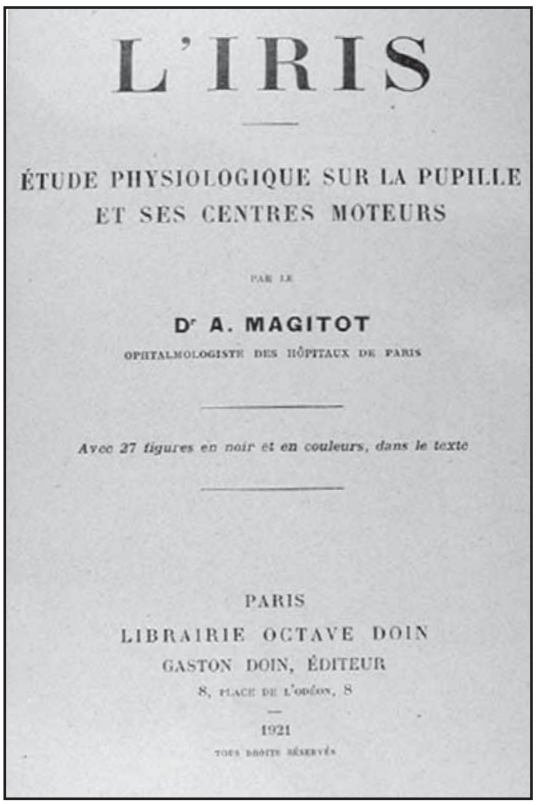
University of Edinburgh, and a few years later took the F.R.C.S., England. After acting as house surgeon to the Ophthalmic Department of the Edinburgh Royal Infirmary MacNab continued his special studies at Freiburg i. Br. and Vienna. His interest in ophthalmic bacteriology was attested by several original communications upon that subject, as well as by his masterly translation of Axenfeld's "*Bacteriology of the Eye.*" He also wrote a very useful book dealing with the *Ulceration of the Cornea* (1907) which included much of the work he had done at Freiburg. At the time of his death he was ophthalmic surgeon to King Edward VII Hospital at Windsor, and was also connected, in the capacity of chief clinical assistant, with the Royal London Ophthalmic Hospital. In 1913 he translated W. Lohmann's *"Disturbances of the Visual Functions,"* a most favorable review of which was published in the *Ophthalmoscope*. At the time of his death, at, the early age of thirty-eight, he was a resident of London. American Encyclopedia of Ophthalmology, Vol.10, p.7569-7570; The Ophthalmoscope,1914,p.743.

MacNamara, Nottidge Charles (1832-1918) English ophthalmic surgeon born at Uxbridge, England. He studied at King's College Hospital, London (M.RC.S., 1854), and served in India as civil and military surgeon from 1854 to 1876; from 1863 to 1876 he was professor of ophthalmic surgery at the Calcutta Medical College. In the 1870s, MacNamara published several treatises in which he correctly posited that cholera was a water-borne infection, spread by fecal contamination; his claim was ignored, and it remained for Koch to gain the credit. In 1876, Macnamara returned to England, settling in London, where he became surgeon to the Westminster Hospital and the Royal Westminster Ophthalmic Hospital; he specialized in diseases of the bones and joints and in ophthalmology, especially cataract surgery, and wrote extensively on these subjects. In ophthalmology, he wrote: *Lectures on diseases of the eye* London 1866; *A manual of the diseases of the eye* London 1868, 2d ed. London 1872, 4th ed.1882. He also wrote: *Notes on Leprosy* (1867); *Lectures on Diseases of Bones and Joints* (2nd ed.1881, 3rd.1886); *A Treatise on Asiatic Cholera* (1870); *History od Asiatic Cholera* (1876) *Diseases of Joints* (1879) . MacNamara was editor of the *Indian Medical Gazette* in which he published many of his papers.

Maddox, Ernest Edmund (1860-1933) English ophthalmologist born in Shipton, England. Maddox received his medical degree in Edinburgh (1882) and became ophthalmic surgeon to the Royal Edinburgh Infirmary and the Royal Victoria and West Hants Hospital. He devised the Maddox Rod and the Maddox Prism, devices for testing deviation of the eye. He wrote: *The clinical use of prisms, and the decentering of lenses*. Bristol and London 1889; *Tests and studies of the ocular muscles* Bristol 1898

Magawly, Count John (1831-1904). Russian ophthalmologist, of Irish origin. Born in Cummingshof, near Riga, he received his medical degree at Dorpat, in 1856. He then for a time continued his studies at Vienna, Berlin and Paris, deciding at last to devote himself to ophthalmology because of the influence of von →Graefe. In 1859 he settled in St. Petersburg, where he was appointed physician to the Eye Infirmary. In 1873 he became body-oculist to the Imperial Court, and in 1885 a Fellow of the Medical Council. In 1901 he resigned his offices on account of ill health, and from that time onward lived in retirement at Leutsch, near Leipzig. American Encyclopedia of Ophthalmology, Vol.10, p.7577

Magendie, François (1783-1855) French pioneer in experimental physiology. Magendie was born in Bordeaux and in 1791 moved with his family to Paris, where he studied medicine at the Hôpital Saint-Louis (M.D., 1808) and in 1809 published the first of his epoch-making investigations. Magendie made profoundly important discoveries concerning the toxic actions of drugs, the functions of the spinal nerves and the cerebellum, the mechanism of deglutition and vomiting, various aspects of digestion and circulation, the functions of the liver, and the phenomenon of anaphylaxis. He refused to advance theories or generalizations, insisting on dealing only in isolated facts; his enthusiasm for experimentations on living animals won him the eternal condemnation of anti-vivisectionists. *Mémoire sur l'usage de 1'epiglotte suivi d'un mémoire sur les images qui se forment au fond de l´oeil*. Paris 1813 ; *Lecons sur les Phenomenes Physiques de la Vie* , 4 vols. Paris 1836-1838 ; *Précis elementaire de Physiologie*, 2 vols. Paris 1816-1817 (American edition: *An elementary treatise on human physiology* New York 1844).



L'IRIS

ÉTUDE PHYSIOLOGIQUE SUR LA PUPILLE
ET SES CENTRES MOTEURS

PAR LE

Dr A. MAGITOT

OPHTALMOLOGISTE DES HÔPITAUX DE PARIS

Avec 27 figures en noir et en couleurs, dans le texte

PARIS
LIBRAIRIE OCTAVE DOIN
GASTON DOIN, ÉDITEUR
8, PLACE DE L'ODÉON, 8
1921
TOUS DROITS RÉSERVÉS

Magitot, André (1877-1958) French ophthalmologist. Magitot became an interne des hôpitaux in Paris in 1903 and in 1907 served in the clinic of Victor→Morax. In 1935 he succeeded Poulard at the Lariboisière where, apart from his necessary flight during the German occupation of Paris because of his Jewish origin, he remained as senior surgeon until he was succeeded by Edouard Hartmann in 1946. Thereafter his interest in ophthalmology continued unabated, and he retained his active editorship of the *Annales d'Oculistique* until his sudden death at the age of 82 in 1958. There is no doubt that Magitot was one of the most able and original of the ophthalmologists of a previous generation. His initial researches concerned the development of the eye, based on his personal collection of seventy human embryonic and foetal eyes of all ages, as well as the circulation in the optic nerve and chiasma. There followed his classical researches on the nature of the aqueous humour, the ocular circulation, and the control of the intra-ocular pressure. He was the *first* to demonstrate the viability of the cornea after death and was a pioneer in the application of this knowledge to the practice of corneal grafting. But the work for which he will be most remembered is his life-study of the pathogenesis and clinical features of primary glaucoma which he pictured as a medical disease usually of mesencephalic origin; in a long series of papers he insisted that the rise in ocular tension was merely a symptom, the mechanical relief of which by surgery was palliative but not curative. He wrote: *L´ Iris* (1921) *Physiologie Oculaire Clinique* (Paris 1946) and with P. Baillart *Manuel d´ophtalmologie* (1950) BJO 1959, 43:128. AJO 1958,47:895-896. JPW

Magne, Pierre Alexandre Charles (1818-1887) French ophthalmologist born at Étampes, France. Magne received his M.D. in 1842 in Paris (thesis: *Quelques Mots sur l´Ophtalmologie*), where he became the assistant and friend of Sanson and subsequently earned distinction as an ophthalmologist. Magne was the author of numerous journal articles and treatises on eye diseases and the uses of spectacles. He wrote: *Hygiene de la vue* Paris 1847 (4th ed.1865) ; *De la cure radicale de la tumeur et de la fistule du sac lacrymal* Paris 1850 (2nd ed.1857); *Études sur les maladies des yeux comprenant l'hygiène de la vue* 2d ed. Paris 1854; *Du croup des paupières ou diphthérie de la conjonctive* (1858) ; *Des Lunettes Conserves, Lorgnons..conseils aux personnes qui ont recours à l´Opticien* (1851) ; *Ophtalmies Traumatiques, Choix d´Observations* (1854). American Encyclopedia of Ophthalmology, Vol.10, p.7577-7578. Albert.JPW

Magni, Francesco (1828-1887). Italian ophthalmologist. Born in Pistoia, he received the degree of Doctor in Medicine at Pisa, afterwards, studying ophthalmology at Vienna, Prague (where he stayed a long time with Ferdinand von Arlt with whom a life long friendship began), Paris and Berlin. At first he settled in Florence, where he founded a Polyclinic for eye patients. Removing to Bologna he became renowned internationally as an operator. Called to Peru to operate, he remained in South America for a year, operating in all the larger cities of that continent. Some years later he also performed a number of operations in Egypt. He wrote a 4 volumes set of lectures on ophthalmology: *Lezioni teoriche di oftalmajatria* which were published in Bologna 1861 to 1867.American Encyclopedia of Ophthalmology, Vol.10, p.7587.Annales d´Oculistique,1887,97:318-321.JPW

Magnus, Hugo Friedrich (1842-1907) German ophthalmologist born in Neumarkt, Germany. Magnus received his M.D. in 1867 at the University of Breslau, where he became lecturer (1873) and then (1883) professor of ophthalmology. A prolific writer, Magnus made especially noteworthy contributions in the fields of color vision and the history of ophthalmology.He main writings are: "*Ophthalmoscopischer Atlas*" Leipzig: Wilhelm Engelmann, 1872; „*Das Auge in seinen ästhetischen und culturgeschichtlichen Beziehungen; fünf Vorlesungen*." Breslau: J.U. Kern's Verlag (Max Müller), 1876; „*Geschichte des grauen Staares*." Leipzig: Veit & Comp., 1876.[GM 5993] „*Die Entwickelung des Farbensinnes*" Jena: Hermann Dufft, 1877; „*Historische Tafeln zur Anatomie des Auges*."Rostock:Hermann Schmidt, 1877; „*Die Anatomie des Auges bei den*

Griechen und Römern“ Leipzig: von Veit, 1878; „*Tafel zur Erziehung des Farbensinnes*“ Breslau:J.U. Kern's Verlag 1879; „*Die Blindheit, ihre Entstehung und ihre Verhütung*“ Breslau: J.U. Kern's Verlag , 1883; „*Die Sprache der Augen*“Wiesbaden: J.F. Bergmann, 1885; „*Die Jugend-Blindheit. Klinisch-statistische Studien*“ Wiesbaden: J.F. Bergmann, 1886; „*Die Entstehung der reflectorischen Pupillenbewegungen*“ Breslau: J.U. Kern's Verlag, 1889.„*Augenärztliche unterrichtstafeln für den akademischen und selbst-unterricht*“Breslau: J.U. Kern's Verlag, 1892 –1900 *20 parts with plates.Each part is written not only by Magnus, but also by other famous ophthalmologists of his time. For example: Karl → Baas, (1898); Wilhelm →Czermak, (1895); Carl Richard →Greeff, (1897); Edmund →Landolt, (1893, 1887); Maximilian→Salzmann, (1899); Adolf →Vossius, (1895). „Anleitung zur Diagnostik der centralen Störungen des optischen Apparates*“Breslau: J.U. Kern's Verlag , 1892. (Augenärztliche Unterrichstafeln, Heft 1) ; „*Die Darstellung des Auges in der antiken plastik*“. Leipzig: E.A. Seemann, 1892. „*Die Entwicklung des Altersstaares.*“ Breslau: J.U. Kern's Verlag, 1892. (Augenärztliche Unterrichstafeln, Heft 2); „*Die Haupttypen des ophthalmoskopischen Veränderungen des Augenhintergrundes Allgemein-Erkrankungen*“ Breslau 1893; „*Leitfaden für Begutachtung und Berechnung von Unfallsbeschädigungen der Augen*“ Breslau: J.U. Kern, 1897; „*Die Untersuchung der optischen Dienstfähigkeit des Eisenbahn-Personals*“ Breslau: J.U. Kern, 1898; „*Die Augenheilkunde der Alten*“Breslau:Kern 1901 translated by Richey L.Waugh jr.,*(Ophthalmology of the Ancients)* JP Wayenborgh 2 vols. Ostend 1998-1999; [GM 5997]; Daniel M.Albert Source Book of Ophthalmology, p.212-213 ; The Ophthalmoscope,London 1907 ; GM 6624,6640-1; Centralblatt f.Augenheilkunde 1907: 123-124 ; British Medical Journal, 1907:1096 ; Hirschberg-History of Ophthalmology 11/1b: 230-231;American Encyclopedia of Ophthalmology, Vol.10, p. 7589.

Magnus, John Antony (1900-1966) British ophthalmologist of German birth. Born in Aachen in Germany he was medically educated in Heidelberg and graduated in 1923. In his youth he served as an ophthalmologist in several German hospitals, but in 1934 came to Britain as a Jewish refugee, to the enrichment of this country. He requalified at the University of Glasgow in 1935 and thereafter gained ophthalmic diplomas including the F.R.C.S.Ed. (1938). In that year he was appointed ophthalmic surgeon to the York City, Hospital where he worked until his retirement in 1966. Not only was he mainly responsible for the modernization of the ophthalmic department at York, but he was an active member of the North of England Ophthalmological Society and became president of the York Medical Society. Brit.J.Ophthal.1966,50:680

Maher, Odillo (1857-1916). Australian ophthalmologist born in Sydney. After spending some terms at the Sydney University, he went to Ireland, where in 1881 he took the degrees of M.D. and Ch.M. at the Royal University. During a stay in London, he took the membership of the Royal College of Surgeons and became house-surgeon to Moorfields Hospital. On his return to Sydney, Maher was appointed ophthalmic surgeon to the Sydney Hospital and to St.Vincent´s Hospital, Sydney. He was also examiner in Ophthalmology at Sydney University and a member of the consulting staff of the Military Base Hospital at Randwick, Sydney. The Ophthalmoscope,1916, p.286.

Mailer, Colin (1935-) Canadian ophthalmologist. Mailer received his medical education at Edinburgh University receiving there his MB Ch. B. in 1959. He became, under T. K. Lyle, ophthalmologist in 1968, having visited first the Hammersmith Hospital, London from 1963 to1965, then, from 1965 to 1968 Moorfields Hospital. He spent the years 1968 to 1969 at the University of Western Ontario. Mailer wrote about 25 papers, most of ophthalmic nature, amongst those: *Investigation of blood volumes in patients with Hematemesis and Melena* jointly with Abraham Goldberg, R Harden, Grey-Thomas and W. Burnett BMJ 1963; *Ocular Pathology of Gargoylism* (Pathology case report, with collaboration of the late Norman Ashton in 1968) *Avulsion of the inferior rectus muscle*, Canadian J of Ophthalmology.1970; *Retinal Blood vessel Diameters and the effects of inspired gases*, jointly with Hill, Dollery and de Souza-Ramalho. Mailer also undertook translations from the French language: Jean Bernard Weiss *Ocular Muscle Imbalance and the Weiss coordimeter* (not yet published); Philippe Lanthony *The Eye of the Painters-An ophthalmology Viewpoint* (not yet published) and *History of Corneal Neutralization and of*

Contact Lenses (3 volumes) 2001 ff. Wayenborgh Ostend/Belgium. Colin Mailer is a member of the Canadian Ophthalmological Society and of the American Academy of Ophthalmology. His hobbies are: viola playing in London Community Orchestra, Active membership of London Opera Guild, stamp collecting and the study of European Languages. phone 519-672-2510 (private office), phone (519)-438-6367 (home), fax 519-672-0898. JPW

Maiman, Theodore (1927-) American scientist. Ted Maiman´s career has always been marked by more than a bit of iconoclasm . While theoretical physicists wrote papers and debated the merits of different materials and approaches for a laser , Maiman set out to build one . A pragmatic scientist , one of his main concerns was practicality - he not only wanted to build a laser , but he wanted the device to be easy to work with . Along the way , Maiman had to overcome obstacles put in place by scientific colleagues , supervisors ... and the laws of physics . He was determinated , however , to let nothing stand in his way . It was his independent attitude that helped Maiman to win the race to build the first laser . In May , 1960 , he demonstrated laser action from a ruby crystal while working at Hughes Research Laboratories in Malibu , California. Maiman left Hughes in 1962 to found Korad Corp , one of the first manufacturers of laser equipment . From 1976 to 1983 he was vice-president of advanced technology for TRW Inc´s electronic and defense sector . He is currently a consultant in Marina Del Rey , and a director of PlesCor Optronics . Meanwhile , Theodore Maiman was trying to use his knowledge of ruby masers to make a laser at Hughes Research Laboratories in Malibu. As he relates , he forged ahead , working alone , despite assurances by Schawlow and others that ruby was unsuitable for a laser . Maiman knew better , but those statements led to frowns by management . By the time he succeeded in making the ruby laser work for the first time , on May 16 , 1960 , he was not supposed to be working on the program. Maiman´s success is undisputed , but almost immediately he ran into problems in reporting that success . Hughes´ management reacted enthusiastically once the laser worked and sponsored a full-fledged press announcement in early July . However , the public relations photographer commissioned to immortalize the first laser on film wasn´t satisfied with it . He thought the device too small and insisted that Maiman pose with a bigger flashlamp and ruby rod . Today Hughes is still distributing those pictures , showing Maiman with what isn´t really the first ruby laser .A more serious problem came when Maiman submitted his paper for publication . The then-new *Physical Review Letters* summarily rejected it as " just another maser paper " . The journal´s founding editor , Samuel Goudsmit , a theoretician best known as the codiscoverer of electron spin , had grown tired of the glut of maser papers arriving at his office , and decided they no longer merited rapid publication . Maiman hurriedly prepared a concise 300-word report which was immediately accepted by the British weekly *Nature* , and when efforts to convince Goudsmit of his error failed , *Nature* carried the first report of the laser on August 6 , 1960: *Theodore H. Maiman* Stimulated optical radiation in ruby *Nature Vol 187 p. 493 (Aug. 6 , 1960).* Maiman later published a more detailed analysis in Physical Review: Theodore H. Maiman *"Stimulated Optical Emission in Fluorescent Solids*, Part 1, Theoretical Considerations"Physical Review Vol.125,p.1145(1961) *; Theodore H. Maiman , R.H. Hoskins , I.J. D´Haenens , C.K. Asawa , and V. Evtuhov , Part II , Physical Review Vol 125 p. 1151 (1961)* Schawlow´s group at Bell Labs was among the first to get a duplicate working , and soon afterwards they and another group reported laser action on slightly different lines in a " dark " or " red " ruby , which has a higher concentration of chromium ions than the " pink " ruby Maiman used . Duplication of Maiman´s "pink" ruby laser (with low chromium ion concentration) was reported in *R.J.Collins , D.F. Nelson , A.L. Schawlow , W. Bond , C.G.B. Garret , and W. Kaiser " Coherence , narrowing , directionality, and relaxation oscillations in the light emission from ruby " Physical Review Letters Vol 5 p. 305 (1960)* Production of emission on different lines in " red " ruby with higher chromium concentration was reported in *A.L. Schawlow and G.E. Devlin " Simultaneous optical maser action in 2 ruby satellite lines " Physical Review Letters Vol 6 p. 96 (1961)* Maiman received graduate degrees in both engineering and physics from Stanford University , where he studied under Nobel Prize winner Willis Lamb . He is a fellow of both the American Physical Society and the Optical Society of America , a member of both the National Academy of Science and the National Academy of Engineers, and a recent inductee to the National Inventor´s Hall of Fame.*(JPW)*

Maissiat, Jacques Henri (? - 1878) French physician, and comparative anatomist, of a slight ophthalmologic importance, because of his *"Lois Générales de l '0ptique* " (1843). Born at Nantua, he studied at Lyon, Montpellier and Paris, receiving his degree in 1838. He was the chief founder of the Museum for Comparative Anatomy at the Ecole de Médecine.American Encyclopedia of Ophthalmology, Vol.10, p.7690

Maitre Jan, Antoine (1650-1725) French surgeon and ophthalmologist, especially noted for his re-discovery of the true nature and situation of cataract. He is often called the "Father of French Ophthalmology". Born at Méry-sur-Seine in l650, he studied at Paris, returning to his native town for the practise of his profession. His success as a surgeon was almost immediate. He became a corresponding member, of the Paris Academy and Body Physician to the King. He wrote *"Observations on the Chicken, or the Different Changes which occur in the Egg,", etc.* (Troyes 1707) ; "*History of a very Singular Monster*" *(Hist. of the Acad. of Sciences,* 1705) ; "*Report of a very Voluminous Nasal Polypus*" (Ibid. 1706). His only ophthalmologic work was *Traité des Maladies de l´Oeil, et des remedes propres pour leur guerison* (*"Treatise on the Diseases of the Eye and the Remedies Proper for Its Cure"*) (Troyes, 1707; Paris, 1722 and 1741). Also inGerman: *Tractat von den Kranckheiten des Auges* Nürnberg 1725. The ophthalmologic work has always, and quite properly, received the very highest praise. It marked, in fact, a great improvement over all preceding ophthalmologic treatises. It is a large quarto of 570 pages, one hundred of which are devoted to Ocular Anatomy and Physiology. In this portion is included an excellent (of course, for its day) treatment of the Nature of Vision, together with a number of "experiments" relating to the camera obscura and to the reflection and refraction of light. In the pathologic portion of his work, Mâitre Jan takes the position, then very new, that a cataract is not an inspissated humour in a (wholly imaginary) space between the pupil and the lens, but the lens itself in a hardened and clouded condition. Mâitre Jan was not really the discoverer of this, the true, doctrine concerning cataract, but its rediscoverer. →Quarré seems to have been the first in history to announce the doctrine in question, while to a German, →Rolfinck, belongs the credit of having been the first to demonstrate the truth of the doctrine by actual anatomical investigation. To the young →Brisseau, however, and to Maître Jan, must certainly be conceded the re-discovery of the great truth which, in the thirty or forty years since its first announcement and anatomical demonstration had been absolutely forgotten. To these re- discoverers, furthermore, must be allowed the honour of having fought for the truth of their great re-discovery until the attention of the scientific world was properly and for all time focused upon it. The new teaching concerning the nature and situation of cataract, however, was not accepted till after a long and bitter controversy which involved a majority of the prominent ophthalmologists of the day, especially those of France. The leader of the opposition was →Woolhouse, an English oculist resident in Paris. Lesser opponents were →Hovius, →Freytag and →Hecquet.American Encyclopedia of Ophthalmology, Vol.10, p.7590-7591

Majima, Akio (1931-) Japanese ophthalmologist, Professor Emeritus of Nagoya City University, the 37th generation of the Majima Family (→Majima Seigan). He graduated from Nagoya University in 1956 and studied Ophthalmology under Prof. K.→Kojima and received his Doctor of Medical Sciences from the University in 196l (thesis: *Eye abnormalities in mouse embryos caused by X-radiation of mothers*. Jpn. J. Ophthalmol. 5: 104, 1961). He conducted research also at the Henry Phipps Institute of the University of Pennsylvania, U.S.A. in 1963-1964. He served as the Professor and Chairman of the Department of Ophthalmology at Nagoya City University from 1972 to 1997. His research interest has been in developmental problems of the eye and has worked as a member of the Ministry of Health and Welfare Project on Retinopathy of Prematurity (1974-77): the Project team determined the Diagnostic Criteria and Classification (Studies of retinopathy of prematurity. Jpn. J. Ophthalmol, 21:404, 1977). He worked as a member of the International Committee for the Classification of Retinopathy of Prematurity (23 members from 11 countries: 1981-1987): the conclusion of the Committee was published in Arch. Ophthalmol. 102: 1130, 1984 and ibid. 105: 906, 1987. He delivered special lectures at the 31st Congress of the Japanese Society of Clinical Ophthalmology in 1983 (Experimental and clinical studies on malformation of the eye) and at the 98th Congress of the Japanese

Ophthalmological Society in 1994 (Microphthalmos and its pathogenic classification). He served as the Chief Editor of the 7-volume History of Ophthalmology in Japan: Commemorative publication of the Centennial of the Japanese Ophthalmological Society.(SM)

Seigan Majima

Majima, Seigan (? – 1379) Founder of Majima Ophthalmology School. He was appointed the Chief-priest of a Buddhist Temple in 1356-1360 that was founded around 802, in Owari Area (presently Nagoya Aichi Prefecture). He began treating patients with eye diseases at the Temple and he was particularly good at Cataract Surgery (Couching). He developed his own system of the concept of eye diseases and methods of treatment. Many people came to this temple to study eye diseases and the methods of treatment, and they were spread throughout Japan. Majima School is, therefore, regarded as the origin of many Schools of eye treatment established thereafter. The Heads of the Majima School are as follows: 1. Seigan, 2. Seiyuu (? -1386), 3. Yuukei (? -1416), 4. Jyouen (? -1444), 5. Enkaku (? -1461), 6. Enchi (? – 1476), 7. Enshyou (? – 1483), 8. Ryouen (? – 1503), 9. Yuukai (? – 1533), 10. Enjyun (? – 1558), 11. Gien (? -1580), 12. Tyouen (? -1611), 13. Enkei (? – 1651), 14. Ensei (? – 1677), 15. Entan (? –1731), 16. Enyuu (? –1731), 17. Gikuu (? -1720), 18. Enyuu (reappointment), 19. Enshyou (? –1761), 20. Engi (? –1767), 21. Enkai (? –1798), 22. Enkei (? –1813), 23. Enjyun (? –1833), 24. Ensetsu (? –1840), 25. Enkan (? –1843), 26. Enkyou (? –1843?), 27. Entei (? –1864), 28. Enjyo (? –1855), 29. Enshou (? -1894), 30. Ensai (? -1864), 31. Enin (? –1873), 32. Enshou (reappointment), 33. Majima Noriyasu (1833-1911), 34. Majima Junkichi (1868-1934), 35. Majima Norikazu (? –1951), 36. Majima Kiyonori (1896-1976), 37. Majima Yoshinao (1928-), Majima Akio (1931-). The teaching of the Majima School was traditional Chinese medicine and which inherited the technique of couching. In the long history of the Majima School, Enkei (13th generation) was granted the title “Myougenin” (Institute to give light) by the Emperor of Japan in 1632. At the time of Enkai (21st generation) the Myougenin was named to serve the Emperor. Enjyo (28th generation) was aware of the importance of Western medicine and went to Nagasaki to study Dutch medicine. Thereafter, the Majima School taught Chinese-Dutch medicine, and Enjyo developed many surgical instruments. The Majima Family is probably the oldest Ophthalmology family in the world, and the present family head is Prof. Majima Yoshinao of Fujita Health University, world famous cataract surgeon, and the younger brother, Majima Akio is the Professor Emeritus of Nagoya City University (see their Biographies). In the 38th generation, the Majima family has 3 ophthalmologists and 3 medical students. (SM)

Majima, Yoshinao (1928-) Japanese ophthalmologist, President of Fujita Health University. He is born as the 37th generation of the Ophthalmology family Majima (→Majima Seigan) and is the 37th Family Head. He graduated from Nagoya University Medical School in 1950, studied Ophthalmology at Nagoya University under Prof.→Kojima Koku and received his Doctor of Medical Sciences in 1956 (thesis: *Phosphatase in ocular tissues* J. Jpn. Ophthalmol. Soc. 57: 713, 1957). He was then promoted to Lecturer in 1961 and to Assistant Professor in 1966. In 1973, he was invited to be the Professor and Chairman of the Department of Ophthalmology of Fujita Health University and served as the Professor until 1996. During his tenure, he served as the University Hospital Director during 1988-1996. He was then elected to the Board of Trustees of the University in 1996 and to the President in 1999. He is a leading expert in cataract surgery and played a central role in completing and popularizing the technique of phacoemulsification and Intra-ocular lens implantation not only in Japan but also in the World. He gave many instruction courses at National and International Congresses and helped Prof. Yuan Jia-Qin establish the *Tianjing International Intraocular Implant Training Centre*. He is the Founder and the President of Japanese Society of Intraocular Lens and Refractive Surgery and the President of Cataract Research Association Inc. He is an Honorary Member of the Japanese Ophthalmological Society. He published many original articles, e.g. "*The basic and clinical aspects of intraocular lens*“. Jpn. J. Clin. Ophthalmol. 50: 1351, 1996 and "*Recent progress in cataract surgery”*. (Special Report to the 86th Congress) J. Jpn. Ophthalmol. Soc. 86: 1893, 1983. Some examples of his books are "*The intraocular lens*”. Medical Aoi Publ. Tokyo, 1986 and *"Cataract Surgery with self-sealing wound”*. Medical Aoi Publ. Tokyo 1992. His younger brother is Prof.→

Majima Akio. His son, the 38th generation of Majima family, Majima Kiyoyuki is also an ophthalmologist who graduated from Fujita Health University in 1985. Majima Kiyoyuki completed the courses of Graduate School of Medicine of Kyoto Prefectural University of Medicine, and received his Doctor of Medical Sciences. He extended his study at the Department of Anatomy of the University of Sydney and works as the Assistant Professor of the Department of Ophthalmology of Fujita Health University. (Fujita Health University, Toyoake, Aichi 470-1192, Japan. phone: +81-5-6293-2061, fax: +81-5-6293-4593, e-mail: med-3@fujita-hu.ac.jp)(SM)

Major, Johann Daniel (1634-1693) German physician who paid considerable attention to ophthalmology. Born at Breslau, he studied at Wittenberg, Leipsic, and Padua, at the last named institution receiving his medical degree in 1660. He practised, successively, at Wittenberg, Hamburg, Kiel and Stockholm. He died in Stockholm. His only ophthalmologic writing was *"De Amaurosi"* (Kiel, 1674.) American Encyclopedia of Ophthalmology, Vol.10, p. 7591

Shoichi Makiuchi

Makiuchi Shoichi (1900-1988) Japanese ophthalmologist and Professor Emeritus of Osaka Medical College. He graduated from Osaka University in 1927 and studied at the Department of Ophthalmology under Prof. Nakamura Bunpei. After having received Doctor of Medical Sciences from the University, he was appointed the Professor and Chairman of the Department of Ophthalmology of Osaka Medical College and served in this position until retirement in 1971. During his tenure, he served as the Director of the Hospital. He was the President of 17th Congress of the Middle Regional Section of the Japanese Ophthalmological Society in 1951. He founded the Japan Contact Lens Society and served as the President of its First Congress in 1958. His research covered physiology of contact lens, ocular trauma and many others. He was entitled Professor Emeritus of the College and was Emeritus Member of the Japanese Ophthalmological Society. (SM)

Malgaigne, Joseph Francois (1806-1865). A famous French surgeon of some importance in ophthalmology. Born in Charmes Moselle (Vosges) the son of a country doctor, he at first studied medicine at Nancy, and, in 1825, was an *officier de santé.* Proceeding shortly afterward to Paris, he studied at the military hospital of Val-de-Grace, and received his medical degree in 1831. He then for a number of years served in the national army in his medical capacity. Returning to Paris, he became in 1835 associate professor and surgeon at the Central Bureau. So brilliant were his lectures at the *Ecole Pratique* that he almost immediately became famous. He founded in 1843 the *Journal de Chirurgie,* and served as its editor-in-chief for twelve years. In the course of these years, he was appointed surgeon to all the most important Parisian hospitals, and in 1850 made full professor on the faculty. He was world-renowned as an operator, teacher and author. Malgaigne's most important ophthalmologic writings, which, for the greater part, appeared in the earlier years of his practice, are as follows: 1. *Nouvelle Theorie de la Vision*. (1830.) 2. *Traitement de la Fist.Lac*. (1835.) 3. *Lettre sur la Nature et le Siège de la Cataracte*. (Ann. *d'Oc.,* VI, pp. 62, 66; VIII, p. 148.) 4. *Lecture sur la Nature et le Siège de la Cataracte*. (Ibid., IX, p. 50.) 5. *Sur les Diverses Espèces des Cataractes*. (Ibid , XX, p. 234,) 6. *Sur le Siège et les Especes des Cataractes. (Revue Méd.Chir.de Paris,* Jan.and Feb., 1855; Canstatt's *Jahresbericht fiir 1855.)* 7. *La Cure des Taches de la Cornée*. (*Ann. d'Oc.,* IX, p. 95, 181.) 8. *Sur les Conséquences de I'Abrasion*. (Ibid., XIII, p, 211.)American Encyclopedia of Ophthalmology, Vol.10, p.7592-7593

S. R. K. Padmashri Malik

Malik, S. R. K. Padmashri (1931-1993) Indian ophthalmologist, Former Professor and Chairman of the Department of Ophthalmology, Guru Nanak Eye Centre, Maulana Azad Medical (MAM) Collage, New Dehli. He graduated from Agra University in 1954, received Master of Surgery in 1957 and became a fellow of Royal College of Surgeons 1959: he was elected to the Fellow of the Academy of Medical Sciences of India in 1979. He served as the Professor of Ophthalmology at the MAM College from 1964 to 1974 and Honorary Ophthalmic Surgeon to the President of India from 1974 to 1987. He also served as the Dean of the Faculty of Medical Sciences of Delhi University. Subsequently was engaged in many activities, i.e. Advisor in Ophthalmology to Delhi Administration and Armed Forces Medical Services, Chief Eye Surgeon and Director M.M.R. Eye Institute, Honorary Consultant to Sir Ganga Ram Hospital and RB Gujarmal Modi

Community Ophthalmic Research Centre, Emeritus Consultant to Mool Chand Khairati Ram Hospital, New Dehli, Chairman of the South-East Asia Region of International Agency for Prevention of Blindness and Vice-President of Afro-Asian Council of Ophthalmology. He fulfilled his social duty to many organizations, and to name a few, they were President of All India Ophthalmological Society (1989), President of the National Society for the Prevention of Blindness (1986-1992), Chairman of the 3rd General Assembly of International Agency for the Prevention of Blindness (1986), Founder and Secretary General of the Indo-Japanese Ophthalmological Foundation, Councillor of the Asia-Pacific Academy of Ophthalmology (APAO)(1985-1993) and many others. He founded Indo-Pakistan Intraocular Implant Club that contributed to the friendship of renowned eye surgeons of the two Countries. He contributed to the health of people by running Eye Camps over 30 years and performed more than 20,000 operations in the eye camps and more than 20,000 operations at the M.A.M. College and associated Hospitals. He established 12 subspecialty Units including Keratoplasty and Cornea Unit, Fluoresein Angiography Unit, Electroretinography Unit and others at the M.A.M. College Hospital. He published a total of 374 scientific papers in National and International Journals. He had editorial assignment for many professional journals, e.g. Editor-in-Chief of *Afro-Asian Journal of Ophthalmology*, of *Indian Journal of Ophthalmology*, *Proceedings of All India Ophthalmological Society*, *Ophthalmic Literature* (London) and many others. Due to his outstanding service, he received the National Order "Padmashri" in 1989 and received the Distinguished Service Award from the APAO in 1985 and 1987. His son Dr. Sanjiv Malik follows the father's footsteps and is working as the Honorary Director and Chief Eye Surgeon of the MMR Eye Institute (MMR Eye Institute, B-15 Swansthya Vihar Vikas Mrg, Nelhi-110092, Inida, phone:+91-11-2242267, fax: +91-11-2219092) (SM)

Malla, Om Krishna (1941-) Nepalese ophthalmologist, Senior Consultant Eye Surgeon, Nepal Eye Hospital/Bir Hospital and Medical Director of Nepal Eye Hospital. He graduated from Panjab University, Lahore Pakistan, in 1963 with MBBS degree and conducted further studies in London, with Diploma in Ophthalmology conferred from the Royal College of Physicians and Surgeons of England, London, in 1971, and FRCS from Royal College of Surgeons of Edinburgh in 1975. He is also registered as a Fellow of International College of Surgeons, U.S. A. in 1983. His professional activities embrace Visiting Professor of Ophthalmology, Tribhuvan University, Institute of Medicine, Kathmandu, Founder Member of Nepal Medical College , Kathmandu, Executive Member of Nepal Netra Jyoti Sangh (National Society for Comprehensive Eye Care), Executive Member of Nepal Diabetic Association, President of Nepal Ophthalmic Society (1994-1997), President of Rotary Club of Kathmandu (1997-1998) and Chairman of the Organizing Committee and Scientific Sub-Committee of the XVI Congress of the Asia-Pacific Academy of Ophthalmology (APAO) (1997). He has published about 20 scientific papers in international journals, and he received Honors in Pharmacology and Forensic Medicine in Medical College (1960/1961) and Distinguished Service Award from the APAO in1993. (Nepal Eye Hospital, P. O. Box 1297, Tripureswor, Kathmandu, Nepal, e-mail: malla@family.mos.com.np) (SM)

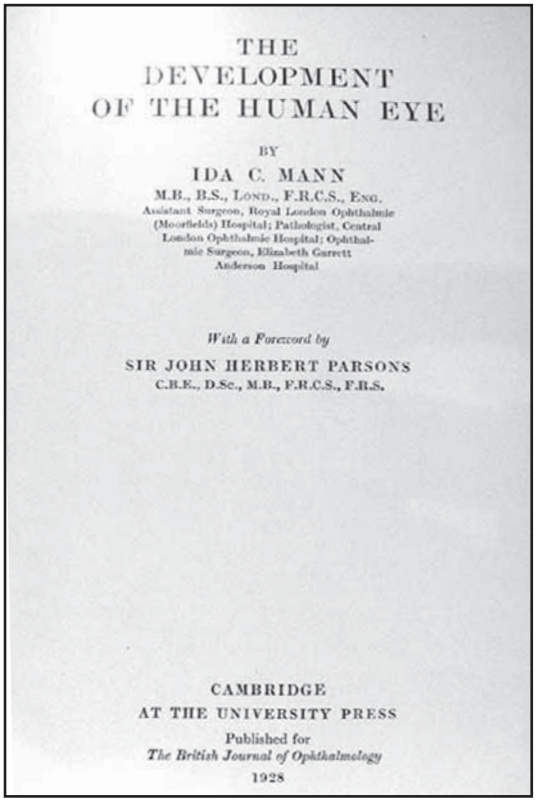
Manabe, Reizo (1928-) Japanese ophthalmologist, Professor Emeritus of Osaka University. He graduated from Osaka University Medical School in 1954, studied Ophthalmology at the Postgraduate School of Medicine of the University under Prof. Mizukawa Takashi and received his Doctor of Medical Sciences in 1959 (thesis; *Studies on the Action Current of the Frog Retina by Short Period Light Beam Interception*. Folia Ophthalmologica Japonica 10: 101—117, 1959). He extended his studies as a Deutcher Akademischer Austausch Dienst recipient at the University of Munich (1963) and also as a Research Fellow at the Eye Research Institute of Retina Foundation, Boston (1989—1972) where he worked with Dr.C.H.→Dohlman (Corneal Collagenases: Evidence for Zinc Metalloenzymes. Annals of Ophthahmology 5: 1193-1209, 1973). On his return to Osaka, he was appointed the Professor and Chairman of the Department of Ophthalmology of Osaka University Medical School in 1974 and served in this position until retirement in 1991. He served the Japanese Ophthalmological Society (JOS) as a Councillor (1975-1993), Executive Board of Trustees (1979-1983, 1985-1989) and many

other Japanese Societies: he is an Honorary Member of the JOS (1993—), Japanese Society of Ophthalmic Surgeons (1993—). Ophthalmological Optics Society of Japan (1993-), Japanese Society of Ocular Pharmacology (1995-) and Japan Contact Lens Society (1995-). He is currently the President of the Japan Eye Bank Association (1979—) and Director of the Keratoplasty Society of Japan (1975—). His research interest has been mainly in the cornea and he has many publications in the field and some examples are "*Cornea Clinic*,(as editor), Igakushoin Publ. Co.,Tokyo, 1990", "*Color Atlas of Allergic Disease of the Eye*,(editor), Nankodo, Co., Tokyo. 1993" and "*Keratoplasty, Textbook of Organ Transplantation*. (ed.) Amemiya, H., Nihon Hyoronsha Co.,Tokyo, 1998". In recognition of his meritorious contributions, the JOS granted him their Award in 1998 (Award Lecture at the 91st Congress of JOS: *Recent Advances in Researches for Herpetic Eye Diseases*. J. Jpn. Ophthalmol. Soc. 92: 1-25, 1988). Since 1996 he has been working as the Director of the Tane Memorial Hospital . (Director of Tane Memorial Hospital, 1-1-39 Sakaigawa, Nishi-ku, Osaka, 550-0024, Japan. phone: +81-6-6581-5800; fax: +81-6-6581-5063)(SM).

Manché, Lieut.-Colonel (1846-1921) Maltese ophthalmologist. Manché was the first holder of the chair of ophthalmology in the University of Malta. He did much to develop ophthalmology in the island, where he established and maintained an ophthalmic clinic for poor patients.BJO 1921,5:288

Mandelstamm, Max (1838-1912) .German ophthalmologist from Kieff who studied under A.von →Graefe in Berlin and under Hermann von →Helmholtz in Heidelberg. Because Mandelstamm was Hebrew his official progress sadly was interfered. This did not prevent him having a most extensive private practice. The Ophthalmoscope, 1912,p.301.

Manfredi, Nicolo (1836-1916) Italian ophthalmologist born in Boscomarengo. Manfredi studied in Paris, where he was an assistant to →Desmarres. Returning to Italy, he worked in Pavia with →Reymond, →Sperino and →Quaglino. Later he founded a clinic at Pisa. His contributions to literature extended from 1864-1892.AJO,1:296.


THE
DEVELOPMENT
OF THE HUMAN EYE

BY

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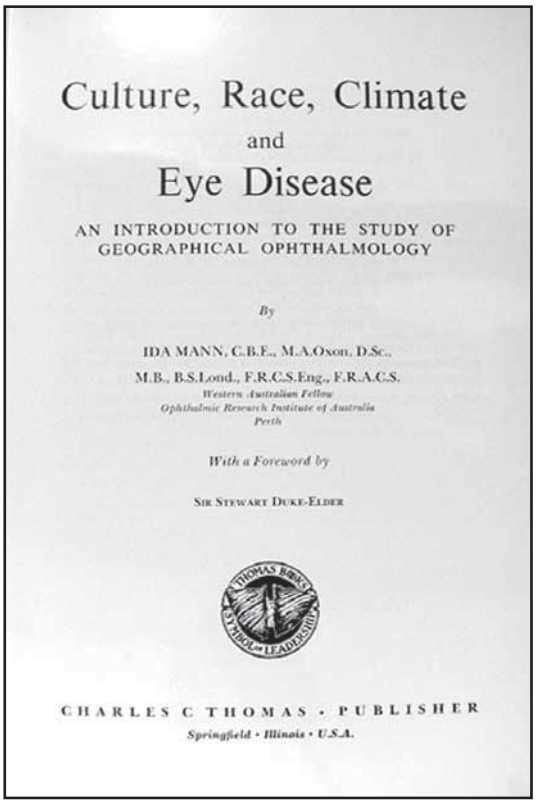
Mann, Dame Ida Caroline (1893-1983) alias Caroline Gye. British, later, Australian ophthalmologist and essayist. Ida Mann was born in London and went to school in West Hampstead. Her father was a civil servant working for the post office who later became a member of the Order of the British Empire. Her mother was a Packham, an old family of Sussex farmers and millers who provided the connection with Australia that was later to become so important; her maternal uncle emigrated to Western Australia in 1880 and set up the wheat belt. She came from a family of churchgoers who were not necessarily believers. Ida Mann's family was not involved in the medical field, and her school taught no science. No doubt, this left her immensely curious about the natural world. After her school days, she passionately wanted to attend university, but it was not yet the time of full enfranchisement for women. Her father insisted that she first prove herself in a job. She spent two dismal years in the Post Office Savings Bank before escaping through a convenient ruse. For a woman, there was only one medical school available at the University of London, the London School of Medicine for Women-the Royal Free Hospital. She enrolled there in 1914, at the start of World War I, and then went on to St Mary's Hospital, where she finished her studies in 1920. The eminent anatomist and osteologist, Professor W. Ernest Frazer of St Mary's Hospital, became her mentor. Mann was supported by a fellowship from the Imperial College of Science, a Mable Webb scholarship, and a grant from the British Medical Research Council to study congenital and hereditary eye defects. She used Professor Frazer's unrivaled collection of human embryos to study ocular development, and for her thesis work, she received a doctor of science degree in 1924. These studies were the basis of her classic volumes, The "*Development of the Human Eye*" (1928, 1949,1950 & 1964) and *Developmental Abnormalities of the Eye* (Cambridge 1937, 2nd ed.London 1957). With her scientific and clinical background, Ida Mann mused over a career as an anatomist, but

she was encouraged by Professor Frazer to take up ophthalmology instead. Again, at that time, the road for women physicians was narrow; the Elizabeth Garrett Anderson Hospital, to which she was appointed as an ophthalmologist, was the only one open to women. However, in 1925, she was appointed pathologist and assistant surgeon at the Central London Ophthalmic Hospital; in 1927, to the honorary staff of Moorfields Eye Hospital; and in 1928, to the Royal Free Hospital. She was the first woman to hold these latter appointments. For the next ten years, she continued her clinical and research endeavors in London, but at the outbreak of war in 1939, she was appointed by the Ministry of Supply to study the effects of chemical warfare agents on the eye. She started work at the Medical Research Council Establishment at Mill Hill, with a research team including Antoinette Pirie and Davidina Pullinger. This was exciting toxicologic work, including studies of corneal vascularization and the effects of mustard gas, but her work was not published until after the war for security reasons. In 1941, the University of Oxford invited Ida Mann to become Margaret Ogilvie's Reader in Ophthalmology. She accepted but insisted on adequate space for research, teaching, and her clinical practice. A gift from Lord Nuffield allowed the university to build a laboratory and give her a research assistant (Antoinette Pirie), two technicians, and a secretary. The Nuffield Laboratory of Ophthalmology preceded the establishment of the Institute of Ophthalmology in London by several years. In 1942, with the laboratory built, Mann was given a personal professorship at the University of Oxford; she automatically became a don and a fellow of St Hugh's College. Mann retained her private practice on Harley Street, London, but spent most of her time in Oxford. She saw patients at the Oxford Eye Hospital and the Nuffield Laboratory of Ophthalmology. Mann taught medical students and directed a program for a diploma in ophthalmology at the University of Oxford. She carried out her laboratory research, made frequent trips "up north" where chemical warfare agents were under study, and sustained her research in clinical areas. Ida Mann also was very interested in thyroid disease; she collaborated with Sir Hans Krebs on studies involving night-blind patients and men receiving vitamin A-deficient diets. She worked with Professor Howard W. Florey, who made small amounts of the newly discovered penicillin available for the treatment of eye infections. She also met Sir Stewart→Duke-Elder during his regular visits to the Head Injury Hospital. He and the university assisted her in setting up the Ophthalmological Research and Endowment Fund. By 1947, more than 76,000 Pounds had been raised for an expanded research laboratory. However, postwar building restrictions did not allow further laboratory construction until 1951. In 1944, Ida married Professor William Ewart Gye, director of the Imperial Cancer Institute in London, with whom she collaborated then and later in the field of cancer research. In 1945, she became senior surgeon at Moorfields Eye Hospital, the only woman to achieve this distinction. She resigned from her post at the University of Oxford in 1947, and in 1949 finally emigrated to Australia with her husband. During her "English period," Ida Mann received many honors and reached the top of her profession. She was a credit to the feminist movement. She won the Gifford Edmonds Prize in 1927 and gave the Harrison Gale Lecture in 1929, the Doyne Memorial Lecture in 1928, the Nettleship Lecture in 1932, and the Montgomery Lecture in 1935. She served with distinction on many national and international committees. Ida Mann's first contact with Australia was in 1939 when she was a guest at the inaugural congress of the newly formed Ophthalmological Society of Australia in Melbourne. It was not until 1949, however, that her "*Australian years*" began. Within a year, Ida had set up a busy consultant practice and was soon appointed consultant to the Royal Perth Hospital. She practiced until her 85th year from her home, which she claimed was previously a house of ill repute. About this time, Father Frank Flynn, priest and former ophthalmologist, had reported a high incidence of trachoma among the aborigines of northern Australia. Such reports had been received with skepticism by ophthalmologists in the more densely populated areas from which trachoma had practically disappeared. For more than ten years, she examined and recorded details on thousands of patients. The prevalence of trachoma was confirmed and its geographic


Culture, Race, Climate
and
Eye Disease
AN INTRODUCTION TO THE STUDY OF GEOGRAPHICAL OPHTHALMOLOGY
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CHARLES C THOMAS · PUBLISHER
Springfield · Illinois · U.S.A.

variations documented. She subsequently arranged mass treatment programs. To this day, her name is held in esteem by elders of the aboriginal population. Ida's interest in trachoma led her further afield, to surveys of the inhabitants of the jungles and highlands of Papua New Guinea and, later, to Taiwan and other parts of the Asian-Pacific region. She was appointed regional consultant and adviser to the World Health Organization and became one of the founders of the Society of Geographic Ophthalmology. She continued her prolific publication rate with detailed reports of her trachoma findings and some of the earliest attempts to culture *Chlamydia trachomatis.* Her professional experiences were combined with those of many journeys in her book, *Culture, Race, Climate and Eye Disease(1966).* Her early fieldwork with trachoma was captured with sparkling wit and intricate detail in her successful novels, *The Cockney and the Crocodile* and *China 13*, both written under her married name, Caroline Gye. With the new field of research came further acclaim and awards. In 1958, she received the Howe Medal from the American Ophthalmological Society. In 1961, she gave the Bowman Lecture for the Ophthalmological Society of the United Kingdom. In 1962, she gave the Norman McAlister Gregg Oration for the Ophthalmological Society of Australia. She was elevated to the order of Dame of the British Empire (DBE) in 1980 and was awarded, in 1977 and 1983, honorary doctorates by Western Australia's two universities. She gave advice on the formation of the Ophthalmic Research Institute of Australia, participated in establishing the medical school at the University of Western Australia, organized educational facilities for visually handicapped children, and formed a genetic society. The ophthalmic contributions of Dame Ida Mann will be perpetually honored at the University of Oxford in the annual lecture given in her name and at the Institute of Ophthalmology in London, the Ophthalmic Research Institute of Australia, and the Lions Eye Institute in Perth. Other monographs written by Ida Mann are: with A. Pirie *The Science of Seeing* Perth (Australia) 1950 and her autobiography, *The Chase*, which was published in 1986. Ida Mann, in 1927, also collaborated with T. Harrison Butler´s *An Illustrated Guide to the Slit-lamp.* Arch Ophthalmol 1984,102:1713-1715. JPW

Mann, William A. (1898-1971) American ophthalmologist, professor Emeritus of Ophthalmology at Northwestern University and Chairman Emeritus of the Department of Ophthalmology at Chicago Wesley Memorial Hospital and the Veterans Hospital at Hines, Illinois. He devoted his entire professional career to these institutions. He began as a clinical assistant at Northwestern University in 1927, and ascended the academic ladder to become professor in 1949. He was acting chairman of the department of ophthalmology following Sanford Gifford's unexpected death in 1943, and managed the department until Derrick Vail became a professor in 1945. He was devoted and loyal to the department and did yeoman service in its organization and activities. He served on the staffs of both Wesley and Passavant hospitals, and with the opening of the new Wesley Hospital in 1940, he became chairman of its department of ophthalmology and a consultant at Passavant. He began service with the United States Veterans' hospital in Hines in 1933 and became its chairman in 1946. He was responsible for instituting the residency program at both Wesley and Hines hospitals. In addition, he played an active role in the formation of the facility at Hines for training newly blinded soldiers. The details of Dr. Mann´s career are related in the special issue of the American Journal of Ophthalmology published in his honor in October, 1967. He attended the public schools in Chicago and Wilmette. He graduated from the University of Illinois and interned at Evanston hospital. His ophthalmic training was obtained at the University of Illinois and in Vienna. In his early professional career he was active in the affairs of the Alpha Kappa Kappa medical fraternity. He served as president of the professional interfraternity council from 1933 to 1935 and was chairman of the medical interfraternity conference from 1947 to 1949. He was Grand Primerius of the Alpha Kappa Kappa Fraternity from 1949 to 1953, and again from 1963 to 1965. He also edited the Centaur, their official magazine, and served as president, grand vice-president, and grand historian. He was president of Omega Beta Pi, honorary national fraternity from 1932 to 1935 and served as president, of Lambda Chi Alpha while attending the University of Illinois. His scientific contributions were in two main areas, photography of the eye, and therapy. He was active in the development of color and infrared photography of the fundus and wrote his thesis for the American Ophthalmological Society describing an animal eye as a camera after Scheiner. He was

active in the initial development of ACTH and the corticosteroids. For many years he gave a course in the optical correction of aphakia at the American Academy of Ophthalmology and Otolaryngology, from which be received its honor medal, and he wrote extensively concerning hysterical amblyopia. His major love, however, was history and at the time of his death he was historian of the Chicago Ophthalmological Society and had written extensively concerning the history of ophthalmology in the Illinois region. He combined his interests in his final contribution, relating the history of photography in ophthalmology (Surv. Ophth. 1970).He was a member of numerous organizations: American Medical Association, Illinois State Medical Society, Chicago Medical Society, American Ophthalmological Society, American Academy of Ophthalmology and Otolaryngology, Association for Research in Vision and Ophthalmology, American Association of Ophthalmology, Oxford Ophthalmological Congress, and American Society of Ophthalmology and Chicago Ophthalmological Society (President, 1946-47). He served as a member of the revision committee and as chairman of the panel on ophthalmology of the U.S. Pharmacopia from 1950 to 1960, and on the panel of ophthalmology from 1960 to 1965. AJO 1971,72:489-491

Manni Domenico Maria (1690-1788) Italian author of the first history of spectacles: *Degli occhiali da naso inventati da Salvino Armati* Firenze: Anton-Maria Albizzini, 1738.

Mannis Mark J. (1946-) American ophthalmologist, Professor of Ophthalmology, University of California, Davis. Mannis received his medical education at the University of Florida School of Medicine (MD); University of Vermont (Internship, Internal Medicine); Washington University in St. Louis (Residency, Ophthalmology); and University of Iowa (Fellowship, Cornea & External Disease). He received the degrees of BA, MA. He received his Doctor of Medicine degree in 1975 at the University of Florida, and he became an ophthalmologist after completing residency training in 1979 at Washington University School of Medicine in St. Louis. Melvin Rubin, Morton M. Smith and Jay H. Krachmer were his primary mentors in ophthalmology. Dr. Mannis has been Full Professor of Ophthalmology at the University of California, Davis School of Medicine, Davis, California since 1989 where he first joined the faculty in 1980. Prior to his full professorship, from 1985 to 1989, he was Associate Professor of Ophthalmology; and from 1980 to 1985 Assistant Professor of Ophthalmology. From 1980 to the present he has served as Director, Cornea and External Disease Service, University of California, Davis Medical Center, Sacramento, CA ; 1980-1985 Medical Director, Lions Eye and Tissue Bank, University of California Davis Medical Center, Sacramento, CA; 1983 to 1984 Medical Director, UCD Medical Center Transplant Bank, University of California, Davis Medical Center, Sacramento, CA ; 1985-1990 Medical Director, Lions Eye and Tissue Bank, University of California, Davis Medical Center, Sacramento, CA.1990-Present Medical Director, Sierra Eye and Tissue Donor Services, Sacramento, CA; 1988-1994 Director of Residency Training, Department of Ophthalmology, University of California, Davis Medical Center, Sacramento, CA; 1981-1990 Director of Medical Student Training, Department of Ophthalmology, University of California, Davis, Medical Center, Sacramento, CA; 1996-Present Director, Cornea, External Disease, and Refractive Surgery, University of California, Davis Medical Center, Sacramento CA. Chairman, Eye Bank Association of America, 19XX-19XX; Editor-in-Chief, *Cornea: The Journal of Cornea and External Disease*, 1995-2001; Director, American Board of Ophthalmology, 1999-Present; Member, American Ophthalmological Society, 2001-Present. *Bibliography*: *A)* *Books*: Mannis, M.J., Macsai, M.S., Huntley, A.C. *Eye and Skin Disease.* Lippincott-Raven, 1996; Mannis, M.J. and Mannis A.A. *Corneal Transplantation: A History in Profiles*, Wayenborgh Press, 1999; *B)* *Co-authored books* : Krachmer, J.H., Mannis, M.J., Holland, E.J. *Cornea*, Mosby-Yearbook 1997; Holland, E.J. and Mannis, M.J. *Ocular Surface Disease: Medical and Surgical Management*, Springer Verlag, New York 2001. *C)* *Papers, Editorials, and Book Chapters:* 1. 1981 Mannis, M.J. and Krachmer, J.H.: Keratoplasty: *A historical perspective*. Surv Ophthalmol 25: 333-338. *2.* 1981 Mannis, M.J., Krachmer, J.H., Rodrigues, M.M. and Pardos, G.J.: *Polymorphic amyloid degeneration of the cornea. A clinical and histopathologic study*. Arch Ophthalmol 9: 1217-1223. *3.* 1981 Pardos, G.J., Krachmer, J.H., and Mannis, M.J.: *Posterior corneal vesicles*. Arch Ophthalmol. 99: 1573-1577 4.1983 Mannis, M.J. and

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Manolesco, N.(1850-1910) Bulgarian oculist. Manolesco received his medical degree at the University of Bucharest. He then studied ophthalmology at Paris, chiefly under de→Wecker, and became assistant to that master ophthalmologist. Later, he studied at Vienna under→Arlt. In 1881 he was appointed professor of ophthalmology and surgeon-in-chief to the Ophthalmic Hospital at Bucharest. He wrote almost nothing, but invented a number of instruments, as well as two or three methods for the removal of Cataract. He is said to have invented abrasion of the conjunctiva for the treatment of trachoma- a procedure, however, which was very well known to the ancients.American Encyclopedia of Ophthalmology, Vol.10, p.7595

Manz, Wilhelm(1833-1911). German ophthalmologist. Born in Freiburg i. Br., he studied medicine at Freiburg, Prague, and Berlin, at the last named center receiving his degree in 1858. The following year he qualified as privatdocent in his city, and four years later was made extraordinary professor in that institution. In 1868 he received the full professorship, and was appointed director of the Freiburg Ophthalmic Hospital. He wrote a large number of articles, chiefly on choked disc, tuberculosis and the embryology and teratology of the eye. His important composition was the division on ocular embryology teratology in the Graefe-Saemisch *Handbuch.* He invented the lymphstasis theory of the production of choked disc. Manz retired in 1901 and died aged almost 78 years. American Encyclopedia of Ophthalmology, Vol.10, p.7596; The Ophthalmoscope, 1911,p.466.

Wenshu Mao

Manzini, Carlo Antonio (?- 1687) Italian astronomer at Bologna and one of the founders of the Accademia dei Vespertini. He wrote an important and probably the earliest practical account of the contemporary methods of grinding and polishing glass for spectacles and telescopes: *Vocchiale all'occhio dioptrica pratica ...dove si tratta della luce; della refrattione* Bologna 1660.

Mao, Wenshu (Winifred) (1910-1988) Chinese ophthalmologist, wife of Eugene Chan, Professor of Ophthalmology at Sun Yat-Sen University of Medical Sciences and of Beijing Union Hospital. She graduated from West Union University, School of Medicine,

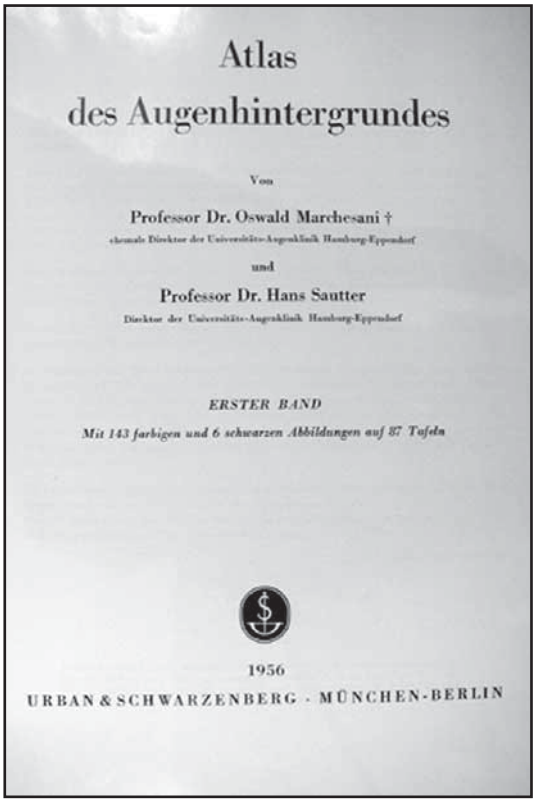
Chengdu and received her M.D. degree in 1937. She received residency training at the Department of Ophthalmology of the University Eye and ENT Hospital during 1937-1941 and was made an attending ophthalmologist of the University Eye and ENT Hospital. She worked as a Fellow at Toronto University, Canada, (1947-1948) and at Chicago University, Illinois, U. S. A. (1948-1949). On her homecoming, she was appointed the Associate Professor at West Union University, Chengdu (1949-1950). She then worked as the Professor of Ophthalmology of Sun Yat-Sen University of Medical Sciences (SUMS), Guangzhou in 1950 -1977. During her tenure she served as the Deputy Chairman of the Department of Ophthalmology (1965-1977), Vice-President of the SUMS (1973-1977) and the Deputy Director of the Eye Hospital of SUMS (1965-1977). She then worked as the Professor of Ophthalmology at the Beijing Union Hospital in 1977-1983; she returned to Guangzhou as the Director of Zhongshan Ophthalmic Center of SUMS (1983-1988). Her professional activities were extensive and served as the Vice-President of the Chinese Ophthalmological Society (1979-1985) and she held many Seminars and Symposia of Ophthalmology: she was the Co-Founder of the *Asia-Pacific Society of Intraocular Lens Implantation* in 1986. She was a member of the American Academy of Ophthalmology (1979-1986). She also served as the Deputy to the China National People's Congress (5th, 6th and 7th) in 1975-1988. Her scientific publications are more than 100 papers and she wrote many books, e.g. "*Ophthalmology: University Textbook*, 2nd Ed". People's Medical Publ. House, Beijing, 1980 and "*Ophthalmology: University Textbook*, 3rd Ed". 1990. She received many Honor Awards for her outstanding service, e.g. Guest of Honor to the 85th Congress of the Japanese Ophthalmological Society in 1981 and to the American Academy of Ophthalmology in 1981, and she received the Distinguished Service Award of the Asia-Pacific Academy of Ophthalmology in 1983. (SM)

Marahakim, Haji Mohamed Noor Binn, Dato (1923-1998) Malaysian ophthalmologist, Professor of Ophthalmology, National University of Malaysia. He graduated from University of Malaya (Singapore) in 1952, and completed postgraduate study in London with Diploma in Ophthalmology in 1959. He served as the Head of the Department of Ophthalmology, General Hospital Kuala Lumpur (1972-1978). He founded the Department of Ophthalmology at National University of Malaysia and developed the Department to an outstanding teaching Center as Associate professor of Ophthalmology, National University of Malaysia (1978-1981) and then as the Professor (1981-1988). He also founded the undergraduate course of Optometry at the University in 1981. Among many professional activities, he served as the Chairman of the Ophthalmological Society of the Malaysian Medical Association (1974-1978). He was a member of Academy of Medicine Malaysia and a Fellow of the American College of Surgeons. He translated "*Lecture notes in Ophthalmology* "by Trevor-Roper into the Malaysian Language, and this book is widely read among Ophthalmology students. His service having been recognized, he was granted the State Awards and Federal Awards, including the title Dato. (SM)

Marat, Jean-Paul (1743-1793) French scientist and a major figure in the French Revolution. Marat was born at Boudry, near Neuchatel, Switzerland, studied medicine in various cities, including London, where he lived and practiced from 1760 to 1777. While in England, he published treatises on ophthalmology and on venereal disease, in addition to political and philosophical writings. Settling in Paris (1777), he practiced general medicine and ophthalmology, and experimented with fire, light, and electricity, publishing numerous scientific papers. Beginning in 1789, as editor of the newspaper L´Ami du peuple, Marat became an influential proponent of radical democratic change. A leading member of the national Convention during 1792 and 1793, he was opposed by the conservative Girondin faction, one of whose adherents, Charlotte Corday, assassinated him. He wrote: *Découvertes sur la lumière Paris*: Jombert, 1780 ; *Notions élémentaires d'optique*. Paris 1784 ; *De la presbytie accidentelle* Paris 1791.

Marcellus Empiricus (i.e."the empyric"). French pharmacist and courtier of the later fourth and earlier fifth centuries. Born at Burdigala (now Bordeaux) in Gaul, he rose to be chief apothecary and master of the household *(magister officiorum)* to Theodosius 1. About A. D. 410 he compiled a dispensatory for the poor, entitled "*De Medicamentis*." The substance of this work was taken chiefly from Scribonius Largus, but its author added much new matter of a magical and superstitious kind. It consists of 28 chapters, or

divisions, of which the eighth, devoted to ophthalmology, is entitled "*Ad Omnes et Multiplices Oculoruin Dolores Collyria et Remedia Diversa, etiam Physica de Probabilibus Experimentis*." The whole book closes with a poetical epilogue in 78 lines. Marcellus, the Empiric, is not to be confounded with Marcellus Sideta (i.e., of Sida, in Pamphylia). The latter, a general physician, was the author of "Iatrika," and lived in the second century A. D., in the reigns of Hadrian and Antoninus Pius.American Encyclopedia of Ophthalmology, Vol.10, p.7597


Atlas
des Augenhintergrundes
Von
Professor Dr. Oswald Marchesani †
ehemals Direktor der Universitäts-Augenklinik Hamburg-Eppendorf
und
Professor Dr. Hans Sautter
Direktor der Universitäts-Augenklinik Hamburg-Eppendorf
ERSTER BAND
Mit 143 farbigen und 6 schwarzen Abbildungen auf 87 Tafeln
1956
URBAN & SCHWARZENBERG · MÜNCHEN-BERLIN

Marchesani, Oswald (1900-1952) German ophthalmologist, born in Schwaz/Tyrol. M. received 1923 his degree in medicine in Innsbruck/Austria. From 1923 assistant ophthalmologist under →Seefelder. Marchesani accepted 1927 a position as assistant in the Munich University Clinic of Ophthalmology under Karl→Wessely. Marchesani became lecturer 1928 and professor (without chair) 1934 in Munich. Marchesani received a call to Münster to replace Aurel v. →Szily (who like K. Wessely became a victim of the Nazis) and stayed there until 1945. He accepted a call to Hamburg where he worked until his early death. Machesani focused much on the borders and relations of neurology and ophthalmology. This culminated in his chapter „*Symptomatologie der Erkrankungen des N. Opticus*" in the famous treatise by O.Bumke & Förster: „*Handbuch der Neurologie*" Vol.4, 1936. Other monographs by Marchesani are"*Simulation von Krankheiten und Funktionsstörungen des Auges*" in „*Handbuch der Artefacte*" and „*Albinismus. Die totale Farbenblindheit. Partielle Farbenblindheit*" in *Handbuch der Erbkrankheiten*, Vol.5,1938. His main work was the *Atlas des Augenhintergrundes* written with his pupil Hans Sautter and published in two volumes posthumously in 1956. Marchesani was coeditor of *Augenheilkunde der Gegenwart* and *Graefe´s Archiv für Ophthalmologie* in which nearly all his articles were published.Klin. Monatsblätter f.Augenheilkunde, Vol.120,1952 , p.653 ; Graefe´s Archiv für Ophthalmologie,Vol.152, 1953,p.551. JPW

Marchetti, Luigi (1807- ?). Italian ophthalmologist, founder of the first outdoor clinic for eye patients at Milan. He was for a time assistant to →Flarer. For thirty-five years he practised at Milan as ophthalmologist, enjoying a wide reputation, especially as an operator for cataract. According to Hirschberg, the only method he employed was depression. He wrote a booklet on ophthalmoscopy and a number of case reports. American Encyclopedia of Ophthalmology, Vol.10, p.7597

Maressal de Marsilly, A.-C (?- ?) nothing is known yet about him except that his booklet contains for the first time the word ophthalmoscope in its modern sense : *Études cliniques sur divers modes d'exploration de l'oeil* Paris 1852.

Marie, Auguste Armand (b. 1865) French psychiatrist, born in Vairon, Isère, France. Marie received his M.D. in Paris in 1890 and worked at various mental hospitals. He was the founder of the first hospitals for mentally disabled people in France.He wrote extensively on mental illness and on symptoms of neurologic damage. He authored the following ophthalmic titles: *Troubles oculaires dans la paralysie générale* Paris 1890 and with Joseph Bonnet *La vision chez les idiots & les imbeciles* Paris 1892 ; *Sur un cas de délire religieux à hallucinations visuelles et auditives* Nancy 1897. Marie was editor of the *Encyclopedie internationale de prévoyance* and of the *Traité international de psychiatrie et de psychologie pathologique*.

Mariotte, Edme (1620-1684). French physicist, immortal for his discovery of the "*blind spot*" of the eye-often known as "*the blind spot of Mariotte* ". He was born in Burgundy, became a priest, in this capacity officiated at St. Martin sous Beaune, near Dijon, and there became Prior. He was one of the early members of the Academy of Sciences, which, by the way, was founded in 1666, the year in which the blind spot was discovered. Strange as the fact may sound, the physicist-priest was the very first person in history to investigate the visual function of the optic papilla. To the investigator's great surprise, he

found that the ocular end of the optic nerve was absolutely devoid of every sort and kind of light perception. Two years after this discovery, Mariotte was called to London for the purpose of demonstrating the blind spot (which, now, was very well known by his name) before the King. The experiment was, of course, successfully repeated by all persons present. In 1681 Mariotte published a work entitled *"Essai sur la Nature des Couleurs"* (Paris, 1681) in which he attacked (unfortunately) the color theory of Newton, but in which, with greater increase to his reputation, he included his " *Investigations of the Colored Rings round the Sun and the Moon*. " In this portion of the book he correctly assigned as the cause of the major halos and of the mock-sun and mock-moon the presence in the higher atmosphere of floating needles and prisms of ice; to account for the minor halos, however, he wrongly resorted to the theory of double refraction through drops of water which lay suspended in the upper regions of the air. He also wrote : *Nouvelle découverte touchant la veue*. Paris 1668; *Essays de phisique* Paris 1679 and 1681.Mariotte died in Paris. American Encyclopedia of Ophthalmology, Vol.10, p.7598-7599.

Marmor, Michael F. (1941-) American ophthalmologist and retinal physiologist, Professor of Ophthalmology at Stanford University School of Medicine. He graduated from Harvard College (magna cum laude in mathematics) in 1962, and received his M.D. from Harvard Medical School in 1966. He trained in neurophysiology at the National Institute of Mental Health (1967 – 1970), and in ophthalmology at Massachusetts Eye and Ear Infirmary (1970-1973). In 1973 he became Assistant Professor of Ophthalmology at the University of California, San Francisco. In 1974 he moved to the Stanford University School of Medicine where he rose to Professor of Ophthalmology in 1986. From 1974 to 1984 he was Chief of the Ophthalmology Section at the Veteran's Administration Medical Center in Palo Alto. In 1984 he was appointed Head of the Division of Ophthalmology at Stanford, and he guided the program to departmental status in 1987, serving as its Chair until 1992. Since 1982 he has been a faculty member of the Program in Human Biology, an undergraduate program which integrates biological and social sciences. He directs the international Basic Science Course in Ophthalmology at Stanford. He has belonged to the American Physiological Society, Society of General Physiologists, Association for Research in Vision and Ophthalmology, and International Society for Eye Research. As a Fellow of the American Academy of Ophthalmology, he has served on the Board of Counselors and many committees (Honor Award, 1984; Senior Honor Award, 1996). In the International Society for Clinical Electrophysiology of Vision (ISCEV) he served as Vice-President for the Americas (1990 - 1998) and Chair of the ERG Standardization Committee. He coordinated the first international standardization of the ERG (Marmor MF, Arden GB, Nilsson SE and Zrenner E: *Standard for clinical electroretinography*. Arch Ophthalmol 107:816-819, 1989), and subsequently did the same for the EOG, pattern ERG and multifocal ERG (in progress). He is a member of the Retina Society, Macula Society, Cogan Ophthalmic History Society (Executive Committee), and a Fellow of the International Academy of Sports Vision. He has been on the Scientific Advisory Board of the Foundation Fighting Blindness (Service Award, 1981). He was Editor-in-Chief of *Documenta Ophthalmologica* (1995 - 1999), and is History Editor for *Survey of Ophthalmology*. His teaching activities include clinical ophthalmic education, the mentoring of research fellows, undergraduate teaching (Human Biology 116: The Eye and Implications of Vision) and regular courses at the annual meetings of American Academy of Ophthalmology ("*Vision and Art*," "*The Eye and Vision of Animals*"). His books include two major reference works on the retinal pigment epithelium (Zinn K and Marmor MF (Eds): *The Retinal Pigment Epithelium*. Cambridge, Harvard Univ Press, 1979; Marmor MF and Wolfensberger TJ (Eds): *The Retinal Pigment Epithelium: Function and Disease*. New York, Oxford University Press, 1998), and a consideration of vision and ophthalmic disease in relation to art (with JG→Ravin): *The Eye of the Artist*. St. Louis, Mosby-Year Book, Inc., 1997). His research was funded by the National Eye Institute for more than 20 years, and he received an Alcon Research Award in 1989. He has given numerous invited lectures and Professorships, including Principal Guest Lecturer, 50th Meeting of the Mid-Japan Ophthalmological Society, Kyoto, 1984, Honorary Professor at Xian Medical University, 1988, and the 1999 Susruta Lecturer, West Virginia University. He has recently been an invited participant in conferences of the Concerted Action of the

European Union on retinal diseases and physiology. He has written more than 50 book chapters and 200 papers. His early neurophysiologic work focused on the neurobiology of ion transport across the cell membrane (e.g., Marmor MF and Gorman ALF: *Membrane potential as the sum of ionic and metabolic components*. Science 167:65-67, 1970). After training in ophthalmology, he studied electrical responses of the retina and RPE (e.g., Lurie M and Marmor MF: *Analysis of the response properties and light-integrating characteristics of the c-wave in the rabbit eye*. Exp Eye Res 31:335-349, 1980), and championed the importance of the RPE as a factor in the retinal health and disease. He worked actively with retinal dystrophies such as retinitis pigmentosa (e.g., Marmor MF: *Visual loss in retinitis pigmentosa*. Am J Ophthalmol 89:692-698, 1980), and gave the first clinical description of two syndromes: pattern dystrophy (Marmor MF and Byers B: *Pattern dystrophy of the pigment epithelium*. Am J Ophthalmol 84:32-44, 1977) and the enhanced S cone syndrome (Marmor MF, Jacobson SG, Foerster MH, Kellner U and Weleber RG: *Diagnostic clinical findings of a new syndrome with night blindness, maculopathy and enhanced S cone sensitivity*. Am J Ophthalmol 110:124-134, 1990). He proposed new explanations for central serous chorioretinopathy (e.g., Marmor MF: *New hypothesis on the pathogenesis and treatment of serous retinal detachment.* Graefe's Arch Clin Exp Ophthalmol 226:548-552, 1988; Marmor MF: *On the cause of serous detachments and acute central serous chorioretinopathy*. Br J Ophthalmol 81:812-813, 1997). He has also studied toxic retinopathy (e.g., Marmor MF: *Is thioridazine retinopathy progressive? Relationship of pigmentary changes to visual function.* Br J Ophthalmol 74:739-742, 1990; Marmor MF and Kessler R: *Sildenafil (Viagra) and ophthalmology*. Surv Ophthalmol 44:153-162, 1999). He pioneered in studying the mechanisms of adhesion between retina and RPE, developing a technique for making small experimental detachments (blebs) that is now routine in vitreoretinal surgery (Marmor MF, Abdul-Rahim AS and Cohen DS: *The effect of metabolic inhibitors on retinal adhesion and subretinal fluid resorption*. Invest Ophthalmol Vis Sci 19:893-903, 1980). His work showed the importance of metabolic activity in controlling and maintaining retinal adhesive force (e.g., Marmor MF and Yao X-Y: *The metabolic dependency of retinal adhesion in rabbit and primate*. Arch Ophthalmol 113:232-238, 1995). This work also characterized the movement of water and ions across the subretinal space in health and disease (e.g., Negi A and Marmor MF: *The resorption of subretinal fluid after diffuse damage to the retinal pigment epithelium*. Invest Ophthalmol Vis Sci 24:1475-1479, 1983). He opened the field of retinal neuroprotection after ischemia (Yoon YH and Marmor MF: *Dextromethorphan enhances ERG recovery after retinal ischemia*. Arch Ophthalmol 107:409-411, 1989). He has worked extensively in clinical electrophysiology, characterizing and developing electrodiagnostic procedures. He also works to integrate visual physiology and ophthalmology with other disciplines including art (e.g., Marmor MF and Lanthony P: *The dilemma of color-deficiency and art.* Surv Ophthalmol, In Press), music (e.g., Marmor MF: *Vision and the musician*. Medical Problems of Performing Artists. 1:117-121, 1986), history (e.g., Marmor MF: *Wilson, strokes and zebras*. New Engl J Med 307:528-535, 1982), and sports. (Department of Ophthalmology, A-157, Stanford University Medical Center, 300 Pasteur Ave., Stanford, California, 94305-5308; marmor@stanford.edu).(SM)

Marple, Wilbur Boileau (1856-1916) American ophthalmologist, inventor of the Marple ophthalmoscope. Born in northern Ohio, he received the degree of A.B. at Amherst College in 1877 and that of M.D. at the Starling Medical College, Columbus, 0., in 1881. For a time he practised general medicine with a Dr.Foster at Washington Court House, 0. Later, he studied ophthalmology at the New York Ophthalmic and Aural Institute, and from then until his death practised in New York City. He was a Fellow of the American Ophthalmological Society and of the American College of Surgeons, also ophthalmic surgeon to the New York Eye and Ear Infirmary, visiting ophthalmic surgeon to the Almshouse and Workhouse hospitals, Blackwell's Island, and consulting ophthalmic surgeon to the Babies' Hospital, New York.American Encyclopedia of Ophthalmology 10,p.7608

Marshall, J. Cole (1876-1952) British ophthalmologist. James Cole Marshall was born at Blandford, Dorset,. He studied at Bart's and qualified in 1900. His first interest was

gynaecology, and his M.D. degree, which he took in 1904, a year after taking the Fellowship, was in this subject. Soon afterwards, however, he was attracted to ophthalmology, and decided to make that his specialty. Although Marshall's main work was done at the Western Ophthalmic Hospital, where he was a member of the honorary staff from 1913 to 1946 and senior surgeon for 11 years, he held other appointments at the Royal Waterloo Hospital, the Lambeth L.C.C. Hospital, and the Northwood and Pinner Hospital. He was further associated with several institutions for the blind, such as the Sunshine Home and the Royal London Society for Teaching and Training the Blind. He was also Oculist to the Royal Academy of Music, and during the first world war he served in the R.A.M.C. as ophthalmic specialist to the Army of the Rhine. Cole Marshall was an efficient all-round surgeon, skilful, careful, and deliberate as an operator; sound in clinical judgement; and thorough in examination. He was one of the very first in Great Britain to practise the modern operative treatment of retinal detachment, which he continued to study with increasing enthusiasm and practised with remarkable success for the rest of his medical career. This success was primarily due to his careful and prolonged survey of the fundus for retinal tears, etc. These were all systematically plotted on his well-known muscle charts, which are still widely used. His capacity for work and his energy in this and other respects were outstanding, and his methods and example in training a long succession of house-surgeons and registrars were an inspiration to his colleagues. It is no exaggeration to say that he founded a school of detachment surgery at the Western. Although he tried out most of the various techniques, he ultimately remained faithful to puncture diathermy, which he preferred to surface coagulation. In this he was supported by the work of the →Weekers in Belgium, who showed that the puncture technique facilitates the down growth of subconjunctival cells, resulting in a firmer scar. He had a craftsman's pride in the quality of his scars, not too weak and not too dense-the latter, owing to scar tissue contraction, predisposing to secondary tears. In 1935, he gave the Middlemore Lecture at the Birmingham Eye Hospital; his book *Detachment of the Retina* was published in Oxford, 1936 and in 1938 he was appointed Hunterian professor at the Royal College of Surgeons. BJO 1953,37:192

Marshall, John (1895-1970) Scottish ophthalmologist, Surgeon-Oculist to King George VI and to Queen Elisabeth II. Born and educated in Glasgow, he graduated with honours in 1917; he immediately joined the R.A.M.C. and was awarded the Military Cross in 1918; thereafter he acted as a lieutenant-colonel in the Territorial Army and in the second world war he became consulting ophthalmologist in Scotland to the Admiralty. Immediately after the first world war he returned to Glasgow and for the remainder of his professional life was associated with the Glasgow Eye Infirmary where he was appointed a surgeon in 1928 and was senior surgeon when he retired in 196o. In this city he took a prominent part in professional life, was consultant to several hospitals and to the Tennant Institute, founded the Orthoptic Training School, and was chairman of the Advisory Committee to the Ross Foundation for the Prevention of Blindness. In 1951 he was appointed Surgeon-Oculist to King George VI and subsequently to Queen Elizabeth II. His interests, however, extended beyond Glasgow, he was president of the Scottish Ophthalmological Club, vice-president of the Ophthalmological Society of the U.K., and president of the Faculty of Ophthalmologists; in 1953 he was awarded the Mackenzie Memorial Medal. BJO 1970,54:768

Marston, Allan (1832-1911). British surgeon. Marston was honorary surgeon to the King and was the author of a famous communication dealing with ophthalmia in the *Archives of Medicine*, April 1862, in which occured the oft quoted phrase that *„the palpebral conjunctiva offers a delicate test and evidence as to the hygienic conditions of a regiment*“. At that time Marston was assistant surgeon to the Royal Artillery. The Ophthalmoscope, 1911, p.390.

Marston, Philip Bourke (1850-87) British blind poet, born in London, England. His memory survives through his friendships, rather than through his poems. Some of these are exquisite, but too sad for a world with good eyesight. See A *Last Harvest*, with memoir by Mrs. Moulton.American Encyclopedia of Ophthalmology 10,p.7608

Martin, Benjamin (1704-1782) British science popularizer and instrument maker, born at Worplesdon, England. Martin appears to have been self-taught in science. He worked as a school teacher and traveling lecturer for about thirty years before establishing himself in London (ca.1755) as a retailer of scientific instruments, some of them (particularly microscopes) invented or improved by himself. He wrote: *A new and compendious system of optics* London 1740; *Optical essays* London c. 1740, *An essay on visual glasses* of which the 3rd ed. appeared London 1758; *New elements of optics* 2 parts, London 1759-1769; *Bibliotheca technologica* of which the 4th ed. was published in London 1776.

Martinasch, N.J. (1834-1892) French-American ophthalmologist, discoverer of the method of treating corneal ulcers by means of the cautery. Born at Hornaing, near Douai, Departement du Nord, France, he received the medical degree at Paris May 25, 1861. He then studied ophthalmology under the famous de →Wecker. In 1869 he moved to San Francisco, Ca., where he became professor of ophthalmology and otology in the Medical Department of the University of California. His discovery of the method of treating corneal ulcers by means of the cautery was made in 1873.American Encyclopedia of Ophthalmology 10,p.7608

Martini, Alphons (1829-1880). German surgeon and ophthalmologist. Born at Salgau, Upper Swabia, he studied at Munich, Vienna, Tübingen, Paris and London, and, returning to Munich, there received his medical degree about 1853. Settling in Ochsenhausen, Würtemberg, he was there an official physician for fifteen years. In 1869 he moved to Biberach, and became chiefly an ophthalmologist. Though a skillful operator on the eye, his only ophthalmologic writing was his graduation dissertation entitled *Ueber die Hornhautwunden und ihre Folgen*. American Encyclopedia of Ophthalmology 10,p.7609

Martin-Jones, John Dennis (1907-1955) British ophthalmologist. He was born the elder son of Martin Llewellyn Jones, F.R.C.S., and Mrs. Martin-Jones of Aberdare, Glamorganshire. From his father he inherited an aptitude for surgery and good literary taste, for both father and son read widely. Martin-Jones was educated at Denstone College and then at Emmanuel College, Cambridge, where he obtained honours in the Natural Sciences Tripos. In January, 1931, he entered St. Bartholomew's Hospital and in 1934 qualified. He became House Physician to Dr. Hinds Howell and later House Surgeon to the Eye Department, 1935-36. In 1936 he took his Cambridge M.B., B.Ch., and in 1938 the D.O.M.S. He was resident surgical officer and then registrar at the Royal Westminster Ophthalmic Hospital and there as Cruise research scholar he investigated uveal sarcoma, on which subject he wrote a thesis for the Cambridge M.D., 1939, which had the distinction of being published as a monograph supplement of the British Journal of Ophthalmology in 1946. He served in the army from 1940-45 and spent 4 years overseas as an ophthalmic specialist in hospitals in the Middle East and in a Mobile Ophthalmic Unit in Normandy. Despite the stressing and often difficult conditions of active service the excellence of his work never varied. The field medical cards which accompanied the wounded who had passed through his capable hands were marked with his neat handwriting setting out concisely and clearly every essential detail. On leaving the army he decided wisely that the unbalanced and madly competitive career of a consultant in London was not his way of life. In the Cathedral Close of Salisbury and the consulting staff of the General Infirmary he found the suitable medium for his unhurried and thorough clinical work. In Salisbury he was fortunately spared the isolation that specialists may endure in a provincial town, for near by there lived his old chief, Robert Foster Moore, to whom he went both for advice and for the recreation of fishing. Theirs was a friendship which was perfectly complementary. Soon he established in Salisbury an efficient eye unit which gave good service of a high clinical order to a wide area of surrounding country. BJO 1955,39:575-576

Maruo, Toshio (1932-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology of Teikyo University. Born as the 5th generation of an Ophthalmology family, he graduated from Tokyo University in 1958, studied Ophthalmology under Prof.→HAGIWARA Hogara and received the degree Doctor of Medical Sciences in 1964 (thesis: *Studies of stretch reflex of the extracoular muscles*. No. 1. J. Jpn. Ophthalmol. Soc. 68: 212, *No.2*, ibid. 68: 238, 1964). He has been in the present

position as above since 1971. He held many professional positions, including President of the Japanese Ophthalmological Society (1995-1999) and President of the Japanese Association of Strabismus and Amblyopia (1990-1998). He is the Chief Editor of the Japanese Review of Clinical Ophthalmology (founded in 1905 by KUWABARA Yushichiro) since 1982. His main interest is oculomotor systems, electromyography of the extraocular muscles, strabismus, amblyopia and ocular plastic surgery, and he has many publications in this field, e.g. "*Duane's Syndrome*", Jpn. J. Ophthalmol. 23: 435, 1979 and "*Results of surgery for paralytic exotropia due to oculomotor palsy*" Ophthalmologica 21: 163, 1996. He received the Award of the Japanese Ophthalmological Society: the Award Lecture was "*Treatment of paralytic strabismus*. J. Jpn. Ophthalmol. Soc. 98: 161, 1994". In the 6th generation of Maruo family, two ophthalmologists are at work. (Department of Ophthalmology, Teikyo University, University School of Medicine, 2-11-1, Kaga, Itabashi-ku, Tokyo, Japan 173-8605: telephone: +81-3-3964-1211, fax: +81-3-3964-1225

Marxow, Ernst Fleischl von see **Fleischl**

Masawaih Abu Juhanna (8th century) Iraqi. This renowned operator on the eye flourished at Bagdad in the 8th century A.D. He is said to have cured the Caliph Haroun Alraschid of an obstinate ophthalmia, and to have received therefore a pension of 2400 drachma yearly.American Encyclopedia of Ophthalmology 10,p.7609

Maskati, B.T. (1925-) Indian ophthalmologist, Professor Emeritus, Department of Ophthalmology, K.E. Hospital and Seth G. S. Medical College. He graduated from Seth G. S. Medical College in 1950, studied Ophthalmology at the K. E. M. Hospital and G.S. the Medical College and received the degree Master of Surgery in Ophthalmology in the year 1955. He was appointed the Assistant Honorary Ophthalmic Surgeon at Bachooally Eye Hospital, Parel Bombay (1955), and the Honorary Assistant Professor at Seth G. S. Medical College and K.E. M. Hospital (1958). He was then appointed the Honorary Professor and Ophthalmic Surgeon of the twin Institutions in 1963 and the Head of the Department of Ophthalmology in 1974 and he served in this position until retirement in 1983. He also served as the Honorary Surgeon to the Bombay Hospital for 25 years, and he is now the Professor Emeritus of the Hospital. He was actively associated in designing *Taparia Institute of Ophthalmology* (1986) and he worked as the Chief of the Institute in its early period. He served as the Secretary General of All India Ophthalmological Society (AIOS)(1978-1985), Vice-President (1986) and President (1987) of the AIOS: he successfully obtained duty exemption from the Government of India on sight saving instruments. He also served as the President of Bombay Ophthalmological Society (1970) and Madras and South India Ophthalmological Society (1972). He has been the representative of India to many International organizations, and they are International Council of Ophthalmology on Prevention and Cure of Blindness (1970-1974), Executive Council of the Asia-Pacific Academy of Ophthalmology (1972), International Federation of Ophthalmological Societies (1978,1982), Centenary of the Ophthalmological Society of U. K. (1983) and Centenary of the American Academy of Ophthalmology (1996). He published more than 100 scientific papers in National and International Journals and wrote chapters of many books. He has been Chairman, Panelist, invited Lecturer and orator on many occasions. He has conducted many eye camps since 1962 and performed more than 60,000 cataract and glaucoma operations. He is also a pioneer of *Squint Camps* and performed many squint operations since 1968. In recognition of his meritorious service, many Organizations granted him Honor Awards, e.g. Parasnath Gold Medal by Dhanbad Ophthalmic Society (1965), Dr. P. Siva Reddy Gold Medal-Andhra Pradesh (l982), Life time Achievement Award from the AIOS (1998) and many others. (Maskati Eye Clinic, Harishankar Lodg Bldg. 1st Floor, 23, Quenn's road. Mumbai-400 004, India, phone : +91-22-382-2973, fax: +91-22-388-5822) (SM)

Maskelyne, Nevil (1732-1811),British astronomer and physicist, inventor of the prismatic micrometer, born in London. In 1758 he was elected a Fellow of the Royal Society, and resolved to devote himself to astronomy. In 1763 he went to Barbados for the Board of Longitude to test the newly-invented Harrison chronometers, and after his return was (1765) appointed astronomer-royal. The first of his very numerous publications was the

British Mariner's Guide (1763). In 1767 he commenced the *Nautical Almanac*. In 1776 he produced the first volume of the *Astronomical Observations made at the Royal Observatory, Greenwich, from 1665*-an invaluable work. American Encyclopedia of Ophthalmology 10,p.7609

Mason, Mary Emmeline (1893-1951) British ophthalmologist **(née Joll)**. After studying at the London School of Medicine for Women and qualifying in 1915, Joll (later Mason) held posts of house surgeon and house physician at the Royal Free Hospital, London, and was later appointed chief clinical assistant and senior house surgeon at Moorfields Eye Hospital, being the first woman to hold this latter post. As a well-known ophthalmologist in North-West England, she had a large consulting practice and also did much work among school-children. Remote from the main centres of activity she applied her knowledge and skill in the limited area in which she was working, and her warm human personality gave her contacts with her patients that are not readily established in the busy centres. These contacts she employed fully in her scientific investigations. She brought a single-minded devotion to whatever task was at hand, whether it was a routine refraction, a difficult operation, or a complicated investigation. Her many artistic talents are illustrated in the ophthalmological paintings which have appeared in the BJO (33, 67). BJO 1951, 35:188

Masselon, Michel Julien (1844-1917) French ophthalmologist, pupil of de Wecker, born in Rouen. Masselon received his M.D. in 1872 in Paris, where he remained for the rest of his life. Together with Louis de Wecker, his partner in a private ophthalmologic practice, he wrote works on the testing of visual acuity and color vision, ophthalmoscopy, and general and surgical ophthalmology: *Clinique ophthalmologique de Dr. de Wecker a Paris. Relevé statistique, par Dr. Masselon, chef de clinique, des opérations pratiquées pendant l'année 1873*. Paris 1874 ; *Clinique ophthalmologique de Dr. De Wecker à Paris. Relevé statistique, par le Dr.Masselon pour l'année 1876*. Paris 1877; *Examen Fonctionnel de l´Œil*, Paris 1882 (2nd ed. 1890); *L´ophtalmoscope Helmholtz-Wecker* Ghent 1887 ; with de Wecker *Ophthalmoscopie Clinique* Paris 1881 (2nd ed.1891) and *Manuel d´Ophthalmologie* Paris 1889. Masselon also edited de Weckers lectures : *Thérapeutique Oculaire par L. de Wecker* Paris 1879 and *Chirurgie Oculaire par L. de Wecker* Paris 1879. AJO,1:296; Ann.d´Ocul.,154:193;Albert:Source Book of Ophthalmology,p.219,371. JPW

Masters, John Lewis (1859-1916) American ophthalmologist. Masters, he received his medical degree from the Louisville, Ky., Medical College in 1885, being honor man of his class. He served as interne at the Louisville City Hospital for one year, and then engaged in general practice at Shandon, Ohio, till 1892, when he went to New York City for the study of ophthalmology and otolaryngology. For about one year he was house physician at the New York Eye and Ear Hospital. In 1893 he settled as ophthalmologist and oto-laryngologist at Idianapolis, Ind., where he lived and practised until his death. In March 1894, he was elected lecturer on Histology and on the Eye and Ear at the Central College of Physicians and Surgeons, now a part of the Indiana University School of Medicine. Two months later he received the full professorship in these branches. In 1896 he was made treasurer of the College. All these positions he held till 1903, when he went to Berlin for further study. Returning to Indianapolis in 1904, he was elected in 1906 clinical professor of otology in the Indiana Medical College, later the Indiana University School of Medicine. This chair he held till 1909 or 1910. He was oculist and aurist to the Indiana City Hospital and City Dispensary from 1894 until 1905. American Encyclopedia of Ophthalmology 10,p.7613-7615.

Masuda, Kanjiro (1936-) Japanese ophthalmologist, Professor Emeritus of Tokyo University, Director of Kanto Rosai Hospital (National Hospital under Ministry of Labor). He was born as the son of MASUDA Yoshiya and as the third generation in an Ophthalmology family. He graduated from Tokyo University in 1964, studied Ophthalmology at the University under Prof.→SHIKANO Shinichi and Prof.→MISHIMA Saiichi and received his Doctor of Medical Sciences in 1972 (thesis: *Pressure dependence of the aqueous humor formation in rabbit and cynomolgus monkey eyes*. Jpn. J. Ophthalmol. 16: 190, 1972). He was elected as a Japan-US Exchange Fellow and carried

out research at Yale University with Prof. M.L.→Sears (1977-1979). He was then promoted to Assistant Professor of Tokyo University in 1982 and to Professor and Chairman of the Department of Ophthalmology of Tokyo University in 1987: he served in this position until retirement in 1997. Subsequently, he was invited to be the Director of Kanto Rosai Hospital and is currently in service. He has held key positions in many National and International professional Societies. They are Councillor of the Japanese Ophthalmological Societies (JOS) (1985-), Executive Director of the JOS (1988-1990, 1993-present), President of the Japanese Society of Ocular Pharmacology (1995-1997), Executive Director of the Japanese Society of Ophthalmological Optics (1989-present), of the Japanese Society of Ophthalmic Surgeons (1990-present), of the Japan Glaucoma Society (1996-present), of the Japanese Society of Cataract Research (1989-present) and of many other National Societies. He has served as the Vice-President of the Asia-Pacific Academy of Ophthalmology (APAO) (1991-present) and delivered the deOcampo Lecture, the most prestigious Award of the APAO, at the 16th APAO Congress in Kathmandu 1997 (Title: *Behcet's Disease*). He has also served as the Vice-President of the ISER (International Society for Eye Research) (1990-1993) and organized, as the President, the 12th ISER Congress held in Yokohama in 1996. He also organized the 3rd Congress of the International Society of Ocular Inflammation in 1994. He also served as the President of the 100th Congress of the JOS and organized its Centennial Festivities. He has been the President of many National congresses, and also served numerous Government Councils and Committees, including the Committee for National Examination for Medical Licenses, Chairman for Research Groups of Intractable Diseases of the Ministry of Health and of the Ministry of Education. His editorial assignments are Chief-Editor of the Japanese Journal of Ophthalmology (1978-present), of Jpn. J. Clin. Ophthalmology (1987-1997), Survey of Ophthalmology (1993-present), Asia-Pacific Journal of Ophthalmology (1987-) and many others. His research covered a wide area, i.e. uveitis, immunology, glaucoma, pharmacology and surgery, and he published many papers in the field: he delivered the JOS Award lecture in 1996 at the 100th Congress of the JOS (Current topics in glaucoma, J. Jpn. Ophthalmol. Soc. 100; 923-936, 1996). He was also elected as Special Reporter to the 91st Congress of the JOS: his lecture was "*Basic aspects and clinical significance of the blood-ocular barrier*". Based on his expertise, he gave invited lectures on more than 25 occasions around the World, and served as a Visiting Professor to many Japanese and foreign Universities. He is the World-leading figure on Behcet's disease and published "Double masked trial of cyclosporin versus cholchicine and long-term open study of cyclosporin in Behcet's disease. The Lancet, May 20, 1093-1096, 1989". (Director: Kanto Rosai Hospital. Kizuki-Sumiyosi 2035, Nakahara-ku, Kawasaki, 211-0021, Japan. phone: +81-4-4411-3131, fax: +81-4-4433-3150)(SM)

Takashi Masuda

Masuda, Takashi (1885-1925) Japanese ophthalmologist, Professor of Ophthalmology of Kyoto Prefectural Medical University. He graduated from Tokyo University in 1911, and studied Ophthalmology under Prof.→KOMOTO Jujiro, and received Doctor of Medical Sciences from Tokyo University in 1921. He was invited to be Professor and Chairman of the Department of Ophthalmology of Kyoto Medical School (presently Kyoto Prefectural Medical University) in 1916. He compiled 192 cases of central retinopathy described by ASAYAMA Ikujiro and examined the fundus using Komoto's Ophthalmoscope with intensive acetylene-gas lamp, Thorner's Ophthalmoscope and many other techniques then available. He concluded that inflammatory processes are present in the Choriocapillaris and the Pigment Epithelium in the Macular Region, and that serous exudation elevates the Retina. He determined that this fundus disease is a distinct clinical entity and subsequently the disease is called Central Serous Chorioretinopathy of Masuda. During the short period of his Professorship, he published excellent books e.g. "*Central Retinal Diseases*", "*Atlas of Ocular Fundus of Japanese*", "*Methods of Clinical Examination in Ophthalmology*" and many others. (SM)

Masuda, Yoshiya (1907-) Japanese ophthalmologist, Professor Emeritus of Kurume University. He is the father of MASUDA Kanjoro. He graduated from Kyushu University in 1933, studied Ophthalmology in the Graduate School of Medicine at the University under Prof. SHOJI Yoshiharu, and received his Doctor of Medical Sciences in 1940 (thesis: *Étude biochimique due corps vitré comme d'oxydation-réduction*. J. Jpn.

Ophthalmol. Soc. 43; 714, 1939). He served as the Professor of Ophthalmology of Heijyo (presently Pyong Yang, People´s Republic of Korea) from 1941 to 1945: while serving as the Professor he was drafted as an army surgion. After World War II, he returned home and served as the Head of the Eye Clinic of Hiroshima Red Cross Hospital (1950-1959). His studies on the atomic bomb cataract during this period were published in "*Statistical Observation of atom-bomb cataract in Hiroshima*", Am. J. Ophthalmol 42: (2), 1956 and "*Clinical study of atomic bomb cataract in Hiroshima"*, J. Jpn. Ophthalmol. Soc. 70: 1109, 1966. He was then appointed Professor and Chairman of the Department of Ophthalmology of Kurume University in 1959 and served until retirement in 1973. During his tenure, he served as Vice-Director of the University Hospital (1961-1967), Director of the University Hospital (1967-1969) and Board of Trustees of the University (1961-1969). He also served the Ministry of Health as a Committee Member for Examination of Medical Licenses (1968-1970). Upon retirement from Kurume University, he was invited to be the Professor of Fukuoka University and founded the Department of Ophthalmology, where he served until 1983. His research interest has been cataract, its basic and surgical aspects. He founded in 1964 the Cataract Research Group that evolved to the Japanese Society for Cataract Research (JSCR) (1984): he served as the President. He gave the commemorative Lecture to the 23rd Congress of the JSCR "*Inauguration of Japanese Society for Cataract Research*. Atarashi-Ganka (Journal of the eye) 2: 116, 1985" He also delivered a Special Lecture "*Complications of cataract surgery and their management*" to the 26th Congress of the Japanese Society of Clinical Ophthalmology (1972). He has served the Japanese Ophthalmological Society (JOS) as a Councillor (1960-1981), as an Auditor (1977-1979): he is an Honorary Member of the JOS and JSCR. He is the author of "*Crystalline Lens and Cataract*, *Handbook of Clinical Ophthalmology*, Kanehara Publ. Co. Tokyo, 1972".(SM)

Matin, Mohammad Abdul (1937-) Bangladeshi ophthalmologist, Professor Emeritus of Institute of Postgraduate Medicine and Research in Dhaka, President of the Bangladesh Academy of Ophthalmology. He graduated from Dhaka University Medical College in 1960, received Diploma of Ophthalmology in London (1964) and received FRCS from Royal College of Surgeons of Edinburgh in 1967. He served as the Professor of Ophthalmology at the Institute of Postgraduate Medicine and Research in Dhaka (1967-1977): he had joint appointment as the Consultant to Islamia Eye Hospital, the Combined Military Hospital, The Holy Family Hospital, The Dhaka shishu (Children's) Hospital and the Diabetic Centre of Dhaka. His professional activities are numerous: President of the Ophthalmological Society of Bangladesh (1975-1995), President of Bangladesh College of Physicians and Surgeons (1981-1985), Vice-President of World Health Assembly (1988), Vice-President of the Asia-Pacific Academy of Ophthalmology since 1991 and the 13th Congress President of the Academy (1993) and he is currently the Founder Secretary General of the Bangladesh National Society for the Blind, Vice-Chairman of Bangladesh Medical Research Council. He has a magnificent career in the public service. He served as the Minister of Health of the Government of Bangladesh (1980-1989). He was elected 3 times as Member of the parliament (1979.1986,1988) and served as the Deputy prime Minister, Education Minister, Home Minister, Commerce Minister and Communication Minister. He is also very active in social works. He established a Handicraft Centre where poor but talented boys and girls are trained and their products are exported to Europe. He also established an organization "*Bridge of Light*" which carries out a credit program for poor people to give them Hope in their future. He has many publications in Professional Journals: his book "*Ophthalmic Optics*" and "*Treatment of Eye Diseases*" are the textbooks that are most widely read by Bangladeshi Ophthalmology students. He is a recipient of many Awards: Alim Memorial Gold Medal from the Ophthalmological Society of Bangladesh (1978), Distinguished Service Award from the Asia-Pacific Academy of Ophthalmology (1981), Jose Rizal Medal of the Academy (1993), Susruta Lecturer of the Academy (1995) and many other International Awards. In recognition of his services, he has been awarded the Fellowship of Overseas Doctors' Association of UK (1994).(SM)

Matsuda, Hidehiko (1936-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Hokkaido University. He graduated from Hokkaido

University in 1961, studied Ophthalmology under Prof. FUJIYAMA Hidetoshi and received his Doctor of Medical Sciences in 1968 (thesis: *Successive culture of trachoma pathogens in chick embryo. I*. J. Jpn. Ophthalmol. Soc. 69: 673, 1965; *II*. ibid. 69: 2109, 1965). He was promoted to the Lecturer in 1969 and extended his study during 1970-1972 at the Columbia University, New York and worked with Dr.G.K. Smelser ("*Epithelium and stroma in alkali burned corneas*". Arch. Ophthalmol. 89: 402, 1973; „*Electron microscopy of corneal wound healing*". Exp. Eye Res. 13:, 427, 1973). He was appointed Assistant Professor of his Alma Mater in 1974 under Prof.→SUGIURA Seiji and was promoted to the present position as above in 1978. His interest is in ocular infection, fine structure of ocular tissues, uveitis and immunology, genetics and retina: examples of recent publications are "*CREB-induced transcriptional activation depends on mGluR6 in rod bipolar cells*", K. Yoshida et al. Molecular Brain Res. 57: 241-247, 1998 and "*Central nervous system symptom in patients with Behcet disease receiving cyclosporine therapy*", S. Kotake et al Ophthalmology 105: 586-589, 1999. He is a Councillor of the Japanese Ophthalmological Society (JOS) (1978-), Executive Director (1998-), Chairman of the Ophthalmology Board of JOS (1998-) and organized as the President the 97th Congress of the JOS in 1993. (Department of Ophthalmology, Hokkaido University, Kita-15 Nishi-7, Kita-ku Sapporo, 060-8638, Japan. phone: +81-1-1716-1161, fax: +81-1-1736-0962, e-mail: hmatsuda@med.hokudai.ac.jp)(SM)

Matsuhashi, Masakazu (1947-) Japanese ophthalmologist, Professor and Chairman of the First Department of Ophthalmology of Toho University. He graduated from Keio University in 1973, studied Ophthalmology under Prof.→UEMURA Yasuo. He further studied as a Research Associate at the Eye Research Institute of Retina Foundation under Drs.→HIROSE Tatsuo and Charles L.→SCHEPENS in 1980-1983. He submitted thesis (*Pre-vitrectomy electrophysiologic tests for diabetic vitreous hemorrhage*. J. Keio Med. Soc. 67: 89, 1990) to Keio University and received his Doctor of Medical Sciences in 1990. He was appointed the Assistant Professor of Toho University in 1990 and was promoted to the present position as above in 1996. He is Councillor of the Japanese Neuro-Ophthalmology Society and a member of the Japanese Ophthalmological Society, Japanese Society for Clinical Electrophysiology of Vision and International Society for Clinical Electrophysiology of Vision. He published many scientific papers in the field of neuro-ophthalmology and electrophysiology of vision; some examples are "*Clinical ERG and VECP from unsedated children aged under one year*. Proc. 16th ISCEV Symposium: 279, 1979, Suppl. Jpn. J. Ophthalmol." And "*Interocular suppression in visually evoked cortical potentials (VECP).* Suppl Documenta Ophthalmol. Proc. Series, 27: 283, 1981". (Department of Ophthalmology, Toho University, 6-11-1 Ohmori-Nishi, Ohta-ku, 143-0015, Japan. phone: +81-3-3762-4151, fax: +81-3-3298-0030)(SM)

Matsui, Mizuo (1929-) Japanese ophthalmologist, Professor Emeritus of Nihon University. He graduated from the Faculty of Medicine of Keio University in 1954, and studied Ophthalmology under Prof.→UEMURA Misao. He was granted his Doctor of Medical Sciences from the Keio University in 1960. He was promoted to Assistant Professor in 1963 and to Associate Professor of Nihon University in 1969. He studied at the Bascom Palmer Eye Institute in Miami, U.S.A. for 1 year, 1971-1972. He was promoted Professor of Ophthalmology of Nihon University in 1980 and served in this position until retirement in 1996, whereupon he is was entitled Professor Emeritus of the University. During his tenure, he served as the Director of Surugadai Hospital of Nihon University in 1990-1993. He also served as the President of the Japanese Ophthalmological Society in 1993-1996 and the Chairman of the Organizing Committee of the Centennial Festivities of the Society in 1996. He worked as the Secretary General of the 13th Congress of the Asia-Pacific Academy of Ophthalmology in 1991. He organized the 48th Congress of the Japanese Society of Clinical Ophthalmology as the Congress President in 1994. His research interest has been in Vitreo-retinal diseases and Fundus photography. In recognition of his outstanding contribution, the Vitreoretina Society of Japan granted him the Mori Prize in 1998. As one of the symposists at the 74th Congress of the Japanese Ophthalmological Society, he lectured on fluorescein angiographic findings in arterial hypertensive patients in 1979. He served as the Chairman of the Research Project of the Ministry of Health and Education on

Chorioretinal Diseases, 1988-1993, and the outcome of this research is summarized in his book "*Macular Diseases in the Elderly*", Nanzando Publ. Co. Tokyo 1998. He served as a member of the Science Council of Japan in 1996-1997. (fax: +81-3-3796-0329, e-mail: mmatsui@mba.dopa.nttdocomo.ne.jp)(SM)

Matsumura, Miyo (1949-) Japanese ophthalmologist, Professor and Head of the Department of Ophthalmology of Kansai Medical University. She graduated from Kyoto University in 1974, studied Ophthalmology in the Graduate School of Medicine of the University under Prof.→TSUKAHARA Isamu and received her Doctor of Medical Sciences in 1981 (thesis: *Synaptic vesicle exocytosis in goldfish photoreceptor cells*. A.v. Graefe Arch. Clin. exp. Ophthalmol. 215: 159, 1981). She extended her study in 1983-1984 at the Health Science Center of the University of Colorado and carried out research on aqueous humor dynamics with Prof. P.P. Ellis (*Pilocarpine concentrations in aqueous humor following single drop application. I. Effect of soft contact lenses*. Curr. Eye Res. 4: 1041, 1985). After having served at Amagasaki Prefectural Hospital, Kyoto University Hospital and Kurashiki Central Hospital, she worked as the Vice-Director of the Nagata Eye Hospital during 1994-1998: she learned clinical Ophthalmology from Dr.→NAGATA Makoto. She has been in the present position since 1999. Her works cover electrophysiology of vision, retinal diseases, electron microscopy, glaucoma and microsurgery and she has published 39 original papers in English and 250 papers in the Japanese Language, and some examples are "*Electron microscopic studies on celestial goldfish retina – a possible new type of retinal degeneration in experimental animals*. Exp. Eye Res. 32: 649, 1981" and "*Surgical techniques and reattachment rate in retinal detachment due to macular hole*. Arch. Ophthalmol. 108: 1559, 1990". She is a Councillor to the Japanese Ophthalmological Society (1995-), Japan Glaucoma Society (1998-) and on the Board of Trustees of the Japanese Society of Intraocular Implant and Refractive Surgery (1995-) and Japanese Society of Ophthalmic Surgeons (1997-). She is a member of many National and International professional Societies, including the Association for Research in Vision and Ophthalmology (ARVO) and the International Society for Eye Research (ISER). (Department of Ophthalmology, Kansai Medical University, Fumizono-cho 10-15, Moriguchi, Osaka, 570-8507, Japan. phone: +81-6-6992-1001(ext. 3320), fax: +81-6-6997-3475, e-mail: matsumum@takii.kmu.ac.jp)

Matsuo, Harutake (1921-) Japanese ophthalmologist, Professor Emeritus of Tokyo Medical University. He graduated from Tokyo Medical College (presently University) in 1942, studied Ophthalmology at the University under Prof. UMAZUME Kakichi and Prof. KUWAHARA Yasuharu and received his Doctor of Medical Sciences in 1951 (thesis*: Seasonal changes in the luminosity in color sensation*. J. Jpn. Ophthalmol. Soc. 55: 271, 1951). He extended his study in 1961-1963 at Sorbonne University, Paris, L'École Pratique des Hautes Études and also Institute of Physics of the Museum of Natural History of France. During this period he studied various aspects of the visual field under Prof. A.→Dubois-Poulsen and Prof. M. A.→Dollfus. On his return home, he was appointed Professor of Ophthalmology of his Alma Mater, and served until 1982 when he was elected to the President of the University. During his tenure, he served as the Director of the University Hospital (1970-1974), and Executive Director of the University (1970-1974,1981-1992). He has held key positions in a number of professional Societies, and they are Executive Director of the Japanese Society of Color Science (1958-1974), President of the Society (1974), Councillor of the Japanese Ophthalmological Society (JOS) (1963-1987), Executive Director of the JOS (1973-1977), President of the JOS (1981-1983), President of the 81st Congress of the JOS (1976), Executive Director of the Japanese Society of Ophthalmological Optics (1975-1987), Executive Director of the International Perimetric Society (IPS) (1974-1987) and President of the 3rd International Visual Field Symposium of the IPS (1978). He also served many Government Councils and Committees. His interest in research has been in Color Science and perimetry and he has published more than 300 papers. Some examples of his books are "*Diagnostic methods in Ophthalmology. Handbook of Ophthalmology*, Vol. 5, by JOS, Kanehara Publ. Tokyo, 1961" and "*Perimetry: methods and diagnostic criteria*, Kanehara Publ. Tokyo, 1977". He made a Special Report to the 75th JOS Congress in 1971 (Visual functions and traffic problems. J. Jpn. Ophthalmol. Soc. 75: 2007, 1971). He received the JOS Award

and delivered the Award Lecture to the 83rd Congress in 1979 (*The visual field*. J. Jpn. Ophthalmol. Soc. 83: 1815, 1979). He is an Honorary Member of the JOS (1987-) and of the International Perimetric Society (1988-). In recognition of his meritorious service, the Government of Japan conferred on him the Second Order of Sacred Treasures in 1994 and the Government of France granted him Legion d'Honneur Chevalier in 1990.(SM)

Matsuo, Nobuhiko (1931-) Japanese ophthalmologist, Professor Emeritus of Okayama University. He was born as the son of a scholarly ophthalmologist in Okayama and graduated from Okayama University in 1955. He studied Ophthalmology in the Graduate School of Medicine of the University under Prof.→AKAGI Goro and Prof.→OKUDA Kanji, and his Doctor of Medical Sciences was granted in 1960 (thesis: *Studies on conjunctival follicles*. Report I-VI J. Jpn. Ophthalmol. Soc. 63, 1541, 1959). For the excellence of this series of works, he received the Yuki Prize of the University in 1962. He extended his studies in 1968-1970 at the Columbia University, New York, and worked with Prof. G. K.→Smelser: they published "*Electron microscopic studies on the pupillary membrane: fine structure of the white strands of the disappearing stage of this membrane*." Invest. Ophthalmol. 102: 108, 1971. On returning home, he served Okayama University as the Assistant Professor (1971-1974), Professor and Chairman of the Department of Ophthalmology of the University (1974-1997), Director of the University Hospital (1992-1994), Dean of the Medical School (1995-1997). His activities in professional Societies include Councillor of the Japanese Ophthalmological Society (JOS) (1975-1997), Executive Director of the JOS (1983-1987, 1993-1995), President of 94th JOS Congress (1990), Vice-Chairman of the Ophthalmology Board of JOS (1990-1994), Councillor of Japanese Society of Clinical Electron Microscopy (1972-), Executive Director of Japan Contact Lens Society (1986-1997) and Congress President of many other National Societies. He has been active in various projects of the Ministry of Health and Welfare, e.g. Behcet's disease, Retinopathy of prematurity, Sjoegren's disease etc. His research interest has been pathology of the retina and choroid, and many of his publications embrace "*Photoreceptor outer segments in the aqueous humor in rhegmetogenous retinal detachment*. Am. J. Ophthalmol. 106: 673, 1986" and "*Photoreceptor outer segments in the aqueous humor of patients with atopic dermatitis and retinal detachment*. Am. J. Ophthalmol. 115: 21, 1993". He served many Japanese Universities as a Visiting Professor and also as invited speaker to the Verhoeff Society (*Clinicohistopathology of a case of endogenous mycotic endophthalmitis*. 39th Annual Meeting, 1985) and the Wilmer Ophthalmological Institute (*High speed microcinematographic analysis of choriocapillary blood flow after laser photocoagulation*. 44th Clinical Meeting, 1985). He is a recipient of the JOS Award in 1980 (Award Lecture: *Studies on choroidal circulation*. J. Jpn. Ophthalmol. Soc. 84: 2147, 1980). For his meritorious service, he received the Okayama Prize of Cultural Merit (1995). After retirement from Okayama University, he serves as the Director of Kagawa Prefectural Central Hospital. (Director, Kagawa Prefectural Central Hospital, Bancho 5-4-16, Takamatsu 760-8557, Japan. phone: +81-8-7835-2222, fax: +81-8-7834-8363)(SM)

Yonosuke Matsuoka

Matsuoka, Yonosuke (1888-1932) Japanese ophthalmologist and Professor of Ophthalmology of Nagasaki University. He was a graduate of Kyoto University in 1914 and studied Ophthalmology under Prof. ASAYAMA Ikujiro. He was promoted to lecture at the University by Prof. ICHIKAWA K. in 1917, and the following year he was invited to be Professor of Ophthalmology of Nagasaki University as the successor of Prof. A. MURAKAMI. He received the degree, Doctor of Medical Sciences from Kyoto University in 1924. His research covered Trachoma, Glycogen of the Crystalline Lens and Cornea and many areas of Ophthalmology. Of particular significance was his statistics of 640 cases of Central Serous Chorioretinopathy where he described central scotoma, metamorphopsia and micropsia of this disease. (SM)

Matsuyama, Michiro (1924-) Japanese ophthalmologist, Professor Emeritus of Osaka City University. He graduated from Kyoto University in 1948, studied Ophthalmology at the University under Prof.→ASAYAMA Ryoji and received his Doctor of Medical Sciences in 1958 (thesis: *Ueber die Chronaxie des optischen Systems*. J. Jpn. Ophthalmol. Soc. 59: 842, 1955). He served as the Head of the Eye Clinic of Kurashiki Central Hospital during 1956-1974. He received the Shimizu Prize from the Japanese

Ophthalmological Society in 1960 for the excellence of his work "*Ueber die feine Morphologie der Hornhautnerven im normalen Kaninchenauge*". Ann. Kurashik Central Hospital 29: 1-42, 1960. He also received the Kurashiki Culture Award in 1962 for his research on the nerves of the eye. He was appointed Professor and Chairman of the Department of Ophthalmology of Osaka City University in 1974 and served until retirement in 1990. He served the Japanese Ophthalmological Society (JOS) as a Councillor (1975-1990) and is Honorary Member of the Society. His interest in clinical research has been retinal diseases and ocular traumatology, and his publications embrace "*Clinical aspects and pathology of fundus changes in blunt ocular trauma*". Folia Ophthalmol. Jpn. 35: 1915-1928, 1984 and "*Ocular Pathology, the Retina. Modern System of Pathology*, Vol. 22B: p. 237-266, Nakayama Shoten, Tokyo, 1991.(SM)

Shyuichi Matsuyama

Matsuyama, Shyuichi (1933-1998) Japanese ophthalmologist and Professor Emeritus of Hirosaki University. He graduated from Hirosaki University in 1957 and studied Ophthalmology under Prof. K.→IRINODA; he received the degree, Doctor of Medical Sciences, after having finished the Postgraduate School and submitted his thesis to the University. He was promoted to Assistant Professor in 1972 and to Professor and Chairman of the Department of Ophthalmology of Hirosaki University. He served until retirement in 1998, and was entitled Professor Emeritus. His research interest was Retinal Microcirculation and he organized the *Research Society of Ocular Microcirculation* in 1984; he published many papers on spontaneously hypertensive rats, e.g. "*Caliber measurements of the retinal vessels in spontaneously hypertensive rats*" Jpn. J. Ophthalmol.21: 206,1977. The Government conferred on him The Posthumous Decoration of the Third Order of the Rising Sun. (SM)

Matsuzaki, Hiroshi (1924-) Japanese ophthalmologist, Professor Emeritus of Jikei Medical University. He graduated from Jikei Medical University in 1949, studied Ophthalmology at the University under Prof. OHASHI Kohei and received his Doctor of Medical Sciences in 1960 (thesis: *Studies of effects of glucagon on diabetes mellitus*). He was promoted Assistant Professor of the University in 1973 and then appointed the Professor and Chairman of the Department of Ophthalmology in 1982 and served in this position until retirement. He has served as Councillor (1975,1982-1991) to the Japanese Ophthalmological Society (JOS), as Executive Director (1975-) to the Japanese Society of Neuro-ophthalmology, Japanese Society of Strabismus and Amblyopia (1978-1990) and Japanese Society of Traffic Ophthalmology (1977-). He has worked extensively in the field of neuro-ophthalmology and published more than 250 original papers. Some examples are "Optic nerve damage in head trauma: clinical and experimental studies. Jpn. J. Ophthalmol. 26: 447, 1982" and "Structure of the optic nerve in the optic canal. J. Jpn. Ophthalmol. Soc. 89: 132, 1985 (Special Report to the 89th Congress of the JOS)". He received the JOS Award and delivered the Award Lecture at the 92nd Congress (Optic nerve damage - Experimental model and clinical pictures. J. Jpn. Ophthalmol. Soc. 92: 27,1988). He also received the Ishikawa Medal from the Japanese Society of Neuro-ophthalmology. He is an Honorary Member of the JOS and other Societies he has served as above. (SM)

Matteucci, Pellegrino (1909-1965) Italian ophthalmologist. Matteucci was director of the ophthalmic clinic of the Parma University. He obtained his medical degree at Bologna in 1932, specialised in ophthalmology in Turin where he stayed for many years, first under professor Guglianetti and later under professor Riccardo Gallenga. In 1948 he obtained the free lectureship of ophthalmology , and 1957 became the chair of ophthalmology at the University of Sassari where he remained until 1959. He was than invited to the directorship of the Ophthalmic Clinic of the Medical Faculty at Parma. He wrote more than 100 publications and was much interested in strabismology, chromatic senses, ocular biochemistry, influence of the vegetative nervous system on certain ocular functions and on glaucoma. Annales d´oculistique 1965,198:1221. JPW

Matton, Marie-Thérèse born **Van Leuven (1930-)** Belgian ophthalmologist. Matton was born in Mechelen. She obtained her M.D. degree in 1955 at the University of Ghent. She became assistant at the department of ophthalmology in 1955. She stayed from 1958 to 1961 in the United States for specialization in genetical laboratory techniques and in

clinical genetics. After her return to Europe she built progressively the department of human genetics. Her and her staff's principal activities are genetic diagnosis, counselling and research. Diagnosis relies on cytogenetic and clinical examination of the counsellee and the relatives performed in the Department. Biochemical analyses are done in collaboration with specialised laboratories. The counselling procedure is non dirigistic and provides besides complete information also psychological support during coping and decision making. Research includes fundamental and applied clinical topics and many are of ophthalmologic interest such as retinoblastoma, uveal melanoma, colour blindness, aniridia, congenital nystagmus, dyslexia, collagen disorders etc. (Verriest)

Mauchart, Burkard (or Burchard) David (1696-1751). German. A celebrated Württemberger ophthalmologist. Born at Marbach, Württemburg, April 19, 1696, he received an excellent all round education, then began to study medicine at Tübingen. Migrating in 1717 to Altdorf, he studied, still later, at Strassburg and Paris. In 1722 he settled in Tübingen, and soon was court physician to the Duke of Württemberg. Four years later he began to teach at the University: according to Gurlt “anatomy and surgery”; according to Hirschberg, "all the divisions of the healing art and still more." He seems to have been an excellent operator, and was certainly a clear and forceful writer. He never wrote a book, but his numerous ophthalmologic dissertations were very valuable. These were, in part, as follows: 1. *De Ophthalmoxusi Nov-Antiqua seu Woolhusiano-Hippocratica*, quam praeside Burc.David Mauchart P. P. Defendet Jo. Georg. Gmelin. 2. *Diss. Med. de Ectropio*, quam praeside Joan. Zellero M. D. and P.P.P. pro Doctorato Defendet Author Egidius Crato Keck, Heidenh., Tubingae die 17 Oct. anno 1733. (According to Hirschberg, the term, "Ectropion” was invented either by Mauchart or by Woolhouse. The ancient expression was, in fact, "phalangosis." "Entropion" was, of course, among the ancients, in very common use.) 3. *De Hypopyo*, Diss. Med. Chir., quam Praeside B. D. Mauchart P. P. Defendebat Phil. Frid." Gmelin Tubing., Tubingae. M. Martio a 1742. 4. *De Empyesi Oculi seu Pure in Secunda Oculi Camera* Diss. m. ch., quam praes. B. D. Mauchart Tuebatur G. Fr. Seiz, Schorndorfensis, Tub. 10. Nov. 10, 1749. 5. *Tobiae Leucomata*, Diss. Med. Dilucidata, quam praeside B. D. Mauchart Defendet C. Dav. Brecht, Theilfingens., Tubing. 24 Maji Anno 1743. 6. *Diss. M. Ch. de Setaceo Nuchae, Airicularum Ipsiusque Oculi*, quam praes. B. D. Mauchart Tuebatur Chr. D. Zeller, Tubingens., Tubing. 10 Dec. Anno 1742. 7. *Dissert. Corneae Oculi Tunicae*, Examen Anatomico-Physiologicum Sistens, Ferd. Godefr. Georgii, Tubingen, 24 Jun. 1743. 8. Diss. M. Ch. *de Pupillae Phthisi ac Synizesi s. Angustia p. N. et Concretione* quam fr. B. D. Mauchart, P. P. Defendet Christ. Frid. Fras. Kirello-Teccens., Tubing. 29 Dec. Anno 1745. *Dissertationes medicae selectae Tubingenses. Oculi humani affectus medico-chirurgice consideratos ... editae ... Christian Friedr. Reuss*. 3 vols. Tubingen 1783-1785.American Encyclopedia of Ophthalmology 10,p.7616-17. Albert

Maumenee A. Edward (1913-1998) American ophthalmologist. Edward Maumenee, the son of an ophthalmologist from Mobile, Alabama, said once he wanted to become the best ophthalmologist in the world, and many believe he achieved that goal. In addition to being a highly regarded cataract and corneal transplant surgeon, he also classified disorders of the macula, discovered an important immune response in the rejection of corneal tissue, and made pioneering contributions to the understanding and treatment of retinal malfunctions and glaucoma. Maumenee served as director of the Wilmer Eye Institute at Johns Hopkins Hospital from 1955 to 1979, and was director emeritus until his death last year. He was instrumental in focusing national attention on the problem of blindness, in the formation of a national eye banking system, and in the 1968 creation of the National Eye Institute at the National Institutes of Health.

Maunoir, Charles-Théophile (1770-1830) Swiss physician, younger brother of Jean-Pierre Maunoir, born in Geneva. He studied in Paris receiving his medical degree in 1804 with the thesis *Dissertation sur la Section de l´artère entre deux ligatures dans l'opération de l'anéurisme*

Maunoir, Jean Pierre (1768-1861) Swiss physician born in Geneva. Maunoir studied in Paris under Pierre Joseph Desault and in England; returning to his native city, he became professor of anatomy at the Académie Impériale and a famous cataract surgeon. He

enjoyed a long friendship and correspondence with Antonio Scarpa. In addition to works on general surgery, of which that on torsions of the arteries is the most significant, Maunoir wrote monographs and papers on cataract, the creation of an artificial pupil, retinoblastoma, and fungus hematodes: *Mémoires sur l'organisation de l'iris et l'opération de la pupille artificielle*. Paris and Genève 1812; *Mémoire sur les fongus médulaire et hématode*. Paris 1820 ; *Mémoires sur les amputations, l'hydrocèle du cou, et l'organisation de l'iris* Genève & Paris 1825 ; *Mémoire sur les causes de non-succès dans l'opération de la cataracte et des moyens d'y remédier*. Bordeaux 1842.

Maunoir, Théodore David Eugène (1806-1869) Swiss physician, nephew of J.P. Maunoir. He was born in Geneva, and received his M.D. in 1833 in Paris with a dissertation on cataract (*Essai sur quelques points de l'histoire de la cataracte* [also in English : *Essay on cataract* translated by H.I. Bowditich, M.D. 1837]) and practiced surgery in Geneva. He published several articles on general surgical topics.

Maurice David M. (1922-) American Physiologist of English origin. Born in London, England, he graduated from the University of Reading, U. K. in 1942 with a BSc in Physics. After World War II, he joined H Davson and WS →Duke-Elder at University College, London, and gained his PhD in Physiology of Eye in 1951 (thesis: *The permeability to sodium ions of the living rabbit's cornea*. J. Physiol. 112. 367, 1951). He moved to the Institute of Ophthalmology, London, from the time of its foundation and worked there until 1967. His main interest in research has been biophysics and physiology of the cornea; the paper " *The structure and transparency of the cornea*. J. Physiol. 136: 236, 1957" established interference theory of the corneal transparency on the basis of lattice structure of collagen in the corneal stroma. He moved to the Department of Ophthalmology, Stanford University, California, and worked there until 1993. He wrote over 200 research articles or book chapters. Research interests have been almost exclusively in vegetative physiology of the eye and largely concerned with the cornea. He developed the pump-leak hypothesis of corneal hydration control and interference theory of transparency but has also published on mechanics, nutrition, and wound healing of the cornea. Other interests include quantitative exploitation of studies with fluorescent tracers in all ocular tissues including demonstration of unidirectional transport of fluorescein across blood-retinal barrier (with J Cunha-Vaz). He delivered the Friedenwald Award Lecture in 1967 "*The Use of flurorescein in ophthalmological research.* Invest. Ophthalmol.6: 464, 1997" where he summarized his previous works on this subjects. Another major interest has been ocular pharmacokinetics (with S.→Mishima) and his theory and results are integrated in the article " *Ocular pharmacokinetics*" in *Pharmacology of the Eye*. ed. Sears, M.L., Springer Verlag, 1984. He has been the Founding Member of the International Society for Eye Research (ISER) and he received the von Sallmann Prize at the 12th Congress held in Yokohama, 1996. Currently, he is actively pursuing several projects, at the Institute of Ophthalmology, Columbia University. Further detail of his career in Eye Research and biographical information can be obtained from the article "*An oneiropenic account of an ophthalmological career*. Exp. Eye Res. (1998), 66, 147-154". (Institute of Ophthalmology College of Physicians and Surgeons of Columiba University, 635west, 165th Street, New York, NY 10032 U. S. A.; e-mail: dmm35@columbia.edu)(JPW)

Maurolycus, Franciscus (1494-1577). A celebrated churchman and mathematician who was born of a Greek father at Messina in 1494 and who died in 1577. He is remembered chiefly for his optical work, entitled *"Photismi de Lumine et Umbra"* (Venice, 1597 [An American translation was published by Macmillan in 1940]). In this book he overthrew the old Galenic doctrine that the essential organ of vision is the crystalline lens, and taught, instead, that the office of that body is merely the production of a distinct image in the deeper portions of the eye. With considerable elegance he declared that the crystalline humor of the eye is the convex lens of nature while the lope made of glass is the crystalline body of art. He also correctly explained for the first time shortsight and farsight, by postulating that, in the former abnormality, the ocular lens was too strongly curved, in the latter, however, too weakly. American Encyclopedia of Ophthalmology 10,p.7617.JPW

Mauthner, Ludwig Wilhelm (1840-1894) Austrian ophthalmologist of Vienna. Mauthner received his M.D. in 1861 at the University of Vienna, where he lectured on ophthalmology from 1864 to 1869. After some years at the University of Innsbruck, he returned to Vienna in 1877 as extraordinary professor to succeed, in 1894, Stellwag von Carion´s Chair. He died before enjoying this position. Mauthner was an authority on ophthalmoscopy, refraction, and motor anomalies of the eye.He became a renowned surgeon and is credited with the introduction of sclerotomy for the treatment of glaucoma. His main writings are: *Lehrbuch der Ophthalmoscopie*. Wien 1868; *Vorlesungen über die optischen Fehler des Auges* 2 vols. Wien 1872-1876; *Vortraege aus dem Gesammtgebiete der Augenheilkunde für Studirende und Aertze*. 2 vols. Wiesbaden 1881-1889 of which a part (Die sympathischen Augenleiden) was translated *The sympathetic diseases of the eye* New York 1881; *Gehirn und Auge*. Wiesbaden 1881; *Die Lehre vom Glaucom*. Wiesbaden 1882. American Encyclopedia of Ophthalmology 10,p.7617-18. Albert.JPW

Mawas, Jacques (1885-1976) French ophthalmologist. Born in Tanta, Egypt, he obtained his baccalaureat at the College St Louis there. He began his medical studies at the Faculty of Medicine St Joseph in Beirut. The Jesuit educators found him too brilliant, and sent him to the Faculty of Medicine of Lyon, where he received his MD in 1910. His thesis revealed the direction of his future activity: *Recherches sur l´anatomie et la physiologie de la région ciliaire de la retine. Sécrétion de l´humeur acqueuse . Origine des fibres de la zonule de Zinn*. Lyon 1910. (Research on the anatomy and physiology of the ciliary region of the retina. Secretion of aqueous humor. Origin of fibers of the zonule of Zinn.). He worked at the Pasteur Institute in Paris with Roux until the onset of war in 1914. As a combatant, he was gassed, then sent to southwest France for recovery. After the war he was nominated for a position in Bordeaux, near his chief Felix Lagrange, but had already settled in Paris, and did not want to move. Rather than following the usual academic path through competive examinations (concourses), he pursued laboratory research. His major work concerned histology of the retina and choroid and ocular and adnexal tumors. He became the chief of the laboratory of the Quinze-Vingts in Paris. In 1921 became director of research at the new laboratory of the Adolphe de Rothschild Ophthalmologic Foundation, where he had a very long career. He became chief of a service and scientific director of the Foundation. Baron Maurice Rothschild, nephew of the founder, responded to a request for information about the Foundation by replying humorously that he had never heard of the Rothschild Foundation, that perhaps the questioner was referring to the Mawas Foundation. Mawas patients included many well known individuals, such as Claude Monet and Leon Blum. During the occupation of France in World War II he was forced into hiding, but had the courage to go to Vichy to help Jeanne Torres, Leon Blum's fiance, join him in prison.He then rushed to Switzerland, where Adolphe Franceschetti sheltered him, Professor Nordman of Strasbourg, Professor Campos of Genoa, and other Jewish refugees. The French government named him head of the ophthalmologic laboratory of the Ecole Pratique des Hautes Etudes. In this position Mawas combined medical research with clinical practice. Mawas was a member of multiple scholarly societies in France and abroad and was President of the Ophthalmologic Society of Paris in 1952. He was honored by being named Commander of the Legion of Honor, received the Croix de Guerre 1914-1918, and was an Officer of Public Instruction. His publications include more than 250 articles and the well known book *Biomicroscopie de la chambre anterieure de l'iris et du corps ciliaire* (Paris 1928). Other monographs written by Mawas are : *Introduction à l´étude de la myopie et des chorio-rétinites myopiques* (Paris 1934) ; *Cancers de la rétine optique* (Paris 1963) *Tumeurs de la rétine et du nerf optique* in : *Traité d´Ophtalmologie* (Paris 1939) ; *Myopie* in *Traité d´Ophtalmologie* (Paris 1939) *Photographie et rétinographie* in *Traité d´Ophtalmologie* (Paris 1939). Arch Ophtal 1976; 36: 273-276. Ann d'Oculist 1976; 209: 325-337. Bull Soc Ophtal Fr 1987; 87: 35-36; Bull du Cancer 1976; 63: 259-268. Bull Soc Belge d'Ophtal 1976; 172: 611-613. James G. Ravin. JPW.

Maxwell, James Clerk (1831–1879) Scottish scientist born in Edinburgh, Scotland. Maxwell received private tuition for a certain time. Maxwell possessed a fantastic memory. In 1841 he started school at the Edinburgh Academy. At the age of 15 he sent his first paper to the Royal Society in Edinburgh. The paper on *The Description of Oval*

Curves described curves which could be constructed with drawing pins and thread in a similar manner to that of ellipses. Maxwell continued his education on entering the University of Edinburgh at the age of 16. During his time there he published a further two papers, finally leaving Edinburgh in 1850 for the University of Cambridge, where his remarkable talents were recognized. He graduated in 1854 and won the Smith's prize for writing an essay containing original research. Maxwell was then elected a fellow of Trinity College in 1855, in 1856 he accepted a post as professor of natural philosophy at the Marischal College in Aberdeen and in the same year he started work on his work in electricity and magnetism. In 1857, Maxwell wrote an essay demonstrating theoretically that the rings of Saturn must consist of many fragments of matter rather than being solid, which was later confirmed by the Voyager probes over 100 years later. In 1860 Maxwell moved to London, taking up post as professor of natural philosophy at Kings College London, after being made redundant due to the merger of Marischal and Kings College Aberdeen to Aberdeen University. In the same year he submitted papers to the Royal Society on colour and colour blindness, and demonstrated in a lecture that it was possible to produce colour photographs. Then in 1865 he resigned his post as professor at Kings college returning home to Glenair, though he frequently visited London in spring and maintained his position as an external examiner for the Mathematical exams (Tripos) at Cambridge. Maxwell continued his work on electricity and magnetism and around 1865 arrived at his electromagnetic theory of light. Maxwell viewed light as consisting of transverse waves of electric and magnetic force and had come to this conclusion by his explanation of Michael Faradays discovery of electromagnetic induction in mathematical terms. He had constructed a model and found that "displacement currents" were produced in dielectric material as a result of the induction. Maxwell then went on to discover that these displacement currents could be the basis for transverse waves. He calculated that the velocity of these waves to be that of the speed of light. Realising that there was no set limit on the wave length of these waves, he predicted the existance of other electromagnetic waves. His theory also suggested the ability to create electromagnetic waves artificially. Maxwell's theory was generally disregarded until Heinrich Hertz's discovery of radio waves in 1887. Finally in 1873 Maxwell published his *Treatise on Electricity and Magnetism* which contains his famous Maxwell equations. Maxwell also made contributions to other parts of physics most notably in his application of statistical probabilities to gases, producing the law of statistical distrubution of the mean velocities of molecules in a gas. This included the calculation of their mean-free path and of the coefficient of friction for gases. His ideas have also stimulated or helped research in other disciplines including Maxwell's demonstration in information technology and in Johannes Diederik van der Waals' theory of fluids. Besides a great number of papers on various subjects, mathematical, optical, dynamical, he published a text-book of the *Theory of Heat* and a little treatise on *Matter and Motion*. In 1871 Maxwell took the new position of Cavendish professor of experimental physics at Cambridge, which he headed, and supervised during construction of the new Cavendish laboratories. He later founded a scholarship in physics at Cambridge. His *Scientific Papers* were edited by W.D. Niven (8 vols., 1890) and his *Life* has been written by Campbell and Garnett (1882). (JPW)

Maxwell, Patrick W. (1856-1917) Scottish ophthalmologist and otologist who received his medical education at Edinburgh and Vienna and who practiced many years in Dublin. He was aurist to the Lord Lieutenant of Ireland and was examiner in ophthalmology in the Royal College of Surgeons, Ireland. He served as councellor to the Ophthalmological Society of the United Kingdom from 1900-1902 and as Vice-President from 1912-1915. He published papers upon symblepharon, squint, accommodation and the operation of capsulotomy.AJO 1:296.

May, Charles H. (1861-1943) American ophthalmologist. May had a brilliant career as a student, obtaining a gold medal at the college of Pharmacy in New York City in 1879. He graduated M.D. from the Columbia University College of Physicians and Surgeons in 1883. After hospitals appointments and some private practice experience he came to Europe in 1887 visiting Germany and spending six months with Ernst Fuchs and Dimmer in Vienna and returning to New York City with further stops in Paris and London. May held many appointments, including those of Mount Sinai Hospital and Bellevue Hospital

from 1914-1925. Besides public appointments he had a large private practice. May's ophthalmoscope is well known to collectors and his „*Manual of Diseases of the Eyes*"(1900) went through 18 editions. BJO 1944; 28:313-314.

Mayer, August Franz Joseph Karl, (1787-1865) German anatomist born in Schwäbisch Gmünd, Württemberg. Mayer received his M.D. in 1812 at Tübingen, and was professor of anatomy, pathologic anatomy, and physiology at Bern (1815-1819) and Bonn (1819-1856). Of Mayer's vast published titles, most are characteristic works of the Nature-Philosophy School of early nineteenth-century German medicine; of more value are his histologic investigations: *Anatomische Untersuchungen über das Auge der Cetaceen nebst Bemerkungen über das Auge des Menschen und der Thiere*. Bonn 1852.

Maynard, Frederick Pinsent (1864-1921). British ophthalmologist. Since his retirement from the Indian Medical Service about 1919, he lived at Audlem, practising as an ophthalmic surgeon in Crewe, and holding an appointment as oculist to the Cheshire County Council Schools. He was born at Preston, Lancs., and was educated at the local grammar school. He received his medical education at St. Bartholomew's Hospital, London, Paris, Bonn, and Würzburg. He entered the I.M.S. at the age of 23 from Netley, passing out third on the list. In India Maynard had a distinguished career. He was at first attached to the Allahabad Station Hospital, and from thence was transferred to cholera duty at Kohat. He was then given medical charge of the 27th Punjab Infantry at Bareilly, also of the 2/3 Gurkhas at Kaludanda. At a later period he was placed in medical charge at Dinapore, of the 13th Brigade of Infantry He was professor of ophthalmic surgery at the Medical College at Calcutta, and ophthalmic surgeon to the Medical College Hospital and surgical superintendent of the Mayo Hospital, Calcutta. Despite poor health, he found energy to write several books, as well as many medical publications. His best known book was "*A Manual of Ophthalmic Operations*" (1908) which was followed by a second edition in 1920. Shortly before he died , he visited →Barraquer in Barcelona in order to witness the removal of cataract by his operation of suction (phaco-erisis), and provided himself with all the instruments necessary for its performance which he did not live to accomplish. BJO 1921,5:528; AJO 5:327-328

Mayne, Robert Crawford (1811-1864).Irish Dublin physician, who paid considerable attention to ophthalmology. Born at Allenstown, County Meath, he became in 1836 a Licentiate, in 1844 a Fellow, of the Royal College of Surgeons of Ireland. In the last named year he began to teach anatomy in the Richmond Medical School. From 1863 to 1864 he was professor of internal medicine in the same institution. He wrote the article entitled "*The Optic Nerve* " in Todd's *Cyclopedia*, and died of typhus. American Encyclopedia of Ophthalmology 10,p.7617-18

Mayor, François Isaac (1779-1855) Swiss surgeon. Mayor was born at Schloss Bières, Switzerland, and worked as a military surgeon before earning his medical degree at Montpellier in 1808 with the dissertaton *Essai sur quelques maladies congéniales des yeux* . Settling in Geneva, he became a leading physician and municipal official, helped found the city's natural history museum, and gave public lectures on anatomy and forensic medicine. Mayor's best-known work is *Bruits du coeur du Foetus* (1818), a paper in which he makes pioneering observations about obstetric auscultation.

Mayrhofer, Karl (1837-1882). Austrian gynecologist, who devoted considerable attention to diseases of the eye. Born at Steyr, he received the degree of doctor in medicine at Vienna in 1860. He was for a time private assistant to →Arlt. He became, however, privatdocent in gynecology (having studied the subject with Carl von Braun), and in 1875 extraordinarius. Then he moved to Russia. In Tiflis he was very successful; moving, however, to St. Petersburg, he met with many reversals of fortune. In 1881 he again moved, to Franzensbad, where he died. Mayrhofer was a prolific writer on gynecological subjects. His only ophthalmological writing, however, was "*Ueber die Wirkung des Gesteigerten Intraoculären Druckes*" *(Zeitschr. der k. k. Gesellsch. d. Aerzte*, 1860).American Encyclopedia of Ophthalmology 10,p.7619

McArevey Joseph Bertrand (1897-1951) Irish ophthalmologist. He became a member of the Honorary Staff of the Royal Victoria Eye and Ear Hospital, Dublin, in 1924, and gave early promise of what he was to become, an operator of outstanding ability. His absorbing interest in operative work is evidenced by his papers and reports of cases given at the meetings of the Irish Ophthalmological Society, and duly published in the Transactions. In 1944, the Council of the Royal College of Surgeons Ireland invited him to deliver the Montgomery Lecture. His paper *The Social and Medical Problems of Phlyctenular Disease in Dublin* ", provided a clear-cut analysis of relevant facts, and afforded him the opportunity to focus attention on the low standard of living amongst the poor of Dublin. It may well have been this opportunity which determined his choice of subject. BJO 1951,35:444

McCartney, Alison (1951-1996). British ophthalmologist & pathologist. McCartney studied medicine at Girton, Cambridge and St. Bartholomew´s Hospital.London, qualifying in 1975. Soon after she entered pathology at St.Stephen and the Charing Cross Hospitals in London, obtaining MRC Path in 1981. She was appointed senior lecturer in 1982 and in 1985 was appointed to the Institute of Ophthalmology, London and Moorfield´s Hospital. McCartney was subsequently elected FRCOphth, FrcPath and was awarded her MD. Her major interests were corneal disease and tumours of the eye and adnexa. In 1993, she was appointed to the United Medical and Dental Schools of Guy´s and St.Thomas´ as Iris Fund senior lecturer.She was a prolific author of scientific papers and successful organiser of international congresses of ophthalmic pathology. Spurred by her own illness she also made a film on breast cancer.BJO 1996, 80, p.679.

McClellan, George (1796-1847) American surgeon, founder of Jefferson Medical College in Philadelphia. McClellan was born in Woodstock, Connecticut, receiving his M.D. in 1819 at the University of Pennsylvania. He settled in Philadelphia as general and ophthalmic surgeon. In 1821, he founded the Institution for the Diseases of the Eye and Ear; four years later he and a few colleagues established the Jefferson Medical College, where McClellan was professor of surgery from 1826 to 1838. McClellan wrote: *A Report of the trial of an action for libel in which Dr. George McClellan was plaintiff, and Dr. Francis S. Beattie was defendent* Philadelphia 1829.Albert

McClure William Wallace (1842-1923) American Ophthalmologist , who was one of the pioneers in this field of medicine. Born in Philadelphia his fourscore years brought him a life of rich experience and well trained service to humanity. His preliminary education was acquired in the school at Andalusia and his medical training was received at the Jefferson Medical College, where he was graduated in 1864. He was appointed interne to the Philadelphia General Hospital, then called "Blockley", where he served for one year. About the close of the Civil War he was attached to the U. S. Hospital, "*The Satterlee*," which was located in West Philadelphia. He began to specialize in ophthalmology on April 2, 1866 when he was elected a Resident Physician to the Will´s Eye Hospital for the term of one year serving under a staff of distinguished surgeons composed George Morton, A. Douglas Hall, Levis and D. Hayes Agnew. During the year following this service he went abroad to visit the European clinics where he spent some time under the Master Ophthalmologists of that day. On his return to Philadelphia he was elected, January 1, 1868, an Assistant Surgeon to the Wills Eye Hospital on the service of Dr. Harlan, and in 1872 he was elected Ophthalmic Surgeon to the Presbyterian Hospital, which he served with fidelity and distinction until his retirement in 1886, when he was made Consulting Ophthalmic Surgeon. When the Surgical Staff of the Wills Eye Hospital was reorganized in January, 1872, Dr. McClure was elected an Attending Surgeon along with Drs. Dyer, Goodman, Keyser, Norris and Thomson. Drs.Harlan and Morton were the only "hold-overs" from the old staff; while Drs. Hall and Levis, who had tendered their resignations, were re-elected in July of that year, after a six months ' "moratorium." In 1873 Dr. Dyer resigned and Dr. Strawbridge was elected to fill his place. In 1874 Drs. Morton and Levis resigned but their positions were not filled. In 1877 Dr. Thomson resigned and Dr. Schell was awarded the vacancy. This staff of eight surgeons continued intact until the retirement of Dr. Strawbridgre and the death of Dr. Schell in 1890. McClure's early ambition stimulated him to inaugurate a course of lectures on the eye at the Wills Eye Hospital, that became very popular with the medical profession of

Philadelphia, who crowded the front clinic room of the old Hospital to listen to them. He discussed the human eye in its minutest details and also presented studies in comparative anatomy, especially portraying the fundus appearance of birds and fishes through stereoscopic slides. Among other things he exhibited a stereoscopic diagram of his new plastic operation for Ptosis which clearly antedates (1867) the one known as the Hunt-Tansley operation, although the details are slightly different. AJO 1924, 7:320-323

McCoy, George Washington (1871-1932) American ophthalmologist. McCoy was born on a farm at Bellebrook, Ohio. He received his bachelor's and master's degrees from Ohio Wesleyan University and was a member of Phi Beta Kappa fraternity. He was graduated with honors from Miami Medical College and was valedictorian of his class. Following his medical schooling, he engaged in hospital work for a number of years in Cincinnati, New York City, Vienna, London, and Glasgow. His splendid education was financed entirely by his own efforts. Approximately 1908, he went to Los Angeles as an associate of Dr. A. C. Rogers and his brother, Dr. Thomas Jefferson McCoy. Dr. McCoy took up their work, adding it to his own growing practice and became one of the foremost ophthalmologists and otolaryngologists on the Pacific Coast. Behind the unassuming good nature and instinctive geniality of McCoy, there lay a great reserve of ability. He was nationally known for his exceptional skill in mastoid surgery. His carefully prepared contributions to the medical literature were received with respect and approval. McCoy held membership in the following organizations: American Medical Association, American College of Surgeons, National Board of Medical Examiners, Pacific Coast Oto-ophthalmological Society, Southern California Medical Association, Clinical and Pathological Society of Los Angeles, Symposium Society of Los Angeles, Los Angeles Ophthalmological Society and Los Angeles Society of Ophthalmology and Otolaryngology; charter member of the Research Study Club of the Eye and Ear Section of the Los Angeles County Medical Association. He held appointments as Chief of Attending Staff, Eye Service, Los Angeles County General Hospital, and was a member of the Senior Staff and Executive Medical Board of the California Lutheran Hospital. He was a member of the Medical Faculty of the University of Southern California and in the past had been Associate Professor of Ophthalmology in the Los Angeles School of Physicians and Surgeons. AJO 1932,15:654

McDonald P. Robb (1909-1985) American ophthalmologist. He was a Markle Fellow at the Johnson Foundation, working with Haldan Keffer Hartline, who received the Nobel Prize in 1967 for his work with vision. Keffer Hartline worked from midnight until 8 a.m. because his work went best when minimal electric current was being used elsewhere in the hospital. This meant that Robb also worked those hours, but Robb did not have the luxury of relaxing during the day-he had many other duties of an ophthalmologic nature. This was typical of a life spent in constant activity. Robb was born in Kong Moon, China, to Presbyterian medical missionary parents. He was educated there, in Canada, and in the United States. He earned his baccalaureate and doctoral degrees at McGill University in Montreal, and served his residency in ophthalmology at Royal Victoria Hospital and at the Wills Eye Hospital in Philadelphia.When the United States entered World War II, Robb joined the Army Air Corps where he helped establish visual standards for aircrews. He had been assigned to the Air Surgeon General's office and was discharged from the service with the rank of Lieutenant Colonel and was awarded the Legion of Merit. McDonald returned to his staff post at Wills Eye Hospital on James→Shipman's service. Later he became one of the chief surgeons of the hospital and, in 1960, he was extremely helpful as Director of the Wills Eye Hospital. He founded the Retinal Service and remained as its Director until 1971. McDonald joined the medical staff at Lankenau Hospital in 1946; two years later he was named chief of the Department of Ophthalmology, a post he held until he retired in 1984. He became chief of the Medical Staff at Lankenau Hospital in 1964 and in 1979 a section of the new Pew Wing was named in his honor. For many years he was a consultant to the Surgeon General of the Air Force and to the United States Naval Hospital in Philadelphia. He was Clinical Professor of Ophthalmology at the University of Pennsylvania Graduate School of Medicine and also at Jefferson Medical College. He was a member of many professional organizations, including the American College of Surgeons, the American Ophthalmological Society, and the American Academy of

Ophthalmology and Otolaryngology. Robb served on the Editorial Board of *the American Journal of Ophthalmology* from 1952 to 1965. He was also a member of the St. Andrews Society of Philadelphia, the Philadelphia Country Club, and the Marion Cricket Club. Robb had a distinguished career and earned a lasting place in the history of ophthalmology. He spent long and diligent hours at his work and managed to maintain a high level of achievement.AJO 1985,100:749

McDougall, William (? – 1937) British psychologist. He is best known for his epoch making book on the Instincts contained in his " Introduction to Social Psychology" and for his many works on social and abnormal psychology advocating his hormic theory. But it may be doubted whether these works represented his greatest claims to honour as a scientist. These were probably his highly original experimental studies on colour vision (published and buried in " Mind," a journal of limited circulation), on after images, and above all on recurrent vision (published in the British Journal of Psychology). All this work was done during his tenure of posts at University College, London, and at Oxford, before his migration to the United States, as the successor of Professor Münsterberg at Harvard. BJO 23,78,1938

McGregor, Ian Stewart (1904-1947) British ophthalmologist. He graduated M.B.Ch.B. at the University of Glasgow in 1927 and thereafter filled various resident appointments. His attainments were all the more remarkable in that his interests in ophthalmology began only in 1938, previous to which he was in general practice on the Island of Bute. This experience in general medicine, however, so broadened his outlook and sharpened his judgment that be learned quickly and fastidiously from his colleagues and within a brief period was appointed Clinical Assistant at the Glasgow Eye Infirmary and Assistant Ophthalmic Surgeon to the Ophthalmic Institution of the Glasgow Royal Infirmary and obtained the Diploma of Ophthalmic Medicine and Surgery granted by the Royal Colleges in England. At the outbreak of war he was mobilised as a squadron leader in the R.A.F.V.R. where be served for two years. His release was requested in 1941 to fill a vacancy as Visiting Surgeon to the Ophthalmic Institution. He also acted as Senior Assistant to the University Department of Ophthalmology. Despite the great demands of hospital practice in the war years he became a Fellow of the Royal Faculty of Physicians and Surgeons and of the Royal College of Surgeons in Edinburgh. He graduated M.D. in 1943, the subject of his thesis being the "*Effect upon the eyes of methyl alcohol poisoning*" Self critical he published only after his precise staking of the known boundaries of ophthalmology. His publications included the following important papers: "*Orbital cellulitis from gas producing organisms*.." (*Brit.Med.Journal*, 1, 292-293, 1942.); "*Reticulin content and prognosis in malignant melanoma of uvea"*. (*Arch.ophthal.*, 30, 291-297, 1943) [with Hill, J.] ; "*Study of histopathological changes in retina and late changes in visual field in acute methyl alcohol poisoning*". BJO 27, 523-543, 1943; "*Quinine blindness*." *Lancet,* 2, 566-567, 1944 (with A.Loewenstein); "*Bilateral partial ectasia of nerve head with peripapillary ectasia*" BJO 28, 618-622, 1944 ; *"Macular coloboma with bilateral grouped pigmentation of retina"*. *BJO* 29, 132-136, 1945.; *"Segmental movement of pupil"*. *Brit. Med.J.* 1, 629-630,1945. "*Cyclic oculomotor-palsy"*. *J. Neurol. Neurosurg. and Psychiat.*, 8, 22-23, 1945. BJO 1947,31:318-319

McHardy, Malcolm Macdonald (1852-1913). British ophthalmologist, inventor of the MacHardy's perimeter. Born at Springfield, he studied at St. George's Hospital, London, and became an M. R. C. S. in 1873. Four years later he was made an F. R. C. S., Edinburgh. Having held for years a number of subordinate positions in various hospitals, he finally became ophthalmic surgeon and professor of ophthalmology at the King's College Hospital. In 1909 he retired from teaching and practice alike, and died at Dumfries, Scotland. He was known in connection with the removal of foreign bodies with the help of the magnet and the artificial maturation of immature senile cataract. MacHardy edited the fourth edition of →Wells on *Diseases of the Eye*, adding to the book an ophthalmoscopic atlas of his own. He also wrote (in addition to works of a general character) : *Case of Double Black Cataract* (Trans. Oph. Soc.), *Electro-Magnet for Removal of Iron and Steel from Within the Eye* (Clin.Soc.Trans., Brit.Med.Jour., 1881*)* and *A New Self-Registering Perimeter*. American Encyclopedia of Ophthalmology 10,p.7619; The Ophthalmoscope, 1913, p.195-196.

McIntire, Charles (1847-1920) American ophthalmologist, long secretary of the American Academy of Medicine. He received his degree of A.B. at Lafayette College in 1868 and that of A.M. in 1871. From 1868 to 1872 he was assistant in Chemistry in his Alma Mater and adjunct professor from 1872 to 1874. He received his medical degree at the University of Pennsylvania in 1873. In 1882 he was appointed lecturer on hygiene at Lafayette College and from 1884 to 1888 was medical director of physical training at the same institution. For a time McIntire was medical inspector of the Pennsylvania State Board of Health. He was a member of countless medical societies as well as a member of the American Institute of Mining Engineers. McIntire was a prolific contributor to chemical and medical journals, editor of the Lehigh Valley Medical Journal and of the Bulletin of the American Academy of Medicine.AJO 3:309-311

McKee, Samuel Hanford (1875-1942) Canadian ophthalmologist of Montreal, educated at the University of New Brunswick and McGill University. He took his B.A. in 1896 winning the Douglas Gold Medal and qualified M.D., C.M. at McGill in 1900. After post graduate study at Freiburg he set up in Montreal as an ophthalmologist. In 1928 he was appointed Clinical Professor of Ophthalmology at McGill and in 1931 Director of the Ophthalmological Department at the Montreal General Hospital. McKee was Chairman of the Medical Board of the Hospital in 1938 and had been secretary of the Montreal Medico Chirurgical Society for sixteen years, except the years of the last great war ; and was President of the Society in 1925. In 1932 he was President of the American Academy of Ophthalmology and Otolaryngology. His research work on conjunctivitis is well known. (BJO, 25, 1943)

McKendrick, John Gray (1841-1926) Scottish physiologist, born in Aberdeen. McKendrick received his M.D. there in 1864, and from 1876 to 1906 was professor of physiology at the University of Glasgow; he continued to live in Glasgow for the twenty years following his retirement. McKendrick investigated the physiology of the nerves and muscles, publishing several important treatises. He wrote a biography of Helmholtz: *Hermann Ludwig Ferdinand von Helmholtz* London 1899.

McKeown, David (1851-1907). English ophthalmologist and otologist, brother of the much more celebrated W. W. McKeown. He practised in Manchester. was surgeon to the Manchester Eye and Ear Hospital, and died in 1907.American Encyclopedia of Ophthalmology 10,p.7620

McKeown, William Alexander (1844-1904) Irish ophthalmologist born in Bellyclare, county Antrim, Ireland. McKeown received his M.D. at Belfast in 1869; after ophthalmologic studies in Dublin, Paris, and London, he settled in Belfast as surgeon to the Ulster Eye, Ear, and Throat Hospital and as lecturer on ophthalmology and otology at Queen's College. McKeown, the first to remove a foreign body from the interior of the eye by means of a magnet, was also renowned as a cataract surgeon. He wrote: *A treatise on "unripe" cataract* London 1898. American Encyclopedia of Ophthalmology 10,p.7620.Albert

McLean, John Milton (1909-1968) American Professor of Surgery at the Cornell University Medical College and Attending Surgeon in Ophthalmology at the New York Hospital, son of Dr. William McLean, professor of ophthalmology at New York Medical College. Born and raised in New York City, John McLean attended Collegiate School, Stevens Institute, and Cornell Medical School, graduating from the last in 1934. After completing his eye training at the Wilmer Institute in 1939, he joined its attending staff but in 1941 was called to Cornell to succeed Bernard→Samuels as head of the Eye Department, a post he distinguished until his death. His career was exceptionally brilliant, encompassing research, writing, teaching, and administration. He was author and co-author of 110 scientific papers. He wrote two textbooks and contributed to five others. An analysis of the papers of which he was sole or principal author shows the wide range of his interests and knowledge, extending from ACTH to zonulolysis, and encompassing pathology, clinical glaucoma, neuro-ophthalmology, general and specific therapies, and the gamut of surgery: cornea, strabismus, glaucoma, plastics, cataracts, trauma, retinal detachments, cryosurgery, and complications. His corneoscleral suture, devised when he

was a house officer, has revolutionized the section and made cataract surgery safer. He developed two new surgical technics for strengthening the superior and inferior oblique muscles. He was a leading exponent of tonometer standardization and served on a committee for that purpose. He conceived of and established the first corneal eye bank in existence. Originally at the New York Hospital, it was later moved to its present location at the Manhattan Eye Ear and Throat Hospital. He evolved a new gonioscope. He pioneered in the clinical work in ACTH and steroids, one of the first papers on their eye application comming from his institution. He was involved in research on cryotherapy and its various clinical applications. In addition to his academic and scholastic accomplishments, he gave freely of himself in administrative chores and tasks, the most important being his services as a member of the American Board of Ophthalmology, an officer and Council member of the American Academy of Ophthalmology and Otolaryngology, President of the Pan-American Association of Ophthalmology, Chairman of the Section on Ophthalmology of the American Medical Association, Trustee of the American Association of University Professors of Ophthalmology, President and a founder of the Verhoeff Society, Vice President of the National Society to Prevent Blindness, Board Director for the National Council to Prevent Blindness, and President of the New York Ophthalmological Society. His regular memberships in eye organizations numbered 20, and there were an additional 10 honorary memberships, seven of them foreign. He served as consultant at seven hospitals. His academic honors mirror the recognition of his talents and generosity. He delivered nine Memorial Lectures: the Bedell, Jackson, Smith, Schoenberg, Gifford, Snell, de Schweinitz, McPherson and May. He was awarded an honorary Doctor of Engineering by Stevens Institute. Two recent awards were the Gold Medal of the National Society for the Prevention of Blindness, presented at the recent meeting of the Pan-American Association of Ophthalmology in Argentina, and the naming of the travelling professorships established by this same Association as the John McLean Exchange Program for the Americas. It is appropriate to announce at this time the establishment of the John M. McLean Memorial Lecture of the Section on Ophthalmology of the New York Academy of Medicine. The Cornell Eye Residents Alumni Association is grateful to the Academy for the privilege of instituting this tribute. AJO 1968,66:128-134

McMeel, J. Wallace (1928-) American ophthalmologist, born in Iowa.McMeel received his MD degree from George Washington University, Washington, D.C., in 1953, followed by an internship and residency in internal medicine at George Washington University Hospital, Washington, D. C. He continued his studies with a residency in ophthalmology (1957-1960) at the Wilmer Institute of the Johns Hopkins Hospital, Baltimore and a vitreoretinal fellowship (1960-61) at the Schepens Eye Research Institute (SERI) and Massachusetts Eye and Ear Infirmary, Boston. He was certified 1962. Dr. McMeel is Clinical Senior Scientist, SERI, and Associate Clinical Professor of Ophthalmology, Harvard Medical School; and Surgeon in Ophthalmology at the Massachusetts Eye and Ear Infirmary. Dr. McMeel is also Associate Director of clinical Research at SERI. He has been the Principal Investigator for the Diabetic Retinopathy Study and Diabetic Vitrectomy Study sponsored by the National Eye Institute for the NIH. Dr. McMeel received the 1997 Distinguished Alumni Achievement Award from George Washington University School of Medicine. E-Mail: jwm@schepens.com

McNabb, Harry Horsmant (1874-1948) British ophthalmologist. McNabb was born and received his early education in Bolton, later passing on to the University of Manchester, where he qualified M.B., Ch.B. in 1898, taking the M.D. four years later. After a short period in general practice, he was appointed a resident at the Manchester Royal Eye Hospital and subsequently Assistant Honorary Surgeon, full Surgeon, Consulting Surgeon and Vice-President, his connection with the Hospital covering a period of 49 years. During most of this time he conducted an extensive private practice, and his services were much in demand as a medico-legal expert witness. He was an active member (and ex-President) of the North of England Ophthalmological Society and an enthusiast at the Oxford Ophthalmological Congress, which he attended regularly. BJO 1948, 33:587

McPherson Jr, Samuel D. (1919-1998) American ophthalmologist, pioneer of microsurgery and a leader in eye care and education in North Carolina. His contributions and reputation were recognized internationally. McPherson followed in the footsteps of his

father. After obtaining his MD degree and completing his residency at Johns Hopkins, he joined his father's practice in Durham, NC, eventually becoming chair of ophthalmology and chief of staff at McPherson Hospital, the first institution in North Carolina to perform corneal transplantation and one of the first to provide residency training programs in microsurgery. In keeping with his father's wishes, the name of McPherson Hospital was changed to the North Carolina Eye and Ear Hospital when Sam retired. McPherson was also a pioneer in establishing residency training in ophthalmology at the University of North Carolina, where he served as head of the Division of Ophthalmology in the Department of Surgery and led the division into its status as a freestanding department in the early 1960s. He was also a clinical professor of ophthalmology at the Duke University Eye Center. McPherson published more than 150 articles in peer-reviewed journals; these articles spanned the gamut of ophthalmology but focused primarily on his interest in microsurgery for cataracts and glaucoma. McPherson was also a leader in several professional organizations. He served as president of the American Ophthalmological Society and first vice president of the American Academy of Ophthalmology. He chaired the Glaucoma Committee of the National Society to Prevent Blindness, which presented its Dunningham Award to him in 1987, and founded the North Carolina Society to Prevent Blindness. Arch Ophthal 117,1670,1999

McPherson, Hector James (1916-1984): Scottish ophthalmologist, Founder Chairman of the Ophthalmological Society of Malaysia. He graduated from Edinburgh University in 1939, did his postgraduate studies at Moorfields Eye Hospital, London and received the Diploma of Ophthalmology in 1951. In November 1946, he joined the Malaysian Medical Service and was posted in Seremban. Then he served in Penang, Malacca, Kuala Pilah and Seremban in 1947. He worked in Johore Bharu from 1952 to 1954 where he published *Hypopyon corneal ulcer in Malaya*. Med. J. Malaya, 8: No. 1954. From December 1955 to January 1956, he served in Kelantan, and then from February 1956 to March 1965 in Kuala Lumpur. He founded the Ophthalmological Society of Malysian Medical Association in 1964, and served as the Chairman from November 1964 to March 1965. In 1965, he was awarded the Order of the British Empire. He returned to his home Edinburgh and worked at the Eye Pavilion of the Royal Infirmary and he retired in 1981. (SM)

Mead, Richard (1673-1754). English physician of moderate importance in ophthalmology. Born at Stepney, near London, he studied at first in Leyden, then in Padua, at the latter university receiving his degree in 1696. The following year he returned to London, where he began to practise general medicine. He became physician to the Prince of Wales, and also to St. Thomas's Hospital. He grew very wealthy, and became a patron of the fine arts. He wrote *"A Mechanical Account of Poisons"* (London, 1702, and numerous later eds., with many translations), which became a classic in the world of legal medicine. He also published many other works, of which we need to mention only *"Monita et Precepta Medica"* (London, 1751; numerous later eds. and many translations). This work, which, for many years, enjoyed an amazing vogue in many lands, devoted its eleventh chapter to diseases of the eye. The chapter was much read and was universally regarded as a high authority on ophthalmology, but it contained no original matter or any exceptionally clarifying remarks or observations. American Encyclopedia of Ophthalmology 10,p.7620

Medow, Norman B. (1938-) American ophthalmologist Director of Pediatric Ophthalmology at Manhattan Eye, Ear & Throat Hospital in New York City. Dr. Medow did his primary schooling in Brooklyn New York and received a Bachelor of Arts Degree from Lycoming College, Williamsport, Pennsylvania in 1960. In 1966 he received his M.D. Degree from the State University of New York, Downstate Medical Center. From 1967-1969 Dr. Medow served in the United States Navy Medical Corps and was discharged in 1967 as a Lieutenant Commander in the Medical Corps after serving one year in Vietnam. From 1969-1972 Dr. Medow was a resident in ophthalmology at Manhattan Eye, Ear & Throat Hospital and from 1972-1973 he did a Fellowship in cataract surgery with Dr. Charles Kelman. Since completing his Fellowship with Dr. Kelman, Dr. Medow has been both in academic and private practice ever since. Dr. Medow has written in excess of one hundred articles on subjects such as glaucoma in the

pediatric age group, corneal transplants in children and cataract surgery in the pediatric age group. Medow is on the editorial board of: *The Lighthouse National Center For Vision and Child Development, Envision*(1995 – Present), *The Lighthouse Inc, Medical Advisory Board* (1996 – Present), *Ophthalmology Times*, Medical Board Member Columnist - *Ophthalmic Heritage* (1996 – Present), *Journal of Pediatric Ophthalmology and Strabismus* (1997 – Present). He is reviewer of *American Journal of Ophthalmology* (since 1994) *American Journal for Pediatric Ophthalmology and Strabismus* (since 1995) *Archives of Ophthalmology* (since 1997) and *Binocular Vision and Strabismus Quarterly* (since 1997). Medow was, in 1977, Visiting Professor, University of Guadalajara, Guadalajara, Mexico; in 1997 *Irving H. Leopold Lecturer*: Wills Eye Hospital Alumni Association, *Great Moments in Ophthalmic History* and in 1998 gave the *Koplowitz Lecture*: *Cataract Surgery: 2500 Years and Counting*: The 36th Annual Alumni Conference Ophthalmology Symposium, Georgetown University. Medow published also: *Latest Advances in Ophthalmic Surgery*, in: Faye and Hood, C: *Low Vision*, Chapter VIII, Pages 71-80 Springfield, Illinois, Charles C. Thomas 1975; *Management of Corneal Diseases in the Low Vision Patient*, in: *Clinical Low Vision*; Faye, E. Boston, Mass. Chapter 21, Pages 263-270 Little Brown & Co., 1976; with Cooper, J. *Intermittent Exotropia; Basic and Divergence Excess Type*, Supplement vol. 8 #3 *Binocular Vision and Eye Muscle Surgery Quarterly* 1993; Sweeney, Tara; Medow, N.B.; Richards, Rene: *Pediatric Ophthalmology and Strabismus*, Chapter 12, Mandava, Suresh; Sweeney, Tara; Guyer, David, *The Manhattan Eye, Ear & Throat Hospital Pocket Color Atlas of Ophthalmology* Thieme, Medical Publishers 1999. Medow, N.B.in: Mannis, M. *Johann Friedrich Dieffenbach, Corneal Transplantation, A History in Profiles*, by Mannis, M; Mannis A., Chapter 5, pgs 76-85: J.P. Wayenborgh, Oostende, Belgium 1999. McLeod, M., Wisnicki, J., Medow, N.B.: Vision Impairment in the Pediatric Population, Vision Impairment and Vision Rehabilitation, Volume I, pages 19-33, Oxford Press 2000. *In Preparation*: Medow, N.B.: *Pediatric Ophthalmology*, Chapman and Hall and Medow, N.B.: *History of Ophthalmology in America.* Dr. Medow has one of the twenty-five pediatric ophthalmology fellowship programs in the United States and has been training pediatric ophthalmology fellows since 1980. Dr. Medow is a Professor of Ophthalmology at the Weill College of Medicine in New York City. Dr. Medow lectures frequently in the United States as well as throughout the World. He can be reached at Norman B. Medow, M.D., 225 East 64th Street, New York, NY 10021, USA telephone number: 212-644-5100, fax: 212-644-2520, E-mail: NBMEDOWMD@aol.com

Meekeren, Job Janszoon van (1611-1666). Called by the anatomist Tulp "*chirurgus industrius*" and by →Haller "*celebris et candidus chirurgus*." Born at Amsterdam, he studied with Tulp, and practised mostly in his native city. He held a large number of official positions, and was widely known as a dexterous operator, especially on the eye. He invented a conical needle for the removal of hypopion.Meekeren was, according to Garrison & Morton, the first to record a bone graft. His only writing appeared posthumously under the title *"Heel,-en Geneeskonstiqe Aanmerkingen*," (Amsterdam, 1668; The Hague, 1673; Germ.trans., Nürnberg, 1675; Lat. trans., Amsterdam, 1682).American Encyclopedia of Ophthalmology 10,p.7625-7626; GM 5735

Meerdervoort, J.L.C. van see **Pompe van Meerdervoort**

Meesmann, Alois (1888-1969) German ophthalmologist, professor of ophthalmology in Kiel. Meesmann was born in Bochum-Riemke (Ruhr). He received his Dr.med. in Berlin in 1914 and participated in the first world war until 1918. He received his approbation from Berlin University with the thesis: "*Über rhinogene Sehrvervenleiden* ". During his time in Berlin (1919-1935) he became assistant professor under Greeff (1919-1927), 1923 lecturer (habil. Thema was Physik.-Chem. *Untersuchungen des intraokularen Flüssigkeitswechsel*), he became ophthalmologist in 1924, first physician at the Charité in 1927, in 1928 professor and leader of the Charité Ophthalmic Clinic after Greeff´s retirement. In 1935 he became Professor and Chairman of the Kiel University Ophthalmic Clinic. Meesmann became Professor Emeritus of the Kiel University in 1959. The construction by Alvar Gullstrand of the Slit Lamp (for which Gullstrand received the Nobel prize in 1911) was a corner stone in Meesmann´s life. He spent many years of research into the pathology of the lens (in 1922,1928 and 1932). In 1932, he investigated

the genesis of ultra-red-cataract. Meesmann authored *Hypocalcämie und Linse* Stuttgat 1938 (in Beihefte, Bücherei des Augenarztes Nr.1 , Klin Mbl. F. Augenheilkunde);*Die Mikroskopie des lebenden Auges an der Gullstrtandschen Spaltlampe* Berlin 1927. During his time in Berlin he altered and improved countless ophthalmic instruments: the slit-lamp-microscope, the perimeter, and instruments used for retina detachment operations. He also made important improvements in the ophthalmoscope. Meesmann was also in charge of the rebuilding of the eye clinic of Kiel University , that had been severely damadged during the second war. JPW

Meibom, Heinrich (1638-1700) German physician. Meibom was born in Lübeck, Germany and studied medicine at Helmstadt, where he became professor of medicine in 1664, and later professor of history and literature. He did not discover the sebaceous glands that bear his name, but did provide the first exact description of them. Meibom's writings are numerous and wide-ranging in subject. The most important for ophthalmology is: *De vasis palpebrarum novis epistola* Helmstadt 1666. American Encyclopedia of Ophthalmology 10,p.7627.Albert

Meighan, Stuart Spence (? – 1954) Scottish ophthalmologist. Stuart Spence M. was the son of Dr. →T. Spence Meighan, Surgeon to the Glasgow Eye Infirmary, 1875-1909. He was educated at the Glasgow High School, and at Glasgow University, where he graduated in Science and in Medicine (with Honours) in 1912. After residentships with Sir William McEwan and Professor Ralph Stockman, he joined the staff of the Glasgow Eye Infirmary as a house surgeon in 1914, thereafter proceeding to France to join the Highland Field Ambulance under Col. Rorie in the 51st (Highland) Division. With this Unit he served until he was taken prisoner in March, 1918. His experience in one of the worst of the prisoner-of-war camps was to have a lasting effect upon his general health, and was to handicap him to some extent throughout his life. For his services in France he was twice mentioned in dispatches. On demobilisation, he returned to the staff of the Glasgow Eye Infirmary, and in 1920 became a Fellow of the Royal Faculty of Physicians and Surgeons of Glasgow qua Ophthalmic Surgeon. He was later appointed ophthalmic surgeon to Stobhill Hospital, then a Poor Law Institution, and it was to him that the development of the ophthalmic department of this hospital is entirely due. In 1926 he was promoted surgeon to the Glasgow Eye Infirmary, and in the same year became professor of ophthalmology at the Anderson College of Medicine, a post which he held until a failure of health caused him to resign. He was, shortly afterwards, appointed an honorary lecturer in ophthalmology to the University of Glasgow. He was vice-president of the Ophthalmological Society of the United Kingdom, a past president of the Scottish Ophthalmological Club, and at the time of his death vice-president elect of the Section of Ophthalmology of the British Medical Association meeting in Glasgow. His special professional interests lay in medical legal ophthalmology, and in the treatment of trachoma; his experience of this disease, in the only area of the United Kingdom in which it was notifiable, was unique. BJO 1954,38:384

Meighan, Thomas Spence (1849-1909) Scottish ophthalmologist from Glasgow. He graduated from Glasgow University in 1870, and proceeded to the degree of M.D., 1874. In 1897 he became Fellow of the Glasgow Faculty. Meighan was a member of the Ophthalmological Society of the United Kingdom.He was for a number of years Lecturer in Ophthalmology at Anderson´s College Medical School. American Encyclopedia of Ophthalmology 10,p.767628-7629; The Ophthalmoscope 1909,p.798.

Meiners, Heinrich (18th century) German. One of the assistants of the great English charlatan, John Taylor. He followed Taylor to Constantinople, but did not remain long in that city-owing, as Hirschberg tells us, to the anger of deluded patients. Meiners published the following: 1. *Lista delle Operazioni e Sciolta delle piu Singulari Curazioni Fatte in Turino sulle Malattie degli Occhi.* (Turin, 1742.) 2. *Lista delle Operazioni Fatte per la Cataratta, Gotta Serena, Glaucomi, Prunelle Artificiali.* (Milan, 1742.) 3. *Lista delle Operazioni Fatte a Cento Dodeci Persone per Cataratta*. American Encyclopedia of Ophthalmology 10,p.7629

Méjan, Benoit (flourished 2nd part 18th century). French Monspellensian surgeon, father of Thomas Méjan, and himself an ophthalmologist of some importance in his day. He was made professor at the College of Surgery and surgeon-in-chief at the Hôtel Dieu Saint-Eloi in Montpellier in 1747. After adopting the extraction method for cataract, he soon returned to depression, after the fashion of many of his contemporaries. He invented a "special treatment of the laryngeal fistula," which possessed a considerable vogue for a time, but which unfortunately has not descended to our day. American Encyclopedia of Ophthalmology 10,p.7629

Méjan, Thomas, (fl. late 18th-early 19th cent.,) French physician of Montpellier. He was the son and pupil of Benoit Méjan, an eminent general and ophthalmic surgeon who taught at the University of Montpellier. Thomas Méjan also became a well-known surgeon, and, like his father, an opponent of the extraction method for cataract.He wrote: *Sur une Nouvelle Méthode de Traiter la Fistule Lacrimale Mém. de l'Acad. R. de Chir. II*, 193, 1753 and *De cataracta dissertatio, medico-chirurgia* Montpellier 1776. American Encyclopedia of Ophthalmology 10,p.7629.Albert

Meller, Joseph (1874-1968) Austrian ophthalmologist who succeeded Ernst Fuchs in the Chair in Vienna and who died at the age of 94 years on November 23, 1968. In ophthalmology Meller had many interests. His principal contributions to ophthalmology were the origin of cilio-choroidal detachments, his clinical studies on the leukaemias as they affect the eye, and the various forms of keratitis. His great interest, apart from art and music, was his belief that the major factor in the aetiology of uveitis was tuberculosis, a subject on which he gave the Doyne Lecture in 1934. At operative surgery he was unusually good, and his standard textbook, *Augenärztliche Eingriffe* 1918, 6th edition 1950, has long served as the standard for the German-speaking world. Third American edition published in 1923. BJO 1969,53:719

Melli, Sebastiano (18th century).Italian surgeon of the early 18th century, who paid considerable attention to diseases of the eye. Born at Venice, son of the surgeon, Bernardo Melli, he studied with his father, and, settling in his native city, there became, professor of surgery. His only ophthalmologic writing was "*Delle Fistole Lacrimale il Pro e Control vel Nuovo Metodo di Guarirla*," etc. (Venice, 1717; 2d ed.., 1740).American Encyclopedia of Ophthalmology 10,p.7635.Albert

Mellick, Alexander (1903-1958) Scottish ophthalmologist. Mellick qualified at Glasgow in 1926, taking the B.Sc., M.B., Ch.B. course of those days with Commendation. He was an assistant physician to OutPatients at the Glasgow Royal Infirmary for several years and, at the same time, engaged in general practice. It was during this period that he prepared a thesis on *Hepatic Efficiency* for the degree of M.D. In 1933 he was appointed a clinical assistant to the Glasgow Eye Infirmary; he worked his way through the various staff appointments, served during the war as an ophthalmic specialist with the rank of major, and on his demobilization in 1946, was made a surgeon in charge of beds at the Southern General Hospital. He was also ophthalmic surgeon to the Glasgow Fever Hospitals and Sanatoria. In 1949 he was admitted a Fellow of the Royal Faculty of Physicians and Surgeons and became a Surgeon to the Glasgow Eye Infirmary. He was a member of the Ophthalmological Society of the United Kingdom and of the Oxford Ophthalmological Congress, and contributed several papers to the British Journal of Ophthalmology on aspects of squint. BJO 1959, 43:128

Menacho, Antonio de (1889-1915) Latino-American ophthalmologist. Menacho was an assistant in Felix →Lagrange´s Clinique in Paris where he studied military surgery. He was, despite his young age, an expert in chemical analysis and made special studies of the eye in relation to comparative anatomy. The Ophthalmoscope, 1916,p.112.

Mercado, Jose Rizal y *see* **Rizal y Mercado**

Mercuriali, Hieronymus or in Italian: **Girolamo (1530-1606)** Italian physician born at Forli, Italy. Mercuriali studied at Bologna and Padua, and became professor of medicine successively at Padua (1569), Bologna (1587), and Pisa (1599). Among Mercuriali's many

publications were the first systematic treatise on skin diseases (*De Morbis Cutaneis* etc. 1572); a celebrated treatise on gymnastics, one of the earliest works to discuss the medical benefits of gymnastic exercise (*Artis Gymnasticae apud antiques celeberrimae* etc. 1569; 2d illustrated edition, 1573); one of the earliest works on diseases of children (*De Morbis Puerorum* 1583); and a scholarly Latin translation of the works of Hippocrates (*Hippocratis Coi Opera Graece et latine* 1588), and a work on toxicology (*De venenis, et morbis venenosis tractatus locupletissimi* Venice 1601). Important to ophthalmology is his *Tractatus, de compositione medicamentorum. De morbis oculorum, & aurium* Venice 1590 which contains also the first clinical manual of diseases of the ear. American Encyclopedia of Ophthalmology 10,p.7646.Albert

Merkel, Friedrich Siegmund (1845-1919) German anatomist born in Nürnberg. Merkel received his M.D. in 1869 at Erlangen and became professor of anatomy successively at Rostock (1872), Königsberg (1883), and Göttingen (1885). An authority on both gross anatomy and histology, particularly the histology and embryology of the visual apparatus, Merkel also made important advances in microscopic techniques. Among other books he wrote: *Die Musculatur der menschlichen Iris* Rostock 1873; *Makroskopische Anatomie des Auges* in vol.1 of the *first edition* of Graefe-Saemisch *Handbuch der ges. Augenheilkunde* and in vol.1 of the *second edition* of the same treatise but this time with the collaboration of E. Kallius. His main work was *Die Anatomie des Menschen* (3 parts) Wiesbaden 1913-1914.

Méry, Jean (1645-1722). French anatomist, surgeon and ophthalmologist, one of the predecessors of Helmholtz in the field of ophthalmoscopy. Born the son of a surgeon at Vatan (Berry), he studied surgery for a number of years at Paris, in the Hôtel-Dieu. In 1681 he was appointed surgeon to the Queen, and, two years later, surgeon to the Institute for Military Pensioners. In 1684 he was sent by Louis XIV to Lisbon to treat the Queen of Portugal. Remaining for some time in Lisbon and Spain, he was sent, in 1692, by the King on a private embassy to England. A number of other royal or semi-royal, appointments followed, and, in 1700, he accepted the position of surgeon-in-chief to the Hôtel-Dieu. From that time forward he rejected with great resolution all temptations to wander from a strictly scientific, career, devoting himself with great assiduity to surgery, anatomy, otology, and ophthalmology. Among his most important writings are: *Exact Description of the Human Ear, with a Mechanical and Physical Explanation of the Functions of the Sensitive Soul* (Paris, 1677, 1687) *; Observations on the Manner of Cutting in the two Sexes for the Extraction of Stone, Practised by Brother John* (Paris, 1700; Amsterdam, 1687) *; New System of the Circulation of the Blood, by the Foramen Ovale, in the Human Foetus, with Replies to the Objections*, etc. (Paris, 1700) *Six Problems of Physics Upon the Generation of the Human Foetus* (Paris, 1700) ; *On the - Movements of the Iris, and, Incidentally, on the Essential Portion, of the Organ of Vision (in History of the Royal Academy of Sciences*, 1704, 10 pp.-containing, however, his account of the famous cat-submersion experiment, by which he obtained a view of the fundus oculi. As early as 1707, Méry declared that extraction of cataract was among the possibilities. Daviel, be it remembered, did not perform his "first extraction in history" until about 1749 or 1750. However,. Méry did not himself carry out the procedure he recommended, hence to Daviel belongs the paternity of cataract extraction. Méry will, however, always be remembered chiefly for his cat experiment. That experiment was this: He immersed a cat in water, and, as its pupil dilated (as a result of suspended respiration) he beheld in all its glory the fundus of the animal's eye-the entrance of the optic nerve, and all the colors and vessels of the choroid. Méry understood quite well enough that something more than mere pupillary dilatation was necessary to account for the possibility of observing the fundus of the eye when the eye was under water. This explanation, however, of the "something more" was wholly erroneous. He believed that the view of the fundus was rendered possible by the water, because that fluid filled up a multitude of tiny "unevennesses" of the anterior surface of the cornea. Five years later, de la Hire stepped forward with the correct explanation. According to him, the water obviated the refraction of light by the cornea, so that all rays leaving a given point upon the fundus emerged from the eye not as parallel, but as divergent, rays. He also observed, incidentally, the disturbing light-reflexes proceeding from the cornea *in aere* are done

away with by the water. Neither of these discoveries (Méry's or de la Hire's) was at the time regarded as of any great importance. Yet, bit by bit, the mosaic of modern ophthalmology was being put together. Lacking either of these items, the pattern is incomplete. American Encyclopedia of Ophthalmology 10,p.767657-7659

Mesmer, Friedrich Anton or Franz (1733-1815) German physician,the founder of the doctrine of animal magnetism, born near Constance, Germany, took up the study of medicine at Vienna, and took his doctor's degree in 1766. About 1772 he began with a Jesuit, Hell, to investigate the curative powers of the magnet, and was led to adopt the opinion that there exists a power, similar to magnetism, which exercises an extraordinary influence on the human body. This he called animal magnetism, and published an account of his discovery, and of its medicinal value, in 1775. In 1778 he went to Paris, where he created a great sensation. His system obtained the support of members of the medical profession, as well as of others; but the government was induced in 1785 to appoint a commission, composed of physicians and scientists, whose report was unfavorable to him. He fell into disrepute, and retired to Meersburg in Switzerland, where he spent the rest of his life in obscurity. American Encyclopedia of Ophthalmology 10,p.7659

Metz, Abraham (1828-1876). American ophthalmologist, born in Stark County, Ohio. He lost his parents at a very early age, but, by teaching at a district school, he saved sufficient money for his medical education. His medical degree was received at the Cleveland Medical College in 1848. Thereupon he settled as family physician at Massilon, Ohio, but, turning his attention to ophthalmology, his practice was soon confined to that specialty alone. From 1864 until his death he was professor of ophthalmology in the Charity Hospital Medical College at Cleveland. He wrote a considerable number of journal articles, but his Magnus Opus was the once well known *Anatomy and Histology of the Human Eye* (Phila., 1868).American Encyclopedia of Ophthalmology 10,p.7677-7678.

Meyer, Edouard (1838-1902) German ophthalmologist born at Dessau, Germany. Meyer received his M.D. at Berlin in 1860 and, after three years of study under von Graefe, settled in Paris, where he became an eminent ophthalmologist. He wrote extensively on diseases of the eye, and was for many years an editor of the *Revue Générale d'Ophtalmologie*. He wrote: *Du strabisme et spécialement des conditions de succès de la strabotomie*. Paris 1863. *Maladies des yeux; Leçons sur la Réfraction et l'Accommodation ... recueillies par A.L. Roulet*. Paris 1869 ; (with Montméja) *Traité des operations qui se pratiquent sur l'oeil.* Paris 1871 (which was the first ophthalmic surgical book illustrated by photographs inserted [not printed] in the text); *Traité pratique des maladies des yeux*. Paris 1873.(translated in German by W. Block *Handbuch der Augenheilkunde* Berlin 1875 and in English by Freeland Fergus *A Practical Treatise on Diseases of the Eye* London 1887. *Das Sehen und der Blick* (Virchow und v.Holtzendorffs Populär-Wissenschaftliche Vorträge, 1883, Nr. 402. Albert.JPW.American Encyclopedia of Ophthalmology 10,p.7678

Meyer, Nikolaus (1775-1855).German ophthalmologist. Born at Bremen, he studied at Halle, Kiel, and Jena, receiving at the last-named institution his professional degree in 1800. He practised first at Bremen, later at Minden. He wrote but little, yet is very important in ophthalmology because he was the *first* to remove by means of the magnet a foreign body from the interior of the eye. Until the time, however, of Nikolaus Meyer-the subject of this sketch-no one had attempted anything more than the mere removal of foreign bodies from the superficial layers of the cornea. Meyer removed a foreign body from the ocular interior. The passage in which this notable event is recorded occurs in the *Medicinische Zeitung*, Vol. Xl, 1842, No. 11, p. 50. As will have been observed, we do not know whether the patient's vision was preserved or his eye saved. For sake of completeness, we add that→MacKeown, in 1874, first made an incision into the eye for the purpose of withdrawing from the ocular interior an attractable body by means of a magnet, and that Julius →Hirschberg in 1875 invented the ocular electro-magnet. American Encyclopedia of Ophthalmology 10,p.7678-7679

Meyer, Reinhard Carl Johannes (1883-1956) South African ophthalmologist from Johannesburg, born in Kimberley, Cape Province, South Africa. He was the son of a mis-

sionary, and was educated in Kimberley and in Cape Town, where he graduated B.A. in 1902. He was awarded the Jamieson Scholarship and took a medical training at Edinburgh University where he graduated M.B., Ch.B. in 1908. He returned to South Africa to become house physician and house surgeon at the Johannesburg General Hospital from 1910 to 1912. He returned in 1953 to Europe for further studies, taking his M.D. and F.R.C.S. at Edinburgh, and his D.O. at Oxford. After demobilization from World War I he became a house surgeon at Moorfields Eye Hospital (R.L.O.H.), and he returned to South Africa in the latter part of 1919 to begin practice as an ophthalmic surgeon in Johannesburg. He was appointed ophthalmic surgeon to the Transvaal Memorial Hospital for Children in 1923 and to the staff of the Johannesburg General Hospital in 1924, where he served for a first term of 15 years. He was recalled to the Johannesburg General Hospital for the years 1939-1945 during the absence of other senior ophthalmic surgeons on war service. In 1930, together with the late Dr. Wood of Cape Town and Dr. Verwey of Pietermaritsburg, he was instrumental in forming the Ophthalmological Society of South Africa, of which he became President in the years 1938 and 1939. He was one of the pioneers in South Africa of diathermy treatment for detachment in the early 1930s of intra-capsular extractions of cataracts about the same time, and of corneal grafting in 1937. He took a keen interest in the work of the Society to help the civilian blind in Johannesburg, and was associated from the inception with the St. John Ophthalmic Foundation which established an Eye Hospital on the outskirts of Johannesburg to begin work in 1951. BJO 1957,4:64

Meyer-Schwickerath, Gerd (1920-1992) German ophthalmologist, retired director of the University Eye Clinic of Essen, Germany. Pioneer of light-coagulation research in ophthalmology Born in Wuppertal-Elberfeld, Germany, Meyer-Schwickerath studied medicine between 1940 and 1945 respectively in Münster(Westphalia), Würzburg and Bonn. He was employed 1946 at the Hamburg University Eye Clinic under→ Marchesani. He received his M.D. 1946 in Hamburg. From 1952 to 1959 employed at the Bonn University Eye Clinic Venusberg under H.K. →Müller. During his time in Bonn, he developed the technique of photocoagulation. His initial studies involved the use of sunlight and a heliostat on the roof of the Eye Clinic. This was followed by the use of the carbon arc. Together with Dr. Hans→Littmann of Carl Zeiss Oberkochen, he developed the Xenon photocoagulator. Meyer-Schwickerath method was for the first time made public at the Meeting of the German Ophthalmological Society in Heidelberg 1949 in a two and a half page manuscript. A first monography with results was published by him in 1959: „*Lichtkoagulation*“ Stuttgart Enke Verlag , translated and published by Mosby Company, St.Louis 1961. It was doubtless Meyer-Schwickerath's study of Alvar→Gullstrands book, "*Dioptrics of the Eye*," that permitted him to make this brilliant discovery. When Dr. Meyer-Schwickerath received the Graefe Medal in 1986, he stated that a major portion of his work was directed toward finding even brighter sources of light. This led eventually to the use of the laser technology in ophthalmology, a development he viewed with some skepticism. In 1952, Meyer-Schwickerath moved to the University of Bonn. Here he developed an enormous practice with patients referred from all over the world for the treatment of vascular tumors, abnormalities of the cornea, iris, and retina. He provided a two-week course for ophthalmologists who came to Bonn from all over the world to observe the patients he treated and to learn photocoagulation on the eyes of anesthetized rabbits. Several months after the course in the spring of 1959, he was one of the founders of the Club Gonin. In 1959, Meyer-Schwickerath was named director of the ophthalmology clinic of the University of Essen. In 1963, he founded the Essen Continuing Education for Ophthalmologists (EFA). Apart from his invention of photocoagulation, this remained his most important achievement. In 1945, Meyer-Schwickerath reestablished the use of indirect ophthalmoscopy in Germany and he preferred the monocular, hand-held, self-contained illuminated ophthalmoscope. He was the first to use an electronic flash for fundus photography, and was mainly responsible for the development of this technique. His immense wealth of ideas, his constant effort to put these ideas into practical use, and his deep personal concern to widen their application gained him international recognition in ophthalmology. In 1960, he was awarded the Graefe Prize. In 1969, he was elected to the German Academy of Scientists and Physicians Leopoldina. In 1970, he received the Gonin Medal, the most highly regarded

award in ophthalmology. In 1978, he was elected to the anglo-french "*Ordre Pour le Merite for Science and Arts*." In 1981, he received the Great Cross of Merit of the Federal Republic of Germany. In 1986, he was awarded the Graefe Medal from the German Ophthalmological Society, and in 1990, the Wesseley Medal at the occasion of the International Congress of Ophthalmology. He was nominated several times as a doctor honoris causa and was an honorary member of countless scientific ophthalmological societies and academies in Germany and abroad. His researches on oculo-dental-digital dysplasia resulted in the Meyer-Schickerath-Weyers Syndrome. AJO 1992,114:245-246;BJO 1992; Ursula Lau-Werner:Deutsche ophthalmologische Gelehrte,München (thesis, private print) 1981(Wayenborgh Library).

Meyner, Ernst Martin (1933-1999) German ophthalmologist born in Altenburg/Thüringen. Meyner first held an apprenticeship as carpenter before turning to medicine in Leipzig and Tübingen. He became ophthalmologist at the Tübingen University presenting his habilitation under the title "*Die Operative Behandlung angeborener Katarakte und Ihre Prognose*". His main scientific work was focused on traumatology and slit lamp photography. He became director of the ophthalmic division in the Pforzheim hospital and professor of ophthalmology in 1980. During his holidays Meyner , for many years, had been teaching ophthalmic basics to nurses of the Elisabeth Hospital in Tanzanya. Augenspiegel 1999,42,4:56

Michael, Francis Morley (1870-1908). American ophthalmologist of much promise, who died before that promise could be fulfilled, was surgeon to the Manhattan Eye and Ear Hospital, oculist to the Binghamton State Hospital and to the Binghamton City Hospital. He died aged 38 years. American Encyclopedia of Ophthalmology 10,p.7680

Michaelis, Eduard (1824-1891) German ophthalmologist of Berlin, son of Heinrich Sabatier Michaelis. He received his M.D. at the University of Berlin in 1847, worked as Albrecht von Graefe's assistant from 1851 to 1862, and thereafter maintained his own practice in ophthalmology. In addition to the biography (*Albrecht von Graefe; sein Leben und Wirken* Berlin 1877) of his mentor, Michaelis published the *Handwörterbuch der augenärztlichen Therapie* (1883).

Michaelis, Gustav Adolf (1798-1848) German physician, director of the School of Midwifery in Kiel. Here mentioned only because of his booklet: *Über die Retina besonders über die Macula lutea und das Foramen centrale*. Breslau 1842.

Michaelis, Heinrich Sabatier (1791-1857) German physician born in Jessnitz (Anhalt), Germany. He received his medical degree with the thesis De Amputatione Penis. During the war, in 1813-14, he served under Carl Ferdinand von Graefe (father of Albrecht v.Graefe) as head physician and became, in 1833, court physician. He was very close to von Graefe and published many papers from volume 1 (1820) in von Graefe´s and Philipp Walthers founded Journal. He also wrote a medical biography of C.F.von Graefe: *C.F.v.Graefe in seinem 30jähr. Wirken für Staat und Wissenschaft* Berlin 1840.

Michaelson, Isaac (1903-1982) Israeli ophthalmologist. He was professor of ophthalmology at Hebrew University, Hadassah Medical School, from 1948 until 1973 when he retired. He then continued to work as director of the Institute for the Prevention of Blindness in Jerusalem. Professor Michaelson graduated from the Royal College of Physicians and Surgeons, Edinburgh and Glasgow, in 1925, and received the diploma of ophthalmic medicine and surgery from the Royal College of Surgeons in England in 1932. He was a doctor of philosophy at Glasgow University. Additionally, he was a fellow of the Royal College of Physicians and Surgeons of Glasgow from 1927 to 1948. He worked on the clinical staff at the Glasgow Eye Infirmary and the Department of Ophthalmology of Glasgow University. During World War II, Professor Michaelson served as an ophthalmologist at a general hospital in the Middle East. He spent most of these years in Israel and was instrumental in recruiting many Jewish doctor-refugees from Nazi Germany into the British Army. Two years after World War II, he was awarded the Israel Prize in Medicine. He wrote numerous articles and textbooks. The third edition of the text, "*Fundus of the Eye*," written in collaboration with his son-in-law, David Ben Ezra,

appeared in 1981. Previous editions were co-authored with Professor Ballantyne of Glasgow University. Michaelson insisted that residents in ophthalmology assist ophthalmologists in developing countries. He helped establish ophthalmic services in emergent countries in Africa. He was most effective in activities concerning prevention of blindness, both in Israel and abroad. AJO 1982,94:417-418

Michel, Charles Eugene (1832-1913). American ophthalmologist of St. Louis, Mo. Born at Charleston, S. C., . Michel, he received the degree of M. D. at the Medical College of the State of South Carolina, at Charleston, in 1857. A surgeon in the Confederate army throughout the Civil War, he was, at its close, a division medical inspector. From the end of the war until his death, Michel practised, as ophthalmologist exclusively, at St. Louis, Mo. Here he was for many years professor of ophthalmology in the Missouri Medical College, and surgeon at the St. Louis Eye, Ear, Nose and Throat Infirmary. He was also for a time ophthalmic surgeon to the Martha Parsons Hospital for Children. He was the first to employ electrolysis in ophthalmology, and invented a number of instruments and operations. He was a skilful operator, and enjoyed an international reputation. He was also a clear and forceful writer and teacher. American Encyclopedia of Ophthalmology 10,p.7680-7682

Michel, Julius von (1843-1911) German ophthalmologist born at Frankenthal, Germany, received his M.D. in 1866 at Würzburg, worked as Horner's assistant at the Zürich University eye clinic (1868-1870), and, after further ophthalmologic and histologic study in Leipzig, became professor of ophthalmology at Erlangen (1873-1879), Würzburg (1879-1900), and with Kuhnt, he founded the *Zeitschrift für Augenheilkunde* in 1899(today "*Ophthalmologica* " Karger Verlag Basle); the topics of his own investigations and writings range widely within the field of ophthalmic anatomy, physiology, and pathology: *Die histologische Structur des Irisstroma* Erlangen 1875; *Die Prüfung des Sehvermögens und der Farbenblindheit beim Eisenbahnpersonal und bei den Truppen*. München 1878; *Lehrbuch der Augenheilkunde*. Wiesbaden 1884; *Über Sehnerven-degeneration und Sehnerven-kreuzung*. Wiesbaden 1887 (Festschrift for the Anatomist Albert Kölliker); *Klinischer Leitfaden der Augenheilkunde Wiesbaden* 1894. He was from 1879 the editor of the *Jahresbericht der Ophthalmologie*. Von Michel was the author of the section on diseases of the eyelids in Graefe-Saemisch´s *Handbuch der Augenheilkunde*. American Encyclopedia of Ophthalmology, 10, The Ophthalmoscope, 1911,p.811-812. Albert.JPW

Michels, Ronald G. (1943-1991) Michels grew up in the small town of Henderson, North Carolina. He attended the University of North Carolina, where he was an outstanding student. He remained at Chapel Hill for medical school, where he worked with Sam McPherson, who urged Michels to consider his alma mater, Wilmer Ophthalmological institute, for residency. In 1968, Micels went to Baltimore for an internship in medicine at Johns Hopkins, and he entered his ophthalmology residency at Wilmer one year later. After his residency, Ron moved on to Bascom Palmer as a retina-vitreous fellow. This was a particularly exciting time for those interested in retinal diseases, and Michels recalled that he was fortunate to work under the guidance of Ed→Norton and the rest of the outstanding group in Miami, including Don→Gass, Victor →Curtin, and Robert →Machemer. Michels found himself right at home in this exciting and stimulating environment. His papers with Don Gass on branch vein occlusion and the series of publications with Robert Machemer regarding vitreous surgery clearly set the standard for that day and established Michels as one of the up-and-coming retinal specialists who would lead the revolution in the diagnosis and management of retinal diseases. Michels inherited Stephen J.→Ryan´s office at Wilmer and quickly established himself and the Wilmer Institute as leaders in vitreoretinal diseases. His series of papers on vitreoretinal surgery, beginning in the early 1970s, were truly outstanding contributions in the field of ophthalmology. He had a number of important papers published and provided important contributions to every major journal in ophthalmology. Among his major publications was the book, *Vitreous Surgery*, voted the medical book of the year for 1981. It is almost unbelievable that one individual could be awarded this prize twice, but Michels won it again for his outstanding book, *Retinal Detachment*, which was coauthored with Pat Wilkinson and Tom Rice and published in 1990. Michels curriculum vitae included some 280 contributions to the literature. His series of papers relating to diabetic retinopathy and

the proper approaches to complications of vitreous surgery in diabetes have fundamentally influenced the practice of vitreoretinal surgery. His papers on complicated retinal detachments, proliferative vitreoretinopathy, and epiretinal membranes were major contributions to the field of vitreous surgery. His surgical fame, however, extended far beyond his manuscripts and lectures. In the late 1970s, when the Cold War was at its most frigid, the Kremlin sought the best vitreoretinal surgeon in the world to operate on one of their leaders. They asked Ron Michels to go to Moscow, where he and his good friend, Walter→Stark (as his assistant), performed successful surgery for a macular pucker. A few years later, the scenario was replayed when an Afghan resistance hero sought care for his remaining eye, which was in a seemingly hopeless condition. Michels salvaged the eye. Michels contributed greatly to the Wilmer Institute and its reputation for leadership in vitreoretinal diseases and surgery until September 1989, when he left to go into practice with Bert Glaser. AJO 1991,111:661-663

Michelson, Albert Abraham (1852-1931) German-American physicist who devise the Michelson interferometer to detect the motion of the earth through the ether. He performed numerous trials with Edward Morley of this classic investigation which was come to be known as the *Michelson-Morley* experiment. No matter how the device was oriented, where it was placed, or when it was used, a null result was obtained. In 1890, he developed a theory for interferometric observations of single and double stars. He suggested that a telescope's resolving power could be increased using external mirrors in an arrangement he called a stellar refractometer. He made trial observations with the 15" Harvard College Observatory which failed. However, he successfully measured the diameters of the Galilean satellites using the Lick 12". He then added a steel beam across the telescope's front on which four small relay mirrors were placed, creating the device known as a Michelson stellar interferometer. He measured seven stars with the 100" Hooker Telescope, although one was later withdrawn *(Sky & Telescope* Oct. 1991). Michelson is quoted as quipping ``the grand underlying principles have been firmly established...further truths of physics are to be looked for in the sixth place of decimals" *(Science,* 1992), but a similar quote is also attributed to Kelvin.(JPW)

Middlemore, Richard (1804-1896).British ophthalmologist of Birmingham, England, renowned especially for his lectures on the eye and for his numerous benefactions to ophthalmic institutions. He studied at St. Bartholomew's Hospital, London (M.R.C.S., 1827), chiefly with Laurence, Vincent and Abernethy, and finally moved to Birmingham (1828). Here he was a student of Hodgson's for about three years, and then, for ten, his assistant. He settled in Birmingham, where he practised until 1879, and continued to reside until his death. He never, even in his private practice, entirely relinquished general medicine and surgery, though ophthalmology engrossed the greater part of his attention. In 1877 he founded a prize in ophthalmology, awarded triennially by the British Medical Association; in 1888 he gave 1000 Pounds to endow a course of lectures in ophthalmology at the Birmingham and Midland Eye Hospital, and another of 2000 Pounds to the Birmingham Asylum for the Blind. Middlemore's most important writings are as follows: 1. *A Treatise on the Diseases of the Eye and its Appendages*. (2 vols., London, 1835. 2d ed., London, 1839. The most important English work on ophthalmology till that of Wharton Jones.) 2. *On the Treatment of Certain Injuries of the Eye, occurring in Infants and Young Persons*. (London, 1840.) American Encyclopedia of Ophthalmology 10,p.7692-7693**.**Albert.JPW

Mihalkovics, Victor Geza (1844-1899). Austrian anatomist and embryologist of some ophthalmologic importance. Born at Budapest he there received his medical degree, also there in 1868 became assistant in anatomy, thence proceeded to Vienna, where he studied histology with Schwalbe and Ludwig, moved to Strasbourg and became assistant to Waldeyer, then, in 1874, back to Budapest where he became privatdocent for descriptive anatomy, and, in 1881, Extraordinary Professor of Complete Descriptive Anatomy. In 1884 he was made Ordinary Fellow of the Hungarian Academy. Mihalkovics's ophthalmologic writings were: 1. *Ueber den Kamm des Vogelauges*. (Archiv f. Mikr. Anat., *IX*, 1873.) 2. *Ein Beitrag zur Ersten Anlage d. Augenlinse*. *(Ibid.,* XI, 1875)American Encyclopedia of Ophthalmology 10,p.7702

Miki, Naomasa (1942-) Japanese neuropharmacologist working on the eye. He graduated from the Faculty of Medicine of Osaka University in 1967. He has worked as the Professor of the Department of Pharmacology of Osaka University since 1989. His publications include "*Purification and properties of the light-activated cyclic nucleotide phosphodiesterase of rod outer segments*. J. Biol. Chem. 250: 6320, 1975, and "*Visinin; a novel calcium-binding protein expressed in retinal cone cells.* Neuron, 2:469, 1990". He is a member of Neuroscience, and is a member of the Japanese Pharmacological Society and Japan Neuroscience Society; he is currently the President of the Japanese Society for Neurochemistry. (Department of Pharmacology, A6, Osaka University Medical School, Yamadaoka Suita, Osaka 565-0871, Japan; phone: 81-6-6879-3520, fax: 81-6-6879-3529, e-mail: nmiki@pharma1.med.oska-u.ac.jp) (SM)

Miki, Tokuhiko (1936-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology of Osaka City University. He graduated from Osaka City University in 1963, studied Pathology in the Postgraduate School of Medicine of the University under Prof. BABA Tameyoshi, Prof. SHIMAZAKI Masayoshi and received his Doctor of Medical Sciences in 1968 (thesis: *Morphogenetic study of congenital ocular malformations in rats induced by excessive vitamin A, with special reference to exophthalmos*. Osaka City Med. J. 14: 1-30, 1968). He started to study Ophthalmology as an assistant ophthalmologist in 1968 and was promoted to Lecturer of the University in 1974 and extended his studies at University of Iowa (1978) with Prof.→Hayreh and also at the University of Munich with Prof.→Lund. On return to Osaka, he was made the Assistant Professor in 1978 and then elected to be the Professor and Chairman, the present position, in 1990. He has a joint appointment as the Councillor of the Osaka City University and the Vice-Director of the University Hospital since 1998. He serves as a Councillor to the Japanese Ophthalmological Society (1991-), to the Japanese Society of Laser Medicine (1998-) and also to many other Japanese Societies. He was the President of the Japan ICG Angiography Club (1991) and has been a senior member of the club (1991-) and also serves as the Chairman of many research groups supported by the Ministry of Health and Welfare and by the Ministry of Education. These groups were engaged in experimental studies of chorioretinopathy due to stress (1970), Computer assisted image analyses of ICG angiography for chorioretinal circulation (1994-1995) and Diagnosis and Treatment of age-related macular degeneration (1997-1999). Furthermore, he has played key roles in the organization of international symposia and meetings, e.g. International Committee to the First International Symposium of ICG Angiography (New York, 1955), Secretary General and Organizing Committee to the 2nd Symposium in Nara (1998), Program Committee to the 5th International Symposium of Ocular Circulation and Neovascularization (Kyoto, 1998), Technical Program Committee to Laser 99 (Munich, 1999), Honorary Committee to the 4th International Symposium of ICG Angiography (Baden-Baden,1999). He is also an editor of Folia Ophthalmologica Japonica and is an Executive Director of the Osaka Eye Bank. Some of his many publications are Photodynamic therapy of a new photosensitizer ATX-S10 on corneal neovascularization. Exp. Eye Res. 67: 10, 1998, Computer assisted image analysis using the subtraction method in indocyanine green angiography. Eur. J. Ophthalmol. 6: 30, 1996, The involvement of polyamines in the proliferation of cultured retinal pigment epithelial cells. Invest. Ophthalmol. Vis. Sci. 37: 1975, 1996. (Department of Ophthalmology, Osaka City University. Abeno Asahi-machi 1-4-3, Osaka 545-8585, Japan. phone:+81-6-6645-3865; fax: +81-6-6634-3873; e-mail: i-miki@med.osaka-cu.ac.jp) (SM)

Masakichi Mikuni

Mikkelsen, Mitchell (1850-1919) American ophthalmologist and oto-laryngologist of Wells, Minnesota. He was born in Dane County, Wis. At the age of 22, in 1872, he homesteaded 160 acres of land in South Dakota, where, on a number of occasions, he had serious difficulties with the Indians. Later he became a herder of the Texas cattle which were owned by the U. S. Indian Agency nearby, and, in this way, was enabled to save the money which gave him a medical education. In 1877 he graduated at the College of Physicians and Surgeons at Keokuk, Iowa, and in 1884 at the College of Physicians and Surgeons of Chicago. For twenty seven years he practiced at Wells.AJO 1919,2:460

Mikuni, Masakichi (1906-1987) Japanese ophthalmologist and Professor Emeritus of Niigata University. He graduated from Niigata University in 1933, and studied

Ophthalmology under Prof. →KUMAGAI Naoki: he received the degree, Doctor Medical Sciences from the University in 1939. His thesis "*Surgery of Strabismus*" was recognized as a good work by the Japanese Ophthalmological Society which granted him the ICHIKAWA Prize. He was promoted Professor and Chairman of the Department of Ophthalmology in 1945 and worked in this position until retirement in 1972. During his tenure, he served as the Hospital Director, 1966-67, and Dean of the Faculty of Medicine, 1967-1970. He also served the Japanese Ophthalmological Society as the President of the 62nd Congress of the Society in 1958 and as a symposist at the 67th Congress (Lecture: *Measurement of the retinal arterial pressure*). He was the Society's Award Lecturer (Lecture: *Measurements in the ocular fundus and the clinical application – in particular reference to fundus photography*) at the 74th Congress in 1970. After retirement, he was entitled Professor Emeritus, and Emeritus Member of the Japanese Ophthalmological Society. In recognition of his service, the Government conferred on him the Third Order of the Rising Sun in 1977. (SM)

Mile, Johannes (1789-1839). Polish physician and obstetrician, who devoted considerable attention to diseases of the eye. Born at Warsaw, he was at first apprentice to a clockmaker. In 1810, however, he began to study medicine at Warsaw and, in 1814, received his medical degree. For the next three years he studied physics, physiology, and obstetrics in Germany, France, Holland and England. Returning to Warsaw in 1817, he became in 1819 full professor of physiology and obstetrics, a title which he held till 1831. Mile's ophthalmologic writings are as follows: 1. *De la Cause qui Dispose l'Oeil pour Voir Distinctement les Objets Placés à Différentes Distances*. (Magendie's Jour., 1826.) 2. *Ueber die Richtungslinie des Sehens.* (Poggendorff's *Annalen, 1*837.) 3. *Ueber die Empfindung, welche Entsteht, wenn Verschiedenfarbige Lichtstrahlen auf dieselben Stellen der Retina eines einzigen Auges Fallen. (Müller's Arch.,* 1839.)American Encyclopedia of Ophthalmology 10,p.7705

Miller, Stephen James(1915-1996) British ophthalmologist born in Arbroath (Scotland). Educated at Arbroath High School and Aberdeen University where he read medicine. Miller was appointed house surgeon at the Royal Infirmary in Hull 1937. After the war in 1952 he was encouraged by Sir Stewart →Duke Elder to come south. He became consultant at St.George´s Hospital. Subsequent appointments as consultant ophthalmologist at *Moorfields Eye Hospital* and at the *National Hospital for Nervous Diseases* established at the front of his profession. Miller was 34 years editor of the *British Journal of Ophthalmology* and wrote the 16th,17th and 18th edition of *Parson´s Diseases of the Eye (1978-1990); Modern Trends in Ophthalmology (1973*). Miller became Hospitaller to St. John Ophthalmic Hospital in Jerusalem in succession to Sir Duke Elder and Keith→Lyle.He was appointed to Queen Elisabeth´Household , later Surgeon Oculist to the Queen.Miller was one of the first to see the potential of fluorescin angiography in ophthalmology, an innovation pioneered in USA, in Britain.The Independent, London,1st May 1996

Miller, William H. (1926-) American scientist who investigated structures in the optical train that are small with respect to light wavelengths and the role of the cyclic nucleotide cascade in phototransduction. He received the degree of M.D. from Johns Hopkins Medical School in 1954, worked with H.K. Hartline and Floyd Ratliff, Rockefeller University, 1955-64, where he also began a life-long association with Tsuneo Tomita and his colleagues. Miller spent the balance of his career at Yale Medical School and is now Professor Emeritus. He showed that arthropod photoreceptor organelles are microvilli of the receptor cells, rather than fenestrated disks or secretions as previously thought. Carl Gustaf Bernhard, Karolinska Institutet, and Miller found that the corneas of some insects have minute nipple-shaped protuberances that function as an anti-reflection coating. Allan Snyder, Australian National University, and Miller found that the avian, retinal deep-fovea acts as the negative element of a telephoto lens so that a bird with human-sized eyes has a resolving power of twice that of the human. They also found that the end-on appearance of the green rod is explained by its myoid functioning as the entrance pupil of the receptor organelle. [Summarized in: Miller, W.H. (1979) Chapter 3 in: *Handbook of Sensory Physiology*, Vol. VII/6A, H. Autrum, ed., Springer-Verlag.] The molecular chain of events

that mediates phototransduction was unknown in 1971 when M.W. Bitensky, then at Yale Medical School, and Miller proposed the cyclic-nucleotide enzymatic cascade for that role. That idea was counterintuitive; most believed that calcium mediated transduction (D. Attwell *News & Views, Phototransduction changes focus.* Nature 317:14, 1985). Grant Nicol, then Miller's graduate student, and Miller found that excess, exogenous cyclic GMP injected into a single frog photoreceptor mimics darkness and that the response to light is delayed until the excess cyclic GMP is hydrolyzed. That cyclic GMP mediates the response to darkness and its hydrolysis mediates the photoresponse was directly confirmed by E. Fesenko and his colleagues in 1985. [Bitensky, M.W., Gorman, R.E. and Miller, W.H. (1971) *Adenyl cyclase as a link between photon capture and changes in membrane permeability of frog photoreceptors*. Proc. Natnl. Acad. Sci. USA 68:561-562; Miller, W.H. and Nicol, G.D. (1979) *Cyclic GMP regulates membrane potential in rod photoreceptors*. Nature 280:64-66; Miller, W.H. Editor,(1981) *Molecular Mechanisms of Phototransduction*. Academic Press, New York; Miller, W.H. (1990) Proctor Medal Lecture: *Dark Mimic*. Inves. Ophthal. & Vis. Sci. 31:1659-1673.] (E-mail: William.Miller@yale.edu)

Millikin, Benjamin L.(1851-1916) American ophthalmologists of the Middle West. Born at Warren, he received the degree of Bachelor of Arts at Allegheny College in 1874, and that of M. D. at the University of Pennsylvania in 1879. After a year or more of graduate study abroad, he returned to this country, and served for a time as resident physician in the University of Pennsylvania, later in the Philadelphia Children's Hospital and the Wills Eye Hospital. In I883, having been appointed professor of diseases of the eye in the medical department of Western Reserve University, he moved to Cleveland, 0. The following year he was appointed visiting ophthalmologist to St. Vincent's Hospital. From 1892 to 1912 he was visiting ophthalmologist to Lakeside Hospital, and, from 1912 until his death, senior visiting ophthalmologist. In 1900 be was made dean and executive officer of the medical faculty of Western Reserve University, retiring in 1912. Throughout his entire career he never ceased to take an interest in general medicine, though practising ophthalmology exclusively. Millikin, in all his professional relations, was a power for good. Thus, it was chiefly owing to his persistent endeavors that the entrance to the medical course at Western Reserve was limited to college graduates. When he became dean, the endowment of the medical department was only $50,000; at the time of his retirement it had. arisen to more than $1,500,000. American Encyclopedia of Ophthalmology 10,p.7823-7825

Millingen (or Milligen), Edwin van (1848-1900) Anglo-Turkish ophthalmologist, son of Dr. Julius van Millingen physician to Lord Byron in the Greek war of independence. He was present with Byron when that celebrated poet died (at Missilonghi), and was subsequently physician to four sultans. He received an excellent education in the arts and sciences, and became a well-known linguist, writing and speaking French, German, Arabic, Greek and English with almost equal ease. His medical education was received chiefly in Germany, especially under Professor Julius→Hirschberg, in Berlin. He practised in Constantinople, and there wrote numerous articles, the most of which appeared in the Centralblat f. prakt. Augenheilkunde. He invented a number of ingenious operations, one of which consisted in the insertion of a collar-buttonshaped glass into the cornea, in cases of double corneal leucoma. This inserted glass was, of course, not tolerated very long, but the object was to enable the completely blind from leucoma to see again, for a very short time at least, just before they died, or else for the purpose of enabling the patient to identify some person, document, or other visible object, in an important case at law. van Milligen was, for years, professor of ophthalmology at the Constantinople Military School, and, for even a longer time, was ophthalmologist and otologist to the Sultan Abdul Aziz and to the harem. So far the *American Encyclopedia***,**p.7825. The historian Shastid, author of this sketch, did not realize the importance of van Milligen´s operation: it was in fact the *first* intraocular artificial lens implant (more than 50 years before →Ridley´s first attempts to implant a lens in the human eye.)[JPW]

Millington, William (1822-1912) British ophthalmologist. Millington was one of the founders of the Wolverhampton Eye Infirmary. The Ophthalmoscope, 1912,p.59.

Mimura, Osamu (1950-) Japanese ophthalmologist, Professor and Chairman of the Department of Hyogo College of Medicine. He graduated from Osaka Medical College in 1975, studied Ophthalmology under Prof. IMACHI Jo and Prof. SHIMO-OKU Masashi in the Postgraduate School of Hyogo College of Medicine. He submitted the thesis (*Re-evaluation of the motoneurones innervating the extraocular muscles in cat using horseradish peroxidase*. Acta Soc. Ophthalmol. Jpn 86:1408-1415,1982) to the College and received his Doctor of Medical Sciences in 1982. He studied in the Department of Ophthalmology, University of Saarland, Germany from 1995 to 1996 (Director Prof. K.W.→Ruprecht). He has been in the present position, as above, since 1998. His research interest is in Neuro-ophthalmology, Strabismus and Pediatric Ophthalmology, and some examples of his publications in these fields embrace "*Saccadic latencies in amblyopia using infrared television fundus camera with two-dimensional stimuli*. Jpn. J. Ophthalmol.25: 248,1981", "*Retinal sensitivity and spatial summation in amblyopia*. Jpn. J. Ophthalmol. 28: 389,1984". He served the Japanese Ophthalmological Society as a Councillor and the Japanese Neuro-ophthalmological Society on the Board of Trustees. For the excellence of his research, the Japanese Association of Strabismus and Amblyopia granted him the Nakagawa Prize in 1990.(Department of Ophthalmology, Hyogo College of Medicine, 1-1 Mokogawa-cho, Nishinomiya, 663-8501, Japan. phone:+81-7-9845-6462; fax:+81-7-9845-6464, e-mail: mimu@hyo-med.ac.jp)(SM)

Mimura, Yasuo (1930-) Japanese ophthalmologist, Professor Emeritus of Tokushima University. He graduated from Osaka University in 1955, studied Ophthalmology in the Graduate School of Medicine of the University under Prof. MIZUKAWA Takashi and received his Doctor of Medical Sciences in 1960 (thesis: *Studies on Lens protein: I. Purification method of bovine lens protein* J. Jpn. Ophthalmol. Soc. 77: 1423, 1958; *II. Immunologic characters of lens proteins*. Folia Ophthalmol. Jpn. 11: 37, 1960). He was granted the fellowship from Deutsche Forschungsgemeinshaft and extended his studies during 1963-1965 at the University of Munich under Prof.H.→Remky (*Antikoerper gegen Hornhauttransplantate*.Klin. Mbl. Augenheilkd. 146: 675, 1965). He was appointed the Professor and Chairman of the Department of Ophthalmology of Tokushima University in 1982 and served until retirement in 1996. He served as a Councillor to the Japanese Ophthalmological Society (1975-1979, 1983-1997), Japanese Society of Connective tissue (1969-1997)(President in 1991), Japanese Society of Allergy (1967-) and the Japanese Society of Oriental Medicine (1982-): he is an Honorary Member of these Societies. He has worked in the field of ocular immunology and his publications embrace "*Treatment of ocular lesions in Behcet's disease*, Jpn. Med. Res. Found.18: *Behcet's Disease*: p. 499-512, 1982" and "*Vogt-Koyanagi-Harada disease*, *Ophthalmology Book*, 13, p.117-144, Kanehara Publ. Co. Tokyo, 1980". Currently, he has been the President of the Tokushima Eye Bank since 1993.(SM)

Reinhard Carl Johannes Meyer

Minami, Kumata (1907-1981) Japanese ophthalmologist and Professor of Ophthalmology of Kurume Medical College. After graduating from Kumamoto University in 1933, he studied Ophthalmology under Prof. KAGOSHIMA Shigeru, and received the degree, Doctor of Medical Sciences in 1939. He was appointed the Professor of Ophthalmology of Kurume Medical College in 1946 and worked until 1956. He wrote the following books "*Diseases of the Eye and Respiratory Organs*" and "*Diseases of the Eye and Reproductive Organs*" in the series of *Handbook of Ophthalmology*, Vol. 12: 5-2,3, Kanehara Publ. Co. Tokyo 1952. (SM)

Minoda, Kensei (1934-) Japanese ophthalmologist, Professor Emeritus of Teikyo University. He graduated from Tokyo University in 1958, studied Ophthalmology at the University under Prof. HAGIWARA Hogara and received his Doctor of Medical Sciences in 1964 (thesis: *Histochemical studies of the nerve endings in the extraocular muscles*. No.1. J. Jpn. Ophthalmol. Soc. 67: 1369, 1963; No. 2. ibid. 68; 311, 1964; No.3. ibid. 68: 327, 1964). He spent 3 years (1964-1967) at the Department of Ophthalmology of New York University and carried out research with Prof. G. M. Breinin (Fine structure of extraocular muscle in rabbit. J. Cell Biol. 39: 193 1968, with Davidowitz J.). He was appointed the Professor and Chairman of the Department of Ophthalmology, Ichihara Hospital of Teikyo University in 1986 and served until retirement in 1999. He received the Shimizu Prize (1972) of the Japanese Ophthalmological Society (JOS) for the

excellence of his paper (Electron microscopic and histochemical studies of the extraocular muscles. J. Jpn. Ophthalmol. Soc.75: 1184, 1971). He was interested in ocular tumors, particularly, retinoblastoma and he organized the National Registry System of Retinoblastoma and served as the General Secretary (1975-) (Survival rate and risk factors for the patients with retinoblastoma in Japan. Jpn. J. Ophthalmol. 36: 121, 1992). He compiled his studies of ocular tumors in the book "*Intraocular Tumors*, Kanehara Publ. Co. 1999". He is a Founder of the Japan Ocular Tumor Research Group, and is a Consultant since 1999. He has served as the Auditor of the JOS (1999-), Board of Trustees of the Japanese Society of Ophthalmic Surgeons (1991-), Board of Trustees of the Japanese Vitreo-Retina Society, and of the Japanese Society of Pediatric Ophthalmology, and Honorary Member of the Japanese Society of Cancer Therapy (1999-). He is an international member of the American Academy of Ophthalmology (1987-) and a Fellow of the International College of Surgeons (1995-). He continues to serve as a Professor at Teikyo University. (Department of Ophthalmology, Teikyo University, Ichihara Hospital. 3426-3 Anesaki, Ichihara, Chiba, 299-0111, Japan. phone: +81-4-3662-1211; fax: +81-4-3662-6420)(SM)

Miram, Eduard (1811-1886) Russian comparative anatomist and embryologist. Born at Mitau (Kurland) he studied at St. Petersburg and settled in Dorpat. In 1838 he lectured there on comparative anatomy, and in 1839 on zoology. In 1841, he travelled in Germany, France and England, for the purpose of studying the universities and museums of those countries. In 1842 he received his degree in medicine at the Königsberg University. Shortly afterward he was appointed extraordinary professor of physiology at Kiev. In 1843 he became the full professor and retained the title until his resignation in 1862. He died at Kiev. His only ophthalmologic writing is entitled "*Beschreibung einer Bildungshemmung des Sehorgans und Betrachtung über die Entwicklung des Auges*" (von Ammon's Monatsschrift, 1839).American Encyclopedia of Ophthalmology 10,p.7841-7842

Mirault, G.M. (? - ?) French surgeon and ophthalmologist. He became physician in Paris 1823 with the thesis *Sur l´Anatomie et l´Inflammation de la Cornée transparente*. Later on he became professor of anatomy and physiology at the Angers secondary medical school (He was therefore called in medical literature "Mirault d´Angers"). He was for a time professor at the Surgical Hospital.He published many ophthalmic papers in the Arch.gén.de médecine and a paper on ectropium in the Annales d´Oculistique (1851). The following pamphlets are also from his pen: *De la cataracte capsulaire et particulièrement du traitement de la cataracte capsulaire secondaire* Angers 1861 and *De l'occlusion chirurgicale temporaire des paupières dans le traitement de l'ectropion cicatriciel* Angers 1871 and a number of articles on keratitis, retinitis, capsular cataract, capsular after-cataract, and the cure of ectropium.American Encyclopedia of Ophthalmology 10,p.7842. Albert.JPW

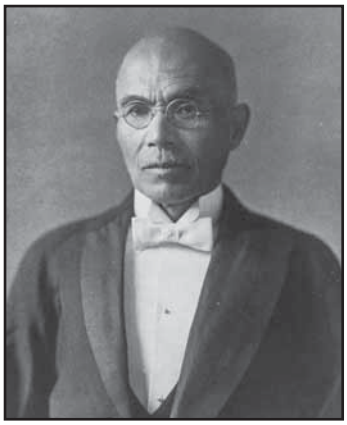
Mishima, Hiromu (1943-) Japanese ophthalmologist, Professor and Chairman of Department of Ophthalmology of Hiroshima University, School of Medicine. Born as the 3rd generation in an Ophthalmology family, he graduated from Hiroshima University in 1969 and studied Ophthalmology under Prof.→Dodo Tsugio. He received his Doctor of Medical Sciences in 1977 (thesis: *Studies on the cytodifferentiation of the neuroblasts and visual cells in the chick embryo retina*: v Greafes Arch. Ophthalmol. 206: 1 1978). He further studied in 1979-1981 at Yale University with Dr. Marvin L→Sears (Mishima &Sears: *Ultracytochemistry of cholera-toxin binding sites in ciliary processes*. Cell &Tissue Res. 223:241,1982). He is the Professor and Chairman of the Department of Ophthalmology of Hiroshima University, School of Medicine since 1996. His research interests have been clinical and basic science of glaucoma using molecular cell biology and molecular genetic techniques; examples of recent publications are "*Protective effects of vasoactive intestinal pepetide against delayed glutamate neurotoxicity in cultured retina*. Brain Res. 809: 127, 1998" and "*Circadian intraocular pressure management with latanoprost*. Surv. Ophthalmol. 41:139,1997". He served on the Council (1987-1991,1996-) and was Vice President (1991-1997) of the International Society of Eye Research and the Secretary General of 12th International Congress of Eye research in 1996 Yokohama, Japan. He also served on the Council (1989-) of the Japanese Ophthalmological Society, Council (1991-) and Executive Council (1997-) of Japanese

Glaucoma Society, Council (1997-) and Executive Council (1999-) of Japanese Society of Ocular Pharmacology. He is a recipient of the International Society of Eye Research Special Award in 1998. (Department of Ophthalmology Hiroshima University School of Medicine, 1-2-3 Kasumi , Minami-Ku, Hiroshima 734-8551, Japan, Phone 81-82-257-5245, Fax 81-82-257-5249, e-mail: hkmishi@ipc.hiroshima-u.ac.jp) (SM)

Mishima, Saiichi (1927-) Japanese ophthalmologist, Professor Emeritus of Tokyo University. Born as the 5th generation in an Ophthalmology family, he graduated from Tokyo University in 1949: he studied Ophthalmology at the University under Prof.→HAGIWARA Hogara and received his Doctor of Medical Sciences in 1957 (thesis: *The effects of the denervation and stimulation of the sympathetic and the trigeminal nerve on the mitotic rate of the corneal epithelium in rabbit*. Jpn. J. Ophthalmol. 1: 65, 1957). He studied through a British Council Scholarship in 1959-1560 at the Institute of Ophthalmology, London, with Dr.David M.Maurice, and then with a Dunphy Fellowship at the Retina Foundation, Boston with Dr. C. H.→Dohlman in 1960-1961. After returning to Japan for a short period, he came back to the Retina Foundation as a Research Associate (1963-1965) and worked as an assistant professor at Columbia University New York (1965-1968). On his homecoming, he served at Tokyo University Medical School as the Assistant Professor (1968-1971) and Professor and Chairman of the Department of Ophthalmology (1971-1987), and as the Director of the University Hospital (1980-1983) and the Dean of the Medical School (1983-1986). Subsequently, he worked as the Director of Tokyo Kosei Nenkin Hospital (under the Ministry of Health and Welfare) during 1987-1997. He is also Professor Emeritus of Norman Bethune Medical University, Changchun, China (1987-). Numerous professional activities include Councillor (1968-1989) and President of the Japanese Ophthalmological Society (JOS) (1977-1981), 92nd Congress President of the JOS, Executive Director (1968-1992) and 8th Congress President (1972) of the Japanese Society of Ophthalmological Optics, Founder and Director of the Japanese Society of Ophthalmic Pharmacology (1971-1988), Executive Director of Japanese Society of Ophthalmic Surgeons (1978-1987), Founder and President of the Japan Glaucoma Society (JGS) (1990-1998), Executive Director of the Japan Eye Bank Association (1976-1995), Vice-President of the Japan Medical Association (1986-1992), Executive Director of Yomiuri Light and Love Foundation (1988-) and many other National Societies. Also, he has served many Government Councils and Committees and was the Chairman of the Confederation of Japan Medical School Deans and Hospital Directors (1983). International service embraces Secretary General of the 23rd International Congress of Ophthalmology (1978), Executive Director of the International Committee of Glaucoma of the International Congress of Ophthalmology (1974-1990), Honorary President of the 6th International Contact Lens Symposium (1986), President of the Asia-Pacific Academy of Ophthalmology (APAO)(1991-1993), 13th Congress President of the APAO (1991), Founding member and Vice-President of the International Society for Eye Research (ISER) (1974-1980) and a member of the Academia Ophthalmologica Internationalis (1977-1996), Councillor of the CMAAO (Confederation Medical Associations of Asia and Oceania) (1988-1992), Chairman of the Council of the World Medical Association (WMA) (1987-1992) and many others. He served as editor to many Journals: Chief Editor of Jpn. J. Ophthalmology (1971-1991) and Jpn. J. Clin. Ophthalmol. (1971-1987), editor of Experimental Eye Research (1970-1980), Ophthalmic Research (1970-1980), v Graefe Arch. Clin. exp. Ophthalmol. (1982-1992), Survey of Ophthalmol. (1982-1992). Core Journals in Ophthalmol.(1977-1992), Asia-Pacific J. Ophthalmol (1989-) and Historia Ophthalmologica Internationalis (1997-). He is an Honorary Member of the JOS, JGS, American Academy of Ophthalmology, ISER, CLAO (Contact Lens Association of Ophthalmologists), Asian Oceanic Glaucoma Society and Academia Ophthalmologica Internationalis. He is a pioneer of ocular microsurgery in Japan and developed the Mishima range of microsurgical instruments and the Topcon operating microscope. He edited the *first* text book of ocular microsurgery in Japan (Igaku-shoin, Tokyo 1979). His scientific works embrace cornea, glaucoma, ocular physiology, pharmacology, Behcet's diseases and ocular microsurgery and he has delivered many invited lectures and given many courses. The named Lectures are "JOS Award lecture: *Physiology and pathology of the corneal endothelium*. J. Jpn. Ophthalmol. Soc. 77: 1736, 1973", "Conrad Berens Memorial Lecture: *Pharmacology of ophthalmic*

solutions. Contact Intraocular Lens Med. J. 4: 22, 1978", "8th Frederick Verhoeff Lecture: *Behcet's disease in Japan, ophthalmologic aspects*. Trans. Am. Ophthalmol. Soc.77: 225, 1979", "Proctor Lecture: *Clinical pharmacokinetics of the eye*. Invest. Ophthalmol. Vis. Sci. 21: 504, 1981", "*Diagnosis and management of glaucoma. Shahid Dr. Alim Memorial Lecture* Trans. Ophthalmol Soc. Bangl. 9: 1, 1981", "38th Edward Jackson Memorial Lecture: *Clinical investigations on the corneal endothelium*. Am. J. Ophthalmol. 93: 1, 1982", "12th Jules Stein Lecture: *Ocular effects of beta-adrenergic agents*. Surv. Ophthalmol.27: 187, 1982","Castroviejo Lecture: *Biomicroscopy using polarized light*. Cornea 1: 187, 1982", "deOcampo Lecture: *Pharmacology of ophthalmic solutions*. Asia-Pacific J. Ophthalmol.1: 1, 1989", "Jules Francois Lecture: *Corneal physiology in contact lens wear*. J. Jpn. Contact Lens Soc. 29: 23, 1987" and "Jules Francois Medal Award Lecture: *Code of ethics and its practice in Ophthalmology*, J. Jpn. Ophthalmol. Soc. 95: 3, 1991". On the occasion of his retirement from Tokyo University, "the *Mishima Saiichi Commemorative Fund for Eye Research and International Exchange, Inc*." was founded in 1987: grant-in-aid and fellowships have been granted to many Ophthalmologists of Asian and other developing countries: and they are playing key roles in their home countries. He is also an historian and co-authored the "*History of Ophthalmology in Japan*", Centennial Commemorative publication of the Japanese Ophthalmological Society in 1996. He served as the President of the Japan National Society for the Prevention of Blindness (1990-2000). The 6th generation of the family has two Ophthalmologists with active practice. In recognition of his meritorious service, the Government of Japan conferred on him the Second Order of the Sacred Treasures in 1997 Fax: +81-4-2381-0758; e-mail: saiichi@ka2.so-net.ne.jp) (AB)

Missotten, Luc (1931-) Belgian ophthalmologist. Luc Missotten was born in Hasselt. He is the son of Robert Missotten, who was also an ophthalmologist. He obtained the M.D. degree at the University of Leuven in 1955. He became assistant of Maurice Appelmans in the department of ophthalmology of the same university in 1955, and became also aspirant at the Belgian National Fund for Scientifical Research. With the help of the laboratories of experimental physics (Prof A. van Itterbeek) and of biochemistry (Prof. Christian de Duve, Nobel price winner) he specialized very soon in electron microscopy of the retina. He presented a report on the ultrastructure of the ocular tissues at the Belgian Society of Ophthalmology in 1964 and obtained the special doctorate in ophthalmology in 1965 with a thesis on the *ultrastructure of he human retina*. This showed the exact relationship between photoreceptors and neurons in the fovea. An own laboratory for elecron microscopy was installed in 1970 with the help of the Belgian National Fund for Scientifical Research. He showed in 1976 that the retina of the nocturnal halfape Perodicticus potto contains also cones. When Appelmans retired in 1972, Missotten became the first full professor of ophthalmology of the Flemish university. Till 1988 he wrote about 170 papers covering not only the matters described above but also clinical ophthalmology as e.g. the effects of beta-blocking agents, and even historical problems as ocular surgery in Hammurabi's code. Prof. Dr. L. Missotten, Secretary General EVER, Dept Ophthalmology, University Hospital St Rafael, Capucijnenvoer 33, B-3000 LEUVEN, Belgium. Email: Luc.Missotten@uz.kuleuven.ac.be. Verriest.JPW



Shunjiro Mita

Mita, Shunjiro (1863-1942) Japanese ophthalmologist and founder of Iwate Medical University. He graduated from Iwate Medical School (closed in 1887) in 1885, and in 1889 he studied at the Postgraduate Course of Ophthalmology at Tokyo University under Prof. J.→KOMOTO. He owned several Hospitals in Morioka and taught medicine. He was a founding member of the Japanese Ophthalmological Society in 1897. In 1928, he founded Iwate Medical School (a private foundation), and he served as the President until his death. The Medical School is the present Iwate Medical University, School of Medicine and he educated many physicians and surgeons. (SM)

Mitarai, Genyo (1921-) Japanese physiologist, Professor Emeritus of Nagoya University. Born as the son of a physician, he graduated from Nagoya University in 1946 and started to develop techniques for electroencephalography at the Department of Internal Medicine. For 4 months in 1949, he studied under Prof. MOTOKAWA Koichi of Tohoku University, and wrote a thesis "*Cortical response to photic stimulation*." Tohoku J. exp. Med. 62: 261, 1955: he received his Doctor of Medical Sciences from Nagoya University in 1954. In this

year, he succeeded in recording the S-potential from isolated carp retina: the results corroborated the works of Dr. Svaetichin of Caracas. Subsequently he conducted research during 1959-1961 with Dr. Svaetichin (Glia-neuron interactions and adaptation mechanisms of the retina. in (Eds) Jung. R. et al. *Neurophysiology and Psychophysics*: *the Visual system*. p. 445-456, Springer-Verlag. Berlin 1961). He then worked as the Professor of the Institute of Environmental Medicine of Nagoya University from 1967 to the retirement in 1984: he served as the Director of the Institute in 1983-1984. He has many original articles on the retinal physiology, e.g. "*Identification of five types of S-potentials and their corresponding generating sites in horizontal cells of the carp retina*. Jpn. J. Ophthalmol. 18: 161, 1974" and "*Chromatic properties of S-potential in fish*. Progress in Clinical and Biological Research. Vol. 113: *The S-potential*. (eds,) Drujan B.D. et al., p. 137-150, Allan R. Liss, New York. 1982". For the excellence of his research on the origin and chromatic sensitivity spectrum of the S-potential, he received the *Prize of General Medicine* from Igaku-shoin in 1965. Taniguchi Symposium on Visual Sciences contributed to the advancement of Vision Science during 1978-1996, and he collaborated as a member of its Organizing Committee chaired by TOMITA Tsuneo, throughout the period of its existence. After retirement from Nagoya University, he continued to serve as a Professor at Chyukyo University from 1984 to 1992. Besides being a vision physiologist, he created an experimental system of space life science in 1992: he investigated neurophysiological aspects of posture control using carps to shed light on the human reactions to weightlessness in space. He has held many key positions in the professional Societies, e.g. Councillor of the Japanese Society of Physiology (1958-), Executive Director of the Society (1971-1984), Councillor of the Japanese Society of Space and Aviation Medicine (1959-), Executive Director of the Society (1970) and the President of the Society (1991-1997). He also served to the Government Council for Space Development and Utilization (1978-1984).(SM)

Yukihiko Mitsui

Mitsui, Yukihiko: (1913-1996) Japanese ophthalmologist, Professor Emeritus of Tokushima University. He graduated from Tokyo University in 1937 and studied Ophthalmology under Prof. ISHIHARA Shinobu; he received the degree, Doctor of Medical Sciences in 1942. He was invited to Kumamoto University as Associate Professor of Ophthalmology in 1950 and worked until 1958 when he was promoted to the Professor and Chairman of the Department of Ophthalmology of Tokushima University. He retired from the University in 1979. He served the WHO for 20 years, 1951-1971, as a Specialist for the Trachoma Prevention Committee, and visited many countries of the world as the WHO Official. He served the University as the Hospital Director, 1964-1966, and the Dean of the Faculty of Medicine, 1976-1978. He served the Japanese Ophthalmological Society as a Councillor, as a symposist at the 57th Congress of the Society (Lecture: *Trachoma*) in 1953 and at the 63rd Congress (Lecture: *Virus and eye diseases with particular attention to epidemic keratoconjunctivitis*) in 1959. He also delivered the Society's Award Lecturer (Lecture: *Infectious diseases of the cornea*) at the 79th Congress in 1975. He organized, as the Congress President, the 5th Afro-Asian Congress held in Tokyo in 1972. He was the Founder of the Japanese Association for Ocular Infection and was the President of the Association from 1964 until 1994. In memory of his distinguished service, the Society created the Mitsui Prize to be granted to researchers with significant accomplishments. In recognition of his distinguished service the Government conferred on him the Second Order of the Sacred Treasures in 1986. (MS)

Mittendorf, William F. (1844-1917) American ophthalmologist, author of: *A manual on diseases of the eye and ear for the use of students and practitioners*. New York 1881. Albert

Miyake, Kensaku (1940-) Japanese ophthalmologist, Director and Head of Shozankai Medical Foundation Miyake Eye Hospital. He was born in Nagoya as the 3rd generation in an Ophthalmology family, elder brother of MIYAKE Yozo, he graduated from Nagoya University in 1966. He studied Ophthalmology at Nagoya University and also from his father: he submitted his thesis (*Electron microscopic studies of the effects of bradykinin on retinochoroidal vessels*. J. Jpn. Ophthalmol. Soc. 75: 1719, 1971) to Nagoya University and received his Doctor of Medical Sciences in 1971. He has been in the present position

since 1975. His professional activities has been extensive and positions he has held are Councillor of the Japanese Ophthalmological Society (JOS), Board of Directors of Japan Ophthalmologists Association (1991-), Board of Chairman for the Japanese Society of Cataract and Refractive Surgery, Board of Directors for Japanese Society of Ophthalmic Surgeons (JSOS), of the Japanese Society of Ocular Inflammation (1997-) and Board of Directors of Highlights of Ophthalmology (1991-). He served as the President to the International Intra-ocular Implant Club (IIIC) (1988-1992) and he is the President of the 23rd Congress of the JSOS in 2000, and a Member of the Academia Opthalmologica Interntionalis (Chair XXVI) since 1996. He is the Chief-Editor for the Jpn. J. Ophthalmic Surg., editor for Highlights of Ophthalmology, Ocular Surgery News International and Ophthalmic Practice, Afro-Asian J. Ophthalmol. Jpn. J. Cataract Refr. Surgery. He delivered many Award Lectures, including the Ridley Medal Award Lecture in 1986 (*Fluorometric evaluation of the blood-ocular barrier function following cataract surgery and intraocular lens implantation*. J. Cataract Refract. Surg. 14: 560, 1988), Special Report to the 92nd Congress of JOS (*Active transport of substances from the vitreous body*. J. Jpn. Ophthalmol. Soc. 92: 909, 1988), Arthur Lim Medal Lecture in 1993 at the 6th Meeting of International Cataract Implant Microsurgery and Refractive Keratoplasty (*The significance of inflammatory reactions following cataract extraction/IOL implantation surgery*. J. Cataract Refract. Surg. 22: 759, 1996) and the Binkhorst Medal Award Lecture at the 100th Anniversary of the American Academy of Ophthalmology in 1996 (*Blood-retinal barrier and autofluorescence of the posterior polar retina in long-standing pseudophakia*. J.Cataract.Refract. Surg. 25: 891, 1999). While he has a busy practice, he has published more than 150 papers in National and International Journals: some examples are "*Prevention of cystoid macular edema after lens extraction by topical indomethacin*. Jpn. J. Ophthalmol. 22: 90, 1978", "*Blood-aqueous barrier in eyes with retina vein occlusion*. Ophthalmology 99: 906, 1992" and "*Active transport system of prostaglandins: Clinical implications and considerations*. J. Cataract Refract. Surg. 18: 100, 1992". For his meritorious research, he received many Awards, e.g. Award for recognition and contribution in Ophthalmology (International Congress of Ophthalmology, 1990), Gold Medal of IIIC (1990), Highest Honor Award of the Japan Medical Association (1995) and many others. (Shyozankai Miyake Eye Hospital: Address. phone: +81-5-2915-8001, fax: +81-5-2915-8525, e-mail: miyake@spice.or.jp)(SM)

Miyake, Yozo (1942-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Nagoya University. He was born as the 3rd generation of an Ophthalmology family in Nagoya and is the younger brother of MIYAKE Kensaku. He graduated from Nagoya University in 1967, studied Ophthalmology under Prof. KOJIMA Koku, Prof. ICHIKAWA Hiroshi, and Prof. AWAYA Shinobu. He received his Doctor of Medical Sciences in 1974 (thesis: *Electro-oculographic change in retinal arterial occlusion and its analysis*. J Jpn Ophthalmol Soc. 78: 311, 1974). He extended his studies at the Schepens Eye Research Institute, Boston, in 1976-1979. He studied the focal macular electroretinogram in human macular diseases, and pre-operative functional evaluation of the retina and optic nerve in vitrectomy candidates under the direction of Prof.→HIROSE Tatsuo. He published five papers with this material, which appeared in the Arch Ophthalmol, Retina, and Ophthalmic Res. He has been in the present position as above since 1997. His research interest is in electrophysiology of vision, function of the macula and vitreoretinal surgery, and he has more than 200 publications. Some examples are: *Congenital stationary night blindness with negative electroretinogram. A new classification*. Arch Ophthalmol 104:1013, 1986" and "Occult macular dystrophy. Am J Ophthalmol 122: 644, 1996". He has been active in National and International Societies, and positions he has held are Councillor of the Japanese Ophthalmological Society (JOS) (1989-), and Board of Trustees of the JOS (1999-), Board of Trustees of Japanese Society of Ophthalmic Surgeons (1998-), and Executive Board of many other Japanese Societies. He is also President of the International Society for Clinical Electrophysiology of Vision (2000-), International Society of Ocular Trauma Board (1991-), Schepens International Society Board (1996-), Alcon Award Scientific Advisory Committee member (1998-) and a member of Club Jules Gonin (1998-). For the excellence of his research, he received the Alcon Award (1995) and the 7th Yomiuri-Tokai Medical Award (1998). (Department of Ophthalmology, Nagoya University, 65 Tsuruma-cho, Showa-ku, Nagoya 466-0064,

Japan. phone: +81-52-744-2273, fax: +81-52-744-2276, e-mail: ymiyake@med.nagoya-u.ac.jp)(SM)

Miyanaga, Yoshitaka (1934-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, the Second Hospital of Tokyo Women's Medical University. He graduated from Nippon Medical School in 1960, studied at the Department of Bacteriology and Immunology of the Postgraduate School of Medicine under Prof.→KIMURA Yoshitami and received his Doctor of Medical Sciences in 1965 (thesis: *The role of bradykinin in allergic reaction*). He then studied Ophthalmology at the Tokyo Police Hospital under Dr. KOMOTO Shoichi, the Director of the Department. He has been in the present position since 1975. He serves as a Councillor to the Japanese Society of Infectious Diseases (1983-), Japanese Society of Allergy (1975-), Japanese Cornea Society (1995-) and also serves on the Executive Board of the Japanese Society of Infectious Diseases (1988-1999) and Japanese Society of Ocular Inflammation (1997-). He organized the 18th Congress of the Japan Cornea Society in 1994, the 31st Congress of the Japanese Association of Ocular Infection in 1994 and the 38th Congress of the Japan Contact Lens Society in 1995. His research interest has been ocular infection and inflammation, and the publications include "*Release of leukotrienes from rabbit ocular tissues*. Concilium Acta XXV, p. 510-518, 1987" and "*A new perspective in ocular infection and the role of antibiotics*. Ophthalmologica 211: 9-14, 1997". (Department of Ophthalmology, Second Hospital of Tokyo Women's Medical University, 2-1-10 Nishiogu, Arakawa-ku, Tokyo 116-8567, Japan. phone: +81-3-3810-1111, fax: +81-3-3810-9817)(SM)

Shyunkichi Miyashita

Miyashita, Shyunkichi (1860-1900) Japanese ophthalmologist and the first Professor of Ophthalmology of Jikei Medical College (presently Jikei University School of Medicine). His original name was Kuniya, but he was adopted in early childhood by the Miyashita family. Born in Tajima province, Japan, he entered the Tokyo Imperial University in 1872. He graduated from Tokyo University in 1884 and studied in Freiburg and Würzburg during 1885-1889; he received the degree, Doktor of Medicine from Würzburg University. He was the first Japanese ophthalmologist who attended the 7th International Congress of Ophthalmology held in Heidelberg in 1888; he reported about the Congress in detail in the Japanese medical bulletin of that time. After his homecoming in 1889 he was made the Professor of Ophthalmology of Jikei Medical School and concurrently he founded Miyashita Eye Hospital. He trained many Ophthalmologists at both hospitals. He was one of the promoters of the Foundation of the Japanese Ophthalmological Society. He published about 1891 a work entitled "*Ophthalmic Diagnosis*". (SM)

Sousuke Miyashita

Miyashita, Sousuke (1882-1948) Japanese ophthalmologist and Professor of Osaka University (Son of Shyunkichi). He graduated from Tokyo University in 1906 and studied Ophthalmology under Prof.→KOMOTO Jujiro. He then studied in Freiburg under Prof. →Axenfeld in 1908-1911. After his homecoming he received the degree, Doctor of Medical Sciences from Tokyo University. He was then invited to Osaka University in 1913 as the Professor of Ophthalmology and retired in 1926. He came back to Tokyo and served as the Head of the Eye Clinic of the Branch Hospital of Tokyo University. He published many papers in the German Language including „*Ueber den Haemolysingehalt des Kaninchenkammerwassers vor und nach Reizung des Auges*" Klin. Mbl. Augenheilkd.47: 62,1909 and "*Experimentelle Untersuchungen ueber die sympathische Reizübertragung*" Ibid. 49:143,1911. (SM)

Miyata, Mikio (1936-) Japanese ophthalmologist, Professor of Ophthalmology, Kitasato University Medical School. He graduated from Nagoya City University in 1961, studied Ophthalmology in the Graduate School of Medicine of the University under Prof. MIZUNO Katsuyoshi and received his Doctor of Medical Sciences in 1965 (thesis: *Pathogenesis and treatment of retinitis pigmentosa*. J. Jpn. Ophthalmol. Soc. 68: 1666, 1964). He was invited to become Assistant Professor of Ophthalmology at Kitasato University in 1974 under Prof. ISHIKAWA Satoshi and was promoted to Professor in 1988. He has conjoint appointment as the Director of the Center for Environmental Medicine, Kitasato Institute Hospital since 1999. He has worked together with Prof. ISHIKAWA on environmental problems in Japan, with particular attention to the retina:

some examples in his 146 original articles are "*Radioisotopic studies on renewal of opsin*. Vision Res. 8: 1139, 1968" and "*Retinal degeneration in rats exposed to an organophosphate pesticide (Fenthion)*. Environ. Res. 30: 453, 1983". Currently he serves as the Secretary General of the Japanese Society of Environmental Medicine and is a member of American Academy of Environmental Medicine. (Center for Environmental Medicine, Kitasato Institute Hospital. Shirokane 5-9-1, Minato-ku, Tokyo, 108-0072, phone: +81-3-3444-6161, fax: +81-3-5791-6319)(SM)

Mizukawa, Takashi (1911-) Japanese ophthalmologist, Professor Emeritus of Osaka University. He graduated from Osaka University in 1935, studied Ophthalmology under Prof. NAKAMURA Bunpei and received his Doctor of Medical Sciences in 1941 (thesis: *Ophthalmological Studies on the effect of the intensity of illumination on work efficiency*. J. Jpn. Ophthalmol. Soc. 44: 1487, 1940). He founded the Department of Ophthalmology of Nara Medical School as the First Professor, but soon he was appointed Lecturer of Osaka University in 1945, and then promoted to Professor and Chairman of the Department of Ophthalmology of Tokushima University in 1953. After 5 years, he was invited to be Professor and Chairman of the Department of Ophthalmology of Osaka University in 1958 and served until retirement in 1974. He then served as the Director of the Osaka National Hospital until 1981 and then as the Director of Tane Memorial Hospital in Osaka in 1978-1995. His professional activities have been very extensive and the positions he has held are Executive Board of Trustees of the Japanese Ophthalmological Society (JOS) (1969-1973), Founder and President of the Japanese Chapter of the International Society for Eye Research (ISER) (1973), President of the Osaka Eye Bank (1963-), President of the Japan Eye Bank Association (1976- 1982) and Chairman of the Research Committee of Intractable Diseases of Osaka (1988-). He has served also as the Chief Editor of the *Folia Ophthalmologica Japonica* (1958-1973) and of Short-wave Radio Broadcasting Educational Program for Ophthalmologists (1964-1974). His interest in research has been visual functions, tears, keratoplasty and immunology, and he has many publications in the field. Some examples are "*Clinical aspects of visual field*. Jpn. J. Clin. Ophthalmol. 22:253, 1967", "*Physiology of tears*. JOS Award lecture at the 75th Congress, J. Jpn. Ophthalmol. Soc. 75:1-21, 1971". He organized an International Symposium on the Cornea in 1967 in Kyoto (*Cornea: A molecular organization of a connective tissue*, ed. M. Langham, Johns Hopkins Press, 1969).(SM)

Mizuno, Katsuyoshi (1923-) Japanese ophthalmologist, Professor Emeritus of Tohoku University. He graduated from Nagoya University in 1946, studied Ophthalmology under Prof.→NAKAJIMA Minoru and Prof. →KOJIMA Koku and received his Doctor of Medical Sciences in 1954 (thesis: *series of 4 papers, on melanin in the eye and retinal biochemistry*, J. Jpn. Ophthalmol. Soc. Vol.56: 1277, 1952; Vol. 57: 109, 1953. Vol. 57: 96l, 1953: Vol. 57: 1130, 1954). He was appointed the Assistant Professor of Nagoya City University in 1959; he conducted research at the Department of Ophthalmology of Yale University, U.S.A in 1962-1964. He was promoted to Professor and Chairman of the Department of Ophthalmology of Nagoya City University in 1964. In 1971, he was invited to be Professor and Chairman of the Department of Ophthalmology of Tohoku University and served until his retirement in 1986. He served as a Member of the Board of Trustees of the Japanese Ophthalmological Society (JOS) (1973-1977,1979-1983, 1985) and as the President of the 88th Congress of the Society in 1984. He also served the Society as the Chairman of the Committee for Specialty Board and played key roles in realization of the present Japanese Board of Ophthalmology. His research interest covered wide areas and his particular interest was retinal pigment degeneration and related conditions. He gave a special report at the 73rd Congress of the JOS (*Basic studies of fragility of the outer segment of the visual cells -toward elucidation of the cause of pigmentary retinal degeneration*, J. Jpn. Ophthalmol. Soc. 73: 2534, 1969), and he also delivered the Society Award Lecture at the 85th Congress (*Clinical and pathological aspects of hereditary chorioretinal degeneration, with particular attention to the gyrate atrophy*. J. Jpn. Ophthalmol. Soc. 85: 1864, 1981). He also published the first electron microscopic findings of the retina in congenital amaurosis of Leber (*Leber's congenital amaurosis*, Mizuno K and Takei Y. Am. J. Ophthalmol. 83: 32, 1977). He is an excellent

inventor of various instruments, e.g. cycloscope to visualize pathologic changes in the ciliary body (*Cycloscopy and fluorescein cycloscopy*. Mizuno K and Asaoka M. Invest. Ophthalmol. 15: 561, 1976 and argon laser photocoagulator using binocular indirect ophthalmoscope (*Binocular indirect argon laser photocoagulator*. Br. J. Ophthalmol. 65: 425, 1981). He also wrote a two-volume book "*Atlas of Ocular Surgery*", Medical View, Tokyo 1989.(SM)

Gentaro Mizuo

Mizuo, Gentaro (1876-1913) Japanese ophthalmologist and Professor of Ophthalmology of Osaka University. He graduated from Tokyo University in 1901 and studied Ophthalmology under Prof. →KOMOTO Jujiro; he received the degree, Doctor of Medical Sciences in 1911 from Tokyo University. He was appointed as the Professor and Chairman of the Department of Ophthalmology of Osaka Medical School (presently Osaka University) in 1905. On the instructions of the Medical School, he studied at Würzburg University under Prof. C.→Hess during 1908-1910, and returned to Osaka University. He published many papers in both the Japanese and German languages; he studied gonioscopy by filling the conjunctival sac with saline in 1912, and he developed a new hemispheric perimeter. In 1912 he instructed his student →NAKAMURA Bunpei to examine the dark adaptation of a patient with Oguchi's disease. Nakamura covered the patient's eye for a long time, but the light sense of the patient continued to improve, and finally the patient's eye was covered for one week. Nakamura discovered that the fundus color of the patient became completely normal. Both →Mizuo and Nakamura studied 2 more cases and found that this normalization of the fundus occurred in all cases. Since MIZUO died suddenly in 1913, NAKAMURA reported this phenomenon at the Congress of the Japanese Ophthalmological Society in 1913. This normalization of the Fundus of Oguchi Disease by long dark adaptation is now called Mizuo-Nakamura Phenomenon of Oguchi's Disease. (SM)

Yutaka Mizutani

Mizutani Yutaka (1913-1991) Japanese ophthalmologist, Pioneer in contact lens in Japan. He graduated from Nagoya University in 1939, studied Ophthalmology at the University under Prof. NAKAJIMA Minoru and received his Doctor of Medical Sciences in 1949 (thesis: *Absorption spectrum of retinal photosensitive pigments*. I. J. Jpn. Ophthalmol. Soc. 52: 113, 1948; II *Retinal photosensitive pigments of protanopia*. ibid. 53: 1, 1949). He founded Nippon Contact Lens Research Institute in 1956 and introduced the first Japanese corneal contact lens in 1953 (*Corneal contact lens*. Jpn. J. Clin. Ophthalmol. 47: 116-118,190-191, 1953), and subsequently developed various types of contact lenses. He founded *Contact Lens Research Meeting* in 1952 together with →SATO Tsutomu, →KAJIURA Mutsuo, →KUNITOMO Noboru and →MAGATANI Hisao, and this meeting evolved in to the *Japan Contact Lens Society* (JCS) in 1958. The first Congress was presided over by Prof. →MAKIUCHI Shoichi and he delivered a special lecture "*Recent advances in contact lens research*". At the 25th Congress of the JCS, he gave a special lecture "*Considerations of contact lens update*" J. JCS 25: 1-7, 1983". He organized the 4th International Contact Lens Symposium in 1978 and received the Javal Medal from the International Contact Lens Council of Ophthalmology. He has many publications on contact lens, e.g. "*Self-soluble, new hard contact lens for medical treatment*. CONTACTO 27:9-12, 1983" and "*History of contact lens in Japan*. J. Am. Optom. Assoc. 37: 248, 1966". (SM)

Mochizuki, Manabu (1947-) Japanese ophthalmologist, Professor and Chairman of the Department of Visual Science of Tokyo Medical and Dental University, Graduate School of Medicine. He graduated from Kyushu University in 1973, studied Ophthalmology at Tokyo University under Prof.→MISHIMA Saiichi and received his Doctor of Medical Sciences in 1979 (thesis: *The adrenergic effects on cyclic AMP and tension of the sphincter pupillae of the rabbit*. Docum. Ophthalmol. Proc. 18: 353,1979). He received a Scholarship for Japan-US Exchange Program in 1981 and carried out research at the National Eye Institute, U. S. A. with R. Nussenblatt (1981-1984) (*Involvement of the pineal gland in rats with experimental autoimmune uveitis*. Invest. Ophthalmol. Vis. Sci. 15:23,64-66,1983. *Cytostatic and cytolytic activities of macrophages regulation by prostaglandins*. Cell. Immunol. 83:34-42,1984. *An association between susceptibility to experimental autoimmune uveitis and choroidal mast cell numbers*. J. Immunol.133: 699-701,1984. Invest.Ophthalmol. Vis.Sci.26:1-9,1985. *Effects of cyclosporine and other*

immunosuppressive drugs on experimental autoimmune uveoretinitis in rats. Invest. Ophthalmol. Vis. Sci. 26: 226-32,1985.) . He was appointed the Professor and Chairman of the Department of Ophthalmology of Kurume University School of Medicine in 1990 and served until 1998, when he was invited to the present position. He has held key positions in the National and International professional Societies, and they are Councillor of the Japanese Ophthalmological Society (1994), Japanese Society of Ocular Pharmacology (1988-), the Japan Association of Ocular Infection (1994) and the Japanese Society of Ocular Inflammation (1997-). He is also Councillor of the International Ocular Inflammation Society (1990-) and organized the third Congress of the Society as the President (1994). He has many publications in the field of ocular inflammation, immunology and molecular biology, and some examples are "*Use of immunosuppressive agents in ocular diseases*. Prog. Ret. Eye Res. 13; 479, 1994" and "*Human T-lymphotropic virus type I uveitis*. (eds) Pepose, J. S. et al. *Ocular Infection and Immunity*. p.1366,Mosby, Philadelphia, 1996". For the excellence of research, he received the Chibret International Award (1986) (*Choroidal Mast Cells: Their possible role in experimental autoimmune uveoretinitis*. Chibret International J. Ophthalmol. 5:41,1987) and the Mitsubishi Foundation Award (1994) (*HTLV-I uveitis: a distinct clinical entity caused by HTLV-I*. Jpn. J. Can. Res. 83:236,1992. *Clinical and immunological features of human T-cell lymphotrophic virus type 1 uveitis*. Am. J. Ophthalmol. 116:156,1993. *Human T lymphotrophic virus type 1 uveitis after Graves' disease*. Br. J. Ophthalmol. 78:163,1994.). (Department of Visual Science, Tokyo Medical and Dental University, Graduate School of Medicine, Yushima 1-5-45, Bunkyo-ku, Tokyo 113-0034,Japan. Phone:+81-3-5803-5296; fax: +81-3-3818-7188, e-mail: m.manabu.oph@med.tmd.ac.jp)(SM)

Moffatt, Paul McGregor (1899-1963) British ophthalmologist. Moffatt was a north Countryman, born in Dalston, Cumberland, the son of Dr. Charles Edward Moffatt. During the first world war he served with the Royal Navy in mine-sweepers, mostly in the Mediterranean. On demobilization he decided to study medicine and entered Guy's Hospital, London. He qualified with the Conjoint Diploma in 1923, obtained the M.B., B.S. (London) in 1924, and spent the next 4 years in general practice in Lancashire with his elder brother. Moffatt then decided to specialize in ophthalmology, returned to London, and became a house surgeon at the Royal Westminster Ophthalmic Hospital and later Registrar both there and at Guy's. He obtained the D.P.H. (Eng.), D.O.M.S., M.D. (Lond.), M.R.C.P. (Lond.), and F.R.C.S. (Eng.), and was appointed to the staff of the Royal Westminster Ophthalmic Hospital in 1938, joining the staff of the newly amalgamated Moorfields Hospital in 1947. He was also Ophthalmic Surgeon to the Hammersmith and West London Hospitals. His advice was sought by colleagues and junior staff alike and he was a willing and able teacher. His pioneer work on vitreous replacement was recognized internationally; his long association with the National Institute for the Blind and with Blind Certification led to his establishing the first Visual Aid Clinic at Moorfields. BJO 1963,47:704

Mohaddab ad-din b. Ad-Dahuar (*1169- ?). A son of Ali of Damascus, born in Damascus. He became official oculist to the Bagdad Hospital and a teacher of the famous →Usaibia.American Encyclopedia of Ophthalmology 10,p.7847

Mohammed Ebn Zakarijah Abu Bekr *see* **Ar-Razi**.

Mohrenheim, Joseph Jacob Freiherr von (c.1759-1799) Austro-Russian surgeon, obstetrician and ophthalmologist, inventor of the compressor bandage for the subclavian artery-a dressing which still bears his name. For him, too, was named "Mohrenheim's fossa," a depression below the clavicle, and between the pectoralis major and deltoid muscles, which serves as a guide in the ligation of the subclavian artery. At first he practised in Vienna, but later (1783) was called to St. Petersburg, where he filled the chair of obstetrics and operative surgery. He was widely known as a cataract operator. His more important writings are the following, of which the second contains a number of interesting ophthalmologic observations, and the third an excellent exposition of cataract: 1. *Wienerische Beytraege zur Arzneykunde, Wundarzneikunst und Geburtshilfe*. (2 vols. Wien, 1781; Dessau, 1783.) 2. *Beobachtungen Verschiedener Chirurgischer Vorfälle*. (2 vols.,

Vienna, 1780.) 3. *Abhandlung von der Entbindungskunst, Verfasst auf Höchsten Befehl Ihre Maj. der Kaiserin*, etc..(St. Petersburg, 1792; Leipsic, 1803). Described by Gurlt as "a sumptuous affair, published at the expense of the Empress Catherine." American Encyclopedia of Ophthalmology 10,p.7847

Mohrenheim, Joseph Jakob Freiherr von (ca. 1759-1799) Austrian, Magister of obstetrics and ophthalmology in Vienna. He started his practical and teaching career in Vienna, where he was an instructor at the medical-surgical school and the editor of the *Wienerische Beyträge zur praktischen Arzneykunde, Wundarzneykunst, und Geburtshilfe*, to which he contributed a valuable treatise on cataract surgery (1781). In 1783 he settled in St. Petersburg, Russia, as director of that city's school for midwives. On the order and costs of Her Majesty the Emperess Catherina he published a magnificent in-folio work titled *Abhandlung von der Entbindungskunst* (St.Petersburg 1792). Mohrenheim also specialized in ophthalmology and was a skilled cataract surgeon. The author makes in his *Beobachtungen verschiedener chirurgischer Vorfälle*. 2 vols., Vienna and Dessau 1780-83) numerous interesting observations about ophthalmic surgery; half of each of these volumes is devoted to observations on the surgery of the eye. He prefers couching for cataract, but reports on his experiences with the extraction operation, as well. Albert. JPW

Moignot, François Napoléon Marie, Abbé (1804-1884) French abbot, mathematician and physicist. Moignot was born at Guémené, France and entered the Jesuit order in 1822. In 1836 Moignot settled in Paris, where he taught mathematics and edited several scientific journals. He was the author of treatises on differential and integral calculus, on telegraphy, and on the stereoscope and the saccharimeter. He was the author of a voluminous work on optics: *Répertoire d'optique moderne* 4 vols. Paris & Leipzig 1847-1850. Albert.JPW

Molinari, Josepho, (19th cent.) Italian physician of Pavia. Molinari was a student of Francesco Flarer. He authored *De scleronyxidis sequelis earumque cura* Bolzano 1823. (a compilation of Flarer's lectures on the complications that can follow cataract couching through a scleral puncture, and how to deal with them.) Albert

Molinelli, Pietro Paolo(1702-1764). Italian surgeon of some ophthalmologic importance. Born in Bombina, Italy, he became the first incumbent of the chair of operative surgery at the University of Bologna. For a time he resided in Paris, but very soon returned to Bologna, where he continued to live, and also to teach in his former position, until his death. He was known in ophthalmology for the numerous operations which he performed on the fistula lacrymalis, and for an article which he wrote on this subject (Comment. Acad. Bonon. Scient. et Artium, Vol. II, 1775)American Encyclopedia of Ophthalmology 10,p.7849

Molinetti, Antonio (? – 1675) Italian anatomist and surgeon, born in Venice. He received his medical education at Padua, where he became professor of anatomy and surgery in 1649, and professor of theoretical medicine in 1661.He wrote: *Dissertationes anatomicae et pathologicae de sensibus, & eorum organis.* Patavii 1669; *Dissertationes anatomico-pathologicae quibus humani corporis partes accuratissime describuntur morbique singulas divexantes explicantur* Venetiis 1675. Albert

Molyneux, William (1656-1698) Irish physicist and astronomer of Dublin. Molyneux was educated at Trinity College. His brief career was one of independent scientific research and philosophical speculation. His papers on the hygroscope, optics, and astronomy appeared in the Philosophical Transactions of the Royal Society, of which he was elected a fellow in 1685; his best-known scientific work is the *Dioptrica nova*. Molyneux is best remembered, however, for *The Case of Ireland's being Bound by Acts of Parliament in England Stated* (1698), an argument for Ireland's autonomy. His book was titled: *Dioptrica nova. A treatise of dioptricks in two parts*. London 1692 and was the *first* treatise on optics published in English. Albert.

Momose, Akira (1929-) Japanese ophthalmologist, Chairman, Director of the Institute of Clinical Ophthalmology, Kiryuu. He graduated from Osaka University in 1950, studied

Ophthalmology under Prof. KAMIYA Sadayoshi at Nara Medical University and received his Doctor of Medical Sciences in 1958 (thesis: *Quantum biophysics of vision*. J. Jpn. Ophthalmol. Soc. 61: 1593-1603, 1957). He has been in the present position since 1978. While he has busy practice, he conducted research on many aspects of clinical Ophthalmology and his international activities have been very extensive. He has published many original papers in National and International Journals, e.g. "*Histopathological observations on bullous keratopathy after argon-laser iridotomy*. J. Jpn. Ophthalmol. Soc. 130: 129-136, 1999" and "*Intracameral anesthetic – a new anesthetic technique for intraocular surgery*. Asia-Pacific J. Ophthalmol. 9:47-54,1998". He is a member of many Japanese Societies and also of International Societies, e.g. American Academy of Ophthalmology, International Intra-ocular Implant Club, American Society of Contemporary Ophthalmology, Contact Lens Association of Ophthalmologists, International Society of Refractive Surgery, Fellow of the International College of Surgeons and Founder Member and Honorary Life Adviser of the Asia-Pacific Intraocular Implant Association. He is also an Honorary Member of College of Ophthalmologists of Sri Lanka and the Nepal Ophthalmic Society. He is an editor to the Indian J. Ophthalmol. Asia-Pacific J. Ophthalmol., Ocular Surgery News International Edition, International Editorial Board of Ophthalmosurgery and Ophthalmic Practice. He is Honorary Professor, Chinese People's Liberation Army Postgraduate Military Medical School, Visiting Professor to Shanghai Medical University, Jinan University Postgraduate Medical School, Tianjin Medical University, Henan Medical University in China, and to Tribhuvan University in Nepal. Due to his dedicated contributions to international relations, he received many Awards, e.g. The Third Order of Merit Gurka Dakshine Bahu Decoration from the King of Nepal (1991), Citation for International Friendship and Goodwill in Asian Countries from the Ministry of Foreign Affairs Japan (1987) and the International Academy Prize from Japan Culture Promoting Association (1998), and many others. (Institute of Clinical Ophthalmology, 1-100 Umeda-cho, Kiryuu, Gunma Prefecture, 376-0601, Japan; phone: 81-277-32-1010, fax: 81-277-32-2216)(SM)

Mondeville (or Amondaville) Henri de (13th-14th century). French surgeon and ophthalmologist of the 13th and 14th centuries, concerning whom but little is now known. He was born in Normandy, at Mondeville, or Amondaville, taught and practised for a considerable time at Montpelier, in 1301 became surgeon to the King, and in 1306 removed to Paris in order to accept a chair of surgery in that city. A few years later he had written a work on surgery, a Latin edition of which was issued by Pagel, at Berlin, in 1892, under the title *Die Chirurgie des Heinrich von Mondeville*, while a French translation by Nicaise appeared at Paris in 1893, called *La Chirurgie de Maître Henri de Mondeville*. Henri de Mondeville did not live to finish his book, which, in consequence, lacks all its ophthalmic divisions, saving and excepting only the bare rubrics. He died of consumption at some time between 1317 and 1320. American Encyclopedia of Ophthalmology 10,p.7854

Monissey, Matthew John (1909 - 1984) Australian physiologist and ophthalmologist born in New Zealand. Monissey was lecturer in physiology at Sydney Technical College. He later gained medical qualifications and a Diploma in Ophthalmology 1955 and then practised ophthalmology until retirement. Educated Sydney Technical College (Associate, with merit) and University of Sydney (BA 1937, MBBS 1951), Diploma in Ophthalmology 1955. Attendant, medical school, University of Sydney, College Fellow and lecturer in physiology, Sydney Technical College, ophthalmologist.

Monoyer, Ferdinand (1836-1912) French ophthalmologist of Lyon. Alsatian, Monoyer had first worked in Strasbourg where he received his medical degree with the thesis *Des Fermentations*, then in Nancy and finally in Lyon. In Strasbourg he was the successor to Victor→Stoeber (also his father-in-law) at the Clinique Ophtalmologique until the city fell in to the hands of the Prussians. He went to Nancy in 1872, creating there an ophthalmic clinic at the local hospital, and later, in 1876, accepting the professorship of medical physics at the University of Lyon. His special domain was physiological optics. He was the first to introduce test-types and lenses on the decimal system and to adopt the meter on which he bestowed the name of *dioptre*. He invented a demonstrating ophthalmoscope (*Un ophtalmoscope portatif*, Annales d´oculistique 1864,52:210) and translated Donders

famous *On the Anomalies of Accommodation and Refraction of the Eye* London 1864 and from the German W. Wundt *Traité élementaire de physique médicale* Paris 1871. He also authored a little booklet *Description et Usage de l´Iconarithme* Strasbourg 1872. The Ophthalmoscope, 1912,p.548; Schett/Keeler *The Ophthalmoscope*, vol.1,p.178-179. JPW

Monro, Alexander (1697-1767) *Primus*. Scottish anatomist and surgeon. Monro was the founder of a dynasty of anatomy teachers who established Edinburgh as a center of medical education. Born in London of Scottish parents, he grew up in Edinburgh, received his medical education in London (under Cheselden), Paris, and Leiden (under Boerhaave), and, returning to Edinburgh, was appointed the University's first professor of anatomy in 1720. He was joined (1759) and succeeded (1764) in that post by his son, Alexander Monro, “secundus”, who was in turn succeeded by his son, Alexander Monro “tertius”, in 1817. Monro Primus wrote primarily on anatomy and surgery, but he also published an article on diseases of the lachrymal passages in which he advocated, in some cases, the removal of the lachrymal sac-one of the first works to recommend this. His principal works are *Osteology* (1726), *Essay on Comparative Anatomy* (1744) and *Observations, Anatomical and Physiological* (1758). His works were published by his son: *The works of Alexander Monro published by his son to which is prefixed the life of the author* Edinburgh 1781. Albert.JPW

Monro, Alexander (1733-1817) *secundus*, Scottish anatomist, son of Alexander Monro, *primus*. Monro *secundus* was born in Edinburgh and received his M.D. in 1755 at the University of Edinburgh, where in the same year he became professor of anatomy and surgery as coadjutor to his father. After further anatomic studies in London, Paris, Leiden, and Berlin, he returned to Edinburgh, where he gave a full course of lectures on anatomy and surgery every year from 1759 to 1808. In his *Observations on the Structure and Functions of the Nervous System* (1783), Monro described the foramen interventriculare, now known as the foramen of Monro; he also published important treatises on comparative anatomy and on the bursae mucosae of the human body. He wrote: *Three treatises. On the brain, the eye and the ear*. Edinburgh 1797. Albert.JPW

Monro, Alexander (1773-1859) *tertius*, of Edinburgh, grandson of Alexander Monro *primus*. He received his M.D. in 1797 at the University of Edinburgh, where after further study in London and Paris, he was appointed conjoint professor (with his father, Monro *secundus*) of medicine, surgery, and anatomy in 1800 and was sole professor from 1817 to 1846.The last of the Monro dynasty, he was of lesser abilities than his father and grandfather, both as lecturer and as writer. Amongst half a dozen books he wrote, there are: *Elements of the anatomy of the human body in its sound and diseased state* Edinburgh 1813; *Essays and Heads of Lectures on Anatomy , Physiology, Pathology and Surgery. With a Memoir of his Life* 1840, which is a posthumous edition of his fathers work. Albert.JPW

Montain, Gilbert Alphonse Claude (1780-1853) French surgeon and obstetrician of Lyon, younger brother of Jean-François-Frederic Montain, also a surgeon. He received his M.D. at Paris in 1808 with the thesis *Quelques propositions sur les Maladies Laiteuses* and became chief surgeon at the Charité in his native city. He invented several ophthalmic instruments and became eminent as a depressor of the cataract. Of his works, on a variety of medical and surgical topics, two deal with ophthalmology: a treatise on the couching of cataract, which decribes a new procedure devised by his brother, Jean François Frederic Montain. He wrote, on ophthalmology, a book on cataracts and a paper on lachrymal tumors and fistulae: *Traité de la cataracte, contenant l' énumération des différens moyens employés pour en obtenir la guérison* Paris & Lyon 1812 and *Considerations sur la Tumeur et la Fistule Lacrymale* (in: *J. general de médecine* 1813). He also published an open letter: *Lettre de M. Thenarley, oculiste de Lyon* 1824. American Encyclopedia of Ophthalmology 10,p.7859. Albert. JPW

Montain, Jean Francois Frédéric (1778-1851) French physician, of some importance in ophthalmology. Born at Lyon, France, he graduated at Montpellier, presenting as thesis "*Quelques Propositions sur la Méthode Expectante Appliquée à la Chirurgie*." In 1809 he became physician to the Hôtel Dieu at Lyon. Imprisoned for a political conspiracy, he

escaped with the assistance of his brother and fled to Belgium. Later he returned to Lyon, and became a military physician, in which capacity he accompanied a number of expeditions to Africa. Though widely known as a coucher of cataract, he left no writings of ophthalmologic character; his special procedure in depression, however, was described by his brother Gilbert. American Encyclopedia of Ophthalmology 10,p.7859-7860

Monte, Alberto del (? – 1922) Italian ophthalmologist. After having spent much time in the study of histology and pathology under Palladino and Armanni del Monte took up ophthalmology under de Vincentiis, in the Naples Clinic where he continued to work until his death. Besides an active life as a clinician he made numerous contributions to the literature of ophthalmology. His first writings were on pathologic and bacteriologic subjects: for example, The Biology of the Xerosis Bacillus, Petrifying Conjunctivitis, The Study of Amyloid Degeneration of the Lids and Conjunctiva. Other later works concerned black cataract, chancroid of the conjunctiva, ocular complications of variola and a very complete work on chalazion, some results of which he intended to present at the Washington Congress. The last years of his life saw the completion of some important work along more general lines on the biology and physiology of blood. He was an active collaborator in the Archivio di Ottalmologia.AJO 5:844.

Monte, Michele del (1838-1885). Italian ophthalmologist, author of the greatest Italian text-book on ophthalmology in his day. Born at Moliterno he studied at Naples and Berlin, at the latter institution receiving the personal instruction of Albrecht von →Graefe. Settling in Naples, he was made extraordinary professor of ophthalmology in that place. He was a good operator and an extraordinarily good teacher. His early death prevented the completion of his major work, the first modern textbook of ophthalmology in Italian: *Manuale pratico di oftalmiatria* 2 parts 1872 & 1876. He authored also *Lezioni di clinica oculistica* published in Napoli 1888 after his death. American Encyclopedia of Ophthalmology 10,p.7860.Albert

Monteath (or Monteith), George Cunningham (1788-1828). Scottish physician, the first in the city of Glasgow to devote himself exclusively to diseases of the eye. Born at Neilston, Renfrewshire, Scotland, he studied at Glasgow and in London, receiving the M. R. C. S. in 1809. For a time he was surgeon in the English army, but in 1813 settled as physician in Glasgow, where, shortly afterward, be began to devote himself exclusively to the study and treatment of ocular diseases. He was widely and favorably known throughout the west of Scotland and the North of England. In the prime of life he died, being but forty years of age. Monteath translated Karl Heinrich →Weller's *Handbuch der Augenkrankheiten*, with the English title *Manual of the Diseases of the Human Eye; translated from the German, Illustrated with Cases and Observations* (2 vols., Glasgow, 1821). This book is declared by Gurlt to have been "das populärste Handbuch jener Zeit." [the most popular in his time] American Encyclopedia of Ophthalmology 10,p.7860

Monteggia, Giovanni Battista (1762-1815) Italian surgeon, who devoted some attention to ophthalmology. Born at Laveno, on Lake Maggiore, he studied chiefly at the Milan General Hospital. In 1790, he was made assistant surgeon and prosector of anatomy at this hospital, in 1791 prison physician, and, four years later, professor of anatomy and surgery, as well as surgeon. Monteggia's writings are all on general surgery. In his masterpiece, however, *Istituzioni di Chirurgia* (Milan, 1802-1803) he devotes a single chapter to the pathology of the eye-a chapter which was valued very highly by so great a man as Antonio→Scarpa.American Encyclopedia of Ophthalmology 10, p.7860

Montméja, A. de (1841- ?) French ophthalmologist. Montméja received his medical degree with the thesis *Diagnostic des cataractes et parallèle des opérations qui sont applicables à leut traitement* in Paris 1871. Little is known about him. He became director of the Clinique Ophtalmologique in Paris. He wrote, with M.A. Hardy, in 1868, *Clinique Photographique de l´Hôpital St. Louis* and was the founder and editor (1869-1876) of the *Revue photographique des hôpitaux de Paris*, the *first* journal of medical photography. Montméja provided the photographs to Ed. Meyer´s famous *Traité des Operations qui se pratiquent sur l´Œil* (1871). He authored : *Pathologie iconographique du fond de l'oeil* Paris 1870 and co-authored, with A. Hardy, a dermatological work : *Chronique*

photographique des maladies de la peau of which the third edition was published in Paris 1882. He is mentionned in: LJ Endtz : *La neurologie et l'illustration photographique du livre médical* in : *Revue neurologique*, 1983, 139 (6-7), 439-444 and G. Tilles : *La création du Musée de l'Hôpital Saint-Louis*. Repères chronologiques et éléments de significations.*Histoire des sciences médicales*, 1994, 28 (4), 351-357. JPW

Moon, Robert C. (1844-1914) British philanthropist, son of William Moon, inventor of an embossed script for the blind. Robert Charles Moon emigrated from England to America, settling in Philadelphia, where he was active in efforts to provide education for the blind. Albert

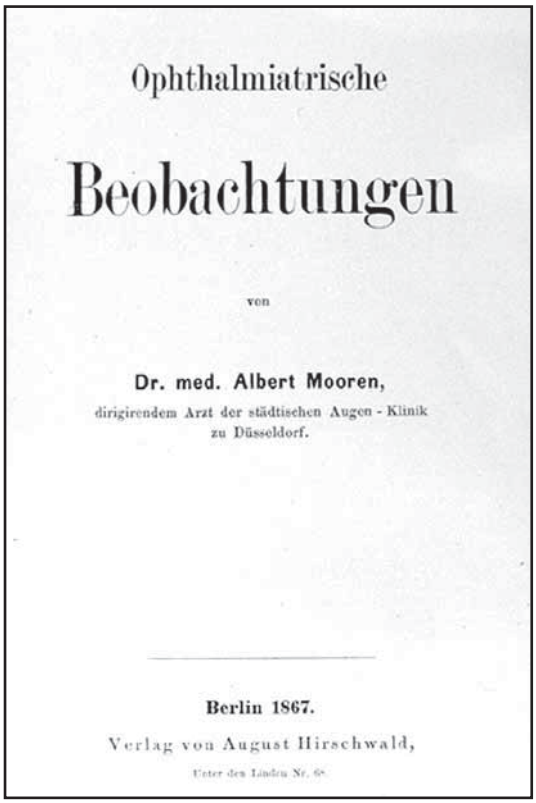
Moon, William (1818-1894) British, father of Robert C. Moon, inventor of an embossed type for the blind, born at Horsemonden, Kent, England. Moon gave up his plans for a career in the church when he became blind in 1840, and instead devoted himself to helping other blind persons to read and to study music and the sciences. He devised a system of embossed characters whose forms were simpler that those then in use; he raised funds for the printing and lending of embossed-type books and periodicals, maps, mathematical figures, literature and music. His philanthropic efforts have produced 80 schools in Great Britain and 14 in other countries. He published: *Light for the blind; a history of the origin and success of Moon's system of reading (embossed in various languages) for the blind*. London 1873; *The consequences & ameliorations of blindness (a brief sketch)*. London 1875. American Encyclopedia of Ophthalmology 10,p.7862 Albert.

Moore, Hugh Tate (1887-1918) American army ophthalmologist of Wilmington, N. C., who died as a result of poisoning by mercuric chlorid taken by mistake for calomel. Moore was born in Bolivar, Tens., in 1887, grew up in Bolivar, and studied at Tulane University, New Orleans, where he received the M.D. in 1900. For about two years he practiced general medicine in New Orleans. In 19I2 he moved to Wilmington, where he practiced as ophthalmologist and otolaryngologist until, in August 1917, he entered the medical service of the army. He was a member of the First Presbyterian Church at Wilmington, and oculist and aurist to the *James Walker Memorial Hospital*.AJO,1:694-695.

Moore, Robert Foster (1878-1963) British ophthalmologist, formerly consulting eye surgeon to St. Bartholomew's Hospital and consulting surgeon to Moorfields Eye Hospital. His distinguished career began at Cambridge towards the end of the 19th century when he entered the university as a scholar of Christ's College. In 1900 he was placed in the first class in part I of the Natural Sciences Tripos, and in 1901 in the second class of part II. In the anthropological laboratories at Cambridge he did some valued research work on the head of an Australian native. While an undergraduate he saved two women from drowning in the frozen Cam, and for this courageous act was awarded the Royal Humane Society's medal. From Cambridge he went to St. Bartholomew's Hospital as a scholar. He qualified in 1904 and became house-surgeon to Sir D'Arcy Power. In 1906 he became F.R.C.S. From 1907 to 1913 he was demonstrator of anatomy, and during this time won a well deserved reputation for lucid and incisive teaching, which endured throughout his hospital career. His sustained memory for the details of human and comparative anatomy was remarkable. In 1913 he gained the Lang Research Scholarship, and in 1914 the Middlemore Prize. The 1914-18 war came at a critical time in his early struggles in practice. As a Captain in the R.A.M.C. he was appointed officer in charge of the B.E.F. ophthalmic centre at Etaples. In moments of comparative tranquillity in France he acquired considerable skill as a water-colour artist. For his services in the Army he was appointed O.B.E. and was mentioned in despatches. His book on *Medical Ophthalmology*, first published in 1922, with a second edition in 1925, was a classic in its time. In 1927 he gave the Montgomery Lecture at Trinity College, Dublin, and in 1949 he chose proptosis as the subject of his Middlemore Lecture at Birmingham. He was President of the Ophthalmological Society of the United Kingdom in 1936. After he retired from his hospital appointment in 1937, he acted as examiner for the Conjoint Board and the University of London; he served as a consultant to the Ministry of Supply; and he was a member of the Ministry of Health's committee on possible substitutes for cocaine. He was elected Justice of the Peace for Wiltshire in 1943, and during the 1939-45 war served in

the Home Guard. Foster Moore's many contributions to ophthalmic medicine and surgery won him an international reputation. He had a wide interest in scientific advances in medicine, and other fields. BJO 1963,47:319-320

Moore, Robert Love (1872-1918), American ophthalmologist of Columbia, S. C. born at McConnelisville, York county, S. C. His medical degree was received at the University of Maryland Baltimore in 1896. He moved to Columbia in 1903. Moore was resident physician to the Presbyterian Eye, Ear, Nose and Throat Hospital, Baltimore, in 1894-95, and oculist to the University of South Carolina from 1903 until his death.AJO,1:381


Ophthalmiatrische

Beobachtungen

von

Dr. med. Albert Mooren,

dirigirendem Arzt der städtischen Augen - Klinik zu Düsseldorf.

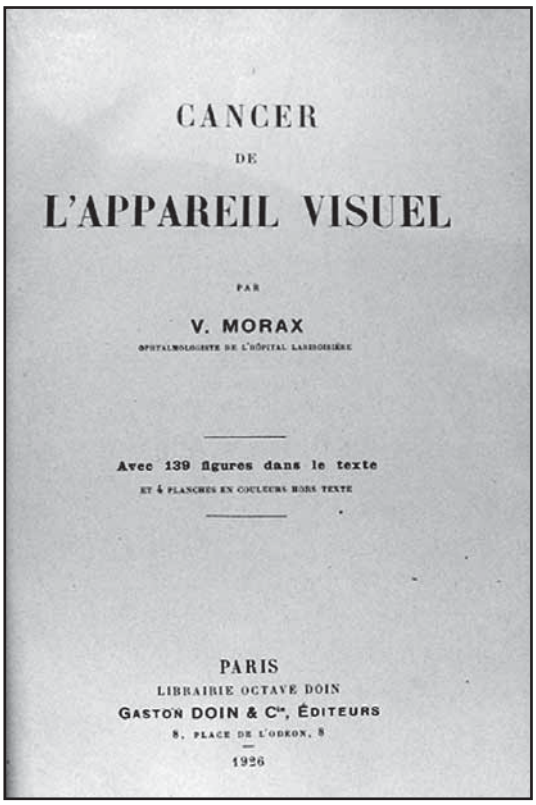
Berlin 1867.

Verlag von August Hirschwald,

Unter den Linden Nr. 68.

Mooren, Albert von (1828-1899). German ophthalmologist and privy medical councillor. Born at Oedt, near Kempen on the Nether Rhine, he studied medicine at Bonn and Berlin, at the latter institution receiving his degree in 1854. It was under the stimulus of A. v. Graefe that he decided to occupy himself with ophthalmology. From 1855 till 1862 he practised as a general physician in Oedt, then was called to the headship of the Ophthalmic Hospital at Düsseldorf. In addition to the numerous duties, of this position he also fulfilled those of the directorship of the Ophthalmic Institute at Liège(Belgium). He resigned the latter position in 1878, the former in 1883. He continued, however, to practise ophthalmology until his death, and with an ever-widening reputation. Numerous honors were conferred upon him in the course of the years. His life, however, was greatly saddened by an accident which occurred to a member of his family. His eldest son, at Marburg, saved a child from drowning, but, in so doing, lost his own life. " The most important of von Mooren's ophthalmologic writings, are as follows: 1. *Ueber Retinitis Pigmentosa*. (Düsseldorf, 1858.) 2. *Die Gehinderte Tränenleitung*. (Ibid., 1858.) 3. *Die Verminderten Gefahren einer Hornhautvereiterung bei der Staarextraction*. (Berlin, 1862.) 4. *Die Behandlung der Bindehauterkrankungen*. (Düsseldorf, 1865.) 5. *Ophthalmiatrische Beobachtungen*. (Berlin, 1867.) 6. *Ueber Sympathische Gesichtsstörungen*. (Ibid., 1869.) 7. *Ophthalmologische Mittheilungen*. (Ibid., 1874.) 8. *Gesichtsstörungen und Uterinleiden*. (Ibid., 1881, 2d ed., 1898.) 9. *Zur Pathogenese der Sympathischen Gesichtsstörungen*, (Zehender's M.-Bl., XI.) 10. *Fünf Lustren Ophthalmologischer Thätigkeit*. (Wiesbaden, 1882.) 11. *Hauteinflüsse und Gesichtsstörungen.* (Ibid., 1884.) 12. *Einige Bemerkungen iiber Glaucomentwicklung*. (Arch. f. Augenhlk., XIII.) 13. *Die Sehstörungen und Entschädigungsansprüche der Arbeiter*. (1891.) 14. *Die Indicationen der Cataractdiscission*. (1893.) 15. *Die Operative Behandlung der Natürliche and Künstlich Gereiften Staarformen*. (1894.)American Encyclopedia of Ophthalmology 10,p.7862-7863.JPW

Morand, Sauveur François (18th century). This surgeon was the son of Jean Morand, chief surgeon of the Hôtel des Invalides, Paris, he married a daughter of Maréchal and studied surgery at Paris. In 1724 he became Demonstrator of Surgery at the Garden of the King, in 1730 surgeon to the Charité and chief-staff-surgeon of the French garden. One of the founders of the French Academy of Surgery, he gave an immense impetus to his beloved art. He himself invented a number of operations, but was the means of introducing many others from foreign countries into France. He wrote a very large number of works and articles of a general character, which need not here be named. Ophthalmologically interesting are the Eulogy on Cheselden and the Eulogy on Daviel. In these two eulogies has been preserved much of the personal information we possess today about these two great masters. He was one of the first to show that membranous cataracts do not exist, except as opacifications in the capsule of the lens. He seems to have been a very friendly man and almost universally liked. He was, however, possessed of much vanity. Thus, Daremberg declares: ". . . his scientific baggage was neither considerable nor important, and he compromised his merit by his vanity." American Encyclopedia of Ophthalmology 10,p.7863-7864


CANCER

DE

L'APPAREIL VISUEL

PAR

V. MORAX

OPHTALMOLOGISTE DE L'HÔPITAL LARIBOISIÈRE

Avec 139 figures dans le texte

ET 4 PLANCHES EN COULEURS HORS TEXTE

PARIS

LIBRAIRIE OCTAVE DOIN

GASTON DOIN & Cie, ÉDITEURS

8, PLACE DE L'ODÉON, 8

1926

Morax, Victor (1866-1935) French ophthalmologist born at Morges, Switzerland. Morax received his M.D. in 1894 at Paris and settled in that city, where he was attached to the Hôpital Lariboisière (1903-1928). In 1930 he became a member of the Académie de Médecine. He was the editor of the *Annales d'oculistique*. Morax specialized in diseases of the conjunctiva and in blepharoplasty; together with Theodor Axenfeld (1867-1930), he isolated the bacillus that bears their names, a common cause of subacute conjunctivitis (*Annales d´Oculistique* 1892,108:393). Morax authored: *Recherches bactériologiques sur l'étiologie des conjonctives aigues et sur I'asepsie dans la chirurgie oculaire*. Paris 1894; *Maladies de la conjonctive et de la cornée. Semiologie oculaire* (in Lagrange & Valude *Encyclopédie Francaise d´Ophtalmologie* Paris 1903-1910) ; with André F. Brun *Thérapeutique Oculaire* Paris 1899 ; *Précis d´Ophtalmologie* Paris 1907 ; *Pathologie Oculaire* Paris 1921 ; *Glaucome et Glaucomateux* Paris 1921 ; *Ophtalmologie du nouveau-né* Paris 1924 ; *Cancer de l´Appareil Visuel* Paris 1926 ; with P. Petit, *Le Trachome* Paris 1929. JPW

Morgagni, Giovanni Battista (1682-1771). One of the greatest anatomists of all time. He was born at Forli, Italy, and was professor of anatomy at Padua for fifty-nine years. His chief service was in the field of pathological anatomy. His most important works are: *Adversaria Anatomica* (Bologna, 1706-19) ; *De Sedibus et Causis Morborum per Anatomiam Indicatis, Lib. V* (Venice, 1761). Ophthalmologically, Morgagni should be remembered because he was one of those who succeeded in securing the acceptance in Italy of "the new teaching about cataract," which had originated in Germany. American Encyclopedia of Ophthalmology 10,p.7864-7865

Morgan, John (1797-1847). English surgeon, of considerable importance in ophthalmology because of his having founded Guy's Eye Infirmary and of having written *Lectures on Diseases of the Eye*, long a favorite work among ophthalmic students in England and America. Born at Stamford Hill, England, son of William Morgan, an actuary, he became an apprentice to Sir Astley Cooper in 1813, and received the diploma of the Royal College of Surgeons either in 1818 or 1820. In 1824 he was elected surgeon to Guy's Hospital, and in 1843 to the Council of the College of Surgeons. Mr. Morgan, in his earlier years, was chiefly interested in comparative anatomy, later, however, he devoted himself almost exclusively to the surgery of the eye. His *Lectures on Diseases of the Eye* (not "Lectures on Ophthalmic Surgery" as given by the Medical Gazette, Vol. XL, p. 779) was published in 1839, a very large second edition appearing in 1848. Morgan was especially famous as an accurate observer, and the story is told of him that "when very young he was taken into his mother's bedroom, soon after one of her confinements, to be reproved for mischief and on coming out he remarked, 'How savage she is now she has got a little one!' thus proving his keen notice of one habit of the female animal." In later life his interest in comparative anatomy and physiology developed almost into mania as in the case of John Hunter-until he became a surgeon at Guy's Hospital. His house, like Hunter's, was full of beasts and birds, living, dead and in various stages of suspended animation. He kept for months a number of female kangaroos, "so as to be able daily to examine them, by the hand put into the pouch, to find out when, or how, the little immature creature came to hang attached, as if organically, to the first-used nipple." After his appointment as surgeon to Guy's, Mr. Morgan to some extent relinquished his comparative investigations, remarking that "he must either be a showman or a surgeon, and suspected that the latter would pay the best." He wrote also *Treatise on veneral and mercurial diseases* London 1829; *An Essay on the operations of poisonous agents upon the living body* London 1829; *Lectures on tetanus* London 1833. American Encyclopedia of Ophthalmology 10,p.7865-7866.Albert.JPW


Shinnosuke Mori

Mori, Shinnosuke (1884-1974) Japanese ophthalmologist and Professor Emeritus of Kyoto University. He graduated from Kyoto University in 1911, studied Ophthalmology under Prof. ASAYAMA Ikujiro and received the degree, Doctor of Medical Sciences in

1922 (thesis: Studies of glycogen in the retina and its relation with the pigment epithelium). He was appointed in 1930 as the successor of Prof. ICHIKAWA Kiyoshi, the Professor and Chairman of the Department of Ophthalmology of Kyoto University and he worked until his retirement in 1944. He was a pioneer in retinal detachment surgery and gave a special lecture "*Treatment of Retinal Detachment*" at the 41st Congress of the Japanese Ophthalmological Society. The results of his long-term research of this subject were integrated into his book "*Surgical Treatment of Retinal Detachment*" Kanehara Publ. Co. 1950, Tokyo. He also served as the President of the 42nd Congress of the Society in 1938. (SM)

Morley, Edward (1838-1923) American chemist who collaborated with Michelson in elaborate experiments designed to detect the motion of the earth through the ether. All trials of the *Michelson-Morley Experiment* produced nil results, calling the ether hypothesis into serious question.(JPW)

Moron Salas, José (1918-) Spanish ophthalmologist, born in Sevilla. Moron was born into an ophthalmologists family and received his education in Sevilla. He earned his MD in 1941 in the last named town. His doctoral thesis was sustained in 1946: *Sobre etiología y patogenia de los fototraumatismos retinianos*. Madrid: Universidad Complutense. In 1946 he went to New York for one year at the invitation of Ramon Castroviejo. Moron is of particular interest to the history of ophthalmology, because, a few months before Meyer-Schwickerath, (see his doctoral thesis) he had already the idea of photocoagulation. However, he did not pursue it, and it and his work did not progress beyond experiments on rabbits. He wrote a paper on the same theme: Morón Salas J. *Obliteración de los desgarros retinianos por quemadura con luz.* Arch Soc Oftalmol Hispano-Americana 1950; 10/6: 566-578. Fernandez-Sabugal,J & Peral Pacheco,D *Los Principios de la coagulacion con Luz en Oftalmologia-Una Deuda Historica*; see also Olivella-Casals, A. *La Fotocoagulacion como Tratamiento en Oftalmologia* , p. 19-20, Barcelona 1968. Meyer-Schwickerath *Lichtkoagulation*, p.2, Stuttgart 1959. JPW.

Morris, Julian M. (1942-1993) American. Associate Director for Science Policy and Legislation at the National Eye Institute. He served the National Eye Institute with distinction and was a friend and colleague to many ophthalmologists and vision research scientists. Born in Baltimore, Maryland, Morris received his B.S. degree in journalism from the University of Wisconsin, Madison. He began working at the National Institutes of Health as an intern in 1963, where he continued for almost 30 years in positions of increasing responsibility and authority. Committed to the development of national vision research plans and eye health education, Morris was instrumental in the development of the first Vision Research Plan, published by the National Advisory Eye Council in 1975. This plan served as the foundation for successive research plans, which culminated in the current national agenda, "Vision Research: A National Plan 1994-1998." In acknowledgment of his professional activities, Morris received the Public Health Service Superior Service award in 1979, which recognized his leadership and guidance in the development of the first national plan for vision research and for his contributions of an extraordinary nature. In 1991, Morris received a National Eye Institute Director's Award for his exceptional leadership and dedication. Morris was considered a pioneer in program planning. AJO1993,116:260

Morton, Andrew Stanford (1847-1927) British ophthalmologist, son of John Morton, M.D., educated at Edinburgh and University College, London. He qualified M.B. Edinburgh 1874 and took the F.R.C.S. England in 1888. He was House Surgeon at Moorfields where he was a colleague of Marcus →Gunn. He served for sixteen years as Clinical Assistant at Moorfields before he was elected Member of the Staff. Previously he had held the post of Surgeon to the Royal Eye Hospital, Southwark and Ophthalmic Surgeon to the Great Northern Hospital and late in life the post of Ophthalmic Surgeon to the Italian Hospital. Morton had excellent artistic abilities which can be seen among the beautiful coloured ophthalmoscopic drawings in the Transactions of the Ophthalmological Society. Morton wrote: *Refraction of the eye* 1881 (several editions, also one in America in 1881). He was a founding member of the Ophthalmological Society and at one time its Vice-President. After his time of service at Moorfields he was elected Consulting Surgeon to the Hospital and became „Chevalier of the Crown of Italy" for his services in

connection with the Italian Hospital. Morton´s name will allways be rembered for his famous improvements of the ophthalmoscope. British Journal of Ophthalmology, 1927, vol.XI, p.319. Albert Source Book of Ophthalmology,p.233. Schett/Keeler The Ophthalmoscope, Vol.1,p.245,287,292,302, vol.2,p.3,117,119,121 & 123. JPW

Ernest Motais

Motais, Ernest (1846-1913) French ophthalmologist from Angers known for his anatomical researches and for a ptosis operation which bears his name. He received his M.D. at Paris 1870 with a thesis on *syptomatology of chronical liver congestion* and settled in Ingrandes-sur-Loire where he practiced a few years. Having the ambition to improve his situation, and the post of head of anatomical preparations being available at the medical school of Angers, he moved to that town to start a new medical career. While teaching his pupils, Motais used his laboratory sources to study the human eye, and particularly the eye muscles and the Tenon´s capsule. He pursued this researches not only on humans, but also on animal eyes and published his results in 1881: *Contribution à l´ètude de l´anatomie comparée des muscles de l´ oeil et de la capsule de Tenon.* Taking advantage of his last years as head of the anatomical laboratory he publishes his book: *L´Anatomie de l´Appareil Moteur de l´Oeil de l´Homme et des Vertébrés. Déductions physiologiques et chirurgicales (strabisme)* Paris 1887. Before that he already had published : *Du Traitement du Strabisme* Paris 1881; *Hygiène Professionnelle* Paris 1883 and *Biographie Scientifique du Docteur Guépin de Nantes* Paris 1885. Motais now being much interested in ophthalmology moves to Paris to study under Panas, Galezowski and de Wecker. In 1886, he founded his private eye clinic, soon very popular in Western France. In 1891, Motais received from the ministry of health the authorization to hold free lectures at the ophthalmic clinic and at the Institute for applied Optics at the Angers University. In 1897 he published his observations about the cure of ptosis by graft for which he repeatedly claimed the priority at the French Society of Ophthalmology and at the Academy of Medicine. In 1901 he became a Member of the Academy of Medicine and from then fought for the creation of an ophthalmic chair at the Angers University which he succeeded in 1904, becoming its first chairman. He than tried hard, to obtain the creation of such chairs in other places of provincial France. Motais received, 1910, the Légion d´Honneur, he became, 1912, President of the commission to prevent blindness, President of the Association of Medical Professors of France and Secretary General of the Technical Committee for Natural and Artificial Lightning. In 1903 he also published *Anatomie et physiologie de l'appareil moteur de l'oeil de l'homme*. Motais was the founder and editor of *l´Ophtalmologie Provinciale*. The Ophthalmoscope, London 1913,p.504-505, Annales d´oculistique 1913,150:241-243. JPW

Akira Motegi

Motegi, Akira (1897-1970) Japanese ophthalmologist and the First Professor of Ophthalmology of Taipei Imperial University (presently National Taiwan University). He graduated from Chiba University in 1921, studied Ophthalmology at Tokyo University from Prof. →KOMOTO Jujiro and received Doctor of Medical Sciences in 1929 (thesis: *Hematological studies of keratitis interstitialis e lue congenita*). He was invited to Hokkaido University in 1929 as the Associate Professor and the following year he was appointed the Professor of Ophthalmology of Taipei Imperial University in 1930. He trained many Ophthalmologists in Taiwan. After the end of World War II, he continued to serve in Taiwan for 3 years; many Ophthalmologists trained by him were the nucleus for the development of Ophthalmology in the postwar era of Taiwan. He came home in 1948 as the Head at the Eye Clinic of the First National Hospital in Tokyo. (SM)

Koiti Motokawa

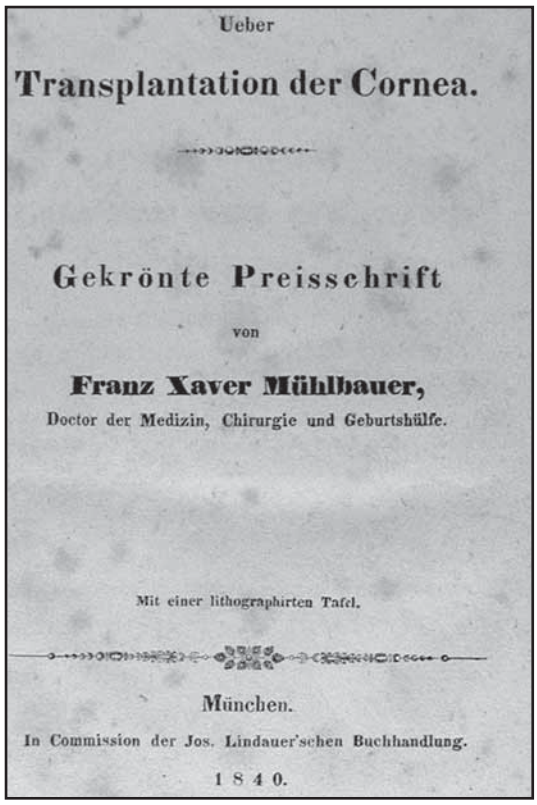
Motokawa, Koiti (1903 -1971) Professor of physiology, President of Tohoku University. He graduated from Tokyo University in 1929, studied at the Department of Physiology and received his Doctor of Medical Sciences from Tokyo University in 1939. He was the Professor and Chairman of the Department of Physiology of the Tohoku University from 1940 to 1965; he was then elected to the President of the Tohoku University and served until death. He was elected in 1962 to the Member of the Japan Science Committee and in 1968 he was made the Member of the Japan Academy. He was the pioneer in electroencephalography and electrophysiology of vision in Japan. He developed a new method of electrical stimulation of the human retina and approximately one hundred papers were published in this research field, e. g. "*Retinal process and their role in color vision*. J. Neurophysiol. 1 2: 291, 1949", "*Physiological studies on mechanism of color*

perception in normal and color blind subjects. J. Neurophysiol. 12: 465, 1949", "*Midbrain response to electrical stimulation of the optic nerve*. Tohoku J. exp. Med. 69: 79, 1958 ", "*Studies of neuronal processes in the retina by antidromic stimulation*. Jpn. J. Physiol. 7: 119, 1957" and "*Receptor potential of vertebrate retina*. J. Neurophysiol. 20: 180, 1957". Many problems of color vision and of other psychophysical phenomena such as optical illusion, figural after-effects stereoscopic vision, etc. were extensively studied by the method of electrical stimulation of the retina on human subject. All of these studies, together with related electrophysiological works, were organized and published in the monograph entitled "*Physiology of Color and Pattern Vision*"(Igakuchoin, 1970). In publishing the book, he hoped that the application of his method would help bridge the gap between physiology and psychophysics of vision. He was a recipient of Asahi Cultural Award in 1954 for his work "*Studies of Color sensation*" and also of the Japan Academy Award in 1954 for his work on Electroencephalography. In recognition of his service to the Japanese-German Cultural Exchange, the Government of Germany granted him the Philip Franz von Siebold Preis in 1966. The Government of Japan conferred on him the Posthumous Decoration of the First Order of the Sacred Treasures.[by TASAKI Kyoji].

Mowat, Daniel (? –1910) British ophthalmologist. He was a graduate of the University of Edinburgh and a member of the Ophthalmological Society of the United Kingdom. He was an assistant at Moorfields for twenty years. The Ophthalmoscope, 1910, p.243.

Moyne, Giuseppe Damiano(1803-1873) Italian ophthalmologist. Born in Piedmont he studied at Turin, and settled in Naples in 1826. Here he became the successor of G. B.→Quadri. He was an excellent teacher, and a very celebrated operator, having an special reputation as an intracapsular cataract extractor. He was a very modest, unassuming man, pleasant and courteous to all, and was universally esteemed. American Encyclopedia of Ophthalmology 10,p.7871

Much, Victor (1898-1985) Austrian ophthalmologist. Much participated, from 1931 to 1932, with Heine, on the development of the grinded contact lenses of Carl Zeiss. After studies in Vienna under H.Lauber, he became assistant to Heine at the Kiel Eye Clinic,especially in charge of contact lenses. Of Jewish origins, Much left Germany for Lucern (Switzerland) and started, in 1937, an ophthalmic practice in Tel-Aviv, being at the same time head of the ophthalmic department in the French Hospital of Jaffa. Back in Europe, Much settled permanently in Vienna (Austria). Selection of his publications: *Der Gegenwärtige Stand des Haftglas Problems, sowie die Möglichkeiten und Grenzen der Haftglastherapie*, Acta ophthalmologica (Kopenhagen), 9: 249-274, 1931; *Das Haftglas und seine Anwendung*, Aerztliche Korrespondenz 6, 1932; *Die optischen und therapeutischen Möglichkeiten des Haftglases*, Die medizinische Welt, 51:1932, 1822-1824; *Über Haftgläser* – 1/ *Geschichtliches*, Archiv für Augenheilkunde, 105:1932, 390-414. *Über Haftgläser* – II/ *Haftglastherapie des Keratokonus, nebst Bemerkungen zur Kasuistik der Erkrankung*, Archiv für Augenheilkunde, 106:1932, 399-427. *Bemerkungen zur Haftglasfrage* (Erwiderung an Dr. Joseph Dallos, Budapest), Klinische Monatsblätter für Augenheilkunde, 93:1934, 515-521; Heitz Robert, Much Victor, *L'histoire des lentilles de contact cornéo-sclérales en verre*. Première partie (1886-1896), Contactologia 7:1985, 104-107. R.Heitz : *History of Contact Lenses*, in Hirschberg History of Ophthalmology, Vol.11/3b Wayenborgh 2002.


Ueber

Transplantation der Cornea.

Gekrönte Preisschrift

von

Franz Xaver Mühlbauer,

Doctor der Medizin, Chirurgie und Geburtshülfe.

Mit einer lithographirten Tafel.

München.

In Commission der Jos. Lindauer'schen Buchhandlung.

1840.

Mueller, Benjamin Carl Leopold (1824-1893) German Army Surgeon, a graduate of University of Bonn. He was invited by the Government of Japan as the First Teacher of Surgery at Tokyo University and served during 1871-1875. He began the first formal lecture of Ophthalmology in Japan at Tokyo University in 1871. (SM)

Mühlbauer, Franz Xaver (? - ?) German physician. From the title page of his booklet we learn that his was "*Doctor in medicine, in surgery and midwifery*". Life dates could not be obtained. His book is important to the history of corneal transplantation. In his experiments he used Reisinger´s

technique that proved to be a failure. Mühlbauer laid the foundation for lamellar keratoplasty. The graft he used was of triangular shape. He wrote: *Ueber Transplantation der Cornea* München 1840. JPW

Muirhead, William Martin (?- 1952) British ophthalmologist. Muirhead was born in Sheffield and educated at Wesley College and Sheffield University, he graduated M.B., Ch.B. in 1911. He held a resident post at the Sheffield Royal Hospital in the Ophthalmic Department which, to-day, would be classed as a Registrarship. He served in the R.A.M.C. from 1916 to 1921, and for a good deal of that time was working as an eye specialist. On leaving the Army he turned seriously to the task of equipping himself as an ophthalmologist, and, being the meticulous person he was, decided to start at the beginning. He held Out-Patient and Resident posts at Moorfields. He took the D.O.M.S. of the Royal Colleges in 1927 and shortly afterwards was appointed Honorary Ophthalmic Surgeon to the Chesterfield and North Derbyshire Royal Hospital, and oculist to the Chesterfield Education Committee. In 1939 he was appointed Honorary Ophthalmic Surgeon to the Rotherham and Worksop hospitals. The immense amount of work resulting from these extra appointments was made possible only by his partnership with his brother, " H. C. ", which began about that time. It was a remarkable partnership, founded on a deep mutual affection, and resulted in an efficient and much appreciated service. On the death of Percival Hay in 1943, he was selected as Secretary of the North of England Ophthalmological Society, and in this responsible task his amazing capacity for hard work and attention to detail found their proper scope. It would be correct to say that this was the activity nearest his heart; in managing its affairs he was remarkably successful in preserving harmony and maintaining a proper balance between the scientific, the political, and the social. His career was profoundly influenced by the exceptionably able group of ophthalmologists, mainly Scottish, whom he met in Salonika during the first world war. Anderson, Ballantyne, Sinclair, Edgar Smith, and, above all, Usher, were frequently quoted as exemplars to be followed in all things, both social and technical. It was from these men that he realized, more fully than he had done before, the need for a basic training built upon genuine observation and personal experience; and so it came about that in the early 1920s he came back to the study of anatomy and physiology although by that time he was over thirty years old. BJO 1952,36:335-336

Noritsugu Mukai

Mukai, Noritsugu (1926-1988) American Pathologist of Japanese origin. He graduated from the Tokyo Medical University in 1950 and received his postgraduate research training at the Department of Pathology and Institute of Brain Research of Tokyo University (1951-1957). He received his Doctor of Medical Sciences in 1957 (thesis: *An evaluation of gliomas derived from the ependymal anlage*. J. Neuropathol. Exp. Neurol. 15: 33, 1956). He extended his studies as a Research Fellow at the Pathology Division of the Institute of Ophthalmology London (1964-1965), and also as Special Fellow at the Oncogene Division, of the National Cancer Center Tokyo (1985-1987). While he was Associate Professor of Neuroscience of Nihon Medical School, he was invited in 1964 to the Retina Foundation (now Schepens Eye Research Institute) by Dr. Charles Schepens to work as Head of the Pathology Division. After having spent 2 years (1965-1967) at McGill University, Montreal as Senior Research Associate in Experimental Surgical Pathology, he rejoined the Schepens Eye Research Institute in 1968, and he was appointed Assistant Professor (1976-1982) and Associate Professor (1982-) of Harvard Medical School. He was an expert in neuropathology. Before he came to Boston he published more than 60 original papers of neuropathology and wrote a chapter : "*Neuropathology*, in: *Textbook of Clinical Pathology*, Kyorin Book Co. Tokyo 1963. At the Schepens Eye Research Institute, he vigorously conducted works on Eye Pathology and trained many research workers. In 1972, he discovered that Adenovirus Type 12 can cause undifferentiated tumor in Hamster (*Undifferentiated intraperitoneal tumors induced by Human Adenovirus Type 12 in Hamsters*. Am. J. Pathol. 69: 331, 1972). He further discovered that this virus cause various tumors in the nervous system (*Primary brain and spinal cord tumors induced by Human Adenovirus Type 12 in Hamsters*. J. Neuropathol. Exp. Neurol. 332: 523, 1973; *Retinoblastoma-like tumors induced in rats by Human Adenovirus*. Invest. Ophthalmol. 12: 853, 1973; *human Adenovirus-induced medulloepitheliomatous neoplasms in Sprague-Dawley rats*. Am. J. Pathol. 73: 671, 1973;

Retinal tumor induced in the baboon by human Adenovirus 12. Science 210: 1023, 1980). He published more than 40 papers on the virus and nerve tumors before his death *(A highly predictable animal model of retinoblastoma*, Acta Neuropathol. 57: 203, 1982). He also worked on diabetic retinopathy (*Course of diabetic retinopathy affected by early application of photocoagulation*. J. Curr. Ther. Surg. 4: 67, 1985). He served as Visiting Professor to many Japanese and American Universities and engaged in teaching. For the excellence of his Research, he received many Awards, e.g. Special Award of the Prime Minister Nakasone's 10–Year Anti-Cancer National Project, and many others. Unfortunately, he died in the midst of his zenith of research activities at the age of 62 years. His son became an Ophthalmologist and works at the Massachusetts Eye and Ear Infirmary, Harvard Medical School. (SM)

Mules, Philip Henry (1843-1905). English ophthalmologist. Born in 1843, he was for many years surgeon to the Royal Eye Hospital in Manchester. He invented Mules's sphere(Trans. ophthalm. Soc. 1885, p.200) and Mules's wire operation for ptosis (Ophthalm.Rev. 1897, S. 396). Late in life he moved to Gresford, Denbighshire, where he became ophthalmic surgeon to the Wrexham Infirmary. Biographisches Lexikon hervorragender Ärzte 1880-1930, 2:1089-1090; American Encyclopedia of Ophthalmology 10,p.7874

Mullen, Carroll R. (1900-1961) American professor of ophthalmology and head of the Department of' Ophthalmology at Jefferson Medical College, and executive and attending surgeon at Wills Eye Hospital, Philadelphia. He was born in Bloomington, Illinois, the eldest son of a physician, took his premedical degree at Creighton University, Omaha, Nebraska, and was graduated from Jefferson Medical College in 1926. He was an intern and resident at the Philadelphia General Hospital. A charter staff member of the Fitzgerald Mercy Hospital, he was also attending ophthalmologist-in-chief at Jefferson Hospital and a consultant at Philadelphia General, the Veterans Hospital, Philadelphia, and Lewis Crozier Hospital, Chester. He was a fellow of the American College of Surgeons, the American Academy of Ophthalmology and Otolaryngology, the Pan-American Association of Ophthalmology, and the Philadelphia College of Physicians; a diplomate of the American Board of Ophthalmology, and a member of the Association for Research in Ophthalmology, the Pennsylvania Academy of Ophthalmology, the American Medical Association, the Philadelphia County Medical Society, and the Pennsylvania Medical Society. Mullen was elected chairman of the Section of Ophthalmology of the College of Physicians of Philadelphia in 1959 and re-elected in 1960. He was chairman of the first Wills Eye Hospital conference and chairman of the conference scheduled for the month he died. Mullen was a life trustee and a director of the Free Library of Philadelphia, succeeding the late A. S. W. Rosenbach as chairman of the committee on exhibits; a member of the Board of City Trusts, and a lay trustee of Villanova University. AJO 1961

Müller, August (1864-1943) German physician. Müller was born in Mönchen-Gladbach. He studied medicine at Bonn, Berlin, Leipzig and Kiel. At the last named he submitted 1889 his medical thesis *Brillengläser und Hornhautlinsen* in which he describes the sclero-corneal lenses made by the optician Otto Himmler from Berlin that helped him to correct his strong myopia (these lenses, first described and checked by R. Heitz, are now at the Deutsche Museum in Munich). The description and comparison of these lenses with those described by Müller in his thesis was undertaken by Robert Heitz (see his *History of Contact Lenses*, Vol.2, in: Hirschberg *History of ophthalmology*, vol.XI/3b, Wayenborgh 2002). Müller settled in Dornap and Düsseldorf, later , 1891 in Forbach. Finally, in 1899 he settled in Mönchen-Gladbach. Because of his myopia he did not orient himself to ophthalmology, but to orthopedics (from there his German surname "Knochen-Müller" meaning "Bone-Müller"). He had a professional success and wrote three books: *Der muskuläre Kopfschmerz* (1911); *Lehrbuch der Massage* (1915) and, in 1926 *Der Kreuzschmerz*. He left Mönchen-Gladbach and married in Rostock. Because of religious conflicts, later on, on his return to Mönchen-Gladbach he had difficulties in getting accepted and became finally a physician for the poor. see Richard M. Pearson and Nathan Efron, *Hundreth anniversary of August Müller's inaugural dissertation on contact lenses*. Survey of ophthalmology, 34, 1989, 123-141 and Robert Heitz: *L'invention des lentilles de contact par August Müller (1889)*, Contactologia, 3, 1981, 46-53.

Müller, Hans-Karl (1899-1977) Geman ophthalmologist born in Würzburg, Germany. Müller studied medicine in Erlangen, Würzburg and Munich, making his practical year 1923-1924 in Nürnberg at the City Hospital. He received his medical degree in 1925 in Marburg with the thesis *Embolie der Bauchaorta*. Müller was assistant at the physiological institute of Marburg under Dittler from 1925 to 1928, went to Basle in 1928 to work under Brückner, becoming there, in 1933 lecturer. Müller moved in 1936 to Berlin to work as first assistant at the Berlin University Eye Clinic under Löhlein, becoming, 1940, professor extraordinarius. During the Second World War he was employed in different lazarets in Russia as advising ophthalmologist. In 1945 he became interim director of the Bonn University Eye Clinic and from 1947 to his retirement in 1967, professor and director of the Bonn University Eye Clinic. Müller was at the begin of his career more interested in the physiology of the senses, of biochemical problems in corneal sensibility, lens metabolism etc. Later he switched to glaucoma and its medicinal treatment, measurement methods of intraocular pressure and their possibilities of mistakes and devised two small instruments, the *ophthalmodynamometer* and the *lidpowermeter*. With Franceschetti, he developed a special Gullstrand-Ophthalmoscope for ophthalmochromoscopy (examination of the retina with coloured light). In the field of surgery he made improvements in the cutting technic of tissues in keratoplasty and improvement of the surgical treatment of eye injuries which last named he had experienced during the war. These experiences were published 1944 in part three of R. Thiel´s *Ophthalmologischen Operationslehre* under the title *Die Behandlung der Verletzungen des Auges im Felde*. He also contributed a chapter titled *Theorie des Dämmersehens* in volume 2 of Schieck & Brückner´s *Kurzen Handbuch der Ophthalmologie* (1931) and the chapters *Die Verletzungen des Auges* and *Die sympathische Ophthalmi*e in Axenfeld-Serr´s *Atlas der Augenheilkunde* (1949). Müller authored in 1947 the monograph *Grundriss der Augenheilkunde* . In 1953 he founded the still existing Klinisches Institut für experimentelle Ophthalmologie, the first of its kind in Germany. The idea was to have an institute which would not be burdened by personal or financial problems, allowing a total focusing of ophthalmic research. Müller was co-editor of the *Graefe´s Archiv für klinische und experimentelle Ophthalmologie* and of the *Zentralblatt für die gesamte Ophthalmologie und ihre Grenzgebiete*. Graefe Archiv 1978, 205: 71 ff. JPW.

Müller, Heinrich (1820-1864) German anatomist and physiologist, born at Castell, Unterfranken, studied medicine in various German cities and Vienna; from 1852 until his death he was professor of anatomy at Würzburg. Müller was especially interested in the anatomy, physiology, and pathology of the eye in general and the retina in particular. Müller also gave instruction in the use of the ophthalmoscope. His writings were published posthumously: *Gesammelte und hinterlassene Schriften zur Anatomie und Physiologie des Auges*. Leipzig 1872. Albert.JPW

Müller, Johannes (1801-1858) German anatomist and physiologist. Müller was the founder of modern physiology. He was born in Coblenz. Müller received his M.D. in 1822 at Bonn with the thesis: *Diss. Inaug. Physiologica sistens commentarios de phoronomia animalium*. After a period of anatomical study under Rudolphi in Berlin, he became professor of anatomy, physiology, and pathology (1826-1833) in Bonn. In 1833 he succeeded Rudolphi as professor of anatomy, physiology, and pathology at Berlin, holding this post until his death; his pupils include Schwann, Henle, Kölliker, Virchow, DuBois-Raymond, Helmholtz, and Brücke. Müller achieved eminence in biology, embryology, comparative anatomy, physiology, chemistry, pathology, and psychology; his major contributions include the formulation of the *Law of Specific Nerve Energies*, studies of color sensation produced by pressure on the retina, the development of a theory of color contrast, studies of the vocal cords and the voice, the discovery of the lymph heart in the frog, the discovery of the Müllerian duct, the isolation of chondrin and glutin, a complete description of the finer anatomy of the glandular and cartilaginous tissues, and comparative studies of the microscopic anatomy of various tumors. In 1834 Müller took over from J.Fr.Meckel the edition of the famous *Archiv für anatomie und Physiologie*, soon known as *Müllers Archiv*. He wrote a monumental treatise: *Handbuch der Physiologie des Menschen* (1833-1840, 4th.ed.1841-44) that provided a critical

examination of existing knowledge of the subject and a wealth of new findings. Müller also wrote: *Ueber die phantastischen Gesichtserscheinungen: Eine physiologische Untersuchung mit einer physiologischen Urkunde des Aristoteles über den Traum, den Philosophen und Aerzten gewidmet* Coblenz 1826; *Zur vergleichenden Physiologie des Gesichtssinnes des Menschen und der Thiere nebst einem Versuch über die Bewegungen der Augen und über dem menschlichen Blick*. Leipzig 1826; *The physiology of the senses* London 1848. He wrote more than 200 papers about physiology, anatomy, biology etc.etc. Albert. JPW

Müller, Leopold (1862- ?) Austrian ophthalmologist born in Ledec nad Sazava, Boehmia. Received his M.D. in 1887 at the University of Vienna, where he became lecturer in ophthalmology (1897) and director of the outpatient eye clinic at the Kaiserin Elisabeth Hospital. He was an authority on myopia and on advancement procedures for strabismus. He wrote: *Über Ruptur der Corneo-Scleralkapsel durch stumpfe Verletzung*. Leipzig 1895.

Müller, Wilhelm (1832-1909) German pathologist. Müller was born in Nürnberg, Germany. He received his M.D. in 1855 at Erlangen, where he lectured on pathologic anatomy (1857-1863) before becoming professor at Kiel (1863-1864) and Jena (1864-1909). He investigated the anatomy and pathology of the kidneys, spleen, lymphatics, and central nervous system, and the evolution of the visual organs in vertebrates: *Ueber die Stammesentwicklung des Sehorgans der Wirbelthiere* Leipzig 1874.

Mumtaz, Raja (1924-) Pakistani ophthalmologist and Professor of Ophthalmology. Mumtaz has obtained his B.Sc degree (Pb) in 1943, M.B.B.S. (Pb) 1948, DO (London) 1951, F.R.C.S. (Ed) 1953, FCPS (Pak) 1972, FRCOphth (London) 1990. His current appointments are honorary medical Director Layton Rahmatullah Benevolent Trust Eye Hospital, Lahore since August 1990 to date, honorary Chief Consultant Al-Shifa Trust Eye Hospital, Rawalpindi since November 1990 to date. His teaching appointments are honorary Ophthalmic Surgeon, Mayo Hospital, Lahore (1955-1956), Assistant Prof., K.E Medical College, Lahore (1956-1967), Chief Coordinator Trachoma Control Project, West Pakistan (1965-1971), Prof. F.J Medical College, Lahore (1967-1973), Prof. K.E Medical College, Lahore (1973- 1984), Prof. Postgraduate Medical Institute and Sheikh Zayed Hospital, Lahore (1984- 1986), Prof. Emeritus Pakistan Institute of Ophthalmology, Rawalpindi 1997. His professional assignments are Nuffield Foundation Travelling fellow October 1963-1964 for special training in Corneal grafting, eye banking, contact lenses and orthoptics at East Grinstead Hospital, England & Institute of Ophthalmology, London, elected member of Oxford Ophthalmological Congress February 1964, participated in 80 different international and national Medical Congress mostly on eye diseases, initiated Ophthalmological Society of Pakistan on 19th December 1957 and remained its Secretary for 15 years, later President of the North Zone and finally President of the center, patron of the North zone branch since 1981 to date, Vice President of the Asia Pacific Academy of Ophthalmology for 8 years (1976-1984) , got the second chair of Professor of Ophthalmology created at King Edward Medical College, Lahore (1976), President of the 7th Congress of Asia Pacific Academy of Ophthalmology, Karachi 7th March 1979, Participated in the seminar on Medical Education at Ayub Medical College, Abbottabad (19-11 April 1981), established Institute of Ophthalmology at Mayo Hospital, Lahore with blessings of the President of Pakistan in 1984, assisted the *first* ever corneal graft operation performed in Indo-Pakistan sub continent by Prof. Ramzan Ali Syed in 1949 at Mayo Hospital, Lahore, Life member of Pakistan Medical Association, in England helped Mr. P.D Trevor Roper in editing his book " *Text Book of Ophthalmology for Diploma Students*", life member of Pakistan Association for the Advancement of Science, Life member of Pakistan Association of Surgeons of Lahore, Life member of Ophthalmological Society of Pakistan and Patron of the North Zone branch, Lahore. Led the Pakistan delegation during Ist SAARC Ophthalmic Congress at Nepal in September 1991, Initiated Ist SAARC Gold Medal for services to Ophthalmology, participated in golden jubilee of all India Ophthalmology Society, New Delhi, India from 2nd February to 5th Feb. 1990, I.C.O. Coordinator for Pakistan since January 1996 till to date, attended the 1st , 3rd , and 4th SAARC conferences, attended the AP.A.O. meetings since 1974 in Sri Lanka, has built two wards of 12 beds each in his village Gadari, District Jhelum at the cost of Rs. 1500000 and has instituted a trust with Rs. 1700000/ (Raja Mumtaz Trust), has

donated Rs. 125000/ for Pakistan Medical Association Library at Rawalpindi ,has donated a scholarship for 3 months for postgraduate training for a doctor in Moorfield's Eye Hospital, London at cost of Rs. 650000/ . He has donated Rs. 350000 to the Ophthalmalogical Society of Pakistan Research Foundation, an organization of which he is the Chief Patron. He is also Chairman of the Ophthalmic Society Gold Medal Awards Committee. His editorial assignments are the First Chief Editor, "*Pakistan Journal of Ophthalmology*" 1984 to date, published 20 papers in international and national journals. He obtained the Ramazan Ali Syed, President of Pakistan Gold Medal in 1986, donated Gold Medal for a DO student who stands 1st in MBBS in Eye diseases in Bolan Medical College, Quetta. (Address: 8-A, Education Town, Post Box, Allama Iqbal Town, Lahore - 18, Postal code 54570, Pakistan. Phone:+92- 5413130; +92- 7840082, e-mail: Irbteye@hotmail.com) (SM)

Munk, Christoph (?-?) German physician. Life dates were not obtainable. He wrote: *Die Ueberpflanzung der Hornhaut (Keratoplastik): Eine Operationsmethode, um Blinden, die am unheilbaren Central-Leukome oder am globösen HornhautStaphylome leiden, das Sehvermögen wieder zu geben*. Bamberg 1840 (Submitted as prize work. The prize, actually, was won by →Mühlbauer). He also developed a semi-circular corneal knife. Albert.JPW

Anzo Murakami

Murakami, Anzo (1862-1927) Japanese ophthalmologist, Professor of Ophthalmology and Dean of Nagasaki University. He graduated from Tokyo University in 1886 and the following year he was appointed the Professor of Nagasaki Medical School (presently Nagasaki University). During 1899-1901, he studied at the University of Breslau under Prof. W.→Uhthoff. After his homecoming, he received the degree Doctor of Medical Sciences from Tokyo University (thesis: *Ein Beitrag zu den Netzhautgefaess-Veränderungen bei Leukaemie*. Klin. Mbl. Augenheilkd. 39:136,1901. He served as the Dean of the University in 1917-1922 and retired from the University; he then practiced in the City of Nagasaki. (SM)

Shyuntai Murakami

Murakami, Shyuntai (1886-1964) Japanese ophthalmologist and Professor Emeritus of Jikei University. He graduated from Tokyo University in 1909, studied Ophthalmology from Prof. KOMOTO Jujiro, and received Doctor of Medical Sciences in 1924 (thesis: Serological studies of the specificity of the vitreous, uvea and crystalline lens). He was the Professor at Jikei University School of Medicine 1922-1947. (SM)

Murdoch, Russell (? – 1905) American ophthalmologist of Baltimore, Md., renowned for his researches in comparative ophthalmology, especially of the ophthalmology of the larger carnivora. A graduate of the Medical Department of the University of Virginia, at Charlottesville, he was a surgeon in the Confederate army through the civil war, and one of the founders of the Baltimore Eye, Ear, and Throat Hospital, after returning to civil life. For a time he was lecturer on diseases of the eye and ear at the University of Maryland, and professor of diseases of the eye, ear, and throat in the Woman's Medical College, at Baltimore, Md. He was a member of the Medical and Chirurgical Faculty of Maryland, of the American Ophthalmological and the American Otological Societies. American Encyclopedia of Ophthalmology 10,p.7879

Murray, William R. (1869-1926) American ophthalmologist. Murray was born at Marquette, Mich. He received the degree of Bachelor of Philosophy at the University of Michigan in 1892, and the Doctor in Medicine at Rush Medical College in 1897. He was interne for a time in the Illinois Eye, Ear, Nose and Throat Infirmary. The following year was spent in practice with Harry V. Wurdemann, at Milwaukee. In 1899 he studied the eye, ear, nose and throat at Philadelphia, in 1909 at Vienna, and in 1914 at London. In 1902 he settled in Minneapolis, where, for a number of years, he was associated with Frank Todd. The following year he became connected with the medical school of the University of Minnesota, in which institution he taught regularly until his death. In 1919 he was made chief of the Eye, Ear, Nose and Throat department. In 1921 he became a member of the Nicollet Clinic, of which institution he was, at his death, medical director. Murray was a member of the Minneapolis Academy of Medicine and of the Minnesota Academy of Ophthalmology and Oto-Laryngology, also of the American Academy of

Ophthalmology and Oto-Laryngology, and of the American College of Surgeons. He was at one time President of the Minnesota Academy and at another time vice chairman and secretary of the section on his specialty in the American Medical Association. He was on the staff of the University and Abbott Hospitals. AJO 1926,9:300

Murrell, Thomas E. (1850-1898) American ophthalmologist, professor of ophthalmology at the Barnes Medical College, of St. Louis, Mo. He received his medical degree at the University of Maryland in 1873. After two or three years of graduate study and hospital work he settled at Little Rock, Ark. In 1890 he became the Secretary of the Ophthalmic Section of the American Medical Association, and in 1893 one of the vice-presidents of the association. In 1894 he removed to St. Louis, that he might occupy the chair of ophthalmology at Barnes Medical College. In 1896, however, he retired, because of ill health, and died at Denver, Colorado. American Encyclopedia of Ophthalmology 10,p.7879

Mursinna, Christian Ludwig (1744-1823) Prussian surgeon of especial renown in the extraction of cataract. Born at Stolp, in Pomerania, he became a military physician, and saw much active service in both field and hospital. He later (in 1799) received his diploma from the University of Jena, returning shortly afterward to his duties as a military surgeon. He finally settled in Berlin, where he became professor of surgery and a prolific writer on surgical and medical subjects. He is said to have performed the cataract operation (extraction) 908 times, with only 41 complete failures. A man of robust health and great physical strength and endurance, he was also remarkable in the matter of longevity, dying almost 90 years of age. American Encyclopedia of Ophthalmology 10,p.7879-7880

Murube del Castillo, Juan (1944-) Spanish ophthalmologist, Professor and Chairman, Department of Ophthalmology, University of Alcalá-Madrid. He received his Doctor degree from the University of Sevilla. He was a fellow of Castroviejo's Clinic, in New York. Later on, he practiced ophthalmology for a number of years as a military doctor in the Spanish Sahara, until he was elected Professor of Ophthalmology at the University of the Canary Islands. Since 1981, he is the Professor and Chairman of the Department of Ophthalmology, University of Alcalá-Madrid, where he directs the Rizal Foundation for Research in Ophthalmology. His main research and innovations have been in the field of dacryology: for dry-eye conditions he introduced the diagnosis of lacunar sulci, the occlusion of the canaliculi by patching the lacrimal puncta with autologous conjunctiva, the salivary gland transplantation to the eye, and the subcutaneous dacryo-pump-tanks for severe dry-eye. For watery-eye conditions he introduced the carunculo-canalicular vent to diagnose and treat canalicular occlusions, the bicanalicular ring intubation, the dacryo-fornyx-rhinostomy, and the contralateral nasal occlusion to avoid the inflammation of an operated eye. In other fields of ophthalmology, he performed the first surgical restrictions of the paralytic pupil (coremeiosis), the treatment of iridodialysis through a single piercing of the cornea, the juxtaciliar excision of the chalazia, the intraocular penetration of retrobulbar drugs after ocular compression, etc. He is the author of 5 books (amongst those: Murube,J (Edit) *Ojo Seco-Dry Eye* Granada 1997) and over 300 scientific articles on ophthalmology: some examples are "Murube J.: *Dacryologia Basica*. Edit. ASEO, Madrid. 1981", "Murube J, Murube E. : *Treatment of dry eye by blocking the lacrimal canaliculi*. Surv. Ophthalmol. 1996; 40:463-480" , "Murube J, Manyari A, ChenZhuo L et al. Labial: *Salivary gland transplantation in severe dry eye. Oper. Techn. Oculoplast.* Reconstr. Surg. 1998; 1:104-110" and "Murube J, Murube L, Murube A.: *Origin and types of emotional tearing*. Europ. J. Ophthalmol. 1999; 9: 77-84". He is also a philologist and a historian. As a philologist, he has carried out research on the origin of the names of colors, the influence of American English on International Ophthalmology, and has introduced many neologisms in the Ophthalmological lexicon, such as dacryology, bicanalicular, amphimetropia, lacunar sulci, conjunctival trigoni, cisterna lacrimalis, etc. As a historian, he has studied the life of several outstanding ophthalmologists (Rizal, De Roetth, Castroviejo, his professor, whose corneas he transplanted, etc), the history of spectacles, saharian ophthalmology, etc. In psychosciences, he posed a novel classification of emotional tearing in two groups: requiring-help and offering-help tears, and afforded a new theory for each one of these groups. He is a member of the Academia Ophthalmologica Internationalis (Chair XLIX), recipient of Golden medal of the

Trachoma Society, member emeritus of numerous universities and Ophthalmological Societies especially from Latin America and the Philippines. He has served as an editor of the Spanish *Archives of Ophtalmology*, and currently is a member of the editorial board of many international journals of ophthalmology.(Rizal Foundation for Research in Ophthalmology, University of Alcala, San Modesto 44, 1st Floor, 28034-Madrid. Spain. Phone: (34) 917290055; Fax : (34) 917340956; e-mail: jmd00007@teleline.es)

Muys, Johannes (1654- ?) Dutch surgeon, born in Arnhem, Holland. He received his M.D. in 1679 at Utrecht and practiced surgery with great success at Steenwijk for many years. He published numerous works on surgery. He published the first book containing a correct depiction of the optic chiasm: *Praxis medico-chirurgica rationalis, seu observationes medico-chirurgicae secundum. solida verae philosophiae fundamenta resolutae* ... Lugdani Batavorum 1685 (which was translated one year later into English: *A rational practice of chyrurgery* London 1686). Albert

Muzzy, Arthur T. (1852- ?) American ophthalmologist and otologist of New York City, who was born in India, the son of a missionary. He graduated from Amherst College in 1874, and from the College of Physicians and Surgeons of the City of New York in 1879. He was assistant surgeon at the New York Eye and Ear Infirmary, and consulting oculist and aurist to the Gabella Heimat. American Encyclopedia of Ophthalmology 11,p.8256

Mydorge, Claude (1585-1647) French mathematician and physicist of Paris. He was a wealthy aristocrat with a passion for science, who made valuable contributions to the study of dioptrics and of conic sections. A friend of Descartes, he aided the latter in his vision studies by having lenses of various shapes made for him. Mydorge's writings on conic sections contain numerous original and ingenious solutions and methods that inspired later mathematicians: *Prodromi catoptricorum et dioptricorum* Paris 1639. This was the author's most important work in which he originated the term parameter of a conic, and also set forth a number of new theorems. Albert

Mylius, Karl (1896-1991) German ophthalmologist born in Goslar, Germany. Mylius received his medical degree with the thesis *Traumatod durch Starkstrom* in Hamburg 1922. He was first employed as physician in the Harbour Clinic (Hafenklinik) in Hamburg becoming, in 1923, assistant at the Institute for Experimental Therapy at the University Clinics of the Hamburg University under professor Much. From 1923 he was assistant at the University Eye Clinic under Wilbrand and Behr. Mylius became first assistant 1926, lecturer in ophthalmology in 1928 and 1931, Head of the eye clinic at the Hamburg General Hospital in Hamburg-Barmbeck. Mylius was named professor extraordinarius in 1934. Under professor Behr´s influence Mylius found a great interest in the relationship between eye diseases and general diseases and focused his energy on this special topic, publishing about 75 papers on this special field. He authored *Netzhautablösung (Amotio Retinae)* Berlin 1938 and a chapter in *Entwickelung und Fortschritt der Augenheilkunde* Stuttgart 1963. He was a member of the Deutsche Ophthalmologische Gesellschaft and for a time its President *Ophthalmologen Verzeichnis* 294-296. JPW

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Nafis ad-din, b. Zobeir. Indo-Arabian oculist, who practised officially as ocular surgeon in the Hospital at Cairo, Egypt, for many years in the 12th and 13th centuries.American Encyclopedia of Ophthalmology 11,p.8285

Nagata, Makoto (1925-) Japanese ophthalmologist, Director of Nagata Eye Hospital. He graduated from Kyoto University in 1948, studied Ophthalmology at the University under Prof. →IMACHI Ken and Prof. →ASAYAMA Roji and received his Doctor of Medical Sciences in 1959 (thesis: *Studies of the effects of pituitary hormones and vitamin B1 on the electroretinogram (ERG)*. J. Jpn. Ophthalmol. Soc. 59, 809, 1955; ibid. 60: 690, 1956 ; ibid. 63: 613, 1959; ibid. 63: 1030, 1959). He spent a year as a Research Fellow at the New York Eye and Ear Infirmary (1963). In the early period of his career, he extended his works on the ERG (*Photopic flicker ERG in cases of congenital night blindness and total color blindness*, in Ed. Henkes H.E. et al. Flicker. *Proc. Symp. on Physiol. Flicker Electroretinography*. p. 352, Dr.W. Junk, The Hague, 1964). He served as the Head of the Eye Department of Tenri Hospital, Nara, in 1966-1989. In 1968, he founded together with

SUGITA S., KOGURE F. and others a Research Group of Ophthalmic Microsurgery, which evolved later to the Japanese Society of Ophthalmic Surgeons. He also found in 1968 (*Photocoagulation for the treatment of the retinopathy of prematurity*, Jpn. J. Clin. Ophthalmol. 22:419, 1968) that progressive changes of the retinopathy of prematurity can be arrested by photocoagulation (Special Report to the 80th Congress of the Japanese Ophthalmological Society (JOS). *Indication and limitation of photocoagulation for the retinopathy of prematurity*. J. Jpn. Ophthalmol. Soc. 80: 1453, 1976; *Treatment of acute proliferative retrolental fibroplasia with xenon-arc photocoagulation.* Jpn. J. Ophthalmol. 21: 436, 1977). This work instigated intensive investigations on the retinopathy of prematurity in Japan, and the Joint Committee supported by the Ministry of Health and Welfare established a new Classification of this disease that offered a basis for the current International Classification (*Current status of retrolental fibroplasia*. Jpn. J. Ophthalmol. 21:366, 1977). He received the Shimizu Prize of the JOS (Retinopathy of Prematurity. Jpn .J. Clin. Ophthalmol. 24: 1327, 1970) and also Award of the JOS (*Cataract Surgery, Its Indications and Prognosis*. Acta. Soc. Ophthalmol. Jpn. 89: 1, 1985). He was also honored at the 2nd International Conference on the retinopathy of prematurity in Chicago (1996) as the pioneer of the treatment of this condition. As an expert in Ophthalmic Microsurgery, he developed his own method of glaucoma surgery. He has been invited as guest lecturer at many National and International Congresses. He has served as Councillor of the JOS, Japan Glaucoma Society, Japanese Society of Clinical Electrophysiology of Vision and many other Societies, and he is an Honorary Member of these Societies. He is also a recipient of the Highest Honor Award of the Japan Medical Association (1995). (Nagata Eye Hospital: 1147,Hourai-cho,Kitayamada,Nara-city,631-0844,Japan, phone: 0742-45-2230, fax: 0742-45-0801,and e-mail: mnagata@ns0.mahoroba.ne.jp)(SM)

Nagel, Albrecht (1833-1895) German ophthalmologist born in Danzig, Germany. Nagel received his M.D. in 1855 at Berlin, where he studied under von Graefe. From 1867 until his death Nagel was professor of ophthalmology at Tübingen University, where, from 1875, he was also director of the University Ophthalmic Hospital. Nagel wrote important treatises on binocular vision, anomalies of refraction and accommodation, amaurosis and amblyopia; in 1872 he founded the *Jahresbericht über die Leistungen und Fortschritte im Gebiete der Ophthalmologie* (which later merged with the *Zentralblatt für die gesamte Ophthalmologie*) and from 1881 he also edited the *Mittheilungen aus der ophthalmologischer Klinik in Tübingen*. He wrote: *Das Sehen mit zwei Augen und die Lehre von den identischen Netzhautstellen* Leipzig 1861; *Die Refractions- und Accommodations-Anomalien des Auges* 1866; *Der Farbensinn* Berlin 1869; *Die Behandlung der Amaurosen und Amblyopieen mit Strychnin*. Tübingen 1871. Nagel contributed a 250-pages chapter on *Anomalies of refraction and accommodation of the eye* in Graefe-Saemisch´s *Handbuch der gesammten Augenheilkunde*, *first* edition, vol.6, part 4 (Leipzig 1880). American Encyclopedia of Ophthalmology 11,p.8286.Albert.JPW

Nagel, Willibald A. (1870-1911) German physiologist. Nagel was born in Tübingen and received his M.D. there in 1893; after working for several years as von Kries' assistant in Freiburg, he became director of research in sensory physiology at the Berlin Physiologic Institute (1902-1908) and professor of physiology at Rostock (1908-1911). Nagel wrote extensively on sensory physiology and physiological optics; for some years he edited the *Zeitschrift für Physiologie de Sinnesorgane*. He edited an important treatise on physiology: *Handbuch der Physiologie*, 4 volumes and a supplement Braunschweig 1904-1910. He also wrote: *Die Lehre vom spezifischen Sinnerenergie*n; *Die Wirkung des Lichtes auf die Netzhaut* and authored *Der Lichtsinn augenloser Tiere* Jena 1896; *Die Diagnose der praktisch wichtigen angeborenen Störungen des Farbensinnes*. Wiesbaden 1899. He was editor of the third edition of →Helmholtz´s „*Handbuch der physiologischen Optik*“ which edition he did not survive. American Encyclopedia of Ophthalmology 11,p.8285-8286.Albert.JPW

Nai, Cu Nhan (1930 -) Vietnamese ophthalmologist Professor. He graduated from Medical College in China in 1959. He worked at National Institute of Ophthalmology from 1962. He was head of traditional medical department, as Vice-Director of National Institute of Ophthalmology from 1978 to 1998. He was Vice-President of Vietnamese Ophthalmological Society. He wrote articles on applying the traditional medicine in the treatment keratoconjunctival diseases caused by bacteriae, pseudomonas aeruginosa,

Ryuichi Naito

herpes and vitreous haemorrhage, retinal haemorrhage, retinitis, choroidosis and optic neuritis. He also wrote on applying the procedure of acupuncture to the treatment of stye, paralysis of nerve III, VII. He is awarded the title "Peoples doctor". He attended international prevention of blindness conferences in Sydney and Milano. (SM)

Naito, Ryuichi (1883-1943) Japanese ophthalmologist and a student of Prof. →KOMOTO Jujiro. He developed an electric direct ophthalmoscope in 1913 (J. Jpn Ophthalmol. Soc. Vol 17). The Naito Ophthalmoscope is used throughout Japan even today. (SM)

Nakagawa, Junichi (1903-1991) Japanese ophthalmologist and Professor of Ophthalmology of Nihon University. He was a graduate from Tokyo University in 1927, and he studied Ophthalmology under Prof. ISHIHARA Shinobu and received the degree Doctor of Medical Sciences from Tokyo University in 1937. He was the Professor of Ophthalmology of Nihon University during 1938-1945. After the World War II, he moved to the Head of the Eye Clinic of Sapporo City Hospital and then served as the Director of the Hospital during 1961-1968. He was a leading specialist in strabismology, and at the 62nd Congress of the Japanese Ophthalmological Society held in 1958, he gave a lecture "*Treatment of non-comitant strabismus – with particular attention to the surgery of oblique muscles*" as one of the symposists. (SM)

Junichi Nakagawa

Nakagawa, Takashi (1935-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Sapporo Medical University. Born as the son NAKAGAWA Junichi, he graduated from Sapporo Medical College in 1961, studied Ophthalmology at the College under Prof.SUEYOSHI Toshizo and received his Doctor of Medical Sciences in 1966 (thesis: *Topographic anatomy of the orbit and its contents*, J. Jpn. Ophthalmol. Soc. 69: 2155, 1965). He extended his studies as a Fellow at the Department of Ophthalmology, State University of New York, Down State Medical Center (1966-1967) and also at the Cider-Sinai Medical Center, Los Angeles (1967-1968). He was promoted to Assistant Professor at Sapporo Medical College in 1971, and then appointed to the present position in 1986. His research interest has been in strabismus, paediatric Ophthalmology, and some example of his many publications are „*Deteriorated accommodative esotropia"*. Reinecke, R.D. (ed.): *Strabismus*, p.149-156, Grune & Stratton, New York, 1982 and *Esotropia*, in *System of Ophthalmology*, Vol. 6: 263-272, Nakayama Shoten, Tokyo, 1994. He serves as a Councillor to the Japanese Ophthalmological Society (1986-), to the Japanese Society of Neuro-ophthalmology (1986-), to the Japanese Society of Strabismus and Amblyopia (1975). He has also served as the Chairman of the Hokkaido Eye Bank Association since 1999. He is the recipient of the Distinguished Service Award of the Japanese Society of Strabismus and Amblyopia in 1995, for the excellence of his contributions. (Department of Ophthalmology, Sapporo Medical University, S-1, W-16, Chuo-ku , Sapporo, 060-8543, Japan, phone:+81-11-611-2111, (ext. 3440) fax: +81-11-611-1189, e-mail: tnakagaw@sapmed.ac.jp)(SM)

Yukifumi Nakaizumi

Nakaizumi, Yukifumi (1932-) Japanese ophthalmologist, Board Member of the Trustees of Kenikai Institute (Institute for History of Ophthalmology) and of the Japan Society for the Prevention of Blindness (JNSPB). Born into an Ophthalmology family as the 5th generation (son of NAKAIZUMI Yukimasa), he graduated from Yokohama City University, Medical School, in 1955, and studied Ophthalmology at Tokyo University under Prof. HAGIWARA Hogara and received his Doctor of Medical Sciences in 1964 (thesis: *Electron microscopic studies of the cornea*, No. 1: J. Jpn. Ophthalmol. Soc. 64: 1066, 1960, No.2: ibid. 65, 79, 1961). He extended his study at the Proctor Foundation, University of California, San Francisco (1961-1963) and conducted research with Dr. Michael Hogan (*Ultrastructure of Bruch's membrane*. Arch. of Ophthalmol. 72:380, 1964). He has been in the present position at Kenikai since 1977 and at the JNSPB since 1986. He also served as an editor to the Jpn. J. Clin. Ophthalmol. (1987-1999). He is in charge of the Kenikai Institute and is interested in the History of Ophthalmology. He wrote "*History of the Japan Society for Prevention of Trachoma* (present JNSPB), 1985" and is a co-author of "*History of Ophthalmology in Japan*, Centennial Publication of the Japanese Ophthalmological Society, 1997". (Kenikai Institute; 5-3-8 Ginza, Chuo-ku, Tokyo, 104-0061. phone:81-3-3571-0194; fax: 81-3-3571-0294)(SM)

Nakaizumi, Yukimasa (1897-1978) Japanese ophthalmologist, founder of the Japanese Society of Clinical Ophthalmology and the Japanese Journal of Clinical Ophthalmology.

Yukimasa Nakaizumi

He was the son of →NAKAIZUMI Yukinori. He graduated from Tokyo University in 1922 and studied Ophthalmology at the Postgraduate School of the University under Prof. →ISHIHARA Shinobu; he received the degree Doctor of Medical Sciences in 1930. He developed an original ocular prosthesis in 1930: he reported "*Progress in Prosthesis in Japan*" in J. Jpn. Ophthalmol. Soc. Vol. 40,1936. After the World War II, he founded, together with NAKAMURA Yasushi, the Japanese Society of Clinical Ophthalmology in 1947, which is the largest Society of Clinical Ophthalmology in Japan today. He also revived the Japan Society for the Prevention of Trachoma in 1950 and served as the President: this is the presently Japan National Society for the Prevention of Blindness. While he practiced at Nakaizumi Eye Hospital founded by his father, he established "*Ken-I-Kai: the Institute for the study of the History of Ophthalmology*" and the Library is maintained by his son, Nakaizumi Yukifumi. The Library has a great number of Japanese classical books of Ophthalmology and gives free access to those interested in research of History of Ophthalmology. (SM)

Nakaizumi, Yukinori (1871-1945) Japanese ophthalmologist, the first Assistant Professor of Ophthalmology at Tokyo University. He graduated from Tokyo University in 1896 and studied Ophthalmology under Prof. →KOMOTO Jujiro, and was promoted to the first Assistant Professor of Ophthalmology at Tokyo University in 1902, and he served in this position until 1921. During his tenure, he studied at University of Freiburg in 1910-1912 under Prof. Th.→Axenfeld. After retirement from Tokyo University, he founded *Nakaizumi Eye Hospital* in Tokyo and trained many Ophthalmologists. He kept detailed records of the Department of Ophthalmology of Tokyo University, and wrote "*History of the Department of Ophthalmology of Tokyo Imperial University*" in J. Jpn. Ophthalmol. Soc. 17:1,1913. He was a collector of Japanese classical books of Ophthalmology: the large collection is now in possession of the Ken-I-Kai Library (→NAKAIZUMUI Yukimasa).

Nakajima, Akira (1923-) Japanese ophthalmologist, Professor Emeritus of Juntendo University. He graduated from Tokyo University in 1945, studied Ophthalmology under Prof. SHOJI Yoshiharu and received the degree Doctor of Medical Sciences in 1953 (thesis: *Theory of determination of refractive errors, series of articles*: J. Jpn. Ophthalmol. Soc. 56: 50, 87, 135, 209, 259, 1952). From 1949 to 1954, he worked as the Chief of the Eye Clinic of Hanaoka Mine Hospital and had joint appointment as the Public Health Officer of the Mine. He carried out research on Trachoma (Rev. Inter. Trachoma 4: 398 1957) and also on the fundus changes in hypertension (Juntendo Med. J. 1: 40, 1956). He published a new method of phacometry (J. Jpn. Ophthalmol. Soc.59: 783 1955). He was appointed the Assistant Professor of Juntendo University under Prof.→SATO Tsutomu. He studied for 2 years in 1956-1958 at Royal Eye Hospital under Prof. Arnold Sorsby and conducted research on the experimental degeneration of the retina (Ophthalmologica 136: 417, 1958). Prof. SATO passed away in June 1960 and he was promoted to the Professor and Chairman of the Department of Ophthalmology of Juntendo University as the successor to Prof. SATO and worked in this position until retirement in 1989. His research interest covered wide areas of Ophthalmology, i.e. refractive errors, contact lenses, Ophthalmic genetics, electrodiagnosis, retinal degeneration, keratoplasty, glaucoma, lasers in Ophthalmology, Ocular Pharmacology, Rehabilitation, Prevention of Blindness etc. He delivered a Special Report "*Evaluation of ERG as a clinical method of examination*. J. Jpn. Ophthalmol. Soc. 66: 1595, 1962) at the 66th Congress of the Society, "*Measurements of the refractive elements of the eye*. Ibid. 72: 2059, 1968" and the Society's Award Lecture "*Prevention of Blindness and heredity in Ophthalmology*. Ibid. 86: 1834, 1982". His professional activities are numerous: he played a key role with Prof. IMAIZUMI Kitetsu and Prof. KUWAHARA Yasuharu in the enactment of the "Keratoplasty Act" in 1958 and in the Foundation of the Japan Eye Bank Association where he served as an Executive Director from 1965 to 1998. He also served as a member of many Government Councils. He has been an Executive Director of the Japan National Society for the Prevention of Blindness since 1987. His international activities are extensive: in Asia-Pacific Academy of Ophthalmology he served as Vice-President (1972-1974), President (1974-1976), Secretary General (1976-1991). In the International Ophthalmology, he served as the President of the 23rd International Congress in Kyoto in 1978, Member of the International Council since 1974, President of the Council in 1990-

1998 and he was named an Honorary Life President in 1998. In Afro-Asian Ophthalmological Society, he served as a Councillor (1968-1972), Vice-President (1972-1986) and he was named an Honorary Member of the Society. He is a Founding Member of the Academia Ophthalmologica Internaitonalis and served as the Secretary General (1980-1988) and the President (1988-1990). He is a recipient of many Awards, e.g. Axenfeld Medal (1978), Gonin Medal (1986), Jose-Rizal Medal (1987), CCRG Medal (1987), Distinguished Service Award of the American Academy of Ophthalmology in 1997, Pan Arab African Council of Ophthalmology Gold Medal (1999) and the Honour Award of the International Agency for the Prevention of Blindness (1999). He is the Honorary Fellow of the American Academy of Ophthalmology. He is currently serving as the Director of the board of the Japan-China Medical Association since 1995. In recognition of his meritorious services, the Government of Japan conferred on him the *Third Order of the Rising Sun* in 2000. (fax: +81-3-5477-7168; e-mail: a-nakjma@yb3.so-net.ne.jp) (SM)

Minoru Nakajima

Nakajima, Minoru (1893-1951) Japanese ophthalmologist, Professor of Tokyo University. He graduated from Tokyo University in 1919, studied Ophthalmology under Prof. KOMOTO Jujiro. He moved to Nagoya University in 1924 to work as Associate Professor under Prof. OGUCHI Chuta. He received the degree, Doctor of Medicine from the University (thesis: *Mechanism of hypotensive effects of adrenalin*). In 1927 He was promoted to Professor and Chairman of the Department of Kanazawa University. From 1927 to 1929, he studied in Leipzig, tissue respiration under Nobel Prize Laureate Prof. Otto Warburg and photochemistry of pigment under Prof. Fritz Weigert, a cousin of Nobel Prize Laureate Prof. Emil Fischer. After returning to Kanazawa he carried out works on retinal metabolism and biochemistry of the retina. He moved to Nagoya University as the successor of Prof. OGUCHI Chuta in 1940 and served for 10 years. In 1950 he was invited to Tokyo University to take the Chair of the Department of Ophthalmology in 1950, but unfortunately fell ill and passed away in February 1951. His work on the retina was the most outstanding of that time, and he delivered a special lecture "*Biochemistry of the Retina*" at the 52nd Congress of the Japanese Ophthalmological Society in 1948 (J. Jpn. Ophthalmol. Soc. 52: 43, 1948). He has published many books e.g. "*Practice of Ophthalmoscopy*", "*Methods of Examinations in Ophthalmology*" and many others. He is the father of Akira→Nakajima, former President of the International Council of Ophthalmology, and they wrote "*Theory and Practice of Spectacle Correction*" in 1955.(SM)

Bunpei Nakamura

Nakamura, Bunpei (1886-1969) Japanese ophthalmologist, Professor Emeritus of Ophthalmology of Osaka University. He graduated from Osaka University in 1911, and studied Ophthalmology under Prof. →MIZUO Gentaro. While he was a second year resident, he studied a case of Oguchi' disease and found that the fundus color of the patients was completely normalized after a long dark-adaptation. He confirmed the accuracy of this phenomenon without exception and reported at the Congress of the Japanese Ophthalmological Society in 1913 under the names Mizuo and Nakamura. This phenomenon is now called Mizuo-Nakamura phenomenon of Oguchi's disease. He received the degree Doctor of Medical Sciences from Tokyo University in 1921 (thesis: *Comparative studies of light sense in various diseases with hemeralopia*). He was promoted to Professor and Chairman of the Department of Ophthalmology of Osaka University in 1923 and served until his retirement in 1944. He organized the 34th Congress of the Japanese Ophthalmological Society as the President in 1930 to which he invited Th.→Axenfeld. This invitation ended the animosity between the Japanese and German Ophthalmological Societies that had continued since World War I. He served as the Director of the University Hospital (1940-1943), member of the International Council of Ophthalmology (1937-1941). He published 302 papers in Japanese, 17 papers in German and many books.(SM)

Yasushi Nakamura

Nakamura, Yasushi (1898-1956) Japanese ophthalmologist, Professor Emeritus of Nippon Medical College. He graduated from Tokyo University in 1923 and he studied under Prof. ISHIHARA Shinobu, and received the degree Doctor of Medical Sciences in 1928. His clinical research laid emphasis on keratoplasty and he gave a special lecture "*Studies of basic aspects of keratoplasty and clinical applications*" at the 54th Congress of the Japanese Ophthalmological Society in 1950, and also organized the 60th Congress of

the Society as the President. He founded the Japanese Journal of Clinical Ophthalmology in 1947 and was the Chief-Editor until his death. He also founded the Japanese Society of Clinical Ophthalmology, and the Journal became the Official Journal of the Society. He was the Co-editor, with K.→MAZUME and M. →UEMURA, of the *Handbook of Ophthalmology* (26 volumes, 42 books) of the Japanese Ophthalmological Society published by Kanehara Publ. Co. Tokyo, 1952-1955.(SM)

Nakao, Shuitsu (1921-) Japanese ophthalmologist, Professor Emeritus of Nara Medical University. He graduated from Osaka University in 1947, studied Ophthalmology at the University under Prof. UYAMA Yasuo and received his Doctor of Medical Sciences in 1957 (thesis: *Thermometric studies on the variations of intraocular the temperature in rabbits with thermocouple permanently inserted into the eye*. Part 1: J. Jpn. Ophthalmol. Soc. 59: 1549, 1955: Part 2, 3,4 : Folia Ophthalmol. Jpn. 8:305, 311, 371, 1957). He served as the Professor and Chairman of the Department of Ophthalmology of Nara Medical University from 1971 to retirement in 1983. He served as a Councillor to the Japanese Ophthalmological Society, and as Executive Director of the Japanese Society of Ophthalmological Optics: he is an Honorary Member of the Society. His work covered visual functions, optics and many other publications including " *A new schematic eye and its clinical applications*, Acta Concilium XXI (Mexico), p. 1001, 1970" and "*Significance of corneal astigmatism for making glasses*, Acta Concilium XXIV (San Francisco), p. 1212, 1982". He served to the National Hospital of Nara as the Director in 1983-1988.(SM)

Nakatsuka, Kazuo (1943-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology of Oita Medical University. He graduated from Nagasaki University in 1970, studied Ophthalmology in the Graduate School of Medicine of the University under Prof. TAKAKU Isao and received his Doctor of Medical Sciences in 1977 (thesis: *Studies on the photic information processing in the Visual Pathway*. J. Jpn. Ophthalmol. Soc. 81: 1351, 1977). He came to Oita Medical University in 1979 as the Assistant Professor under Prof. YAMANOUCHI Uichi. In 1983-1984, he extended his studies at the University of Miami and worked with Prof. Duco I. Hamasaki, and published "*Destruction of the indoleamine accumulating cells alters the ERG of rabbits*. Invest. Ophthalmol. Vis. Sci. 26: 1109, 1985" He was promoted to the present position as above in 1991. He has been working" in the field of Electrophysiology of vision, color vision, refraction and accommodation, and his publications include "*Disturbed perception of colors associated with right hemisphere damaged patients*. Acta Concilium XXV (Roma), p. 1763, Kugler, 1987" and "*electroretinographic changes in eyes with idiopathic macular hole treated by vitrectomy*. Doc. Ophthalmol. 94: 341, 1998" He is a Councillor to the Japanese Ophthalmological Society (1997-) and Board of Directors of the Neuro-ophthalmology Japan (1991-) and Japanese Society for Clinical Electrophysiology of Vision (1991-). He is a member of ISCEV (International Society for Clinical Electrophysiology of Vision) and ARVO (Association for Research in Vision and Ophthalmology). (Department of Ophthalmology,Oita Medical University, Hasama-machi, Oita 879-5593, Japan. phone: +81-97-549-4411, fax: +81-97-549-6043).(SM)

Nakazawa, Mitsuru (1956-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology of Hirosaki University. He is a graduate of Tohoku University in 1980, studied Ophthalmology at the University under Prof.→MIZUNO Katsuyoshi. He extended his study at theUniversity of Cincinnati (1985-1988) and conducted research with Prof.Winston Kao (*Isolation of cDNA clones and genomic DNA clones of beta-subunit of chicken prolyl 4-hydroxylase*. Connective Tissue Res. 18:157, 1988; *Structure of the gene encoding the beta-subunit of chicken prolyl 4-hydroxylase*. Gene 71: 451, 1988.) and received his Doctor of Medical Sciences in 1989 (thesis: *Molecular biological analysis of the beta-subunit of chicken prolyl 4-hydroxylase*, Gene 71: 451, 1988) from Tohoku University under Prof. TAMAI Makoto. He was promoted to Lecturer of Tohoku University in 1989, subsequently to Associate Professor of Tohoku University in 1985, and then promoted to the present position in 1998. He serves the Japanese Ophthalmological Society (JOS) as a Councillor (1999-), the Japanese Society of Ophthalmic Diabetology as a Board of Directors (1996-) and the Hirosaki Eye Bank as the Chairman of the Board of Directors (1998-). He also works on the Japanese Journal of Ophthalmology as an editor for the section of Ophthalmic genetics and pediatric

Ophthalmology. He is a recipient of the JOS Junior Scientific Award (1996) and of the Rohto Award (1996). His research interest is in retinal diseases, genetics in Ophthalmology and retinal degenerations, and many of his publications embrace *"Arrestin gene mutations in autosomal recessive retinitis pigmentosa*. Arch. Ophthalmol. 116: 498, 1998" and "*Ocular findings in patients with autosomal dominant retinitis pigmentosa and transversion mutation in codon 244 (Asn244Lys) of the peripherin/RDS gene*. Arch. Ophthalmol. 112: 1567, 1994" (Department of Ophthalmology, Hirosaki University, 5 Zaifu-cho, Hirosaki, 036-8562, Japan, phone: +81-1-72-39-5094, fax: +81-1-72-37-5795, e-mail: mitsuru@cc.hirosaki-u.ac.jp)(SM)

Namba, Katsuhiko (1945-) Japanese ophthalmologist, Professor and Head of the Department of Ophthalmology, Teikyo University, Mizonokuchi Hospital. He graduated from Tokyo University in 1973, studied Ophthalmology at the University under Prof.→MISHIMA Saiichi and received his Doctor of Medical Sciences in 1980 (thesis: *Lysosomal enzymes of leukocytes in Behcet's disease*. J. Jpn. Ophthalmol. Soc. 84: 1092, 1980). He was appointed the Assistant Professor of Teikyo University in 1986 and was promoted to the present position as above in 1997. He has worked on Behcet's disease with Prof. MASUDA Kanjiro and published more than 180 original articles. Some examples are "*Types of ocular attacks and lysosomal enzymes in Behcet's disease*. Jpn. J. Ophthalmol. 28: 80, 1984" and "*Behcet's disease and streptococcal infection*. Jpn. J. Ophthalmol. 30: 385, 1986".(Department of Ophthalmology, Teikyo University Mizonokuchi Hospital. 3-8-3 Mizonokuchi, Takatsu-ku, Kawasaki, 213-8507, Japan. phone: +81-4-4844-3333, fax: +81-4-4844-3201)(SM)

Nannoni, Angelo (1715-1790) Italian surgeon, father of Lorenzo N., born at Jussa, near Florence. Nannoni studied at the Santa Maria Nuova Hospital in Florence under Benevoli and then in France under Le Cat. He returned to Florence, serving as chief surgeon at the Santa Maria Nuova Hospital until his death, becoming the most renowned surgeon in Tuscany. His writings include a treatise on ophthalmology: *Dissertazioni chirurgiche ... I. Della fistola lagrimale. II. Delle cataratte. III. Dei medicamenti exsiccanti e caustici. IV. De medicamentis causticis* Paris 1748. Albert. American Encyclopedia of Ophthalmology 11,p.8287.JPW

Nannoni, Lorenzo (1749-1812) Italian surgeon of Florence, son and pupil of Angelo Nannoni. With the financial help of the Duke Peter Leopold, along with Felix Fontana, Giov. Fabroni and G. Sancti, he studied medicine in France, England and Holland. He became a famous practitioner and teacher, and published influential treatises on anatomy, physiology, and surgery. Shortly before he died, in 1811, he traveled again to France and Northern Italy. Unlike his father, Lorenzo Nannoni preferred the extraction of cataract over couching. His only ophthalmic book was titled: *Dissertazione sulla cataratta*. Milano 1780. Albert.JPW

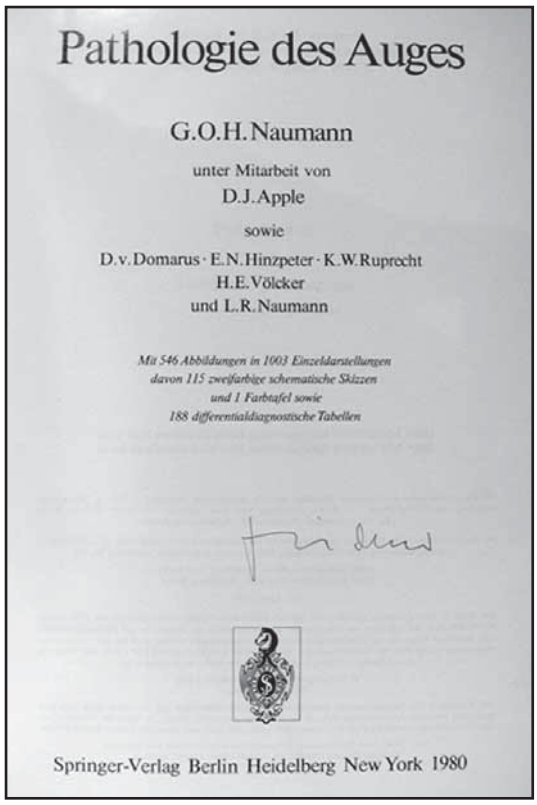
Nantawan, Pornsawat (1941-) Thai ophthalmologist, President of the Thai Red Cross National Eye Bank. He graduated from Chulalongkorn University of Medical Science and received his M.D. degree in 1967. After having completed Ophthalmology training at the University Hospital, he received the Diploma of Thai Board of Ophthalmology. He further studied as a Retina Fellow at the Scheie Eye Institute, Philadelphia, U.S.A. in 1977. On his homecoming he was appointed the Associate Professor of Chulalongkorn University in 1981 and has served as the Head of the Retina Service of the Hospital since 1977. He served as the Chairman of the Ophthalmic Examination Board of Thailand (1996-1997), President of the Ophthalmological Society of Thailand (1992-1993), Secretary of the Royal College of Ophthalmologists of Thailand (1991-1996) and the President of the Vitreous, Retina Society of Thailand since 1999 and the Director of the Thai Red-Cross National Eye Bank since 1995. He is also a Councillor of the Asia-Pacific Academy of Ophthalmology since 1995. (SM)

Nao-I, Nobuhisa (1953-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Miyazaki Medical College. He graduated from Hokkaido University in 1979 and studied Ophthalmology at Kyoto University under Prof.→TSUKAHARA Isamu and Prof.→HONDA Yoshihito. He worked as a research fellow at the Department of Physiology of the University of California, San Francisco, with Prof. R. H. Steiberg. He submitted a thesis to Kyoto University (*Some problems*

involved in employing the ERG c-wave in pharmacological experiments: conditioning in pigmented rabbits. Acta Ophthalmologica, 63: 567-573.1985) and received his Doctor of Medical Sciences in 1986. He was then invited to Miyazaki Medical College as the Assistant Professor under Prof. SAWADA Atsushi in 1988 and was promoted to the Professor and the present position as above in 1998. He is interested in vitreous surgery and macular diseases in recent years, and some example of his publications in this field are "*Effect of debridement of the retinal pigment epithelium in full-thickness macular hole surgery*. Acta Ophthalmol. Scand. 76: 234-237,1998." and "*Pearls in the management of macular holes*. Semin. Ophthalmol. 13 :10-19,1998". He is member of the American Academy of Ophthalmology, Association for Research in Vision and Ophthalmology (ARVO), International Society of Clinical Electrophysiology of Vision, besides being a member of many Japanese professional Societies. (Department of Ophthalmology, Miyazaki Medical College, Kiyotake,Miyazaki 889-1693, Japan. phone: +81-9-8585-2806, fax: +81-9-8584-2065, e-mail: nnaoi@post.miyazaki-med.ac.jp)(SM)

Naquin Howard A.(1918-1972) American ophthalmologist, born in Honokaa, Hawaii, who received a B.A. from Stanford ,University, and an M.D. from Harvard Medical School. Naquin interned at Boston City Hospital and was an assistant resident in medicine there. Subsequently, he served in the Navy as Lieutenant. He completed a five-year residency in ophthalmology at the Wilmer Institute, and was certified by the American Board of Ophthalmology in 1951. He became an associate professor of ophthalmology at Johns Hopkins Hospital in 1954. In addition to his teaching activities, Dr.Naquin had a large diagnostic and surgical practice. He published many articles varying subject from toxoplasma skin tests to orbital reconstruction utilizing the temporalis muscle. He was a Fellow of the American Academy of Ophthalmology and Otolaryngolgy, a Fellow of the American College of Surgeons, a member of the Association for Research in Vision and Ophthalmology and a member of the American Medical Association, and of state and local societies.AJO 1973,76:163

Naumann, Gottfried, Otto, Helmut (1935-) German Ophthalmologist, Professor and Chairman, University Erlangen-Nürnberg, Erlangen, Germany. He graduated from University of Leipzig/Saxony (1957) with Doctor of Medicine granted. He then passed ECFMG/USA examination (1961) and certified by the "American Board of Ophthalmology" and elected "Fellow" of the "American Academy of Ophthalmology and Otolaryngology" (today American Academy Ophthalmology) (1967). He received training in Ophthalmology at institutions including Department of Ophthalmology, University of Hamburg/Germany (H. Sautter) (1961-1964), "Fellow" in the Department of Ophthalmic Pathology of the "Armed Forces Institute of Pathology "(LE. Zimmerman) Washington/D.C/U.S.A. (1965-66). He sumitted a thesis "*Pigmented Naevi of the Choroid and Ciliary Body*" (1968) to University of Hamburg where he was appointed Privat Dozent, worked as a Staff (1966-1975), and vice-Chairman of the Department of Ophthalmology (1971-1975) and promoted to Full professor of University Hamburg (1973). He was then invited to be Chairman and Professor of the Department of Ophthalmology of the University Tübingen /Germany (1975-1980), and then Chairman and Professor of the Department of Ophthalmology and Head of Eye Hospital and Clinic of the University Erlangen-Nürnberg in Erlangen/ Bavaria/ Germany /EU (since July 1,1980). In the professional societies, his special functions include "Fellow" American Academy Ophthalmology (1967). Member of the European Ophthalmic Pathology Society (1968). "Corresponding Secretary" of this Society (1972-75). Member of the Board of the ,,Deutsche Ophth. Gesellschaft" German Ophthalmological Society (1971-1975 and 1979 - 1985). Foundation of Association of German-Speaking Ophthalmic Pathologists in Hamburg (with M. Vogel) (1972). Reviewer of WHO, Histologic Typing of Ocular and Adnexal Tumors (1974). General Secretary of the V. European Congress of Ophthalmology, Hamburg (5.4-9.4.1976). Member of the International Ophthalmic Microsurgical Study Group (1978). Member of commission of the T.N.M. International Union Against Cancer (UICC),



Geneva (1981-83). President of Association of German University Professors in Ophthalmology (1985-1988). Founding member of German Society of Intraocular Lens Implantation (Giessen 1986). Participation in foundation of the *Association of European University Professors of Ophthalmology* (E.U.P.O.) within the European Community in Aachen/Germany (1986), formally established on May 16th, 1988 in Lisboa, Portugal. Reviewer for the "Deutsche Forschungsgemeinschaft (DFG-German Research Foundation) (1988-1996). WHO Expert Commission for Trachoma and Prevention of Blindness (1989-1993). Vice President International Ophthalmic Pathology Society (since 1989). President, European Ophthalmic Pathology Society (EOPS) (1990-93). Organizing Secretary" Joint-Meeting European Ophthalmic Pathology Society and American Ophthalmic Pathology Society (Verhoeff Society), University Erlangen-Nürnberg, Erlangen, May 8-12, 1991. Member of the 12 Member Foundation-Committee for the new Medical Faculty of the University of Dresden (monthly meeting for 2-6 days: 1991-1994). Member of the Advisory-Committee for the Medical Faculties of the Universities of Erfurt, Leipzig and Magdeburg (1992). Founding Member of the "European Board of Ophthalmology", London/U.K. (31.10.1992). Member of International Council of Ophthalmology" (IOC) (1994-1998). International Membership Committee of the "American Academy of Ophthalmology" (1995). President of the European Board of Ophthalmology, Brussel (1996-1998). Speaker of the ,,Sonderforschungsbereich 539" of the Deutsche Forschungsgemeinschaft (DFG) (German Research Foundation) on the subject Glaucoma, including Pseudoexfoliation syndrome of the Friedrich-Alexander University Erlangen-Nürnberg (1997-2000). Commissions for Research and Construction of Medical Faculty of University Erlangen-Nürnberg) (1997-2000). Election as President (1998 - 2002) of the International Feder. Ophth. Soc (IFOS) consisting of approximately 135 national ophthalmological societies and its executive committee, the International Council of Ophthalmology (ICO) and ex officio Vice-President International Agency for the Prevention of Blindness (JAPB) (in Amsterdam 23.06.1998). International Advisory Committee" of the American Academy of Ophthalmology (since 1998). Member of the *Deutsche Akademie der Naturforscher Leopoldina* (founded 1652), Halle /Germany (30.11.1998). University Hospital Council as representative of the Medical Faculty, University Erlangen-Nürnberg in Erlangen (1999-2004). Member of the Scientific Advisory Committee" for the Alcon Research Institute (1999-2004). Based on his expertise, he served as visiting professor to many institutions including Research to Prevent Blindness International Visiting Professorship by invitation of the Association of University Professors in Ophthalmology (AUPO) to 18 University Departments of Ophthalmology in the USA (Oct-Dec. 1972). University Nagoya/Japan (March 1979). Universities Osaka, Tokyo, Fukuoka and Kyoto/Japan (Nov.-Dec. 1988). University of Taipeh/Taiwan-Republic of China (Dec. 1989). Fundacion Oftalmologica Argentina Jorge Malbran, Buenos Aires/Argentina (Nov. 1990). Universities Fukuoka, Osaka and Tokyo/Japan (Nov. 1992). King Khaled Eye Specialist Hospital, King Saud University, Riyadh/Saudia Arabia (24-28.3.1997). University Singapore (16.-18.1.2000). University Sydney/Australia (1 9-24.1 .2000). Juntendo University Tokyo/Japan (26.1.2000). University Nagoya/Japan (27-30.1 .2000). He serves as a key member of many societies, e.g. Deutsche Ophthalmologische Gesellschaft, (DOG) (German Ophthalmic Society) since 1966, honorary member, 2000; Fellow American Academy of Ophthalmology (AAO), since 1967; Association Research Vision and Ophthalmology (ARVO): Life Member since 1978; European Ophthalmic Pathology Society (EOPS), since 1968; Deutschsprachige Ophthalmo-Pathologen (DOP) (German speaking Ophth.Path.: Founding Member, Hamburg 1972; International Microsurgical Study Group (IOMSSG): since 1978. Miembro correspondiente (corresponding member) of Sociedad Chilena de Oftalmologia (1979). Italian Ophthalmological Society - Honorary Member (1990); Hungarian Ophthalmological Society — Honorary Member (1996); European University Professors of Ophthalmology (EUPO) Founding Member Aachen, 1986; Deutsche Gesellschaft für lntraokularlinsen Implantationen, since 1980; *Academia Ophthalmologica Internationalis*: elected chair XXXII, since 1986 (49 members) *Leopoldina-Academy* (1998). His editorial assignments embrace Co-Founder and coeditor (1969-1980) of "*Ophthalmic Research*"; coeditor of "*Klinische Monatsblätter für Augenheilkunde* (Bücherei des Augenärztes)"; Since 1979); Principal Editor of "*Klinische Monatsblätter für Augenheilkunde*" (since 1992); Editorial Board of "*Albrecht von Graefes Archiv für*

klin exp Ophthalmologie" (1976-1982); "*International Ophthalmology*"(since 1976); "*Ophthalmic Surgery*" (1983-1995); „*Der Ophthalmologe*) (since 1990); "*Current Opinion in Ophthalmology*" (1990-1997); "*European Journal of Ophthalmology*" (since 1992); "*Ophthalmology World News*"(OWN), now *Eye-Net Journal*" of the American Academy of Ophthalmology (AAO) (since 1995); "*American Journal of Ophthalmology*" (since 1995); *Japanese Journal of Ophthalmology* (since 1997). He authored and co-authored more than 400 original papers, mainly on ophthalmic pathology and anterior segment microsurgery. Some examples are "*Pathology of the Eye*", 1500 pages (German editions 1980 and 1997; English edition 1986; Japanese Edition 1987 and 2000); with B.P. Gloor: *Woundhealing of the Eye*, 1980,; "*Bio-Morphometry of optic disc* (with J. Jonas), Graefes Archives 1988:226:213-215, 332-336, 522-538 and 587-590; Invest Ophthalmol 1988; 29: 1151-1158; Acta ophthalmol 1989:67:199-203; Graefes Archives 1992:230:129-139); "Blood-Ocular-Barrier-Changes (with M. Kuchle, Am J Ophth. 1994:117:521-528, 1995:119:111-112, 1998:125:177-181; Ophthalmic Res, 1995:27:136-142; J Glaucoma 1999:8:18-23); *Unilateral Arcus lipoides cornea*, Lancet 1993:342:1185. He is a recipient of many honor awards and lectureships: e.g. "Distinguished Foreign Guest" American Medical Association (AMA) in Atlantic City/New Jersey/USA (1975). "European Guest of Honour" of the VERHOEFF Society/USA (27.-29.4.1985) and "Special Guest" of the 44th Clinical Meeting of the Wilmer Ophth. Institute Baltimore/ MD/ USA: *Direct Surgery of the Ciliary Body* (2-4.5.1985), Honour Needle University Leipzig (1989). Honorary Member (Socio Benmerito) Societa Ophthalmologica Italiana, Roma (SOS) (1990). "Invited Special Lecture" 50th Clinical Meeting, Wilmer Ophthalmological Institute, Baltimore/MD/USA: Non-Mechanical Trephination with Excimer Laser 193 nm in keratoplasty" (1991). Honor Award of American Academy of Ophthalmology", Dallas/USA (1992). Invited Lecture to The Royal Society of Medicine", London; "Corrective Surgery for post-traumatic hypotony" (30.03.95). Honor-Medal" of the Medical Academy Lublin/Polen (29.3.1996). Honorary Member, Hungarian Ophthalmological Society, Budapest (30.8.1996); Georg Ernst Konjetzny-Award 1970 of the Hamburg. Cancer Society for research on "Pigmented Nevi of the Uvea". Brian Harcourt Memorial Lecture, Leeds/UK: "Excimer Laser Trephination in Corneal Transplantation". Dr. William Mackenzie Memorial Lecture: "Direct Surgery of the Ciliary Body" and "36 Mackenzie Medal", Glasgow/UK (Oct.31, 1991). "I. Tadeusz Krwawicz Memorial Lecture: "Corneal Transplantation today" and 1. Tadeusz Krwawicz Gold Medal", Polish Ophthalm. Society, Medical Academy, Lublin/Polen. (March 19, 1993). "The Bowman Lecture": "Corneal Transplantation in Anterior Segment Diseases" (Eye, 1995; 9: 395-421) and "56. Bowman Medal", Royal College of Ophthalmology (London) in Guernsey/GB (21.4.1994). "6th Harvard Professorship in Ophthalmology", "7th Harvard Lecture": "Pseudo-Exfoliation-Syndrome: Ocular and Systemic Morphology and Complications", Boston/USA. (16.-17.9.1994). Hilton S. Read Memorial Lecture: "Corneal Transplantation today", Ventnor Foundation Annual Meeting , Atlantic City/USA in Lubeck (9.10.94). 6th Charamis Lecture and Medal of the European Ophthalmological Society, Milano/Italy: Mechanical and Nonmechanical ocular Microsurgery" (June 29, 1995). 30. Bjerrum Lecture 1995 of the Danish Ophthalmological Society: Pseudoexfoliation Syndrome: Clinical Implication and Complications" (Dec 2, 1995). Alcon Research Institute Waward (ARIA)" (29.02.96); German Federal President Roman Herzog presents Federal Service Award First Class (25.06.1996); European Guest Lecture", to International Oxford Ophthalmological Congress (OOC), Oxford/GB: „Pseudoexfoliation Syndrome: Spectrum of intraocular manifestations and its clinical significance" (08.07.96); Academia Ophthalmologica Internationalis Special Lecture": „Pseudoexfoliation Syndrom: for the Comprehensive Ophthalmologist'. Centennial American Academy of Ophthalmology, Chicago/Ill/USA (27.10.1996). Bronze Medal of the University of Helsinki/Finland (December 1997); Guest of Honor", The John Chang Sr Memorial Lecture, The Chinese University of Hong Kong, Kowloon, Hong Kong: The Challenges and Controversies of Eye Surgery in the next Millenium" (20.08.1998). State-of-the-Art Lecture": Selected Topics in Curative and Optical Corneal Transplantations; The First Global Chinese Ophthalmic Congress", Beijing/China (26.08.1998); Second Joaquin Rutllan Memorial Lecture, University of Barcelona/Spain Non-Mechanical Trephination in Penetrating Keratoplasty" (15.5.1999); Dr. Frank Claffy Memorial Lecture and Medal „Pseudoexfoliation-Syndrome is clinically relevant not only for the glaucomas, University of Sydney, Save Sight Institute Congress,

Sydney/Australia (21.02.2000); Building a Bridge to the next Millenium Lecture: „Cornea Surgery" 23rd Annual Meeting of JSOS, Nagoya/Japan (27. -29.1.2000); Doctor honoris causa by Semmelweis University Budapest (March 31,2000) (Department of Ophthalmology, University of Erlangen-Nürnberg, D-91054, Erlangen Germany, Phone: 46-9131-8534477; Fax: 46-9131-8536435, e-mail: Naumann@augen.imed.uni-erlangen.de)

Naval, Cosme Ildefonso (1932-) Filipino ophthalmologist, Professor of Ophthalmology, University of Santo Tomas, Manila. He graduated from University of Santo Tomas Medical School in 1957 and completed the residency training at in Ophthalmology and Otolaryngology at the University Hospital. He was granted the Jose Rizal Scholarship in Ophthalmology and studied at the Department of Ophthalmology of University of Heidelberg (1965-1967) and further completed the Essener Fortbildungs Kurse in Laser Surgery at University of Essen, Germany (1966)[under G.→Meyer-Schwickerath-JPW]. He extended his studies at the University of Manchester by attending the UK Retina Course in 1972. He founded the independent Department of Ophthalmology at Santo Tomas University Hospital as the Professor of Ophthalmology in 1984 and consolidated the basis of the educational and scientific activities as the Chairman of the Department, the position he held until 1993. In the professional Societies, he held important positions as follows: President of the Philippine Society of Ophthalmology (1977-1978), President of the Philippine Academy of Ophthalmology (1986-1988), Assistant Medical Director of Cardinal Santos Medical Center (1989-1991) and Chairman of the Residency Training (1976-1982) and of Scientific Activities (1983-1986) of the University. He organized the first Intraocular Lens Implantation Training Course in 1985 and founded the Philippine Implant and Refractive Surgery Society in 1989. He is a world renowned cataract surgeon and invented many new techniques that can meet needs in various situations; the relevant publications are "*Capsular fusion for pediatric cataracts*. Operative Techniques in Cataract and Refractive Surgery Vol. 1:198,1998", "*Hydrodissection of lens nucleus and cortex*." Ed. Rosen & Kalb. Intercapsular Cataract Surgery, p. 109, Pergamon Press, 1988 and "*Hydrofragmentation of the nucleus*", Proc. 1st. Int. Symp. On the Quality of Cataract Surgery, Stockholm, Eds Rosen et al. p.39, PG Publishing, Singapore, 1990. He has also many publications in the field of laser surgery; e.g. "*Argon laser modified conjunctivoplasty for bullous keratopathy*." Eur. J. Implant Ref. Surg. 7: 279, 1995. He also wrote the first Textbook of Ophthalmology for Filipinos in 1980 with Drs. Fajardo, R. and Espiritu R. In recognition of his meritorious contributions, many organizations granted him honor awards, e.g. Jose Rizal Award for Research by the Association of Philippine Ophthalmologists in America (1990), Distinguished Service Award of the Asia-Pacific Academy of Ophthalmology (1993), Parangal ng Bayan Award, Tribute to National Achievers (1996) and many others. (Professor of Ophthalmology, University of Santo Tomas,24E Goldland Plaza #8 Eisenhower St. Greenhills, San Juan, Metro-Manila, Philippines, Phone: 632-722-2133, Fax: 632-722-2114, e-mail: cinn@i-manila.com.ph) (SM)

Naval, Juan (? - ?) Spanish physician. He was physician to the Spanish royal family. Life dates are not obtainable. He wrote: *Tratado de la ophtalmia y sus especies*. Madrid 1796. Albert

Nayar, K. Koman Nayar Dewan Bahadur (? – 1946) Indian ophthalmologist who was one of the leading ophthalmologist in India at that time. He served at the Government Ophthalmic Hospital, Madras. He became assistant superintendent in December 1918 and frequently acted as superintendent, until in 1938 he was confirmed in that post, and appointed Professor of Ophthalmology, Medical College, Madras.

Neame, Humphrey (1887-1968) British ophthalmologist, educated at Cheltenham College and the London Hospital from which he qualified in 1910. Shortly after he served as a surgeon in a hospital in Serbia during the Balkan war for about one year and on his return to England obtained his F.R.C.S. in 1913. When the first world war broke out in 1914, Neame joined the R.A.M.C. in which service he distinguished himself, being awarded the Croix-de-Guerre. On demobilization he continued post-graduate work at the London Hospital specializing in ophthalmology, and was for a time registrar in the ophthalmic department. He was appointed assistant surgeon at the Central London Ophthalmic Hospital (now the Institute of Ophthalmology) and curator and pathologist at

Moorfields Eye Hospital where he was also Lang research scholar. He was elected ophthalmic surgeon at University College Hospital in 1923 and assistant surgeon at Moorfields in 1926. He retired from Moorfields in 1947 and from U.C.H. in 1952, and from active practice rather early for health reasons. He was a member of the Ophthalmological Society of the United Kingdom and served as secretary, as well as for two periods on the council. He made many contributions to the meetings of the O.S.U.K. and also to those of the Oxford Ophthalmological Congress as well as writing many articles for the medical journals. He wrote with Williamson-Noble a *Handbook of Ophthalmology* (London 1927) and an *Atlas of External Diseases of the Eye*. In addition he contributed articles to Berens's *Eye and its Diseases* and to the *Encyclopaedia Medica*. He took as much interest in the medical side as in the surgical side of ophthalmology and this was reflected in his writings. BJO 1968,52:792

Nebenchari (6th century B.C.) The greatest oculist of Egypt in the 6th century B. C. There is an interesting story about this man which has been preserved by Herodotus. Cambyses, son of Cyrus, king of Persia, finding that his mother, Kassandane, was blind, sent her to Amasis, king of Egypt, beseeching him to dispatch to herald the greatest Egyptian oculist, whoever that might be. Aniasis, sent to her Nebenchari. This oculist, on arriving in Persia, found his royal patient afflicted with senile cataract. For some reason, however, he hesitated to perform an operation, until one day, happening to hear that his king, Amasis, had also gone blind from the same affection, and that he had been successfully operated on by Nebenchari's great rival, Pentammon, the timorous Nebenebari took heart, operated (by couching -this procedure, then called " cutting the skin that covers the pupil of the eye," is said to have been invented by Nebenchari.) and restored to Kassandane her sight. War between Persia and Egypt seems to have grown out of this oculistic incident. At all events, Herodotus (Thalia, III, 1) holds the following language: "Against this Amasis, Cambyses, son of Cyrus, made war, leading with him both others, his own subjects, and of the Grecians, Ionians and Aeonians. The cause, of the war was this: Cambyses, having sent a herald into Egypt, demanded the daughter of Amasis; and he made this demand at the suggestion of an Egyptian physician, who out of spite served Amasis in this manner, because, having selected him out of all the physicians in Egypt, and torn him from his wife and children, he had sent him as a present to the Persians, when Cyrus, having sent to Amasis, required of him the best oculist, in Egypt. The Egyptian, therefore, having this spite against him, urged on Cambyses by his suggestions, bidding him demand the daughter of Amasis, in order that if he should comply he might be grieved, or, if he refused, he might incur the hatred of Cambyses. But Amasis, dreading the power of the Persians, and being alarmed, knew not whether to give or to deny; for he was well aware that Cambyses purposed to take her, not as his wife, but his mistress. Having considered these things, he did as follows. There was a daughter of Apries, the former king, very tall and beautiful, the only survivor of the family; her name was Nitetis. This damsel, Amasis, having adorned with cloth of gold, sent to Persia as his own daughter. After a time, when Cambyses saluted her, addressing her by her father's name, the damsel said to him, '0 king, you do not perceive that you have been imposed upon by Amasis, who, having dressed me in rich attire, sent me to you, presenting me as his own daughter; whereas, in truth, I am the daughter of Apries, whom he, though he was his own master, put to death after he had incited the Egyptians to revolt.' These words in this accusation induced Cambyses, the son of Cyrus, being greatly enraged, to invade Egypt. " American Encyclopedia of Ophthalmology 11,p.8290-8291

Neetens, Adolf J.H.V. (1926-) Belgian ophthalmologist. Neetens was born in Edegem. He was a political prisoner at the age of 17 for 18 months in the concentration camps in Germany. He studied medicine at Ghent University and acted during his student's years as co-assistent in the departments of special histology and of human anatomy. After obtaining his M.D. degree in 1952 he was assistant of Jules Francois until 1956, a year in which he obtained the special doctorate in ophthalmology with a thesis on the *mechanisms of optic atrophy in glaucoma*. He joined the staff of the eye clinic of the St. Elisabeth hospital in Antwerp, of which he became the head in 1965. Meanwhile he was research fellow in the Wilmer Institute of Ophthalmology in Baltimore (with A.E.→Maumenee and F.B. →Walsh), in the National Institute of Health in Bethesda (with von Sallmann), in the Armed Forces Institute of Pathology in Washington (with L. Zimmerman), in the

Universities of Uppsala (Prof Barany), of Prague (Prof Vrabec), of Jeruzalem (Prof Auerbach and Prof Silberberg), of California (Prof O'Connor), and of San Diego (Prof Zweifach). He teaches in the Institute of Tropical Medicine in Antwerp since 1967 and in 1972 he became the first professor of ophthalmology of the University of this town. Accordingly he moved from the St. Elisabeth hospital to the A.Z. Middelheim in 1973 and to the Academic Hospital *U.Z.A.* in 1980. He made from each of these hospitals first rank centres for diagnosis, treatment and research. He was dean of the faculty of medicine of the Antwerp University from 1980 to 1984, and dean of the University hospital from 1985. Until now he wrote about 300 papers and 10 books. He is not only an internationally recognized specialist in *microcirculation*, in *vascular supply of the optic nerve* and in all branches of *neuro-ophthalmology*, but did also valuable work in many other fields such as glaucoma (*perfusion studies, evaluation of suspected glaucoma*), the lacrimal pathways (*dacryocystography*) corneal dystrophies (*flecked dystrophy of Neetens*), histopathology, metabolic ophthalmology, iatrogenic diseases, ophthalmic genetics (*hereditary A3-deletion*) combined cataract-glaucoma surgery etc. He organized important meetings, as the IXth *World Conference of the European Society for Microcirculation* in Antwerp in 1976, the symposium and report about *The Visual System and Disorders of Myelin* in Brussels for the Belgian Society in Ophthalmology in 1983, the *Joint World Meeting on NeuroOphthalmology* in 1984 in Antwerp, the *Antwerp-Boston Clinical and Research World Conference on Retina and Vitreous Body* in 1985 and the *Lustrum UZA* meeting, bringing together the 8 youngest medical schools of Western Europe, created in the 1970s. (Verriest)

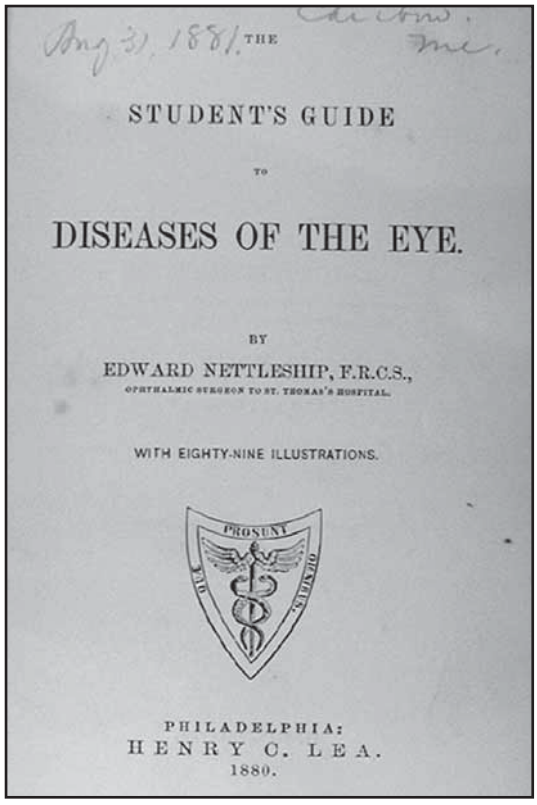
Neftel, William Basil (1830- ?). Russian-American neurologist, of some importance in ophthalmology. Born at Riga, Russia, he received both his classical and his medical education at the University of St. Petersburg, taking the medical degree in 1852 with honors. He served throughout the Crimean War, and in 1857 was sent by the Russian government on an expedition into Central Asia. As a reward for his very distinguished services, he was made Hofrath (Aulic Councillor). For a number of years he studied in various European institutions at the Russian government's expense; among these a year and a half was spent at Würzburg. In 1865 he emigrated to America, returning, however, in the following year to Europe. After two years further study, he came once more to America (in 1868), settling permanently in New York City. Although widely known as a neurologist, he devoted considerable attention to the eye, and wrote a number of articles on ophthalmic subjects. The most important of these is entitled "*The Galvanic Reaction of the Optic and Auditory Nervous Apparatus in Healthy and Diseased Conditions*". American Encyclopedia of Ophthalmology 11,p.8300-8301

Negi, Akira (1951-) Japanese ophthalmologists, Professor and Chairman of the Department of Ophthalmology of Kobe University. He graduated from Kyoto University in 1975, studied Ophthalmology under Prof. TSUKAHARA Isamu and received his Doctor of Medical Sciences in 1986 (thesis: *Experimental serous retinal detachment and focal pigment epithelial damage*. Arch. Ophthalmol. 102: 445, 1984). He extended his studies at Stanford University, CA, U. S. A. and carried out research with Prof. Michael→Marmor (*Effects of subretinal and systemic osmolality on the rate of subretinal fluid resorption*. Invest. Ophthalmol. Vis. Sci. 25: 616, 1984, „*Quantitative estimation of the metabolic transport of the subretinal fluid"*. Invest. Ophthalmol. Vis. Sci. 17: 1564, 1986. He served as the Professor of Kumamoto University from 1964 to March 2000, and moved to the present position as above in April 2000. He serves on the Board of Trustees to the Japanese Ophthalmological Society (1999-), Japanese Society of Ophthalmic Surgeons (1992-), Japan Glaucoma Society (1998-), Japan Vitreoretina Society (1995-) and the Japanese Society of Intraocular Implant and Refractive Surgery (1998-). His recent interest is in the retina, retinal pigment epithelium, vitreoretinal problems, glaucoma and some examples of recent publications are "*Influence of the sensory retina on healing of the rabbit retinal pigment epithelium.*, Curr. Eye Res. 19: 349, 1997" and "*Trabeculotomy combined with phacoemulsification and implantation of intraocular lens for the treatment of primary open angle glaucoma.* Ophthalmic Surgery and Lasers 28: 810, 1997". (Department of Ophthalmology, Kobe University School of Medicine, 7-5-2 Kusunoki-cho, Chuo-ku, Kobe, 650-0017; phone: +81-7-8382-6048; fax: 81+7-8382-6059; e-mail: negi@med.kobe-u.ac.jp) (SM)

Neill, Hugh (19th century) British surgeon. Neill practiced in London until 1830, then moved to Liverpool, where in 1834 he was appointed surgeon to the Ophthalmic Infirmary and the Deaf and Dumb Institute. He founded , in 1839, an Ear Infirmary. Neill was a Fellow of the Royal College of Surgeons and Physicians of Edinburgh and published a series of yearly reports under the title *Reports of the Liverpool Eye and Ear Infirmary*, the first being *The practice in the Liverpool Ophthalmic Infirmary for the year 1834; being the first special report*. London and Liverpool 1835. He authored: *On the cure of cataract, with a practical summary of the best modes of operating, (Continental and British)*. Liverpool & London 1848. American Encyclopedia of Ophthalmology 11,p.8302. Albert. JPW

Nélaton, Auguste (1807-1873) French surgeon of Paris. Nélaton received his M.D. in 1836 at the University of Paris with the thesis *Recherches sur l´affection tuberculeuse des os*. He became lecturer of surgery from 1839 and from 1851 to 1867 professor at the surgical clinic. A celebrated teacher and operator, and the inventor of several instruments (notably Nélaton's catheter), he devoted a lengthy section of his major work, *Élements de pathologie chirurgicale* 5 volumes (Paris 1844-1860), to ophthalmology, in addition to writing the treatise on cataract below. He became, in 1863, Member of the Académie de Médecine, 1868 Senator of the Empire. He wrote: *Parallèle des divers modes opératoires employés dans le traitement de la cataracte*. Paris 1850 (was written as a competitive thesis for the chair of operative medicine at the University of Paris); *Traité des tumeurs de la mamelle* Paris 1839 ; *Rapport sur les progrès de la Chirurgie en France* Paris 1867. American Encyclopedia of Ophthalmology 11,p.8302-8303.Albert.JPW

Nelson, Joseph (1840-1910). An Irish ophthalmologist. Born at Downpatrick, Ireland the son of a Unitarian minister, he graduated in medicine at Queen's University, and then began to study ophthalmology at Vienna under Ferdinand von →Arlt. Soon, however, he went to India, where he engaged in business. For a time he served with Garibaldi against King Bomba, and was afterwards decorated and presented with a sword. Returning to Ireland in 1878, he began to practise ophthalmology at Belfast, and four years later was appointed ophthalmologist to the old Belfast Royal Hospital and to the Belfast Hospital for Sick Children. He was a charter member of the Ophthalmologic Society of the United Kingdom, and, at the time of his death, one of its vice-presidents. He wrote but little. American Encyclopedia of Ophthalmology 11,p.8303


Aug 31, 1881. THE

STUDENT'S GUIDE

TO

DISEASES OF THE EYE.

BY

EDWARD NETTLESHIP, F.R.C.S.,

OPHTHALMIC SURGEON TO ST. THOMAS'S HOSPITAL.

WITH EIGHTY-NINE ILLUSTRATIONS.

PHILADELPHIA:
HENRY C. LEA.
1880.

Nettleship, Edward (1845-1913). Famous British ophthalmologist. He first qualified as a veterinary surgeon, but soon turned his attention to human medicine and studied at King´s College and the London Hospital where he obtained his diplomas of L.S.A. and M.R.C.S. in 1867 and 1868 and that of F.R.C.S. in 1870. From 1871 to 1873 he was curator of the Museum and librarian of the Moorfields Hospital. During 1873-74 he was Resident Medical Superintendent in charge of the Bow Branch Ophthalmic School, receiving children with disease from the West Surrey District School at Anerley. He was appointed ophthalmic surgeon to the South London Ophthalmic Hospital (later Royal Eye Hospital, the Hospital for Sick Children) and eventually The Royal London Ophthalmic Hospital Moorfields 1882-1898 (where he worked under Jonathan →Hutchinson) , and to St.Thomas´s Hospital 1875-1895. He made countless communications to the Ophthalmological Society and published a great number of articles in the Royal London Ophthalmic Hospital Reports. He wrote « *Diseases of the Eyes* » in 1879, of which six further editions (also American editions) appeared subsequently, « *The Students Guide to diseases of the eyes* » 1879 (there was also an American edition 1880). Nettleship wrote 1874 a Government Report dealing with *Ophthalmia in the Metropolitan Pauper Schools*. He was among the founders of the Ophthalmological Society of the United Kingdom which he served as its president from 1895 to 1897. After his retirement in 1902 he conducted important investigations into the role of heredity in night blindness, retinitis pigmentosa and other diseases. The Ophthalmoscope, London 1913,p.767-769. American Encyclopedia of Ophthalmology 11,p. 8317-8319 . A complete list of his publications is to be found in Hirschberg: *The History of Ophthalmology*, Vol.8a, p.284-291. Albert.JPW

Neufeld, Arthur H. (1945-) An American ophthalmic researcher who is currently the Bernard Becker Research Professor of Ophthalmology in the Department of Ophthalmology and Visual Science at Washington University School of Medicine in St. Louis, Missouri. He has been a major contributor to the field of ophthalmic pharmacology, particularly in the area of glaucoma. He has studied the pharmacological regulation of aqueous humor dynamics, pharmacological neuroprotection of the optic nerve in glaucoma, pharmacological inhibition of prostaglandins in ocular tissues during inflammation, and wound healing of the corneal epithelium and endothelium. After receiving an undergraduate degree from New York University, he was awarded the PhD in physiology/pharmacology from New York University in 1970. He then spent the next seven years at Yale University School of Medicine in the Department of Ophthalmology and Visual Sciences developing his career as an ophthalmic pharmacologist. In collaboration with Marvin L. Sears, MD, Dr. Neufeld published numerous papers demonstrating that cyclic AMP is the second messenger by which epinephrine lowers intraocular pressure. In addition, his laboratory first demonstrated that a non-steroidal anti-inflammatory drug could block the breakdown of the blood-aqueous barrier caused by prostaglandins. In 1977, Dr. Neufeld moved his laboratory to the Eye Research Institute in Boston and became a member of the Department of Ophthalmology of Harvard University. During the next 12 years, Dr. Neufeld formed the Ophthalmic Pharmacology Unit, served as Director of Research of the Eye Research Institute and expanded his laboratory and research interests into corneal epithelial and endothelial cell biology as well as continuing his work on pharmacological regulation of intraocular pressure. During this period, he trained many postdoctoral fellows and basic scientists including Drs. M. Jumblatt, S. Bartels, J. Liu, N. Joyce and R. Hernandez. In 1989, Dr. Neufeld left academia to found and to join an entrepreneurial startup, Telor Ophthalmic Pharmaceuticals, Inc., as Chief Scientific Officer. Telor eventually became a public company. Over the next six years, Dr. Neufeld led a team of scientists to file five INDs with the FDA in order to conduct clinical trials on several lead compounds to treat elevated intraocular pressure, corneal pain, intraoperative miosis and presbyopia. In 1995, Dr. Neufeld rejoined academia at his current position to pursue his newly formulated interest in developing a pharmacological agent to directly protect the optic nerve in glaucoma patients. His work has demonstrated that excessive nitric oxide is damaging to the optic nerve in glaucoma and that in an animal model of glaucoma inhibiting the synthesis of nitric oxide prevents the loss of retinal ganglion cells due to elevated intraocular pressure. He has been fully funded during his academic career by NIH and philanthropic organizations. In addition to his research, Dr. Neufeld has been an active member of the vision research community and served as a Trustee and President of ARVO, on several editorial boards for journals, on NIH study sections, and is currently a Trustee of the New England College of Optometry. (Arthur H. Neufeld, PhD: Bernard Becker Research Professor of Ophthalmology, Department of Ophthalmology and Visual Sciences Washington University School of Medicine, 660 South Euclid Avenue, Box 8096, St. Louis, Missouri 63110, U. S. A.; tel: +1- 314-747-1487; fax: +1-314-747-4211; email: neufeld@vision.wustl.edu)

Newell, Frank William (1916-1998) American ophthalmologist, editor of the *American Journal of Ophthalmology*. His editorials contributed greatly to the advancement of ophthalmology as a profession and as a science. His support of the National Eye Institute in his *American Journal of Ophthalmology* editorials bore fruit. Particularly significant was his advocacy of training grants and career development awards. His use of such funds in his own department was exemplary, and at least 3 current department heads began their careers with such backing. His knowledge and experience aided the large number of organizations of which he was a member and chair. As the first chair of the Department of Ophthalmology at the University of Chicago, and as chair of the Section of Ophthalmology before that, Newell used enviable wisdom and exceptional tact to steer his faculty toward the advances in clinical and basic ophthalmology that maximized their individual abilities. Clinical care at the University of Chicago was given on the basis of need with no other considerations. There was a steady stream of patients with unusual problems referred by physicians from the greater Chicago area and beyond. The uniqueness of Chicago ophthalmology lay in the fact that conduct of research in addition to practice was expected of each faculty member. There were no constraints placed on research time, and teaching followed the specialty lines of the faculty members. The

resultant environment provided fertile ground for innovation, and the publications from the department testified to Frank Newell's success. Frank Newell´s CV reads as follows: BSMed, Loyola University, Chicago, Ill, 1938; MD, Loyola University School of Medicine, Chicago, Ill, 1940; Intern, Ancker City and County Hospital, St Paul, Minn, 1939-1940; Teaching fellow, Department of Ophthalmology, University of Minnesota, Minneapolis, 1942; MSOphth, Department of Ophthalmology, University of Minnesota, 1942; First Lieutenant Major, US Army, 1943-1946; Consultant, Ophthalmology, Seine Base Section, American Expeditionary Forces, 1944-1945; Research fellow, Department of Ophthalmology, Northwestern University, Chicago, 1947-1950; Associate, Department of Ophthalmology, Northwestern University, 1950-1953. Associate Professor of Surgery, 1953-1955; Professor of Surgery, Chairman, Section of Ophthalmology, 1955-1970; Raymond Professor ophthalmology and Chairman, Department of Ophthalmology, 1970-1981; Professor Emeritus, 1981-1998, University of Chicago, Chicago. He wrote with J. Terry Ernest: *Ophthalmology: Principles and Concepts* Arch Ophthal 117,703,1999

Newnham, William(1790-1865). English surgeon, who paid considerable attention to diseases of the eye and who studied at Guy's Hospital, London, and settled at Farnham, where he practised until his death. He was a Fellow of the Royal College of Surgeons of England, and a prolific writer. Newnham's only ophthalmologic writing was "*Case of Successful Operation for Melanosis of the Eyeball.*" American Encyclopedia of Ophthalmology 11,p. 8366

Newton, Homer (1835-1915) New Yorker ophthalmologist, founder of the Brooklyn Eye and Ear Hospital. The Ophthalmoscope, 1916,p.112.

Newton, Sir Isaac (1643-1727). One of the greatest natural philosophers of all time, author of the "*Principia***,**" discoverer of "*the law of gravitation*," of the dispersion of light, of the composite nature of white light, of the unequal refrangibility of different colors, also propounder of the emission, or corpuscular, theory of light. He was born at Woolsthorpe, near Grantham, Lincolnshire, England, the son of a small farmer, whose name was also Isaac. The father having died some months before the son was born, and the mother, three years later, having re-married, young Isaac was placed in the care of one of his grandmothers, who seems to have been regardless of his education, for he did not attend school until he was twelve years old. For a long time after that, be was, by his own confession, a careless and indolent scholar. He showed, however, a decided penchant for mechanics, and constructed a number of sundials, windmills, cupboards, tables and little chests. At sixteen years of age, he returned to his mother, now once more a widow, and, for a time, engaged in farming. Showing but little taste or inclination, however, for this employment, he was sent by his mother, on the advice of her vicar, who was also her brother, to Trinity College, Cambridge. Here the giant that was in young Isaac then awoke, and all his studies seemed to him thereafter to be too easy. His Bachelor's degree was taken in 1665, and his Master's two years later. Two years later still he was chosen by Barrow, a professor at Cambridge, to edit the latter's "*Geometrical and Optical Lectures*." Newton was elected Lucasian professor of mathematics at Cambridge in 1669. From 1669 till 1671 he lectured on optics, in addition to mathematics, and, in these optical lectures, announced most of his optical discoveries. Newton published in 1675 his "*Discourse on Light and Colours*," and in 1704 the first edition of his "*Opticks: or, A Treatise of The Reflections, Refractions, Inflections and Colours of Light*." Other English editions of the book appeared at London, in 1716, 1721 and 1730; Latin editions, at London, in 1719, 1721, and 1728; French editions, at Paris, in 1720, 1726, 1737, and at Lausanne, 1740; an Italian edition, at Padua, 1773. American Encyclopedia of Ophthalmology 11,p.8366-8368

Nghiem, Vo Quang (1931-) Vietnamese ophthalmologist. He was born in Vinh Long province. He graduated at Hanoi Medical College in 1962. He received his Ph.D degree in Russia in 1972. He worked at the National Institute of Ophthalmology from 1962 to 1976, a year as the head of Eye Traumatic Department. Later he became the Head of Eye Department of Cho Ray General Hospital, Head of Eye Department of Ho Chi Minh City Medical and Pharmaceutical College. He is Associate Professor on Ophthalmology. He actively participated in prevention of blindness. He wrote many articles on management of trachoma and its complications, cataract, glaucoma operations and sparganose. He has also written some guideline books on ophthalmic practice. He was awarded Medal of Victory. (SM)

Nguyen, Nguyen Xuan (1907-1975) Vietnamese ophthalmologist. He was born in Thanh Hoa. He graduated at Hanoi Medical College in 1935. He was the first Director of the National Institute of Ophthalmology in Hanoi and also was Professor, Head of Eye Department of Hanoi Medical College from 1957 to his death (1975). He trained many Vietnamese Ophthalmologists and started to build Prevention of Blindness network in Vietnam. He wrote many articles on eye diseases, trachoma, infectious eye diseases. He was a member of the Association of Medicine in Tropical Area in 1938, member of Indochina association of Medicine from 1935 to 1945, member of Indochina Association of Ethnology studying, Chairman of Vietnam Association of Ophthalmology from 1960 to 1975, Vice-Chairman of Vietnam General Association of Medicine from 1960 to 1971. He was a member of the Vietnam National Assembly. He had been awarded Ho Chi Minh prize in 1996. (SM)

Nhan, Nguyen Trong (1930-) Vietnamese ophthalmologist Professor. He was born in Hanoi, and went to Moscow in 1954. He graduated from Moscow Medical Institute in 1960 and studied at Filatov's Eye Institute from 1961 to 1964 and received a Ph.D. degree. On home coming in 1964, he worked at the National Eye Institute in Hanoi, and as Deputy Director from 1975, as Director from 1984 to 1995. He was also the Head of Eye Department of Hanoi Medical Institute. He served as Vice-Chairman of the General Association of Medicine and Pharmacy from 1987 to 1995. Since 1987, he has been the Chairman of the Vietnam Red Cross and reelected at this post in March 1995. In 1992, he became Deputy at the National Assembly and was appointed to be Minister of Public Health from October 1992 to October 1995. He is the President of the Vietnam Ophthalmological Society, member of the Japanese Ophthalmological Society, member of the Lyon Ophthalmological Society (France). He is also the President of the Agent Orange Victims Fund since 1998. He wrote articles on blindness prevention in Vietnam, techniques in keratoplasty, cataract surgery, implantation of keratoprothesis, of intraocular lens, surgical treatment of glaucoma (subscleral sclerencleisis), surgical treatment of intraocular cysticercosis. He wrote also about health care in Vietnam, such as organization, control of infectious diseases, EPI (expended program of immunization), eradication of poliomyelitis. He has contributions in humanitarian activities and friendly relationship between peoples. In honor of his work and dedication, he has been awarded the Medal of Victory in 1958; Hero of Labor in 1985; Order of Labor First Degree in 1985; People's Doctor in 1989; Order of Red Cross of Republic of Korea; Gold Award of Merit of Japanese Red Cross in 1998; and Awards from the Asia-Pacific Academy of Ophthalmology (1989, 1997) and many others medals. (SM)

Nicati, William (1850-1931) French ophthalmologist. Of Swiss origins, born in Salavas (Ardèche), Nicati received an excellent scientific education. He reived his medical degree in 1875 in Paris. Nicati had three particular scientific interests: physiology, ophthalmology and philosophy. He wrote an important treatise on comparative physiology: *Physiologie oculaire humaine et comparée*, Paris 1909 ; *l´Orientation et le sens visuel de la durée* ; under the pseudonym Alcuin Millait *Les Operations cardinales de l´esprit humain : Noble Pantagruel* ; *Rabelais notre Maître* (1928) and *Demain à Thélème* (1930). *Annales d´oculistique* 1931, vol.168. JPW

Nichet, J. N. P. (1803-1847) French physician, obstetrician, and ophthalmologist. Born at Frontignan, Hérault, he graduated at Montpellier in 1829. He became in 1832 physician-in-chief at the Lyons Charité, and professor of obstetrics at the Ecole de Médecine. He wrote a number of articles of a general character, and one on iritis. American Encyclopedia of Ophthalmology 11,p.8368

Niimi, Katuhiko (1935-) Japanese ophthalmologist, former Professor of Ophthalmology of Fujita Health University. Born as the 4th generation in an Ophthalmology family, he graduated from Nagoya University in 1959, studied Ophthalmology at the University under Prof. KOJIMA Koku and received his Doctor of Medical Sciences in 1966 (thesis: *Effect of insulin in Ringer and isotonic glucose solution on carp retina glia potential*. J. Jpn. Ophthalmol. Soc. 70: 1795, 1966). He was appointed the Assistant Professor of Fujita Health University under Prof. MAJIMA Yoshinao in 1982 and was promoted to Professor in 1985: he served in this position until retirement in 1999. He has made extensive studies on diabetic retinopathy and the optic nerve, and has published 77 original papers and

written 6 books as co-author: some examples are "*Microdensity distribution of the optic disk by monochromatic photographs*. J. Jpn. Ophthalmol. Soc. 81: 634, 1977" and "*Critical flicker frequency in diabetic retinopathy*. Jpn. J. Clin. Ophthalmol. 35: 1705, 1981". He is a member of the Japanese Ophthalmological Society and many other National Societies. He served as the President of the 30th Congress of the Japanese Society of Ophthalmological Optics in 1994.(SM)

Nilsson, Sven Erik Göran (1931-) Swedish ophthalmologist. He received his M.D. degree from the Karolinska Institute, Stockholm, Sweden, in 1961. He started his research in retinal ultrastructure and electrophysiology at the Karolinska Institute and continued this work at the University of California at Los Angeles. In 1964, he returned to Sweden and received his Ph.D. degree at the Karolinska Institute. After a short time there as Associate Professor of Anatomy, he went into ophthalmology. He fulfilled his clinical training at the Karolinska Institute, where he also became Assistant Professor of Ophthalmology. In 1972, he was appointed Professor of Ophthalmology and Chairman of the Department of Ophthalmology at Linköping University, Sweden. In 1996, he became Emeritus Professor but continued to be an active researcher. In addition to the above, Nilsson was Dean of the Faculty of Health Sciences at Linköping University, Associate Medical Director of the University Hospital in Linköping, Scientific Consultant for Ophthalmology to the Swedish National Board of Health and Welfare, and Member of the Swedish Governmental Committee on the Development of University Research. He was awarded Axel Hirsch's Scientific Prize by the Karolinska Institute and the Medical Students' Award for outstanding teaching. In 1999, he was awarded The Order Of His Majesty, the King of Sweden, for outstanding scientific and teaching achievements in the field of Ophthalmology. Nilsson was President of the Swedish Ophthalmological Society (later Honorary member) and President of the International Society for Clinical Electrophysiology of Vision (later Honorary member). From 1999, he has been President of the International Society for Low-vision Research and Rehabilitation. He published about 250 scientific papers, mainly on retinal and pigment epithelial electrophysiology and ultrastructure, on age-related macular degeneration and on contact lens research.

Nimmo, William (? – 1841) Scottish. A Glasgow surgeon, who devoted considerable attention to diseases of the eye, and who was widely known as an ophthalmic operator. The date of his birth is not known. He became, however, in 1831, Fellow of the Medico-Chirurgical Faculty of Glasgow; in 1834 assistant physician at the Glasgow Eye Infirmary (as well as professor of surgery at the private medical school in College Street) and in 1835 M. D. at the University. He seems to have written nothing on the eye. He died at Demerara, West Indies. American Encyclopedia of Ophthalmology 11,p.8373

Nishi, Okihiro (1940-) Japanese ophthalmologist., Director of Jinshikai Medical Foundation, Nishi Eye Hospital, Osaka. Born as the son of a scholarly Ophthalmologist in Osaka, he graduated from the University of Freiburg, Germany, in 1966. On home coming, he received Ophthalmology Training at Tokyo University under Prof. Shikano Shinichi. He received Doctor of Medical Sciences in 1993 from Tokyo University (thesis: Synthesis of interleukin-1 and prostaglandin E2 by lens epithelial cells of human cataracts. Br. J. Ophthalmol. 76: 338-341, 1992; Amplitude of accommodation of primate lenses refilled with two types of inflatable endocapsular balloons. Arch. Ophthalmol. 111:1677-1684, 1993). He has been in the present position since 1985. He published more than 200 original papers in international journals. He is a member of many National and International Professional Societies, that include International Intraocular Implant Club (IIIC) (1989-), International Ophthalmological Microsurgical Study Group (IOMSG) (1988-), Accommodation Club 1989- American Academy of Ophthalmology (AAO) (1986-), American Society of Cataract Refractive Surgery (ASCRS) (1984-), European Society of Cataract Refractive Surgery (ESCRS) (1986-), Deutsche Ophthalmologische Gesellschaft (DOG) (1985-), Deutschsprachige Gesellschaft für Intraokularlinsen-Implantation und Refractive Chirurge (DGII) (1993-) and Asia-Pacific Intraocular Implant Association (APIIA) (1982-). He serves as a Councillor of Japanese Society of Ophthalmology, of Japanese Society of Cataract Refractive Surgery (JSCRS), of Japanese Society of Ophthalmic Surgery (JSOS) and Director of Highlights of Ophthalmology (1996-). His editorial assignments include Editor of Japanese Journal of Cataract Refractive Surgery (1999-), Editorial member of Japanese Journal of Ophthalmic Surgery

(JJOS), Scientific Advisor of Highlights of Ophthalmology International (1996-), Editorial member of American Journal of Cataract Refractive Surgery (1998-) and Layout Editor of Japanese Edition of Highlights of Ophthalmology (1999-). He is a recipient of many Awards that embrace Medal of Indian Society of Cataract Refractive Surgery (1989), Prize of Video Festival in American Society of Cataract Refractive Surgery Meeting (ASCRS) (1985, 1986, 1987, 1989, 1995, 1996), Prize of Video Festival in Congress of European Society of Cataract Refractive Surgeons (ESCRS) (1990, 1991, 1993), Prize of Video Session in Deutsche Ophthalmologische Gesellschaft (DOG) (1987) and Innovator's Lecture (von Graefe's Lecture) of Deutsche Ophthalmologische Chirurgen (1996).(Director of Jinshikai Medical Foundation, Nishi Eye Hospital, 4-14-26, Nakamichi, Higasinari-ku, Osaka, Japan 537-0025, phone: +81-6-6981-1132, fax: +81-6—981-5630, e-mail: okihiro@nishi-ganka.or.jp)

Nishida, Shozo (1931-) Japanese ophthalmologist, Professor Emeritus of Aichi Medical University. He graduated from Nagoya City University in 1960, and studied Ophthalmology under Prof. →MIZUNO Katsuyoshi at the Postgraduate School of the University. He received his Doctor of Medical Sciences in 1965 (thesis: *Electron microscopic study of chicken retina: on the visual cells and retinal pigment epithelium of newborn chicken under light and dark adaptation*. Folia Ophthalmol. Jpn. 14: 420, 1963 and *The ultrastructure in the retinal pigment epithelium of light adapted chicken*. J. Jpn. Ophthalmol. Soc. 68: 1431, 1964). He conducted research at the Department of Ophthalmology of Yale University, U.S.A. during 1966-1969. He was appointed Assistant Professor of Aichi Medical University in 1972 under Prof. SUZUMURA Akihiro and was promoted to Professor in 1982: he served as the Chairman of the Department of Ophthalmology from 1986 to retirement in 1997. He has been Councillor of the Jpn. Ophthalmol. Soc. (1987-1997), Councillor of the Jpn. Soc. of Histochemistry and Cytochemistry (JSHC) (1971-1997) and of the Japanese Society of Clinical Electron Microscopy (JSCEM) (1972-). He served as Visiting Professor to Norman Bethune University of Medical Sciences, Changchun, China. He delivered many lectures, including "*Adenosine triphosphatase and alcohol dehydrogenase activity in the visual cell outer segment*" at the 12th Congress of JSHC in 1971, "*Aging changes of ocular tissues and their influences on accommodative functions*" at the 93rd Congress of the Jpn. Ophthalmol. Soc. in 1989, "*Deterioration of amplitude of the accommodation with age and its possible restoration in the intraocular lens implanted eye*" at the 96th Congress of the Jpn. Ophthalmol. Soc. in 1991, "*Aging and ciliary muscle*" at the 14th Congress of the Jpn. Soc. Ocular Pharmacology in 1994 and "*Skeletal frame of the monkey trabecular meshwork*" at the100th Congress of the Jpn. Ophthalmol. Soc in 1996. His many publications include "*Electron microscopic studies of human retinitis pigmentosa*. Am J. Ophthalmol.63: 791, 1967" and "*Scanning electron microscopy of the zonular fibers in human and monkey eyes*, Ed. Hollyfields et al. International Symposium on the Structure: 357, Elsevier Biomedical. New York: 1982.(SM)

Nishida, Teruo (1947-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Yamaguchi University. He graduated from Osaka University in 1971, studied biology in the Postgraduate School of the University and received his Doctor of Medical Sciences in 1977 (thesis: *Circadian Rhythm of Disaccharidases of Rat Small Intestine and its Relation to Food Intake*. Osaka University Medical Journal 29: 85, 1977). He then worked as a Research Associate at the Department of Biochemistry of Ehime University School of Medicine (1974-1980) and at the Eye Research Institute of Retina Foundation (now Schepens Eye Institute) (1977-1980). On his homecoming in 1980, he started to study Ophthalmology at the Department of Ophthalmology of Osaka University under Prof.→MANABE Reizo. He was promoted to Assistant Professor of Osaka University in 1981, then to Assistant Professor of Kinki University in 1984. He was appointed to the present position in 1993. His academic activities are extensive and he is a member of many Japanese Societies and the American Academy of Ophthalmology, Castroviejo Cornea Society, Contact Lens Association of Ophthalmologists, Association for Research in Vision and Ophthalmology, International Society for Eye Research and the New York Academy of Science. He is a Councillor of the Japanese Ophthalmological Society (1992-), Trustee of the Society (1999-), and Japanese Society for Connective Tissue Research (1993-) and is the President of the Asia-

Pacific Society for Cornea and Refractive Surgery (1997-). He is an editor to professional journals, i.e. “Cornea (1989-1995,1998-)”, “Connective Tissue (1993-) ”, “Jpn. J. Ophthalmol. (1993-1998)”, “Folia Ophthalmologica Japonica (1993-)”, “Atarashii-Ganka, Journal of the Eye (1993-)” and “ Jpn. J. Clin. Ophthalmol”. (1998). He served as visiting Professor to many Japanese Universities. His research interest is in the cornea and he has published more than 317 original articles that include the following examples: “*Extracellular matrix and growth factors in corneal wound healing*. Curr. Opin. Ophthalmol. 4:4, 1993, *Synergistic effects of substance P with insulin-like growth factor-1 on epithelial migration of the cornea*. J. Cell. Physiol. 169: 159, 1996”, *Clinical evaluation of fibronectin eye drops on epithelial disorders after herpetic keratitis.* Ophthalmology, 92:213, 1985“ and “*A new therapy for corneal trophic ulcer*. Arch. Ophthalmol. 101:1046, 1983”. (Department of Ophthalmology, Yamaguchi University, 1144 Kogushi, Ube City, Yamaguchi 755-8505, Japan: phone:81-836-22-2277; fax: 81-836-29-3228; e-mail: nishida1@po.cc.yamaguchi-u.ac.jp) (SM)

Nizetic, Zdravko (1895-1948) Dalmatian ophthalmologist, born in Dubrovnic. Nizetic studied in Vienna, Prague, Graz and Innsbruck. He became , in 1920, assistant to Prof. Nesic, the chairman of the Belgrade University Clinic. After that he worked in Berlin under R.Greef, receiving in 1938 his habilitation at Franfurt/Main Goethe University. Nizetic, who was on the editorial committee of the Klinische Monatsblätter für Augenheilkunde, was particularly interested in the lacrymal canal and keratosplasty. He also published a great number of papers on bacteriology, trachoma and ocular surgery. JPW

Noble, Ellsworth Hazen (1866-1918) American homeopathic ophthalmologist and oto-laryngologist, of Elmira, New York, well known locally. Born in 1866, he graduated from the Columbia College of Pharmacy in 1886 and from the New York Homeopathic Medical College in 1890. For about twenty years he practiced in Elmira.AJO 1919,2:460

Nodine, Francois 0.(1865-1890)American ophthalmologist and oto-laryngologist. Born at Meadville, Ohio, he received his medical degree at Wooster University in 1886. After a year or more of ophthalmologic study in New York City, he settled as ophthalmologist in Cleveland, Ohio, and for three years practised with Dr. D. B. Smith. For a short time he was Professor of Diseases of the Eye and Ear in the Medical Department of Wooster University. American Encyclopedia of Ophthalmology 11,p.8376

Noël, Léon Ghislain (1845-1877) Belgian Louvain [Leuven] surgeon, who devoted most of his time and energy to ophthalmology. He studied at Louvain, lectured there on "operative medicine, " and in 1874 succeeded Hairion as chief of the Eye Division of the Louvain Civil Hospital. He was a skillful operator. He also discovered the venous pulse in those awakening from chloroform narcosis. This brilliant young man passed from life aged only thirty-two. Noël´s most important ophthalmologic writings are: 1. *Sur la Myopie*. (Bullet. de l'Acad. Roy. de Belgique, 1875.) 2. *Histoire Thérapeutiqne de I'Atropine dans l'Ophtalmologie*. (Jour. des Sciences méd. de Louvain, 1876.) 3. A chapter on the eye in Haan's "*Abrégé de Pathologie Chirurgicale*." American Encyclopedia of Ophthalmology 11,p.8377 [Shastid in the American Encyclopedia wrongly names Lyons for Louvain and places it in France instead of Belgium-JPW] Annales d´oculistique 1877,77:319-323

Nonaka, Kyoichiro (1930-) Japanese ophthalmologist, Director of Nonaka Eye Clinic, and Historian in Ophthalmology. Born as the 6th generation of an Ophthalmology family, he graduated from Tokyo Medical University in 1955. He studied at the University under Prof. KUWAHARA Yasuharu and received his Doctor of Medical Sciences in 1960 (thesis: *Studies of metabolism of cornea in heterografts*. No.1. J. Jpn. Ophthalmol. Soc. 62: 1848, 1958; No.2. ibid.64: 2879, 1960, No.3. ibid. 64: 2884, 1960; No. 4. ibid. 64: 2888, 1960). He followed his ancestors’ footsteps and practices in Matsumoto: while having a busy practice, he collected and maintained Classical Japanese medical books and many ophthalmic instruments and documents, and established a *Museum of the History of Ophthalmology*. At the Centennial Congress of the Japanese Ophthalmological Society (1997), a commemorative display of historical documents was made and his collections contributed greatly to this event. The records of the commemorative display are now maintained in his museum. He is a co-author of the *History of Ophthalmology* in Japan,

Centennial Publication of the Japanese Ophthalmological Society 1997. He is also a member of the Japanese Society of History of Medicine. He has served as the President of the Nagano Eye Bank since 1977, and in recognition of his service, the Ministry of Health and Welfare granted him an exaltation Award in 1999.(SM)

Noorden, Gunter Konstantin von (1928-) American ophthalmologist. Von Noorden was born March 19, 1928 in Frankfurt am Main, Germany. Primary and secondary education in Germany, M.D. from J.W. Goethe University, Frankfurt am Main (1954). Internship at St. Vincent Infirmary, Little Rock, Ark. (1954-1956), Fellowship in Ophthalmology, Cleveland Clinic, Cleveland, Ohio (1956-1957) and Residency in Ophthalmology, State University of Iowa, Iowa City, Iowa (1957-1960) under Alson Braley, Hermann M. Burian and Frederick C. Blodi. Graduated from Iowa with a M.Sc.(Ophthal.) Postgraduate Fellowship, University of Tübingen Eye Clinic, Germany (1960-1961) under G. Mackensen and Heinrich Harms. Assistant Professor of Ophthalmology, State University of Iowa (1961-1963), Associate Professor under A.E.Maumenee and since 1969 full Professor at the Wilmer Institute, Johns Hopkins Hospital and University, Baltimore, Maryland (1963-1972), Professor and Director of Ocular Motility Service, Baylor College of Medicine, Houston, Texas (1973-1995), Emeritus Professor (1995-present) Clinical Professor of Ophthalmology, University of Southern Florida, Tampa (1996-present). Von Noorden is charter member and former president of the American Association of Pediatric Ophthalmology and of the International Strabismological Association. He has served as president to both of these organizations as well as of the American Association of Research in Vision and Ophthalmology (ARVO). He has published 308 scientific papers and is the sole author or senior author of the following books : *Atlas of Strabismus* (1967, 4 editions and translation into numerous languages), *Ocular Motility and Binocular Vision. Theory and Management of Strabismus* (1974, 6 editions and translation into several languages), *Decision making in Strabismus* (1994). He has written numerous chapters and co-edited the following books: F.Blodi, G.K.von Noorden., R.Watzke: *Liber amicorum Hermann M. Burian* (1973), G.Lennerstrand, G.K. von Noorden, E.C. Campos *Strabismus and Amblyopia* (1973) and C.Beyer Machulke and G.K. von Noorden: *Heilmann-Paton's Atlas of Ophthalmic Surgery*. He edited the first monograph on the history of strabismus: *The History of Strabismology* 2002, JP Wayenborgh/ Ostend/ Belgium. Von Noorden devoted his life as physician, teacher and scientist to the practice and study of ocular motility disorders. He has served on the Board of Editors of most ophthalmological journals and received numerous honors for his contributions which encompassed clinical and basic research in strabismus and amblyopia. He is co-recipient of the Hectoen Gold Medal of the American Medical Association, a Career Research Award from the National Institute of Neurological Diseases and Blindness, the Franceschetti Prize from the German Opthalmological Society, the Proctor Award from ARVO, the Bowman Medal from the Ophthalmological Society of the UK , the Alcon Research Award, the Jackson Lecture Award from the American Academy of Ophthalmology and the A.von Humboldt Research Price for "*exceptional scientific contributions to ophthalmology*." He holds honorary membership in 6 scientific organizations and in 1996 was awarded a Doctor honoris causa in medicine and surgery from the University of Bologna. After retirement from his academic post von Noorden is living in Southwest Florida and continues to lecture and publish. E-mail: gunterv@aol.com Web page: www.vr24.de/vonnoorden (AB)

Erik Wilhelm Nordenson

Nordenson, Erik Wilhelm (1847-1919) Swedish ophthalmologist, father of Johan Wilhelm Nordenson. He wrote a very important book which was the basis, along with Theodor Leber´s work, for Gonin´s research and discovery about the significance of the fissure of the retina for the development Ablatio retinae: *Die Netzhautablösung. Untersuchungen über deren pathologische Anatomie und Pathogenese*. Wiesbaden 1887. JPW

Nordenson, Johan Wilhelm (1883-1965) Swedish ophthalmologist. The son of the distinguished Swedish ophthalmologist Erik→Nordenson, he was born in Paris and qualified in medicine at Uppsala in 1911 a university from which he was awarded the Doctorate of Science in 1918. From 1922 to 1931 he was Professor of Ophthalmology in this university, and thereafter he was called to the professorship at the Karolinska Institutet at Stockholm where he acted as head of the Eye Clinic, first at Serafimer-lasarettet and

from 1941 at the Karolinska Sjukhuset. He retired in 1948. Nordenson held a leading position among Swedish ophthalmologists and his scientific work excited world interest. In this his three special subjects were the refracting powers of the eye, especially the refraction of the lens and the mechanism of accommodation: the invention of the first fundus camera suitable for practical use and widely used for many years and the study of the macular pigment. On several occasions he was president of the Swedish Ophthalmological Society, and from 1933 to 1950 he was President of the International Council of Ophthalmology, taking the chair at the International Congress in London in 1950.Brit.J.Ophthal.1965, 49:386;AJO 1965,60:156-157

Nordmann, Jean (1896-1980) French ophthalmologist of Strasburg, born in Colmar(France) . He received his secondary education in his native town and his medical training in Strasburg. He became House Surgeon in 1921 and, after having presented a thesis on the*,, Study of acquired cataract",* Doctor in Medicine in 1926. The same year he was nominated *chef de clinique.* In 1932, he was admitted to the degree of assistant Professor of Ophthalmology. In 1934, he was appointed as policlinical Surgeon and in 1937, as Assistant Head of the Ophthalmological Laboratory. In 1939, he moved to Clermont-Ferrand when the Faculty of Medicine of Strasburg withdrew to that town. Licenciate in Sciences in 1942, he became Doctor in Natural Sciences in 1946, after having presented two theses, one on the *,Physiology of the lens"* and the other on the *,Origin of the pigmented cells in the higher vertebrates".* Also in 1946, he was appointed Ophthalmologist of the Hospitals and in 1947, he succeeded Professor →Redslob in the Chair of Ophthalmology at Strasburg, which he occupied until he became Emeritus Professor in 1969. He continued, nevertheless, until his last days to frequent the Clinic and more particularly its library, to which he devoted his special attention. Professor Nordmann was the author or co-author of some 250 publications and was five times *Rapporteur* to French or foreign societies: in 1939, to the Ophthalmological Society of East of France, on the*,,History and Technique of Glaucoma Operations";* in 1954, to the *Société Française d'Ophtalmologie, on* the*,,Biology of the lens"*[Biologie du Cristallin] - a book which was very rapidly out of print -; in 1965, to the *American Association for Research in Ophthalmology,* on the *,Present state and perspectives in research on the lens";* in 1968, to the *Société Française d'Ophtalmologie on the ,Biology and Surgery of the Vitreous",* which report he had written in collaboration with his pupils, and, also in 1968, to the *German Ophthalmological Society, on ,Congenital and Infantile Cataracts".* Professor Nordmann devoted himself essentially to research on the biochemistry of the normal and pathological lens while he also took an interest in numerous other clinical and surgical problems. All his work excited truly international interest to the point that Professor Nordmann was considered as one of the best experts of his time for the physiology and the pathology of the lens. Professor Nordmann was also actively engaged in the edition of *Documenta Ophthalmologica* from its first appearance in 1938. *Documenta Ophthalmologica* dedicated two volumes to him, the first, in 1966, containing fifty-one contributions, to celebrate his seventieth birthday, and the second in 1976, containing thirty-three contributions on the progress of biochemical research on the lens, to celebrate his eightieth birthday. In 1934, Nordman was awarded the *Cirincione Gold Medal* of the *Italian Ophthalmological Society;* in 1965, the *Cavara Medal* of the *Ophthalmological Society of Rome;* in 1973, the award of the *Society for Research in Ophthalmology;* an in 1975, the *Colle Prize of the Fondation pour la Recherche Médicale Française.* Nordmann was Doctor honoris causa of the Aristotelian University in Saloniki, a member of the *Belgian Royal Academy of Medicine,* honorary member of the *Belgian Ophthalmological Society,* President of the *International Society for Research in Ophthalmology* and a member of the *Concilium Diagnosticum* of the *German Ophthalmological Society.* He was also a *Chevalier de la Légion d´honneur* and an *Officier d´Academie.* Hist. Ophthal. intern. 2, 225 - 229 (1982)[by Jules→François]; AJO 1981,91:803.

Norris, William Fisher (1839-1901). American ophthalmologist, one of the authors of Norris and Oliver's. "*Text-Book of Ophthalmology*" and one of the editors of Norris and Oliver's "*System of Diseases of the Eye*." Born in Philadelphia, he received the degree of Bachelor of Arts from the University of Pennsylvania in 1857 and the degree of M.D. from the same institution in 1861. Serving as resident physician in the Pennsylvania

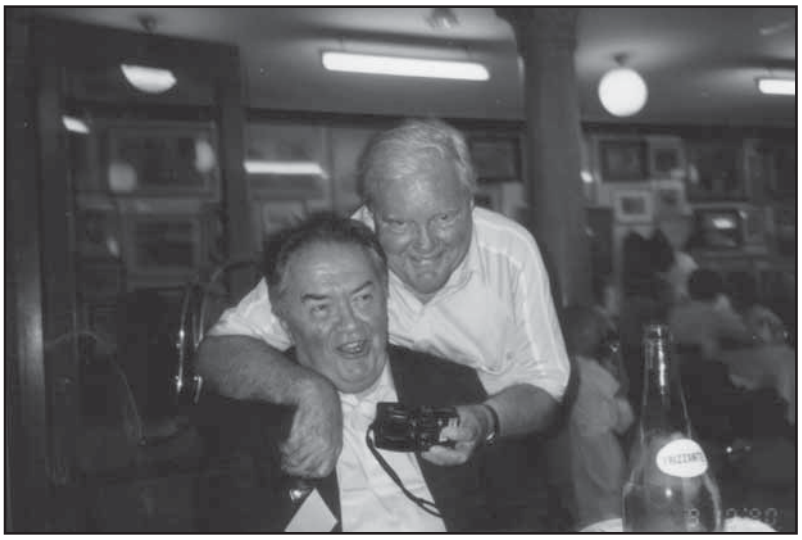
Hospital for eighteen months, he entered the Federal Army as assistant surgeon, and was placed in charge of the Douglas Hospital at Washington. This position he resigned in 1865, having received the brevet rank of captain. It is said that, at one time, Dr. Norris "operated and dressed wounds continuously for thirty-six hours, without food or rest." At the close of the war, i. e., in the autumn of 1865, Dr. Norris proceeded to Europe, where he studied ophthalmology under v.→Arlt, →Jaeger and →Mauthner. Under Stricker he made extensive investigations into the pathologic histology of the cornea, the results of which appeared in Stricker and Norris's "*Versuche über Hornhautentzündung*." Returning in 1870 to Philadelphia, he was appointed lecturer in ophthalmology and otology at the University of Pennsylvania. While in this position, he established, in conjunction with Dr. →Strawbridge, "the first of the special clinics in that institution." A little later, deciding to limit both his practice and his teaching to ophthalmology, he assigned to Dr. Bertelot the part of his teaching which dealt with diseases of the ear. In 1873, when the University was removed to West Philadelphia, Dr. Norris was made Clinical Professor of Ophthalmology. In 1876 he received the full professorship, and retained it until his death, many years afterward. Norris bought the original drawings for Jaeger's "Atlas of the Diseases of the Ocular Fundus" for 4500 florins cash-a fact suggestive of the love which he bore to his profession. Norris's most important ophthalmologic writings, in addition to those above referred to, are as follows: 1. *Albuminuric Retinitis*. (In Dr. Tyson's Monograph on Bright's Disease.) 2. *Diseases of the Crystalline Lens*. (In the "System.") 3. *Investigations of Double Staining in Microscopical Work*. (In collaboration with Shakespeare.) 4. *A Description of the Anatomy of the Human Retina*. (In collaboration with Wallace.) 5. *Foreign Bodies in the Orbit*. 6. *Brain Tumor with Interesting Eye Symptoms* American Encyclopedia of Ophthalmology 11,p.8378-8380.

North, Elisha (1771-1843). American physician, known chiefly as an early vaccinator and writer on epidemic cerebro-spinal meningitis, but of interest to ophthalmologists because of his having founded the *first* eye dispensary in the United States. Born in Goshen, Conn., he received his medical degree at the University of Pennsylvania. Practising for a time at Goshen, he removed in 1812 to New London. Five years later he established in that city the first eye infirmary in the United States. American Encyclopedia of Ophthalmology 11,p.8380-8381

Norton, Arthur Brigham (1856-1919) American homeopathic ophthalmologist born in New Marlborough, MA.. Norton received his degree of M.D. from the New York Homeopathic Medical College and Hospital in 1881, and that of *Oculi et Auris Chirurgus* from the college of the New York Ophthalmic Hospital in 1882. Norton became professor of ophthalmology in the New York Homeopathic Medical College and Hospital in 1902 and had this post until 1907. He also was professor in the College of the New York Ophthalmic Hospital from 1882 to 1919. He was oculist to the Hahnemann and Laura Franklin Free Hospitals; surgeon to the New York Ophthalmic Hospital; a member of the American Institute of Homeopathy; the American Homeopathic Ophthalmological Otological and Laryngological Society and a Fellow of the American College of Surgeons. He contributed numerous articles to homeopathic publications, and also wrote "*Ophthalmic Diseases and Therapeutics*" (Philadelphia 1892, 3rd ed., 1901) and "*Essentials of Diseases of the Eye*" (Philadelphia 1904). He was the founder of *Homeopathic Eye, Ear and Throat Journal*. AJO 3:311-312. JPW

Norton, Edward W.D. (1922-1994) Norton received his higher education from Harvard University (B.S. degree) and the M.D. degree from Cornell University Medical School. This training extended to internship and residency in neurology before Dr. Norton completed ophthalmology residency at New York Hospital-Cornell University Medical College. Subsequent fellowships focused on neuro-ophthalmology at Harvard University and the Mayo Clinic as well as retinal disease and surgery at Harvard University and Johns Hopkins University. These twin areas of special interest, neuro-ophthalmology and retina, continued throughout his professional life. Initial academic appointments were at Cornell University Medical College. With John M. McLean as professor and mentor, he served as instructor and assistant professor from 1954 to 1958. In 1958, Dr. Norton was appointed associate professor and chief of the Division of Ophthalmology at the University of Miami. He moved to Florida and began to fulfill his vision of a comprehensive center for ophthalmology at the University of Miami. His ability was

Ed Norton (L) and Pierre Almaric
Good friends at work (Toronto 1994)



... and after the meeting (Venice 1990)

quickly recognized by the University of Miami, which appointed him professor and chairman of the newly established Department of Ophthalmology in 1959. He maintained these positions for 32 years until transfer to emeritus status in 1991. President of the Ophthalmic Publishing Company, a Director of the Company since 1970, and appointed to The journal's Editorial Board in 1965, Edward Norton contributed to The American Journal of Ophthalmology for nearly three decades. To the University of Miami, Dr. Norton attracted an innovative, multitalented, and distinguished faculty. Equally important, Dr. Norton enlisted support from countless individuals who came to share his dream of establishing the Department of Ophthalmology, Bascom Palmer Eye Institute, and Anne Bates Leach Eye Hospital as a national and international focus for ophthalmology and the Bascom Palmer Eye Institute. He was the author of numerous original articles, critical reviews, chapters, and books with an increasing emphasis on rhegmatogenous vitreoretinal disease, retinal vascular disease, and macular abnormalities. Reflecting his stature, he delivered 20 major eponymous lectures including the Edward Jackson Memorial Lecture (1972), Francis I. Proctor Lecture (1973), de Schweinitz Lecture (1976), Jules Stein Lecture (1978), Doyne Memorial Lecture (1981), and the F. Bruce Fralick Lecture (1991). Dr. Norton gave generously to ophthalmology organizations. He was president or chairman of the Association of University Professors of Ophthalmology (1972), Jules Gonin Society (1973-1980), American Board of Ophthalmology (1976), American Academy of Ophthalmology (1979), and American Ophthalmological Society (1987-1988). Dr.Norton was made an Honorary Fellow of the Royal College of Ophthalmologist in England. A grateful profession bestowed numerous honors on Dr. Norton. Among these were the Lange Medal from the Royal Society of Medicine, London (1968); the Lucien Howe Medal of the American Ophthalmological Society (1976); the Honorary Doctor of Science degree conferred by Thomas Jefferson University (1985); and the Stewart →Duke-Elder Medal of the International Council of Ophthalmology (1994). Norton was an avid collector and, acquiring J.-P. Wayenborgh´s private library in 1985, created one of the largest if not the largest and finest collection of first editions in ophthalmologic literature. That library, located at Bascom Palmer Institute bears the name of *Mary and Edward Norton Library*. AJO 118:545-546.JPW. C.R.Keeler. Archiv Ophthalmol 1994,112:1285

Norton, George S. (1851- ?) American homeopathic oculist of New York City. Born at New Marlboro, Mass., his liberal training was received at the Sedgwick Institute, Great Barrington, Mass., and at Dartmouth College; his medical degree at the New York Homeopathic Medical College in 1872. He at once became House Surgeon to the New York Ophthalmic Hospital, and, in 1875, surgeon to the same institution. In 1883 he was promoted to the Board of Senior Surgeons, and four years later became a member of the Board of Directors. For many years he filled the chair of ophthalmology in the College of the New York Ophthalmic Hospital, and in 1886 was called to the corresponding chair in the New York Homeopathic College. He was for a time surgeon to the Laura Franklin Free Hospital for Children and to the Ward's Island Homeopathic Hospital. He was once

President of the American Homeopathic Ophthalmologic and Otologic Society. He was the founder and for many years the editor of the "Journal of Ophthalmology, Otology and Laryngology." He wrote a large and esteemed text-book, "*Ophthalmic Therapeutics*."(2nd edition New York 1882). American Encyclopedia of Ophthalmology 11,p.8381. Albert. JPW

Noyes, Henry Dewey (1832-1900). American ophthalmologist, author of the well known textbook, *A textbook of Diseases of the Eye*.New York 1890, 2nd ed. 1894 and *A treatise on Diseases of the Eye*, New York 1881. Born in New York City , he received the degree of A. B., from New York University in 1851, the A. M. from the same institution in 1854. Turning his attention to medicine, he received the degree of M. D. in 1855 at the College of Physicians and Surgeons in the City of New York. After three years service on the residence staff of the New York Hospital, he spent a year in England, France, and Germany, as a student of diseases of the eye and ear. Returning to America in 1859, he settled as ophthalmologist and otologist in his native city. He was for many years on the staff of the New York Eye and, Ear Infirmary; assistant ophthalmic surgeon from 1859 until 1864; ophthalmic surgeon from 1864 until 1900; executive surgeon and consulting surgeon from 1875 to 1898. In the Bellevue Hospital Medical College he was professor of ophthalmology and otology from 1868 to 1892, and of ophthalmology alone from 1892 to 1900. One of the founders of the American Ophthalmological Society in 1864, he was also the first secretary of that body, a position which he held till 1874. He was president of the same society from 1878 to 1884. Noyes was not a frequent contributor to periodicals, but his textbook, above referred to, was one of the best which, up to and including its day, had appeared in any language. He was, also, the inventor of a number of useful and ingenious ophthalmic instruments and appliances that bear his name and that are still widely used [1917]. He also wrote *On the tests for musculat asthenopia and on insufficiency of the external recti muscles* Copenhagen 1885American Encyclopedia of Ophthalmology 11,p. 8388-8389. Albert.JPW.

Noyes, James Fanning (1817- ?). American, pioneer ophthalmologist. Born at Kingston, R. I., he studied medicine at the Harvard Medical School and at the Jefferson Medical College, at the latter institution receiving his degree in 1846. For a time he was assistant physician at the U. S. Marine Hospital at Chelsea, but settled at Waterville, Mass., in 1849, and in Cincinnati in 1851. Turning his attention to ophthalmology, he studied in Berlin in 1855, in Vienna in 1856, and in Paris in 1858 and 1859. Returning to America, he settled as ophthalmologist and otologist in Detroit, Mich., where he soon had a large practice and became professor of ophthalmology and otology in the Detroit Medical College. He invented the Noyes operation for strabismus and a number of ophthalmic instruments. American Encyclopedia of Ophthalmology 11,p.8388

Noyori, Kimiharu (1926-1993) Japanese ophthalmologist, Professor of Saitama Medical College. He graduated from Juntendo University and studied Ophthalmology under Prof. SATO Tsutomu. He worked 3 times in the U. S. A., at Washington University St Louis (1958-60), at Columbia University New York (1962-1965, 1968-1970). Under the guidance of Prof. Sato, he developed an original portable Fundus Camera in 1955 (*Hand Fundus Camera*. Am. J. Ophthalmol.42: 639,1956): the portable fundus camera is now used worldwide. He received the degree Doctor of Medical Sciences in 1956, having this work recognized. He was appointed Professor and Chairman of the Department of Ophthalmology of Saitama Medical College in 1972. He extended his research to Laser applications, and as one of the Symposits at the 81st Congress of the Japanese Ophthalmological Society in 1977, he gave a lecture "*Various aspects of photocoagulation*". He wrote several books on this subject (*Laser Ophthalmology*, Igakushyoin 1982; *Ophthalmic Laser Therapy* [in English], Igakushoin 1992). Unfortunately, he fell ill and died before completing his tenure. (SM)

Nuck, Anton (1650-1692) Dutch anatomist, born at Harderwijk. Nuck received his M.D. in 1677 at Leiden, where, after ten years of medical practice and teaching in Delft and The Hague, he became professor of anatomy and medicine (1687-1692). Nuck was particularly interested in the anatomy of the lymphatic system; he devised new techniques for injecting preservative material into even the finest lymphatic vessels. Of special importance to ophthalmology are his investigations of the lacrymal glands and ducts: *De ductu salivali*

novo, saliva, ductibus oculorum aquosis et humore oculi aqueo. Lugduni Batavorum 1685. *Sialographia et ductum aquosorum anatome nova* Lugduni Batavorum 1690 (Second, enlarged edition of *De Ductu*); *Operationes & experimenta chirurgica* Lugduni Batavorum 1692.

Nuel, Jean-Pierre (1847-1920) Belgian ophthalmologist. Nuel was born in Mange (presently Grand Duchy of Luxemburg) and died in Liège. He obtained the M.D. degree in Ghent in 1870 and specialized in Bonn, Vienna and Utrecht (under F.C. Donders). After practizing general medicine in Eich in the Grand Duchy from 1873 to 1877, he became succesively professor of ophthalmology at the Leuven University (from 1877 to 1880), professor of physiology at the Ghent University (from 1880 to 1885) and professor of ophthalmology and of sensory physiology at the Liège University (from 1885 to 1919; during the first World War he was expelled from his department by the german occupant). He was altogether a physiologist and an ophthalmologist. In the first field he wrote on *audition* and on *heart innervation*, but also on the *compound eyes of the insects* (1881), *entoptic phenomena* (1883) etc. He wrote in 1883 a *textbook on physiology* with Lion Fredéricq, and in 1905 an interesting book on *vision*. Concerning ophthalmology we have to cite his papers on *acquired colour vision defects* (1875-1881), *sclerocorneal ruptures* (1888), *intra-ocular injections during cataract extraction* (1889), *corneal endothelium* (1890), *choroidal vascularisation and retinal nutrition* (1891), *filamentous keratitis* (1892-1894), *hyaline degeneration of the corneal epithelium* (1894), *punctate keratitis* (1894), *histology of macular lesions* (1896), circulation of aqueous humour (1898, 1900), miners' nystagmus (1907) and cystoid macular degeneration. Moreover he made a report on *asepsy and antisepsy* for the French Ophthalmological Society in 1892. He was member of the (French) Belgian Academy of Medicine and has been its president in 1908. (Verriest)

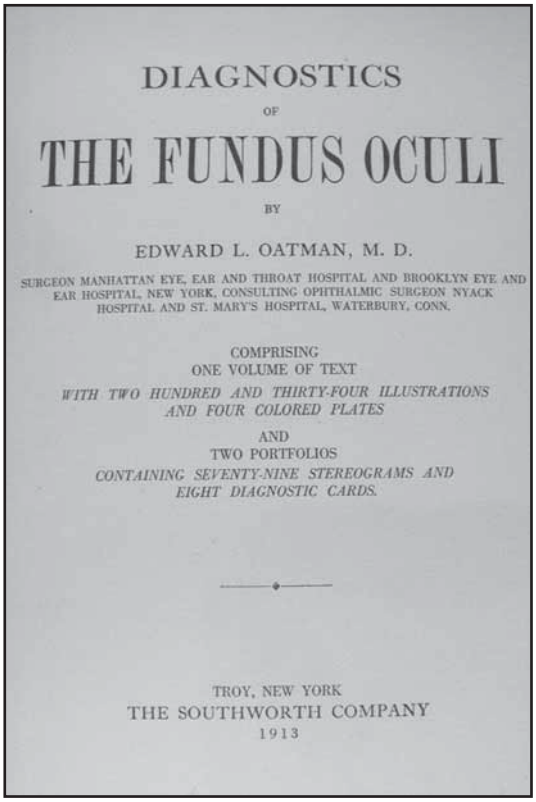
Nunn, Richard (1859-1929) An Irish-American ophthalmologist and oto-laryngologist, professor of diseases of the eye, ear, nose and throat in the University of Oregon Medical School. His medical degree was received at the University of Dublin, in 1883. Dr. Nunn's life would seem to have been a succession of tragedies. Made heir to his father's estate, he became, for some reason unable to enjoy its emoluments. He therefore moved toAmerica and, though nominally the heir of a very fine Irish estate, had little property or cash. About 1900 he married Emilie Trevett , by whom he had several children. Of these the eldest and the youngest were drowned-a loss from which Nunn seems never to have recovered. In May, 1915, he went to England and joined the Royal Army Medical Corps. Passing over to France, he was found unable to endure the physical hardships, and was invalided back to England-an occurrence which broke his heart, for he was never again the same person either in body or in mind. Twelve months after the armistice was signed, he was mustered out, and returned to America. In his younger days, Dr. Nunn was a well known rower, having been on the London Rowing Club eight. Afflicted with insomnia, he resorted to opiates, and died of an overdose, August 17, 1920.AJO, 4: 228

Nunneley, Thomas (1809-1870) British ophthalmologist born at Market Harborough, England. He studied at Guy's Hospital, London, under Key and Sir Astley Cooper, and in Paris under Laennec's nephew. He settled in Leeds, becoming surgeon to the Leeds Eye and Ear Infirmary (1835-1864) and the Leeds General Hospital (1864-1870), and acquiring renown as a cataract surgeon. His main work was *On the organs of vision; their anatomy and physiology*. London 1858. He also published *Anatomical Tables* (1838); *A treatise on the nature, causes and treatment of erysipelas* (1841, American edition Philadelphia 1844). American Encyclopedia of Ophthalmology 11,p. 8391.Albert.JPW

Nussbaum, Johann Nepomuk (1829-1890) German general surgeon and ophthalmologist. Born at Munich, the son of a ministerial secretary, he received the degree of Doctor of Medicine at the Munich University in 1853. His dissertation, on this occasion, was "*Ueber Cornea Artificialis*" After a year of surgical and ophthalmological study in Paris and other foreign cities, he settled as surgeon and ophthalmologist in Munich. He wrote almost 100 books and articles, of which the most important were "*Behandlungen der Hornhauttrübungen mit Besonderer Berücksichtigung der Einsetzung einer Künstlichen Hornhaut*" (1857) and "*Leitfaden zur Antiseptischen Wundbehandlung*" (Five eds. from 1877 till 1889). American Encyclopedia of Ophthalmology 11,p. 8392-8393

O´Halloran, Sylvester (1728-1807) Irish ophthalmologist of Limerick, Ireland. O´Halloran studied medicine and especially ophthalmology in Paris, London, and Leiden, and founded an eye infirmary in Limerick in which he became surgeon. He seems to have worked, for a long time, with the surgeon De Vandeleur. Two years after the foundation of the Royal College of Surgeons he became, in 1786, its Honorary Member. O´Halloran was also a member of the Royal Academy of Ireland.He wrote: *A new treatise on the glaucoma or cataract*. Dublin 1750; *A Treatise on different Disorders of the Head from external Injuries* London 1793; *A Critical Analysis of the new Operation of Cataract* Transact.Irish Academy 1755; *A General History of Ireland* 2 vols. London 1774 (2nd ed.Dublin 1803, 3 vols.).

O´Halloran, Thomas (fl. 1st quarter of the 19th cent.,) British physician. He was a medical officer in an English regiment at Gibraltar. O´Halloran published several studies on yellow fever in addition to his treatise on ophthalmia. He returned to London in 1822. He wrote: *Practical remarks. Part 1. On acute and chronic ophthalmia, ulcers of the eye &c.&c. Part 2. On remittent fever* London 1824.


DIAGNOSTICS
OF
THE FUNDUS OCULI
BY
EDWARD L. OATMAN, M. D.
SURGEON MANHATTAN EYE, EAR AND THROAT HOSPITAL AND BROOKLYN EYE AND EAR HOSPITAL, NEW YORK, CONSULTING OPHTHALMIC SURGEON NYACK HOSPITAL AND ST. MARY'S HOSPITAL, WATERBURY, CONN.
COMPRISING
ONE VOLUME OF TEXT
WITH TWO HUNDRED AND THIRTY-FOUR ILLUSTRATIONS AND FOUR COLORED PLATES
AND
TWO PORTFOLIOS
CONTAINING SEVENTY-NINE STEREOGRAMS AND EIGHT DIAGNOSTIC CARDS.
TROY, NEW YORK
THE SOUTHWORTH COMPANY
1913

Oatman, Edward L. (?-?) American ophthalmologist. He was (c.1913) surgeon at the Manhattan Eye, Ear and Throat Hospital and at Brooklyn Eye and Ear Hospital, both New York. Oatman was also consulting ophthalmic surgeon at Nyack Hospital and also at St.Mary´s Hospital, Waterbury, Connecticut. Oatman is remembered for his *Diagnostics of the Fundus Oculi* which was published in three volumes in New York 1913. His work contain about 80 stereoscopic views of the fundus oculi. One of the first of its kind. JPW

Obara, Yoshitaka (1940-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Dokkyo Medical University. He graduated from Iwate Medical University in 1967, studied Ophthalmology in the Graduate School of Medicine of the University under Prof. IMAIZUMI Kitetsu and received his Doctor of Medical Sciences in 1971 (thesis: *Study on the phospholipid metabolism in the hypophysectomized rat lens*. J. Jpn. Ophthalmol. Soc. 75: 1644, 1971). He was invited to the present position at Dokkyo Medical University in 1996. He is a Councillor of the Japanese Ophthalmological Society and is one of the Founding Member of the Japanese Society of Cataract Research (1988-) and serves as the President of the Society (1995-). Also he serves the US-Japan Cooperative Cataract Research Group as a Councillor. He further holds key positions in many National professional Societies. He organized as the President, the 37th Congress of the Japanese Society for Cataract Research and 13th Congress of the Japanese Society for Cataract and Refractive Surgery in 1997, in Sendai. He is also a member of ARVO, ISER and the American Society of Cataract and Refractive Surgery. His interest has been in cataract and ocular surgery, and many of his publications include "*Cholesterol, cholesterol ester and sphingomyelin complexed to protein of normal human lens and senile cataract*. Doc. Ophthalmol. 8: 193, 1976" and "*Oxidative stress in the cataract formation*. J. Jpn. Ophthalmol. Soc. 99: 1303, 1995".(Department of Ophthalmology, Dokkyo University, Mibu-machi, Tochigi 321-0293, Japan. phone: +81-2-8286-1111, fax: +81-2-8286-0630)(SM)

Obasawa, Hajime (1935-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, School of Medicine, Tokai University. He graduated from Keio University in 1960, studied Ophthalmology in the Graduate School of Medicine under Professor KUWAHARA Yasuharu. He completed the course with the Doctor of Medical Sciences granted in 1966 (thesis: *Electron microscopic studies of the Healing Mechanism of the Lamellar Keratoplasty*. Report I. *On the lamellar Autokeratoplasty*. J. Jpn. Ophthalmol. Soc. 70: 229, 1966; Report II. *On the lamellar Homokeratoplasty*. ibid.70: 500, 1966). He studied in 1971-1972 at Howe Laboratory of Harvard Medical School as a research fellow and in 1972-1973 at the National Institute of Health of the USA as a visiting scientist. He has been in the present position as above since1974. He carried out extensive studies on cataracts and published over 120 original articles: some

examples are "*A new method for retroillumination photography of cataractous lens opacities*. Am. J. Ophthalmol. 90: 186, 1980" and "*The maturing process of the senile cataractous lens opacities*"Acta Concilium Ophthalmol. XXIV, p.359, 1983. His service to the professional Societies include Councillor of the Japanese Ophthalmological Society (JOS) (1978-), Editor of the J of the JOS (1999-), Auditor of the JOS (1999-), Executive Director of the Japanese Society of Cataract Research (1983-), Councillor of Japanese Society of Ophthalmological Optics (1977-) and Organizer of the Lens Research Group (1975-). He is a recipient of the International award of Cooperative Cataract Research Group (1985, 1993) and the 2nd Scheimpflug Club Award (1987). (Department of Ophthalmology, School of Medicine Tokai University. Bohseidai, Isehara-shi, Kanagawa-ken, 259-1193, Japan. phone: +81+4-6393-1121, fax: +81-4-6391-9328, e-mail: obazawa@is.icc.u-tokai.ac.jp)(SM)

Ocampo *see* **De Ocampo, Geminiano T.**

Sadami Ochi

Ochi, Sadami (1879-1971) Japanese ophthalmologist, the First Professor of Ophthalmology and Professor Emeritus of Hokkaido University. He graduated from Tokyo University and studied Ophthalmology under Prof. →KOMOTO Jujiro, and he moved to Kyushu University at the time of its Foundation as the Associate Professor under the Chairman Professor →OHNISH Yoshiakira. He was granted the degree Doctor of Medical Sciences from Kyushu University in 1920 (thesis: *Anatomical studies of the eye in Japanese* – addendum, *extraocular muscles*). He further studied in Europe and North America in 1917-1920. In 1922, Hokkaido Imperial University (presently Hokkaido University) was founded and he was invited to be First Professor and Chairman of the Department of Ophthalmology, and he served until his retirement in 1947. During his tenure, he served as the Director of the University Hospital, he organized the 31st Congress of the Japanese Ophthalmological Society as the President and delivered a special lecture "*Pathogenes of Trachoma*" at the 47th Congress of the Society in 1943. The Government conferred on him The Second Order of the Sacred Treasures in 1951 in recognition of his outstanding service. (SM)

Ockel, Peter von(1780-1858). Russian physician, who paid considerable attention to diseases of the eye. Born at Sahten (Kurland), Russia, he studied medicine at Königsberg, St. Petersburg, Halle, Jena, and Vienna, and received the degree of M. D. at Königsberg in 1806. He practised then for a long time at Mitau. Ockel's only ophthalmologic writing was his graduation dissertation, entitled "*De Tumoribus in Cornea et Sclerotica Prominentibus*,." American Encyclopedia of Ophthalmology 11,p. 8468

O'Connor Patrick R.(1937-1977), American ophthalmologist, director of the Retina Service and residency training program director for the Department of Ophthalmology at the University of Louisville School of Medicine. O'Connor was an intense scholar, a highly organized teacher, and a lucid, prolific writer. He earned his B.A. and M.D. at Vanderbilt and was later chief resident in ophthalmology at the University of Louisville. He then served in the United States Air Force 840 Tactical Hospital as a general ophthalmologist. In 1968, after two years of military duty, be was a Heed Fellow at Cornell University's New York Hospital and in 1969 was a National Institute of Health postdoctoral fellow. He became a full time member of the University of Louisville School of Medicine faculty and at his death held the rank of associate professor. Between 1970 and his death be authored some 30 scientific publications, all in his field of retinal disease, and edited two separate volumes: "*Retinal Vascular Disease*," and "*Retinal Detachment*." One of his most significant editorial accomplishments was the development of a new quarterly journal, "*Perspectives In Ophthalmology*," using extensive color microfiche illustrations. Volume 1, No. 1, appeared just a few days before his death. For many years Dr. O'Connor was an instructor in the American Academy of Ophthalmology and Otolaryngology and had also been elected to the Retina Society. AJO 1977,84:271-272

Odhelius, Johan Lorens (1737-1816) Swedish surgeon born in Strengnas, Sweden, received his medical training at Upsala. He received his medical degree in 1760 and served for a time as a military surgeon. In 1763 Odhelius joined, as assistant, and from 1772 assistant medical director, the medical staff of the Seraphim Lazareth in Stockholm, where he worked for fifty years. In 1772 he became Member of the Medical College improving many aspects of the Swedish medical system. Of his many medical writings,

several concern ophthalmologic matters: cataract, pannus, leukoma, staphyloma, ophthalmia: *Anmärkningar vid starr-operationen och om den sjukas skötsel efterat* ... Stockholm 1775; *Afhandling om ögonsjukdomar* Stockholm 1807. American Encyclopedia of Ophthalmology 11,p. 8472.Albert.JPW

Oeller, Johann Nepomuk (1850-1932) German ophthalmologist born in Obernzell, Germany. Oeller received his M.D. in 1877 with the thesis *Zur Aetiologie der Cataracta Polaris Posterior congenita* at the University of Munich, where he became a lecturer on ophthalmology and an assistant to Rothmund in the eye clinic (1879-1900). After a few years as an assistant, Oeller became railways physician. In 1901 he accepted the position as professor of ophthalmology at Erlangen University and Director of the Eye Clinic (1900-1920). Oeller was a passionate painter and recorded the result of his observations of the retina on canvas. From these paintings he made later his famous atlas on ophthalmoscopy. His writings are *Atlas der Ophthalmoscopie*. Wiesbaden: JR Bergmann, 1896-1899.(In German and English); *Zur Pathologische Anatomie der Bleilähmung* (Festschrift Ärztl.Vereins München 1882) ; *Atlas seltener ophthalmologischer Befunde* Wiesbaden 1900 and 1912.

Oen, Francis (1961-) Singaporean ophthalmologist, Consultant at the Singapore National Eye Centre (SNEC). Member of the Glaucoma Service at SNEC. He graduated from the National University of Singapore in 1985 and started ophthalmology training in 1987. He received the Master of Medicine (Ophth), Fellow of the Royal College of Surgeons (Edinburgh) and Fellow of the College of Ophthalmologist (UK) in 1990. He was a Registrar at Tan Tock Seng Hospital Eye Department and an Eye Specialist for the Singapore Armed Forces from 1990 -1993. He joined the Singapore National Eye Centre in 1993 and has been in the Glaucoma Service since. He was sent on a Glaucoma Fellowship to Moorfields Eye Hospital in the United Kingdom in 1996. He returned to SNEC and was made Consultant in 1997. He is a member of the Singapore Society of Ophthalmologists (1987-) and was a Committee Member of the Exco from 1994-1996. He is also a member of the Asian-Oceanic Glaucoma Society (1996-). (Dr Francis Oen, Singapore National Eye Centre, 11 Third HospiN. Avenue, Singapore 168751. Phone: (65) 2277255; Fax: (65) 2277290; e-mail: foensnec@pacific.net.sg)

Shyujiro Ogata

O'Ferral (or Ferral), Joseph(1798/99-1868). Irish surgeon, re-inventor of enucleation of the eyeball, and re-describer of Tenon's capsule. He studied with Carmichael, and in 1823 became an F. R. C. S. I. Settling in Dublin, he was soon appointed surgeon-in-chief and professor of clinical surgery at St. Vincent's Hospital, as well as vice-president of the Pathological Society. Later he became a Fellow of the Royal Academy of Ireland. The article in which O'Ferral re-described (but very much better than had been done by Tenon) the structure known today as Tenon's capsule, as well as the procedure now called enucleation, appeared in the Dublin Journal of Medical Science, p. 329, July 1, 1841. American Encyclopedia of Ophthalmology 11,p. 8473

Ogata, Shyujiro (1857-1942) Japanese ophthalmologist, graduated from Tokyo University in 1882, studied Ophthalmology from J.→SCRIBA, K.→UME and T.→SUDA. He returned to Osaka and served as the Vice-Director of OGATA Hospital founded by his elder brother. He founded the OGATA Medical Society and published its Journal in 1889. This is one of the earliest professional Journals in Japan and he published detailed Statistics of the Eye Clinic of the Hospital: one of the earliest comprehensive statistics in Japan. He then studied at the Universities of Berlin and Vienna in 1889-1892. He is also one of the founders of the "*Journal of Ophthalmology*" in 1893, the Journal was the precursor of the *Journal of the Japanese Ophthalmological Society*. He founded the Osaka Jikei Medical School in 1893 and trained many physicians and Surgeons: the School was closed around 1912. (SM)

Kenzaburo Ogawa

Ogawa, Kenzaburo (1871-1933) Japanese ophthalmologist and Professor of Okayama Medical School (presently Okayama University). He graduated from Tokyo University 1898, and studied Ophthalmology under Prof. KOMOTO Jujiro. He was appointed the Professor of Okayama Medical School, and studied at the University of Berlin under Prof. R.→Greeff in 1904 -1906. On his homecoming, he received the degree Doctor of Medical Sciences from Tokyo University in 1907 (thesis: *Ueber Pigmentierung des Sehnerven*. Arch Augeheilkd. 52:437, 1905). He retired from the Medical School in 1912 and founded

OGAWA Eye Hospital in Tokyo. While he had a busy practice he founded a Journal "*Journal of Experimental Ophthalmology*" and served as the Chief-Editor until his death: the Journal continued until 1940. Dr. Ogawa was great historian and he wrote "*History of Ophthalmology in Japan*, Tohoudo, Tokyo, 1907", that is a classic of Japanese Ophthalmology. He also wrote many essays on History in his Journal and travelled in Japan to find classical documents of Ophthalmology. (SM)

Ogle, Kenneth Neil (?- 1968) American, Professor of Biophysics in the Mayo Graduate School of the University of Minnesota and consultant in optics to the Section of Ophthalmology of the Mayo Clinic. Ogle was born in Lake City, Colorado, and graduated cum laude from Colorado College. He was awarded the Master' s degree from Dartmouth College and was a teaching fellow at the University of Minnesota. He returned to Dartmouth, where he was awarded the Ph.D. degree cum laude. He served as Research Fellow, Assistant Professor, and Professor of Physiologic Optics at Dartmouth Medical School. In 1947 he came to Rochester, Minnesota, as a member of the Section of Biophysics and became department head in 1958. Ogle had planned to continue his service to ophthalmology as a director of the Medical Manpower Study concerned with eye care under the National Institute of Neurological Diseases and Blindness and the University of Minnesota Medical School. Similar service to ophthalmology had occupied much of Ogle's past 20 years. He served for many years on the Armed Forces-NRC Committee on Vision and the American Medical Association Committee on Optics and Visual Physiology. He gave generously of his time and talent as consultant to the American Foundation for the Blind and the National Society for the Prevention of Blindness. He was a member of the Sensory Diseases Study Section and the Vision Research Training Committee of the National Institutes of Health, as well as a member of the Committee on Standardization of Tests for Stereoscopic Vision of the Pan-American Association of Ophthalmology and the United States National Committee of the International Commission for Optics. He was associate editor of the *Journal of the Optical Society of America,* and of *Investigative Ophthalmology,* and honorary editor of *Vision Research.* He taught physical and physiologic optics, and also visual physiology to residents throughout his many years of service, and was an annual lecturer at the American Academy of Ophthalmology and Otolaryngology. His research in binocular vision, stereopsis, and aniseikonia started in Dartmouth and continued throughout his career. He was recognised for his work by an honorary M.D. degree from the University of Uppsala, Sweden, and D.Sc. from Colorado College. He was the recipient of the Beverly Myers Nelson Achievement Award, the Proctor Medal, and the Tillyer Medal. He was the author of *Researches in Binocular Vision;*(1950) *Optics-An Introduction for Ophthalmologists*, Springfield 1961, and Part 2, Volume 4, of Davson's *The Eye*. He was senior author of *Oculomotor Imbalance in Binocular Vision and Fixation Disparity,*1960 and made numerous contributions to medical and optical journals. AJO1968,65:793-794, BJO 1968; JPW

Oguchi, Chuta (1875-1945) Japanese ophthalmologist, Professor Emeritus of Nagoya University. He graduated from a private medical school in Tokyo (Saisei Gakusha) and passed the National Examination for Medical Practice in 1891. He learned Ophthalmology under Dr. →SUDA Tetsuzo, and then at the Postgraduate Course of Tokyo University under Prof. →KOMOTO Jujiro. He became an Army Surgeon and worked at many hospitals in Japan and in Taiwan. After the Russo-Japanese War 1904-1905, he wrote under the Directorship of Dr.→HORI Manao a 6-volume book "*Eye diseases and injuries during the War 1904-1905*". The statistics part of this book was published in the German Language (*Augenverletzungen im Japanischen Heere waehrend des letzten Krieges, Beitraege zur Augenheilkunde*, 83:75-303, 1913. In 1907 at the Army Hospital in Tokyo, he examined a soldier who complained of night blindness: the patient was suspected of malingering. Dr. Oguchi found a peculiar fundus color with golden and mottled appearance and dark retinal vessels. He also found that the parents of this patient were cousins (J. Jpn. Ophthalmol. Soc. 11: 123, 1907). He further added similar cases in 1910, and concluded that this is a distinct clinical entity with congenital hemeralopia with recessive inheritance (Ueber die eigenartige Hemeralopie mit diffuser weissgraulicher Verfaerbung des Augenhintergrundes, v Graefe Arch Ophthalmol. 81: 109,1912). Prof. J. KOMOTO named it as Oguchi's Disease. He studied at University of Heidelberg under

Prof. A.→Wagenmann and at the University of Munich under Prof. C. →Hess in 1912-1914. After his homecoming, he received the degree Doctor of Medical Sciences from Tokyo University in 1916 (thesis: *Studies of so-called Retinitis Proliferans*. v Graefe Arch Ophthalmol.84: 446,1913). He produced original Pseudoisochromatic charts for color blindness in 1911 while he was working at the Army Hospital. He was appointed the Professor and Chairman of the Department of Ophthalmology of Nagoya University in 1922 and worked until retirement in 1939: he was entitled the Professor Emeritus of the University. He was very interested in history and wrote an article "*50 years History of the Japanese Ophthalmological Society*". He delivered a special lecture at the 40th Congress of the Japanese Ophthalmological Society (Ocular Trauma) in 1936, and served as the 41st Congress President of the Society in 1937. He also served as a Member of the International Council of Ophthalmology 1929-1937. He was granted the Japan Academy of Science Award in 1933 for his work on Oguchi's disease. In recognition of his service, the Government conferred on him the Second Order of the Sacred Treasures. (SM)

Chuta Oguchi

Oguchi, Masami (1907-1989) Japanese ophthalmologist, Professor Emeritus of Nippon Medical School. He graduated from Nippon Medical School in 1931, studied Ophthalmology under Prof. NAKAMURA Yasushi and received his Doctor of Medical Sciences in 1938 (thesis: *Histopathological studies of the optic nerve*. J. Nippon Medical School 8: 1203, 1937). He served as the Professor and Chairman of the Department of Ophthalmology of his Alma Mater as the successor of Prof.→Nakamura from 1954 until retirement in 1974. During his tenure, he served as Councillor (1964-1972), Director of the University Hospital (1970-1974) and Executive Director of the School (1972-1974). He worked extensively on cataract and allergic diseases, and some examples of his many publications are " *Cataract and zonule of Zinn*. J. Jpn. Ophthalmol. Soc. 67: 768, 1963" and "*Statistics of catarrhus vernalis*. ibid. 60: 517, 1956". During 20 years of his Professorship, he trained many able ophthalmologists now active throughout the Country.(SM)

Oguchi, Yoshihisa (1938-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology of Keio University. He is a grandson of →OGUCHI Chuta, and graduated from Keio University in 1966, studied Ophthalmology at the University under Prof.→KUWAHARA Yasuharu and Prof.→UEMURA Yasuo, and received his Doctor of Medical Sciences in 1981 (thesis: *Vector analysis of pattern VEP*. Folia Ophthalmol.Jpn.31:1654-1659,1980). He studied in 1971-1974 at the University of Rotterdam: Oguchi Y, van Lith: *Contribution of the centra1 and the peripheral part of the retina to the VECP under photopic conditions*. Docum 0phthalmol 4:261-268,1974./ Oguchi Y, A.Th.M.van Baren: *Ultrasonic study of the refraction of patients with pseudophakos*. Ultrasound in Med. Biol. 1:267-273, 1974. He has been in the present position as above since 1990. Positions he has held in the professional Societies are Executive Director of the Japanese Ophthalmological Society (1993-), of the Japanese Society of Neuro-ophthalmology (1990-), Japanese Society of Clinical Elecrtrophysiology of Vision (1992-), Auditor of the Japanese Society of Strabismus and Amblyopia (1991-), and Secretary of the Asia-Australian Region of the International Society of Clinical Electrophysiology of Vision (1996). He also serves many Governmental Councils and Committees, e.g. Committee on National Examination for Medical Licenses (Ministry of Health and Welfare), Council for University Inspection and Evaluation (Ministry of Education) and many others. He has worked in the field of electrophysiology of vision, neuro-ophthalmology, amblyopia and psychosomatic medicine, and many of his publications in the field embrace "*Mechanism of visual information analysis and integration - Toward clinical application*. J. Jpn. Ophthalmol. Soc. 102: 101, 1998" and "*Vector analysis of pattern VFEP*. Ophthalmic Res.13: 151, 1981". For the excellence of his works, he received the Kitajima Prize in 1982 from the Keio Medical Association (Oguchi Y,Katsumi O, Kawara T: *Binocular VEP with and without fusion*. Docum. 0phthalmol. 31: 415-420, 1982) and the Hiroishi Prize from the Japanese Society of Strabismus and Amblyopia in 1982 for the excellence of his research published in the same paper as above. (Department of Ophthalmology, Keio University, 35 Shinanomachi, Shinnjuku-ku,Tokyo,160 JAPAN. Phone:+81-3-353-1211 ext.62401Fax: +81-3-352-8703 (direct)(SM)

Ogura, Yuichiro (1956-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Nagoya City University Medical School. He graduated from Kyoto University in 1980, studied Ophthalmology at the University under Prof.→TSUKAHARA Isamu. He worked as a research fellow at the Department of Ophthalmology, University of Illinois at Chicago Medical School under Prof. Jose G. Chuna-Vaz and Prof. Ran C. Zeimer from 1985 to 1986 (*Evaluation of vitreous body integrity in retinitis pigmentosa by vitreous fluorophotometry*. Arch Ophthalmol 105:517-519, 1987). He was also invited as a visiting scholar from the Department of Ophthalmology, University of Illinois at Chicago Medical School from 1989 to 1991. (*Improved visualization of macular hole lesions by laser biomicroscopy*. Arch.Ophthalmol. 109: 957-961, 1991). He received his Doctor of Medical Sciences in 1989 at Kyoto University (thesis: *Estimation of the permeability of the blood-retinal barrier in normal individuals*. Invest. Ophthalmol. Vis. Sci. 26: 969-976, 1985). He has been in the present position as above, since 1997. He has been a Councillor to the Japanese Ophthalmological Society (1993-), to the Japanese Society of Ophthalmic Diabetology (1995-) and Executive Director to the Japanese Society of Ocular Inflammation (1997-). His research interest is in ocular physiology, retinal microcirculation and ocular pharmacology. Some examples of his recent publications are: "*Biodegradable polymer microspheres for targeted drug delivery to the retinal pigment epithelium*. Surv. Ophthalmol. 39: S17-S24, 1995", and "*Quantitative evaluation of leukocyte dynamics in retinal microcirculation*. Invest. Ophthalmol. Vis. Sci. 36: 123-130, 1995). (Department of Ophthalmology, Nagoya City University Medical School, Kawasumi, Mizuho-cho, Mizuho-ku, Nagoya, 467-8601, Japan. phone: +81-5-2853-8251, fax: +81-5-2841-9490, e-mail: ogura@med.nagoya-cu.ac.jp)(SM)

Rokuzo Ogyuu

Ogyuu, Rokuzo (1859-1914) Japanese ophthalmologist, Professor of Ophthalmology and Dean of Chiba University School of Medicine. He graduated from Tokyo University in 1884 and in the following year he was appointed the Professor of Chiba Medical School (presently Chiba University). In 1902, he was made the Director of the Hospital and the Dean of the Medical School. In 1903-1906, he studied Ophthalmology at the University of Berlin (Prof. R.→Greeff) and of Vienna (Prof. E.→Fuchs). He received the degree, Doctor of Medicine from Tokyo University in 1907. Unfortunately, he fell ill and died during his tenure. (SM)

Ohara, Kunitoshi (1946-) Japanese ophthalmologist, Professor of Ophthalmology, Nippon Medical School. He graduated from Tokyo University in 1972 and studied Ophthalmology under Prof.→MISHIMA Saiichi. He received his Doctor of Medical Sciences in 1978 (thesis:*Effects of cholinergic agonists on isolated iris sphincter muscles: A pharmacodynamic study*. Jpn. J. Ophthalmol. 21:516,1977). He further studied in 1978-1980 at the Institute of Ophthalmology, London with Prof. David Cole (Ohara & Cole: *Studies on water flow and dextran penetration through the sclera in vitro*. Acta Soc. Ophthalmol. Jpn. 85:1243,1981, Zhang, Butler, Ohara & Cole: *Sensory neural mechanisms in contraction of the isolated sphincter pupillae: The role of substance P and the effects of sensory denervation on the response to miosis*. Exp. Eye Res. 35:43, 1982). He has been Associate Professor, Department of Ophthalmology, at Jichi Medical School since 1981, and has been the Professor and Chairman of the Department of Ophthalmology, Nippon Medical School since 1995. His professional assignments are Councillor (1997-) of the Japanese Ophthalmological Society, Councillor of Japanese Society of Ocular Pharmacology (1990-), Councillor of Japanese Society of Cataract and Refractive Surgery, Councillor of Japanese Society of Cornea (1995-), Councillor of Japanese Society of Ocular Inflammation (1998-), and Councillor of Japan Sarcoidosis and other Granulomatous Diseases (1997-). His editorial assignments are the J.Jpn Soc. Ophthalmic Surgeons(1988-), and the Folia Ophthalmol Jpn(1995-). He is a member of the International Society for Eye Research (1978-), Association of Research in Vision and Ophthalmology (1985-), American Society of Cataract and Refractive Surgery (1990-), and the European Society of Cataract and Refractive Surgeons (1995-). He received the British Council Scholarship and Wellcome Fellowship in 1978. His major subjects are uveitis, cataract and intraocular lens implant, specular microscopy, and ocular pharmacology.(Department of Ophthalmology, Nippon Medical School, 1-1-5 Sendagi, Bunkyo-ku, Tokyo 113-8602, Phone:81-3-3822-2131, Fax:81-3-5685-0988, e-mail: oharak@nms.ac.jp)(SM)

Kohei Ohashi

Ohashi, Kohei (1906-1979) Japanese ophthalmologist, Professor Emeritus of Jikei University School of Medicine. He graduated from Jikei University School of Medicine in 1929 and studied Ophthalmology under Prof. →MURAKAMI Shyuntai and received the degree Doctor of Medical Sciences in1935. He was promoted to be Professor and Chairman of the Department of Ophthalmology of the University in 1947 and served until retirement in 1971. During his professorship, he served the Japanese Ophthalmological Society as the President of the 52nd Congress in 1948. He was an excellent surgeon and his book "Ohashi *Textbook of Ocular Surgery*, Kanehara Publ. Co. 1967" was read by many Ophthalmologists of the country. He delivered a special lecture "*Cataract*" at the 24th Congress of the Japanese Society of Clinical Ophthalmology in 1970. He founded, together with N. KUNITOMO and M. UEMURA, a journal "*GANKA: Ophthalmology*" in 1959 and worked as the Editor until 1971: the Journal provided Japanese ophthalmologists with the most up-to-date knowledge of clinical Ophthalmology. (SM)

Ohashi, Yuichi (1950-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology of Ehime University. He graduated from Osaka University in 1975 and studied Ophthalmology under Prof.→MANABE Reizo. He conducted research of herpes virus infection from 1978, at the Department of Pathology of the Institute of Microbiology of Osaka University. He extended his work as a Research Fellow at the Francis I Proctor Foundation, University of California San Francisco (1982-1984) and carried out research into ocular infection and ocular immunology with Dr. Tabbara, Dr. Oh, and Dr.Friedlaender (*The presence of cytotoxic autoantibody to lacrimal gland cells in NZB/W mice*. Invest. Ophthalmol. Vis. Sci. 26:214, 1985; *Dietary fat and immune function. I. Antibody responses, lymphocyte and accessory cell function in (NZB x NZW) F1 mice*. J. Immunol. 135:3857, 1985; *Langerhans cell alteration in the guinea pig cornea*. Invest. Ophthalmol. Vis. Sci. 26:1293, 1985; *Suppression of secondary herpes simplex uveitis by cyclosporine*. Invest. Ophthalmol. Vis. Sci. 26:494, 1985; *Dietary fat influences the expression of autoimmune disease in MRL/lpr/lpr mice*. Immunology. 59: 439, 1986; *Protective effect of passive immunization on herpetic retinitis of newborn rabbits*. Curr. Eye Res. 6:161, 1987.) He received his Doctor of Medical Sciences in l987 (thesis: *Role of virus-infected mononuclear leukocytes in herpetic chorioretinitis of newborn rabbits*. Invest. Ophthalmol. Vis. Sci. 27:1459-1465, 1986). He was promoted to Lecturer at Osaka University in 1989 and was appointed to the present position as above in 1992. His research interest has been ocular infection, corneal and conjunctival diseases and refractive surgery, and some examples of his many publications are as follows: *Aldose reductase inhibitor (CT-112) for diabetic corneal epitheliopathy*. Am. J. Ophthalmol. 105: 233-238, 1988. He is a Councillor of the Japanese Ophthalmological Society and on the Board of the Trustees of the Japanese Society of Ophthalmic Surgeons, Japan Contact Lens Society, Japan Cornea Society, Japanese Society of Keratoplasty, Japanese Society of Ocular Infection, Japanese Society of Ocular Inflammation and the Japanese Society of Ophthalmic Diabetology. He is also a fellow of the American Academy of Ophthalmology and a member of the Association for Research in Vision and Ophthalmology. (Department of Ophthalmology, Ehime University, School of Medicine, Shigenobu-cho, Onsen-gun, Ehime 791-0295, Japan, phone:81-89-960-5361, fax number:81-89-960-5364, e-mail: ohashi@m.ehime-u.ac.jp)(SM)

Ohba, Norio (1937-) Japanese ophthalmologist: Professor and Chairman, Department of Ophthalmology, Kagoshima University Faculty of Medicine, Kagoshima. He graduated from Tokyo University Medical School in 1961 and started his professional career as an ophthalmologist at Tokyo University Hospital under the late Professor HAGIWARA Hogara. He then carried out basic and clinical research on neuro-ophthalmology under the direction of Professor SHIKANO Shinichi and received his Doctor of Medical Sciences in 1967 (thesis: *Visual evoked potential in man*. Jpn. J. Ophthalmol. 11:221-226. 1967.) . To further extend his scientific career, he stayed for two years (1969-1971) at the Vision Research Laboratory of the University of Michigan, Ann Arbor, where he worked with Dr. Mathew Alpern (Professor of Physiological Optics and Visual Psychology, Friedenwald Award Recipient in 1974) on pathophysiology of retinal diseases with sophisticated psychophysical technique and retinal densitometry. He published papers on human cone and rod visual pigment kinetics in Vision Research and Journal of Physiology. During the stay in Ann Arbor he was also happy to learn ophthalmic genetics from Professor Harold

F. Falls. Returning home in 1971 (in this year, Professor→MISHIMA Saiichi took the chair of the Department), he was appointed a lecturer (academic rank comparable to the associate professor in the States) of the Department of Ophthalmology, University of Tokyo, and continued to work on neuro-ophthalmology research and genetic eye diseases. One of the papers he then published was on choroideremia, that was surprisingly the first report from Japan about one hundred years later from the first description in 1871 by Professor Ludwig→Mauthner of Innsbruck. In 1978, he was appointed to the present position as above. As the Professor and Chairman, he spends most of his time teaching of students and residents and he trained more than 40 ophthalmologists many of whom are now practicing with fair professional reputation in the local community. However, he continued to recognize the importance of basic research and encouraged young doctors to pursue academic work. He personally is devoted to clinical research on molecular ophthalmic genetics and described the first Japanese cases of Norrie disease and Sorsby's fundus dystrophy and applied molecular pathologic analyses to facilitate understanding these rare but scientifically important disorders. He also performed clinical research on the ocular disorders related to the human lymphotropic virus type 1 (HTLV-I), and published the *first* description of HTLV-I-associated uveitis (HAU) (Jpn. J. Ophthalmol. 33: 383-391, 1989). In addition to his academic leadership in the local Ophthalmological society, his major scientific contributions to the Japanese Ophthalmological Society include a Report for the 1988 Special Symposium on Macular Disease (*A psychophysical study of macular diseases*. J. Jpn. Ophthalmol. Soc. 97: 1370-1393, 1988) and the Award lecture for the Society in 1999 (*A note on some genetic eye disease*. J. Jpn. Ophthalmol. Soc. 103: 851-870, 1999). His editorial assignments include being a Member of the Editorial Board of the Japanese Ophthalmological Society during 1993-1997, a Member of the Editorial Board of the Japanese Journal of Ophthalmology since 1979, and Editorial Associate of Ophthalmic Paediatrics and Genetics in 1989-1995. He also organized the second symposium of the International Society of Genetic Eye Disease, held May 1979 in Tokyo, a meeting then small but now expanded. He established, in cooperation with WATANABE Ikuo, a data-base of the J. Jpn. Ophthalmol. Soc. from Vol. 1 to Vol 100, as a part of the Society's centennial commemorative works. Dr. OHBA and his daughter translated Oliver Sacks' medical essay *"Island of Colorblindness*". (Department of Ophthalmology, Kagoshima University, 8-35-1 Sakuragaoka Kagoshima, 890-0086, Japan. phone: +81-9-9275-5402, fax: +81-9-9265-4894, e-mail: ohba@med5.kufm.kagoshima-u.ac.jp) (SM)

Ohira, Akihiro (1958-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Shimane Medical University. He graduated from Fukuoka University School of Medicine in 1978, studied Ophthalmology in the Graduate School of Medicine under Prof. OHSIMA Kenji and completed the course in 1984. He conducted research on retinal glial cell biology at the Department of Pathology of the Graduate School of Medicine of the University, under the supervision of Prof. M. Kikuchi, and received his Doctor of Medical Sciences in 1984 (thesis: *The distribution of glial fibrillary acidic (GFA) protein in human eyeball – An immuno-peroxidase study of paraffin-embedded tissue*. Afro-Asian J Ophthalmol 2: 41, 1983). He spent several years (1987-1990) with Prof. Eugene de Juan, Jr. at Duke University, North Carolina U.S.A. and published several papers, e.g. "*Retinal ischemia and cell proliferation in the rat: The role of soluble mitogens*. Graefe's Arch Clin. exp. Ophthalmol. 228: 195, 1990" and "*Basic fibroblast growth factor stimulates* ^{3}*H-thymidine uptake in retinal venular and capillary endothelial cells in vivo*. Invest. Ophthalmol. Vis. Sci. 31: 1238, 1990". He has been in the present position since 1998. He is a member of the Japan Society of Histochemistry and Cytochemistry, Japan Society of Clinical Oncology and Japanese Society of Electron Microscopy besides being a member and Councillor of the Japanese Ophthalmological Society. He has also been a member of the Editorial Board of Investigative Ophthalmology and Visual Sciences since 1967. His many publications include "*Oxidative stress induces adult T cell leukemia derived factor/thioredoxin in the rat retina*. Lab. Invest. 70: 279, 1994" and "*Analysis of localization of adult T-cell leukemia-derived factor in the transient ischemic rat retina after treatment with OP-1206 alpha-CD, a prostaglandin E1 analogue*. J. Histochem. Cytochem. 45: 63, 1997". (Department of Ophthalmology, Shimane Medical University, 89-1 Enya, Izumo, Shimane, 693-8501, Japan; phone: +81-853-20-2284, fax: +81-853-20-2278, e-mail: aohira@shimane-med.ac.jp)

Tokuji Ohkuma

Ohkuma, Tokuji (1908-1981) Japanese ophthalmologist, Professor Emeritus of Yokohama City University. He was a graduate of Tokyo University in 1932, and was a student of Prof. →ISHIHARA Shinobu, and he received the degree Doctor of Medical Science in 1940 (thesis: *Studies of color tables for classification of the degree of Color sense anomalies*). He was the Professor and Chairman of the Department of Ophthalmology of Yokohama City University from 1948 to the retirement in1973. He served as the Director of the University Hospital in 1962-1964, and was the President of the 26th Congress of the Japanese Society of Clinical Ophthalmology in 1972. The Government conferred on him The Third Order of the Rising Sun in 1980. (SM)

Ohlemann, Friedrich Wilhelm Max (? - ?) German ophthalmologist from Minden, Germany. Ohlemann seems not to have had an academic career, but was rather a practioner. Nevertheless , he wrote the first book on ocular therapeutics since Carl Ferdinand Graefe´s *Repertorium Augenärztlicher Heilmittel* (1817): *Augenärztliche Therapie für Ärzte und Studierende*. Wiesbaden 1896 (American edition Philadelphia 1899). *Die Farbenbindheit und ihre Diagnose* Braunschweig 1897.

Yoshiakira Ohnishi

Ohnishi, Yoshiakira (1865-1932) Japanese ophthalmologist, the first Professor and Professor Emeritus of Kyushu Imperial University (presently Kyushu University). He studied at Tokyo University, but before finishing the course, he entered the University of Halle in 1885, and then studied at the University of Tübingen under Prof. A.→Nagel. He received the degree Dr.Med. from the latter University (thesis: *Retinitis mit Bildung langer Streifen und Straenge in den tieferen Schichten der Retina, Retinitis striata*: Inaugural Dissertation Tübingen 1890). On his homecoming in 1890, he was appointed as the Professor of Ophthalmology of Okayama Medical School (presently Okayama University). In 1893, he started to publish "*GANKA ZASSHI: Journal of Ophthalmology*" with →ASAYAMA Ikujiro, →OGATA Shyujiro, →INOUE Tsutai and 10 other Ophthalmologist, and he served as the Chief Editor. This was the first Professional Journal in Japan, and later continued as the *Journal of the Japanese Ophthalmological Society*. He then moved to Tokyo in 1895 and founded the Ohnishi Eye Hospital and trained many ophthalmologists. He thought that Japan needed an Ophthalmological Society similar to the Heidelberg Society for the advancement of Ophthalmology, and together with →KAWAKAMI Genjiro and →SUDA Takuji, he persuaded Prof.→KOMOTO Jujiro to serve as the President of the New Society. Thus, the Japanese Ophthalmological Society held the Inaugural Congress in February 27, 1897. Dr. Ohnishi worked as the Chief Editor of the Journal of the Society from 1897 for 30 years to 1928: the Editorship was then transferred to ISIHARA Shinobu. In 1905 Fukuoka Medical College was founded as a Faculty of Kyoto Imperial University and he was invited to be the First Professor of Ophthalmology and Department Chairman. He served as the Director of the Hospital in 1906-1911. He was the President of the 12th Congress of the Japanese Ophthalmological Society in 1908. At this Congress TAKAYSU Mikito reported on a young female patient with peculiar morphology of the retinal vessels: this disease was later called *Takayasu's disease*. Ohnishi discussed at the Congress that he saw similar case with the radial arterial pulsation undetectable. Later, this disease was also called Takayasu-Ohnishi Syndrome (Duke-Elder: *System of Ophthalmology*). Dr. Ohnishi was seriously concerned in the increase of myopia and he wrote many books and submitted an advice to the Government in 1897 to use simplified and large letters in school textbooks. Thus, the Government Decree was issued to avoid small letters in School textbooks. Kyushu Imperial University was founded in 1919 and he continued to work as the Professor until retirement in 1926. He trained many capable ophthalmologists; they include →OCHI Sadami, →HIROSE Kinnosuke, →TAMURA Shigemi and many others. In recognition of his outstanding contribution, the Government conferred on him the posthumous decoration of The Second Order of the Sacred Treasures. (SM)

Ohnishi, Yoshitaka (1942-) Japanese ophthalmologist, Professor and Chairman of Ophthalmology of Wakayama Medical College, Graduate School of Medicine. He was born as a grandson of OHNISHI Yoshiakira, cousin of OHNO Shinji. He graduated from Kyushu University in 1967 and studied Ophthalmology under Prof. →IKUI Hiroshi: he received his Doctor of Medical Sciences in 1973 (thesis: *Tissue culture of the neuroretina. Fine structure of aggregates of cells dissociated from chick embryonic retina*, Jpn. J. Ophthalmol. 18:392,1974). He made further investigations as a visiting scientist in 1977-1979 at the National Eye Institute, National Institutes of Health in Bethesda, MD,U.S.A.

with Dr.Toichiro Kuwabara. He studied morphology of the retina, ciliary body and trabecular meshwork using the techniques of freeze fracture and electron microscopic autoradiography (*Effects of pilocarpine and paracentesis on occluding junctions between the nonpigmented ciliary epithelial cells.* Exp. Eye Res. 32: 635,1981; *Autoradiographic localization of [35S] sulfate and [3H]-glucosamine in the hamster ciliary epithelium.* Exp.EyeRes.36: 247,1983; *Localization of [3H]-glucosamine and [35S]-sulfate in the hamster retina - Light and electron microscopic autoradiography*. Jpn. J. Ophthalmol. 27: 119,1983; *Distribution of [35S]-sulfate and [3H]-glucosamine in the angular region of the hamster*. Invest. Ophthalmol. Vis.Sci.24: 697, 1983). He served as the Assistant Professor of the Department of Ophthalmology, Faculty of Medicine, Kyushu University (1983-1995), and is the Professor and Chairman of the Department of Ophthalmology of the Wakayama Medical College since1995. His professional assignments are Councillor (1995-), of the Japanese Ophthalmological Society, Councillor (1984-), of the Japanese Neuro-ophthalmology Society, Councillor (1984-), of the Japanese Society for Connective Tissue Research and Councillor (1990-), of the Japanese Association for Ocular Infection. His editorial assignment is on the Editorial Board of the J. Jpn. Ophthalmol. Soc. (1997-) and Executive Editor of J. Jpn. Ophthalmol. Soc. (1999-). His clinical and research interest is in oncology and retinal diseases, and he has published many papers in these fields. Some examples of recent papers are "*Effects of hematoporphyrin derivative and light on Y79 retinoblastoma cells in vitro*. Invest. Ophthalmol. Vis. Sci.31: 792, 1990", "*Cancer-associated retinopathy with retinal phlebitis*. Br. J. Ophthalmol. 77: 795, 1993" and "*Capillary blood flow velocity measurements in cystoid macular edema with the scanning laser ophthalmoscope*, Am. J. Ophthalmol. 117: 24,1994. He is a member of the Association for Research in Vision and Ophthalmology (1977-), of the American Society of Cataract and Refractive Surgery (1989-) and of the International Society for Eye Research (1998-). (Department of Ophthalmology, Wakayama Medical College, 811-1 Kimiidera, Wakayama,Japan 641-8509, Phone:+81-73-441-0648, Fax: +81-73-441-0648, e-mail: ohnishiy@wakayama-med.ac.jp)(SM)

Ohno, Shigeaki (1944-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Yokohama City University. He graduated from Hokkaido University in 1970, studied Ophthalmology at the University under Prof. SUGIURA Seiji and received his Doctor of Medical Sciences in 1977 (thesis: *Immunogenetic studies on Behcet's disease*. I. J. Jpn. Ophthalmol. Soc. 78: 1158, 1974; II. ibid. 82: 95, 1978). He extended his studies in 1974-1976 as a George and Rosalie Hearst Fellow at the Department of Ophthalmology and also at the Fancis I. Proctor Foundation of the University of California San Francisco (UCSF) and worked with Drs. M. J. Hogan, S. G. Kramer and G. R. O'Connor. He was appointed the Assistant Professor of Hokkaido University in 1978 and was promoted to the present position as above in 1989. He holds many key positions in professional Societies, e.g. Councillor of the Japanese Ophthalmological Society (JOS) (1989-), President of Behcet's Disease Research Committee of the Ministry of Health and Welfare of Japan (1996-), President of the International Ocular Inflammation Society (1998-), Councillor of the Afro-Asian Congress of Ophthalmology (1990-). He is also an active member of the International Uveitis Study Group, and Cordes Eye Society of the UCSF. He is the leading researcher in Japan of the ocular inflammation, immunology, immunogenetics, allergy and medical anthropology, and he has published more than 400 original papers in the field. He delivered special reports to the 83rd and 96th JOS Congresses (*Immunological problems in the eye*, J. Jpn. Ophthalmol. Soc. 83: 1875, 1979; *Immunology and the eye*. ibid. 96: 1558, 1992), at the 25th International Congress of Ophthalmology, Rome 1986 (*Immunogenetic studies on ocular diseases*. Acta XXV Concilium Ophthalmol.144-154, Kugler and Ghedini, 1988) and Samuel Kimura Lecture at UCSF in 1998 (*Recent development in adenovirus ocular infection*). Some recent articles are "Human herpesvirus 8 variants. Lancet 351: 679, 1998" and "*High incidence of glucose intolerance in Vogt-Koyangagi-Harada disease*. Br. J. Ophthalmol. 83: 39, 1999". (Department of Ophthalmology, Yokohama City University, 3-9 Fuku-ura, Kanazawa-ku, Yokohama 2336-0004, Japan. phone: +81-4-5787-2681; fax: +81-4-5781-9755, e-mail: ohno@med.yokohama-cu.ac.jp)(SM)

Ohno, Shinji (1933-) Japanese ophthalmologist, Professor Emeritus of Saga Medical School. He was born in Fukuoka as a grandson of Prof. OHNISHI Yoshiakira, and

graduated from Kumamoto University in 1958, studied Ophthalmology at Kyushu University under Prof.→IKUI Hiroshi. He carried out research at the Department of Pharmacology of Kyusyu University and received his Doctor of Medical Sciences in 1967 (thesis: *Pharmacological studies of pupillary reflex dilatation*. Jpn. J. Pharmacol. 15: 91, 1965). He worked as a Research fellow under Otto Lowenstein and Irene Loewenfeld, Department of Ophthalmology, College of Physicians and Surgeons of Columbia University in New York (*The iris as pharmacologic indicator*. Eye, Ear, Nose and Throat Monthly 45:69-77,1966). He worked as the Assistant Professor, Associate Professor, and then Professor at the Department of Ophthalmology of Kitasato University (1971-1981). He worked as the visiting Professor at Front du Mer Clinique, University of Sciences & Technologies of Oran, Algeria at the request of the Japanese International Cooperation Agency (1978 9-'79 10). He was appointed the Professor and Chairman of the Department of Ophthalmology of Saga Medical School in 1981 and served until retirement in 1999. He serves as a Councillor of the Japanese Ophthalmological Society (1984-) and is on the Board of Trustees of the Japanese Neuro-Ophthalmological Society (1978-), of the Japan Society of Neurovegetative Research and Japanese Society of Ocular Pharmacology. Currently he is working as Professor of the International University of Health and Welfare (2600-1, Kita-Kanemaru, Ootawara City, Tochigi 324-8501) and also as the Director of the Eye Center, Takagi Hospital (141 Sakemi-Urata, Ookawa City, Fukuoka 831-0016). His interest in research has been Neuro-Ophthalmology, Ocular Pharmacology and Strabismology, and he has many publications in this field: e.g. "*Drugs affecting iris muscle*. in Ed. S. Dikstein *Drugs and Ocular Tissues*, p.288-382, S. Karger, Basel, 1977", "*Development of supersensitivity of the pupil in Horner's syndrome*. Neuro-Ophthalmol. 11: 241-244,1991" and "*Traumatic Horner syndrome without anhidrosis*. Journal of Neuro-Ophthalmology 19: 148-151 1999. (e-mail: DZF14024@nifty.ne.jp) (SM)

Ryoko Ohoka

Ohoka, Ryoko (1916-1999) Japanese ophthalmologist, Professor Emeritus of Toho University. She graduated from the Imperial Women‘s Medical and Pharmaceutical College (presently Faculty of Medicine of Toho University) in 1940, studied Ophthalmology at Keio University under Prof. UEMURA Misao, and received the degree, Doctor of Medical Sciences in 1951 (thesis: Cerebral circulation and the pressure of the central retinal artery. J. Jpn. Ophthalmol. Soc. 57: 455, 1953) from Keio University. She was appointed the Assistant Professor of Toho University in 1951 and then promoted to be Professor and Chairwoman of the Department of Ophthalmology of the University: she served until retirement in 1982. During her tenure, she served as the Dean of the Faculty of Medicine in 1976-1980 and conjointly she performed her duty as the Executive Board Member of Toho University until retirement. She organized and served as the President of the 33rd Congress of the Japanese Society of Clinical Ophthalmology in 1979. She served as the Councillor of many National Societies, e.g. *Jpn. Ophthalmol. Soc*., *Japan Society of Eye Hygiene* (presently *Japan National Society for the Prevention of Blindness*) and the *Japanese Society of Circulation*, Selection Board Member of the *Yoshioka Award* for female doctors, and many others. Her interest in Ophthalmology covered wide areas, e.g. cerebral and ocular circulation, cataract and aqueous biochemistry, ocular movement etc. Some examples of her publications are “*Epidemiology of Adenovirus Type 3 pharyngo-conjunctival fever*. J. Jpn. Ophthalmol. Soc. 67: 1, 1963”, “*Record of ocular movement by impedance method*. ibid. 68: 1171, 1964” and “*Aqueous humor dynamics based on the measurement of PCO2 and pH*. ibid. 72: 654, 1968”. She gave lectures at international meetings, e.g. Cataract-Glaucoma Workshop in U.S.A.1981, at the Second International Conference on Cataract Surgery, Florence 1981 and at the 8th Congress of the Asia-Pacific Academy of Ophthalmology in 1981.(SM)

Ohshima, Sukeyuki (1921-) Japanese ophthalmologist, Professor Emeritus of Tsukuba University. He graduated from Tokyo University in 1945, studied Ophthalmology under Prof. SHOJI Yoshiharu and received his Doctor of Medical Sciences in 1950 (thesis: *Errors in visual acuity test and standardization of brightness*, J. Jpn. Ophthalmol. Soc. 54 Suppl.: 85, 1950; *Accuracy of Landolt Rings*. ibid. 54 Suppl.: 95, 1950). He was appointed Assistant Professor of Ophthalmology at Tokyo Medical and Dental University in 1953 under Prof. OHTSUKA Jin, and then he was invited to be the Professor and Chairman of the Department of Ophthalmology of Tsukuba University in 1976 and served until his retirement in 1985. He is the leading expert in physiological optics, visual function and

refraction, and is one of the Founding Members of the Japanese Society of Ophthalmological Optics and served as the President in 1986-1990 and organized its Annual Congress as the President in 1981. He served the Japanese Ophthalmological Society as a Councillor, and is an Honorary Member of these two Societies. During 1962-1964, the Ministry of Education organized a research team under Prof. HAGIWARA Hogara on "*Evaluation of Visual Acuity*", and he worked as the core member of the team. He published many original papers including "*A semi-automatic refractometer with a TV monitor allowing one position measures of ametropia*: Springer Series in Optical Sciences 41; Advances in Diagnostic Visual Optics (ed.) Greinin G. et al.: p. 43-51, Springer Verlag, 1983" and "*Visual acuity testing – the basis and the clinical applications*. J. Jpn. Ophthalmol. Soc.91: 27-47, 1987.(SM)

Ohta, Yasuo (1927-) Japanese ophthalmologist, Professor Emeritus of Tokyo Medical University. Born as the 4th generation in an Ophthalmology family, he graduated from Tokyo Medical University in 1950, studied Ophthalmology at the University under Prof. UMAZUME Kakichi and received his Doctor of Medical Sciences in 1957 (thesis: *Studies on the acquired anomalous color vision* Report I. *On the color vision of the degeneratio pigmentosa retinae*. J. Jpn. Ophthalmol. Soc. 61:950, 1957; Report II. *The relation between normal vision to the central small field and acquired blue-yellow color blindness*. ibid. 61: 969, 1957; Report III. *The trial central scotometer*. ibid. 61: 976, 1957; Report IV*. On the color vision of the acquired color anomalous under the low luminance*. ibid. 61: 1666, 1957). He made extensive investigations with Prof. UMAZUME K. on color vision and developed the Tokyo Medical College (TMC) Color test chart. He was appointed Professor of Ophthalmology of Tokyo Medical University in 1978 and served until his retirement in 1992. He is the leading expert in Color Science and served as the President of the Color Science Association of Japan (1988). He has long been a member of the International Research Group on Color Vision Deficiency under the auspices of the International Council of Ophthalmology (1971-1994) (present International Colour Vision Society, ICVS) and he is an Honorary Member of the ICVS. He served the Japanese Ophthalmological Society as a Councillor (1975-1992), the Japanese Society of Ophthalmological Optics as the Auditor (1997). He is the author of "*Normal and Defective Color Vision*. Kanehara Publ. Co. 1990" and he contributed a chapter "*Physiology of Color Vision*. *Handbook of Color Science*, 2nd Edition, Tokyo University Press. 1998".(SM)

Jin Ohtsuka

Ohtsuka, Jin (1911-1986) Japanese ophthalmologist, Professor Emeritus of Tokyo Medical and Dental University. He was a graduate of Tokyo University in 1935 and a student of Prof. →ISHIHARA Shinobu; he received the degree Doctor of Medical Sciences in 1940 through studies on myopia (Comparison of refractive state of uni-ovular twins, J. Jpn. Ophthalmol. Soc. 46:1744,1942). He was the Professor and Chairman of the Department of Ophthalmology at the Tokyo Medical and Dental University from 1946 to 1977. He constructed an instrument to project a very thin beam of X-ray whereby he determined the axial length of many eyes, with particular reference to myopia (J. Jpn. Ophthalmol. Soc. 55:100,1951). He conducted extensive studies of the cause of myopia and published many papers on this subject. He was the President of the 4th Congress of the Japan Contact Lens Society in 1961 and of the 2nd Congress of the Japan Ophthalmological Optics in 1966. He was also the President of the 21st Congress of the Japanese Society of Clinical Ophthalmology in 1967 and of the 78th Congress of the Japanese Ophthalmological Society in 1974. (SM)

Ohtsuki, Hiroshi (1946-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Okayama University. He graduated from Okayama University in 1971 and studied ophthalmology at that university under Prof.→OKUDA Kanji and Prof.→MATSUO Nobuhiko. He received his Doctor of Medical Sciences in June 1978 from Okayama University (thesis: *Studies on Suppression Scotoma*. Part 1. *suppression scotoma in esotropia with abnormal retinal correspondence*. Folia. Ophthalmol. Jpn. 28: 1674, 1977. *Studies on Suppression Scotoma*. Part 2. *microtropia, small angle esotropia and anisometropic amblyopia*. Folia. Ophthalmol. Jpn. 29: 703, 1978. *Studies on Suppression Scotoma*. Part 3. *Suppression scotoma in microtropia*. J. Jpn. Ophthalmol. Soc. 83: 212, 1979). As a research fellow of the Alexander von Humboldt Foundation, he carried out research work at the Department of Ophthalmology,

Stadtkrankenhaus Kassel, from 1980 to 1982 under Prof. Wolfram Aust in West Germany. On his return home, he served as the Assistant Professor, Department of Ophthalmology, Faculty of Medicine, Okayama University (1983-1997); then he was promoted and has been in the present position as above since April 1997. He has been working in the field of strabismology and neuro-ophthalmology, and some examples of his many publications are "*Distribution of efferent neurons projecting to the tectum and cerebellum in the rat prepositus hypoglossi nucleus*" (Invest. Ophthalmol. Vis. Sci. 33: 1567, 1992) and "*Intraoperative adjustable suture surgery for bilateral superior oblique palsy*" (Ophthalmology 101: 188, 1994). He received the Yuge Award from the Japanese Association of Strabismus and Amblyopia in 1984 for the excellence of his work. (*Unterschiedliche Reaktionen von Patienten mit Strabismus concomitans unter prismatischem Schielwinkelausgleich.* Kin Mbl. Augenheilkd. 181: 453, 1982). He is a Councillor of the Japanese Ophthalmological Society (1989-), and is on the Editorial Board of the Journal of Strabismus (1998-). (Department of Ophthalmology, Okayama, University School of Medicine, 2-5-1 Shikata-cho, Okayama, 700-7885, Japan, phone: +81-86-223-7151, fax:+81-86-222-5059)(SM)

Ohzu, Hitoshi (1932-) Japanese engineer working in Applied Optics and Physiological Optics, Professor of the Faculty of Science and Engineering of Waseda University since 1969. He graduated from Waseda University in 1953 and carried out postgraduate studies at Technical University of Vienna, Austria: he received his Dr. techn. Degree from this University in 1959. He has many publications that include " *Optical modulation by the isolated human fovea*. Vision Res. 12:245, 1972" and " *Behind the scenes of virtual reality vision and motion*, Proc. IEEE, 84:No.5: 782,1996". He served as the President of the Optical Society of Japan, the Society of Ophthalmological Optics Japan and International Society of Optics within Life Sciences. He is a fellow of Optical Society of America and serves as Japan's representative to ISO/TC172/SC7 Ophthalmic Optics and Instruments. (Department of Applied Physics. School of Science and Engineering, Waseda University,3-4-1 Okubo, Shinjyuku-ku, Tokyo, 169-8555, Japan; phone: 81-3-5286-3225, fax: 81-3-3200-2567, e-mail: ohzu@mn.waseda.ac.jp)(SM)

Oishi, Shyozo (1909-) Japanese ophthalmologist, Professor Emeritus of Yamaguchi University, Director Emeritus of Ehime Rosai Hospital (National Hospital under the Ministry of Labor). He graduated from Manchuria Medical School (presently China Medical University, Shenyang) in 1935, studied Ophthalmology under Prof.→FUNAISHI Shinichi and he submitted a thesis to Kyoto University and received his Doctor of Medical Sciences in 1941 (thesis: *series of studies of trachoma*: J. Jpn. Ophthalmol. Soc. 43: 1129, 1939; *ibid*. 44: 630, 1940; *ibid*. 44: 815, 1940; *ibid*. 44; 2446, 1940; *ibid*. 45: 356, 1941). He served the Medical School as the Assistant Professor from 1944 and after the end of World War II he continued to serve the Medical School until 1948. He returned to Japan and was appointed the Professor and Chairman of the Department of Ophthalmology of Yamaguchi University in 1950 where he worked until 1968. He summarized his research in "*Zur Entwicklung und Aetiologie des Trachomas*", Bull. Yamaguchi Medical School, 1: 1953. During his tenure, he served as the Director of the University Hospital (1955-1958) and the Board of Directors of the University (1967-1968). He was invited to be the Director of Ehime Rosai Hospital in 1968 and worked in this position until 1984. His research interest covered wide areas of Ophthalmology and he and his students published more than 370 original papers. His main interest has, however, been occupational eye problems, and he is the author of "*Eye and Hygiene*, Vol. 4, *Handbook of Ophthalmology of the Japanese Ophthalmological Society* (JOS), Kanehara Publ. Co. Tokyo, 1955". He is an Honorary Member of the JOS and of the Japanese Society of Occupational Medicine and Traumatology. In recognition of his meritorious service, the Government of Japan conferred on him the Third Order of the Sacred Treasures in 1981.(SM)

Okada, Tokindo S. (1927-) Japanese Developmental Biologist studied differentiation and molecular biology of lens cells. He graduated from the Faculty of Science of Kyoto University. After having spent four years as a special fellow at the Postgraduate School, he was appointed as an Instructor, Assistant Professor and then full Professor at the same University in 1967. He was granted the Doctor of Science in 1960 from Kyoto University for his paper on the studies of the development of amphibian digestive tract. During this period he spent two years at the Institute of Animal Genetics, the University of Edinburgh,

U. K. as a McCauley Research Fellow and one year at the Department of Embryology of the Carnegie Institution of Washington, Baltimore, USA, as a Carnegie Fellow. In 1984, he assumed a post of Director-General at the National Institute for Basic Biology in the Okazaki National Research Institutes, Okazaki, Japan. He was promoted to the President of the Institutes in 1989 to hold the post another two years. In 1991 he retired from all the jobs of National Organizations and then assumed the Directorship of the new private organization of Biohistory Research Hall. When he organized his new research group of Developmental Biology at Kyoto University, he chose two main subjects, one of which was the differentiation of Vertebrate´s lens (other being the mechanism of cell adhesion). Such promising eye researchers like Goro Eguchi (now Kumamoto Univ.), Kunio Yasuda (now Nara Institute of Technology), Hisato Kondoh (now Osaka Univ.) joined lens studies of this group. Among Okada's contributions of lens studies, there is a discovery and a proposal of the concept of transdifferentiation in retina-lens system. His group was one of the pioneers of cloning and sequencing of crystalline (mostly delta) genes as well as demonstrating lens-specific expression of the genes by microinjecting the cloned genes into cultured cells. His monograph entitled "*Transdiffentiation - Flexibility in Cell Differentiation*" (1991, Clarendon Press, Oxford) is a review of all the examples of the occurrence of cell-type switch so far reported, but its core materials are works of his own group of the retina-lens system. By his research contributions of differentiation related to the lens, he was awarded the Alcon Science Award for Eye Research from Falcon Institute (USA) in 1988. He was a laureate of Harrison Prize from the International Society of Developmental Biologists in 1989. From the Japanese Government, he was given an honorable title of "*Person with Cultural Merits*"(1995) and was decorated with the medal of "*The Order of the Rising Sun, Gold and Silver Star*"(1998). Okada has worked as an Editor or Editor-in-Chief of many international journals of Developmental Biology. He served as a President of the International Society of Developmental Biologists (1982-1986) and also as a Vice-President of the International Union of Biological Sciences (1991-1996). He is a member of the International Society of Eye Research since the very beginning of this organization. He holds a title of Professor Emeritus of Kyoto University, the National Institute of Basic Biology and the Graduate University for Advanced Studies (Japan). (Director JT Biohistory Research Hall, 1-1 Murasaki-cho, Takatsuki, Osaka 569-1125, Japan. Phone: +81-726-81-9745, fax: +81-726-81-9758, e-mail: Tokindo.Okada@ims.brh.co.jp)(SM)

Okamura, Ryoichi (1931-) Japanese ophthalmologist, Professor Emeritus of Kumamoto University. He graduated from Kumamoto University in 1956, studied Ophthalmology at the University under Prof.→SUDA Keiu and Assistant Prof.→MITSUI Yukihiko and received his Doctor of Medical Sciences in 1961 (thesis: *Study of Pharyngoconjunctival Fever*, J. Jpn. Ophthalmol. Soc. 64:96, 1960). He worked during 1969-1971 with Prof. Johannes W.→Rohen at the Department of Anatomy of University of Marburg (*Elektronenmikroskopische Untersuchungen ueber die Rubeosis iridis*. Albrecht v. Graefes Arch. klin. exp. Ophthalmol., 182:53, 1971 *Elektronenmikroskopische Untersuchungen ueber die Altersveraenderungen der menschlichen Iris* Albrecht v. Graefes Arch. klin. exp. Ophthalmol.186:249, 1973, *Elektronenmikroskopische Untersuchungen ueber die Strukturellen Veraenderungen der menschlichen Iris beim Glaukom*. Albrect v. Graefes klin. exp. Ophthalmol., 186:271, 1973). He was appointed Assistant Professor of Kumamoto University in 1973 and was promoted to Professor and Chairman of the Department of Ophthalmology in1974: he served in this position until 1994. He has been a Councillor of the Japanese Ophthalmological Society, Japanese Society of Neuro-ophthalmology and is an Honorary Member of these Societies. He has many original papers in the field of neuro-ophthalmology and ocular infection and some examples are "*Purification and characterization of four proteases from a clinical isolate of serratia marcescens kums 3958*. J. Bacteriol. 157: 225, 1984" and "*Disturbances of accommodation in Minomata disease: a neuropathological study of methylmercury toxicity in common marmoset monkeys*. Neuro-ophthalmology 13: 331, 1993". He is interested in the History of Ophthalmology and a recent publication is the detailed biography of Dr. Tada→URATA. He is a member of the Japanese Society for the History of Medicine. (e-mail: FZT03061@nifty.ne.jp).(SM)

Okinami, Satoshi (1947-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, Saga Medical School. He graduated from Kyoto University in 1972, studied Ophthalmology at the University under Prof. TSUKAHARA Isamu and received his Doctor of Medical Sciences in 1981 (thesis: *Kuhnt intermediary tissue as a barrier between the optic nerve and retina*, Albrecht v. Graefes Arch. klin. exp. Ophthalmol. 201:57, 1976) He was Assistant Director in the Department of Ophthalmology, Tenri Hospital from 1984 to 1987, Assistant Professor of the Department of Ophthalmology Faculty of Medicine, Kyoto University from 1988 to 1991, and Associate Professor of the Department of Ophthalmology, Saga Medical School from 1991 to July 1999. He worked at the Department of Ophthalmology, University of California San Francisco from 1994 to 1995 as a Visiting Associate Professor. He has been in the present position as above since August 1999. He is a Councillor of the Japanese Ophthalmological Society (1999-), of Japan Glaucoma Society (1994-) and an Executive Director of the Japanese Society of Ocular Inflammation (1998-). His research interest is uveitis, glaucoma and vitreoretinal diseases, and some examples of his many publications are "*Treatment of pars planitis with cryotherapy*, Ophthalmologica 202: 180, 1991", "*Juvenile retinal detachment*, Ophthalmologica 194: 95, 1987". Besides being a member of many Japanese professional Societies, he is a member of the American Academy of Ophthalmology, Association for Research in Vision and Ophthalmology, International Society for Eye Research and New York Academy of Sciences. (Department of Ophthalmology, Saga Medical School. Nabeshima 5-1-1, Saga, 849-8501, Japan. phone: +81-9-5234-2384, fax: +81-9-5233-3696, e-mail: okinami@post.saga-med.ac.jp)(SM)

O'Kinealy, Lieutenant Colonel Frederick (1875-1940) British ophthalmologist and Aurist. O´Kinealy had a distinguished career in the Indian Medical Service. Educated at Beaumont and St. Bartholomew's Hospital he qualified in 1888 and, after winning the prize in pathology at Netley in 1891, he joined the I.M.S. He saw active service in the Tirah Campaign and towards the end of 19th century became resident surgeon of the Presidency General Hospital, Calcutta. O'Kinealy was surgeon to the Viceroy and later surgeon superintendent of his old hospital. He was appointed Chief Medical Officer to the Duke of Windsor, when, as Prince of Wales, he spent a season in India in 1921. In Calcutta he was well known as an ophthalmologist and aurist. He became a Life Member of the Ophthalmological Society from 1889 and at times contributed papers to its Transactions. He also published a good many papers in the Indian journals. He was a member of the Appeal Board of the India Office. BJO 24,420, 1940

Okisaka, Shigekuni (1939-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology, National Defense Medical College. He graduated from Juntendo University in 1964, studied Ophthalmology under Prof.→NAKAJIMA Akira and received his Doctor of Medical Sciences in 1969 (thesis: *The study on transparent ocular tissue – Biological changes of cornea and lens in organ culture of rabbit anterior segment*. J. Jpn. Ophthalmol. Soc. 73: 868, 1969). He further studied Ophthalmic Pathology at Harvard Medical School under Prof. D. G. Cogan and T. Kuwabara (1970-1972), at the National Eye Institute, U. S. A. under Dr. T. Kuwabara (1972-1974) and at Melbourne University (1974-1975). Some examples of his publications during these periods are "*Selective destruction of the pigmented epithelium in the ciliary body*. Science 184: 1298, 1974", "The effects of laser photocoagulation in the retinal capillaries. Am. J. Ophthalmol. 80: 591, 1975" and "*The effects of prostaglandin E_1 on the ciliary epithelium and the drainage angle of cynomolgus monkeys: a light- and electron-microscopic study*. Exp. Eye Res. 22: 141, 1976". He has been in the present position since 1982. He has held key positions in Japanese Societies: Councillor of the Japanese Ophthalmological Society (1982-present), President of the Japanese Ophthalmic Pathology Society (1997-present) and Councillor of the Japan Glaucoma Society (JGS) (1982-present): he organized, as the President, the 9th Congress of the JGS (1998). He is also the President of the International Society of Ophthalmic Pathology (1996-2000). He has published 576 original papers in National and International Journals and has written many books. His main interest in research has been ophthalmic pathology and some examples of his recent papers are "*Comparative histopathological study of free-running mode and continuous wave Nd:YAG laser photocoagulation of monkey retina and choroid*. Jpn. J. Ophthalmol.

335: 233, 1911" and "*Apoptosis in retinal ganglion cell decrease in human glaucomatous eyes*. Jpn. J. Ophthalmol 41:84, 1997". He wrote an "*Atlas and textbook of ocular histopathology*", Bunkodo, Tokyo, 1992". (Department of Ophthalmology, National Defense Medical College, 3-2 Namiki, Tokorozawa, Saitama, 359-8513, Japan. phone+81-4-2995-1211(ext. 2333); fax: +81-4-2993-5332) (SM)

Okuda, Kanji (1910-) Japanese ophthalmologist, Professor Emeritus of Okayama University, Director Emeritus of Okayama National Hospital. He graduated from Okayama University in 1936, studied Ophthalmology under Prof.→HATA Bunpei. He conducted research at the Department of Pathology under Prof. Tamura, and received his Doctor of Medical Sciences in 1943 (thesis: *Comparison of 4 types of Hamasaki ketoenol granules in the retina of various species*. J. Jpn. Ophthalmol. Soc. 46: 233, 1942, *Effects of dark adaptation on the Hamasaki ketoenol granules of the retina*, ibid. 47: 553, 1943, *Hamasaki ketoenol granules in compound eye*. ibid. 48:225, 1944). He was drafted during the World War II and was detained by the Soviets during 1945-1948: he performed health checks on Japanese prisoners. On his return home in 1948, he was made the Head of the Eye Clinic of Okayama National Hospital, but shortly afterwards he was invited to Okayama University in 1952 as the Assistant Professor. He was then promoted to the Professor and Chairman of the Department of Ophthalmology in 1964: he served in this position until 1973. He moved the same year as the Director to the Okayama National Hospital and served until 1980. He is a leader in Ophthalmic Pathology and founded the Ophthalmic Pathology Research Group in 1966 that provided a forum for Ophthalmic Pathologists in Japan. He organized, as the President, the 76th Congress of the Japanese Ophthalmological Society (JOS). He is an Honorary Member of the JOS and the Japanese Society of Clinical Electron Microscopy. His research interest have been in Ophthalmic Pathology, in particular, attention to electron microscopy, and he has many publications, e.g. "*Electron microscopic studies of ocular tissues – observation of visual cells by ultrathin sections*. J. Jpn. Ophthalmol. Soc. 58: 1127, 1954, "*Electron microscopic studies of vertebrate retina*, special report to the 65th Congress of JOS, ibid. 65: 2127, 1961" and "*Electron microscopic observations of the pigment epithelium of vertebrate animals*, Jpn. J. Ophthalmol.6: 76, 1962". He is the author of the book "*Introduction to Ophthalmic Pathology*. Igakushoin Tokyo 1964" and "*Sclera*" in the *Handbook of Clinical Ophthalmology*, Kanehara Publ. Tokyo 1972". In recognition of his distinguished service, the Government of Japan conferred on him the Second Order of the Sacred Treasures in 1982.(SM)

Okuzawa, Yasumasa (1940-) Japanese ophthalmologist, Director of Okuzawa Eye Clinic, Associate Faculty of Kyoto Prefectural University of Medicine. He was born as the 4th generation in an Ophthalmology family and graduated from Osaka Medical University in 1965. He studied Ophthalmology at the Kyoto Prefectural University of Medicine under Prof. YUGE Tshunekazu. He is the leading expert in the History of Ophthalmology in Japan and collects old documents, instruments and books and made a very extensive museum of the *History of Ophthalmology*. He is a Councillor of the Japanese Society of History of Medicine and wrote books, e.g. "*Commoners belief for medical remedies*". Shibunkaku Publ. 1991" and "*Japanese tales as seen by a foreigner: Fuso Chawa: Japanische Sagen, Legenden und Maerchen der Japaner, by Junker von Langegg*, Shibunkaku, 1993". He is the author of the Chapter "*History of Ophthalmology*. *System of Ophthalmology*, Vol. 1, Nakayama Publ. Co. 1993" and "*History of Colour vision deficiency in Japan* and *Ophthalmology awakens in Asia. 40 years of Asia-Pacific Academy of Ophthalmology*. Ed. Lim et al. p. 85, 1999". He is also the co-author of " *History of Ophthalmology in Japan*, Centennial publication of the Japanese Ophthalmological Society, 1997". Furthermore, he is a member of Japanese Society of Mycology and published a book "*The roots and dialect of Japanese mushroom names*. Yama-to-Keikoku, Publ. 1998". (Okuzawa Eye Clinic: 72-13 Chiyoharacho Katura Nisikyoku Kyoto 615-8085, Japan. fax: +81-7-5392-9651).(SM)

Olbers, Heinrich Wilhelm Matthias, (1758-1840) German physician and astronomer born Arbergen near Bremen, Germany. Olbers received his M.D. in 1780 with the thesis *De oculi mutationibus internis* at the University of Göttingen, where he had also studied mathematics and physics. In 1781 he settled in Bremen, where he practiced general medicine and ophthalmology until 1820, thereafter devoting himself to astronomy, a

science to which he made valuable theoretical and observational contributions. He received, in 1830, the *Dr.med.h.c.* title from the universities of Berlin, Bonn and Copenhagen. In his above mentioned doctoral dissertation he explains how the eye adapts to a change in focus by changing the shape of the eyeball; much later it was discovered that only the lens changes shape. Albert. JPW

Oldham, Charles James (1846-1907). British ophthalmologist of Hove, England. He was once vice-president of the Ophthalmological Society of the United Kingdom, and for a long time surgeon to the Sussex Eye Hospital. He wrote almost nothing, but was a good operator. Oldham deviced an ophthalmoscope which he first presented at the International Ophthalmological Congress (London 1872). A second model was presented 1886. He was fond of music and made a collection of valuable musical instruments, among which were four Stradivarii which he, except one, left to the British Museum. At the time of his death he was president of the Brighton Sacred Harmonic Society. American Encyclopedia of Ophthalmology 11,p. 8477-8478. Schett/Keeler The Ophthalmoscope, Vol.1, p.265-266.

Olivar-Santos, Evangeline (1941-) Filipino Ophthalmologist, Clinical Instructor of the University of the Philippines, College of Medicine (UPCM) Department of Ophthalmology; Researcher IV at the Institute of Ophthalmology, UP Manila. She graduated from UPCM in 1965, had training at the UP College of Medicine Department of Ophthalmology and finished a Master Course (in Hospital Administration) at the UP College of Public Health in 1981. She had postgraduate training at the University of London International Centre for Eye Health, where she received the Diploma in Community Eye Health (London) in 1984. She is conducting research at the Institute of Ophthalmology UP and has published many papers; e.g. "*Sucrose studies in-vitro denudation of rabbit corneal endothelium a role of disappearance of sucrose C-14 from the rabbit eye*." Philp. J. Ophthalmol. 6: (No.3), 1974, "*Primary Eye Care Trainor's Manual*", Manila Department of Health, 1990, "*Second National Survey of Blindness*." Institute of Ophthalmology, 1994 and "*Report on the Development of a National Primary Eye Care system in Cambodia*", 1997. (Institute of Ophthalmology, University of the Philippines Manila, PGH Compound Taft Avenue, Manila, phone/fax: 63-2-524-7119, e-mail: eosantos@pworld.net.ph.) (SM)

Oliver, Charles Augustus (1853-1911). American Philadelphia ophthalmologist, one of the authors of Norris and Oliver's "*Text-Book of Ophthalmology*," and one of the editors of Norris and Oliver's "*System of Diseases of the Eye.*" Born at Cincinnati, Ohio, a son of Dr. George Powell Oliver (the founder and first president of the Medico-Chirurgical College of Philadelphia) he moved in very early childhood with his parents to Philadelphia. He received the degrees of A. B. and A.M at the Philadelphia Central High School, and the degree of M. D. in 1876 from the University of Pennsylvania. Having served a year as resident physician in the Philadelphia Hospital, he was appointed clinical clerk to Dr. William F. Norris, professor of ophthalmology at the University of Pennsylvania. From 1890 until his death he was attending surgeon and secretary to the surgical staff at the Wills Eve Hospital. In 1894 he was made ophthalmic surgeon to the Philadelphia Hospital. He was appointed associate clinical professor of ophthalmology in the Woman's Medical College in 1897, and full clinical professor in 1906. He was for a time consulting ophthalmologist to the Friends' Asylum for the Insane and to the State Hospital for the Chronic Insane of Pennsylvania. He was a member of fifty-six scientific societies in America, and of thirty-three abroad. .Dr. Oliver's books were left to Harvard University and to the University Club of Philadelphia. His pictures were bequeathed to Lafayette College, Easton, Pennsylvania. His estate, outside his books and pictures, consisted of only $15,000.00 for he had been very generous. Of this amount one third was given to the Wills Eye Hospital, another for the foundation of a prize in ophthalmology, while the remainder went to the College of Physicians of Philadelphia for the purchase of ophthalmologic journals. Oliver's writings were very numerous. The journal articles alone, inclusive of abstracts and reviews are said to amount to "several hundred." His most important literary services, however, in addition to those rendered in connection with the "Text-Book" and the "System," are these: 1. Translated and edited the English editions of Ohlemann's "*Ocular Therapeutics*." 2. Translated and edited Baudry's "*Injuries to the Eye in their Medico-Legal Aspects*." 3. Translated and edited Donders's "*Essay on the Nature and Consequences of Anomalies of Refraction*." 4. "*Paracentesis, Keratotomy,*

Conjunctivoplasty, and Some Other Operations on the Eye." 5.*„A description of some of the most important ophthalmic methods employed for the recognition of nerve disease"* Philadelphia 1895; and co-authored with William Campbell Posey: *„Sajous Annual 1895: Ophthalmology"* Philadelphia 1895.American Encyclopedia of Ophthalmology 11,p. 8479-8481 Albert:Source Book of Ophthalmology,p.247

Omar b. Junus al-Harrani (10th century) A distinguished Cordovan physician, chiefly remembered today because of the fact that, together with his brother Ahmad, he studied the diseases of the eye under, Ibn Wasif at Bagdad for almost 22 years--941 to 963 A. D. American Encyclopedia of Ophthalmology 11,p.8482

Omodei, Carlo, Giuseppe Annibale (1779-1840) Italian surgeon, ophthalmologist, and medical lexicographer. Born at Cilavegna, near Vigenano, Sardinia, he received his medical degree at Pavia in 1800. After a scientific journey through Germany and Austria, he settled as surgeon at Milan. In 1804 he became Major Physician at the Milan Military Hospital, a position which he held for ten years. From 1817 till 1840, the year of his death. He edited the Annali di Medicina. 0modei's only ophthalmic writing is entitled "*Cenni sull' Ottalmia Contagiosa d'Egitto e sulla Propagazione in Italia*" (Milan, 1816; Germ. trans. by Wolf, Frankfort a. M., 1820). American Encyclopedia of Ophthalmology 11,p. 8482

Onfray, René (1877-1968) French ophthalmologist. Onfray was born, the son of a physician in Flers, in the Normandy, France. Onfray studied medicine in Paris, soon, attracted by ophthalmology, he became assistant to Rochon-Duvigneaud with whom he worked many years. A hard worker, he was chosen by the French Society of Ophthalmology to become their general secretary in 1922. Onfray wrote with G.Tessier *L´Oeil du Praticien* Paris 1912, and collaborated with Baillart´s *Traité d´ophtalmologie*. JPW

Ong, Sze Guan (1958-) Singaporean Ophthalmologist from the Singapore National Eye Centre. Graduated from National University of Singapore with M.B.,B.S. in 1982. He received his postgraduate degree in 1988 from the College of Surgeons of Edinburgh (FRCS). In 1992 he was Research Fellow at Cornell University Medical College where he studied vitreoretinal surgery under Professor Stanley Chang. His research interest includes publications on perfluorocarbon liquids and studies on intravitreal hyaluronidase (Vitrase) for vitreous haemorrhage. He is presently Senior Consultant and Director of Education at the Singapore National Eye Centre since 1995. He served as President of the Ophthalmological Society of Singapore in 1996-1998. Currently he is a member of the Specialist Training Committee of the Ministry of Health of Singapore. (Dr Ong Sze Guan, Singapore National Eye Centre, 11 Third Hospital Avenue, Singapore 168751. Phone: (65) 2277255; Fax: (65) 2277290; e-mail: snecosg@pacific.net.sg)

Oren, Samuel Leo (1879-1918) American ophthalmologist and oto-laryngologist of Lewistown, Ill., who gave much promise. He was born at Laporte, La., and having attended Upper Iowa University at Fayette IA., he entered the Barnes Medical College, at St. Louis, Mo., at a very early age, and there received his medical degree in 1899, being only twenty years old. Later he took a year's graduate course in the medical department of the Iowa State University, at Iowa City, IA.. For a time he practiced at Davis, Ill., but moved to Lewistown on Jan. 1, 1903, where he formed a partnership with his father, Dr. S. A. Oren. He received his commission as first lieutenant in the medical corps of the U. S. Army on Aug. 18, 1917, and embarked for overseas in July, 1918. He died on duty in France, presumably of collapse following ambulantory typhoid fever, and was buried with military honors in an American graveyard at Clermont-Ferrand(France) AJO 1919,2:460

Oribasius (326AD-403AD) A famous Pergamene physician, who became the body physician to Julian the Apostate. Born at Pergamos 326 A. D., he studied in Alexandria, and settled as physician in Athens. While here he received his appointment to Julian, who afterwards became emperor. The physician accompanied his ruler on the expedition into Gaul, and, later, into Persia. After the death of Julian, Oribasius was so mistreated by Valentinianus and Valen (the successor of Julian) that he fled to the Barbarian Goths. Here his reputation as a doctor became so great that he was recalled to Byzantium, restored to his former honors, and given back his property. He died in 403. His writings were as follows: 1. *Medical Collections*. Prepared by request of the Emperor Julian. (This consists

of a compilation from the writings of all the Greek physicians of any consequence, beginning with Hippocrates. Every extract in the book, moreover, has attached thereto the name of the author from whose writings it was extracted.) 2. *The Synopsis*. This is merely a synopsis of the more important passages in the "Medical Collections," made for the benefit of his son, Eustachius. 3. *On Household Remedies*. This work was dedicated to the author's friend, Eunapius, and the educated laity. All these works contain ophthalmologic passages which (though none, as a matter of course, is original with Oribasius) are still of great, importance as completing our knowledge of some of the numerous authors from whom the passages are taken.American Encyclopedia of Ophthalmology 12,p. 9191-9192

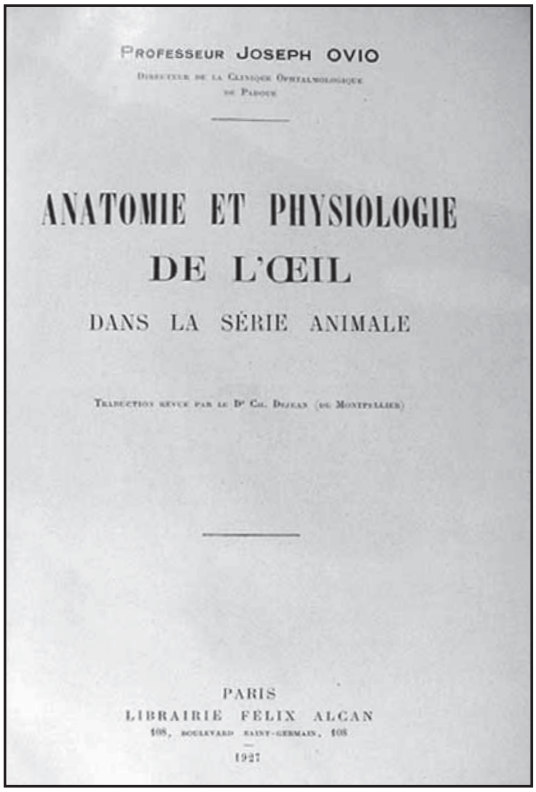
Orzalesi, F. (1906-1970) Italian ophthalmologist, Professor of ophthalmology in Milan. Orzalesi was born in Florence, where he studied medicine, receiving his degree in 1930. He was first assistant at the anatomical institute of the University of Florence until 1932, later at the Eye Clinic until 1938. He was lecturer there from 1935. In 1938 he went to the Eye Clinic of the University of Naples, then, from 1942 at the Clinica Oculistica of the University of Cagliari. He became , 1949, Chairman, and remained on this post until 1956. He successively Chairman at the University of Parma (1958) and Bari (1961). He accepted the chair in Milan where he remained in this post until his death. see *Scritti in Memoria del Prof. F. Orzalesi* Milano 1971. JPW

Oshima, Kenji (1936-) Japanese ophthalmologist, Professor and Chairman of the Department of Ophthalmology of Fukuoka University. He graduated from Kyushu University in1961, studied Ophthalmology in the Graduate School of Medicine of the University under Prof.→IKUI Hiroshi and received his Doctor of Medical Sciences in 1966 (thesis: *Effects of various factors on proliferation of herpes virus*. No.1. J. Jpn. Ophthalmol. Soc.69: 691, 1965: No.2. ibid. 71: 1211, 1967). He was appointed Assistant Professor of Fukuoka University in 1973 under Prof. MASUDA Yoshiya and was promoted to Professor and Chairman in 1978. While teaching and training young ophthalmologists, he served as the Deputy Director of the University Hospital (1993-1997). He serves the Japanese Ophthalmological Society (JOS) as a Councillor (1978-), to the Japanese Society of Intraocular Lens Implant and Refractive Surgery (1985-) and the Japanese Society of Retinal Detachment (1988-) and to the Japanese Society of Ophthalmic Surgeons (1990-) as Executive Director, and as the President to the Japanese Society of Pediatric Ophthalmology (1999-). He is an expert in vitreoretinal diseases and surgery, and published many papers in the field that include "*Long-term follow-up visual acuity in eyes with stage 5 retinopathy of prematurity after closed vitrectomy*. Am. J. Ophthalmol. 120: 308, 1995" and "*Specificity in the progress of vitreoretinal diseases in children*. Jpn. J. Clin. Ophthalmol. 50: 237, 1996". (Department of Ophthalmology, Fukuoka University, Nanakuma 7-45-1, Jyonan-ku, Fukuoka, 814-0180. phone: +81-9-2801-1011(ext. 3475-3477); fax: +81-9-2865-4445)(SM)

Osio (1840-1900) Spanish ophthalmologist of Madrid, born at Caracas. He received his medical degree in 1865. He then studied ophthalmology with J.→Michel, →Desmarres, de→Wecker and X.→Galezowski in Paris; with→Critchett, in London; with Albrecht von→Graefe and Julius→Hirschberg, in Berlin; with Hugo→Magnus, in Breslau; and with F.von→Arlt and →Fuchs in Vienna. In 1869 be settled as ophthalmologist in Barcelona, Spain. Here he lectured on ophthalmology till 1881, when he moved to Madrid where he died. His most important ophthalmologic writing is "*L'Oftalmia Purulenta del Recien Nascido"* (Madrid, 1886). He also translated von→Mooren's work, with the title "*Relacion Entre Padecimientos Uterinos y las Afeciones de los Ojos*" (Madrid, 1864). He was one of the founders of the "*Revista de Ciencias Medicas*,"American Encyclopedia of Ophthalmology 12,p.9196

Otori, Toshifumi (1931-) Japanese ophthalmologist, Professor Emeritus of Kinki University. Born as the son of a scholarly Ophthalmologist in Tokushima, he graduated from Osaka University in 1957, studied Ophthalmology at the University under Prof. →MIZUKAWA Takashi and received his Doctor of Medical Sciences in 1962 (thesis: *Studies on the site of electron transfer to triphenyl-tetrazolium chloride in rat liver mitochondria with reappraisal of Nachlas-Sligman's theory*).He extended his study as a Research Fellow at the Wilmer Ophthalmological Institute of Johns Hopkins University (1964-1967) and conducted research on the Cornea with Dr. M. E. Langham (*Electrolyte*

Content of the rabbit corneal stroma. Exp. Eye Res. 6: 356, 1967). He was invited in 1974 to the New University, Kinki University, to establish the Department of Ophthalmology and served until his retirement in 1999. He has held many key positions in professional Societies such as Councillor of the Japanese Ophthalmological Society (JOS) (1974-1999), Director of the Japanese Society of Neuro-ophthalmology (1985-) and Councillor of the Japanese Histocytochemical Association (1980-). He is a Founding member of the Japanese Chapter of the International Society for Eye Research (ISER) and served as an Executive Director to the Japanese Chapter of ISER (1973-) and to the International Perimetric Society (1992-1996). In the early period of his career, he did research on the cornea, but later he worked extensively in the field of Neuro-ophthalmology, and many publications embrace papers on new designs of automated light threshold and flicker perimeters, e.g. "*Central critical fusion frequency in neuro-ophthalmological practice*. ed. Greve E.L. Docum. Ophthalmol. Proceeding Series, 19: 95, 1979". The JOS granted him the Society Award in 1998, and the Award Lecture was given to the102nd Congress of the JOS: "*Basic and clinical aspects of modern perimetry*. J. Jpn. Ophthalmol. Soc. 102: 779, 1998". He continues his activities as the Professor at the Life Science Institute of Kinki University. (Life Science Institute, Kinki University, Ohnodai 4-3-7, Osaka-Sayamashi , 589-0023, Japan. phone: +81-7-2366-8853, fax: +81-7-2366-2568)(SM)


PROFESSEUR JOSEPH OVIO

ANATOMIE ET PHYSIOLOGIE DE L'ŒIL

DANS LA SÉRIE ANIMALE

PARIS
LIBRAIRIE FÉLIX ALCAN
1927

Ovio, Giuseppe (1863-1957) Italian ophthalmologist and historian. He was Director of the eye clinic in Padua, and, later in Rome. He wrote: *L´occhio nel Linguaggio Comune* , 2 vols. Roma 1941; *Oculistica pratica*, Milan 1925. He also wrote important ophthalmic historic treatises: *G.B.Morgagni nella Storia dell´Oculistica*, Milano 1890,2nd ed 1899,3rd ed 1903 and 4th edition 1921; *La scienza dei colori. Visione dei colori* Milano: Ulrico Hoepli 1927, French translation published in Paris by Alcan *La Vision des Couleurs* 1932; Anatomy and Physiology of the Eye which was translated into French *Anatomie et Physiologie de l´Oeil* Paris 1927; *L´Oculistica di Antonio Scarpa e due Secoli di Storia* (2 vols.) Naples 1936; *Storia dell´Oculistica* (2 vols.) Cuneo 1950 (planed in three volumes, this work is incomplete, the publication having been interrupted by the author's death). JPW

Oye, Raphael *see* **Van Oye**

P

Pacini, Filippo (1812-1883) Italian surgeon, who devoted considerable attention to ophthalmology. Born at Pistoja, he there studied medicine and was early distinguished as an original investigator. In 1840 he settled in Pisa, where he was assistant to Prof. Savi. Not finding in Pisa the recognition to which he was entitled, he moved to Florence, where be was made professor of descriptive and artistic anatomy. His most important contribution to ophthalmology was: *Nuove Ricerche Microscopiche sulla Tessitura Intima della Retina nellúomo* (Bologna, 1845). He was the first in this article to describe the outermost, thin nerve-fibres of the granular layer of the retina. His writings on anatomy and physiology in general are very numerous, and, for the most part, valuable. American Encyclopedia of Ophthalmology 12,p.9210. JPW

Pacini, Luigi Torello (1784-) Italian surgeon, born near Lucca, the 39th (!) son of his father, who was three times married. He studied surgery in Lucca, in Pisa and Paris; from 1819 Pacini taught human and comparative anatomy at the Real Lyceum in Lucca, and was chief surgeon to the court from 1837. His main publication was *Riflessioni critiche sullo stato attuale della chirurgia italiana e defesa della stessa* Lucca 1838. Of his many other publications, several deal with ocular pathology: De keratonyxide, dissertatio Lucca 1822; *Lettere sulla lacerazione della cristalloide anteriore intorno ad un aneurisma dell'arteria toracica sopra una doppia pupilla*. Lucca 1826.Albert.JPW

Padiaur, Anton (?- 1902). A Bohemian ophthalmologist and oto-laryngologist. The date and the place of his birth are not now ascertainable. Padiaur died, however, at Eger, Bobemia of "blood poisoning," aged either thirty-eight or thirty-nine years. American Encyclopedia of Ophthalmology 12,p.9210

Padmanabhan, Vishwanath (1959-) Consultant ophthalmologist, Singapore National Eye Centre. Clinical instructor, National University Hospital, Singapore. Graduate of the University of Melbourne 1984. Studied Ophthalmology at the University of New South Wales under Prof Minas Coroneo and Dr Ivan Goldberg. Research interests include Lid and Ocular Surface Diseases, Cataract and Ocular Vascular Diseases. Papers and presentations in these fields include “Intravenous Streptaokinase for Acute Central Retinal Artery Occulusion ARVO 1997 and “Paediatric BlepharoKeratitis” ARVO 1998. (Dr Vishwanath Padmanabhan: Singapore National Eye Centre, 11 Third Hospital Avenue, Singapore 168751, Singapore. Phone: (65) 2277255; Fax : (65) 2277290; e-mail: snecvp@pacific.net.sg)

Pagenstecher, Alexander (1828-1879) . German ophthalmologist, whose name is inseparably connected with the so-called "Pagenstecher's ointment." Born at Wallau, near Wiesbaden, he studied at Giessen, Heidelberg and Würzburg, at the latter institution receiving his degree in 1849. In 1851 he studied ophthalmology at Paris under Desmarres and Sichel and in 1852 at Berlin. Settling in Wiesbaden, he founded an Eye Infirmary for the Poor, which soon had a great reputation. In 1857 he became court councillor. He published in conjunction with Saemisch (Bonn), Hirschmann (Charkow), and Berlin (Stuttgart), the justly celebrated *Klinische Beobachtungen aus der Augenheilanstalt in Wiesbaden* (Wiesbaden, 1861-62). He was killed while hunting, by the accidental discharge of his gun. Pagenstecher wrote but little. In fact, his only ophthalmologic writing, aside from that already mentioned, was a rather short article entitled "*Zur Iridodesis*" (Graefe's Archiv, VIII). American Encyclopedia of Ophthalmology 12,p.9211

Pagenstecher, Hermann (Senior), (1844-1932) German ophthalmologist from Wiesbaden,brother of Alexander P., professor of ophthalmology. Pagenstecher was known far beyond the boundaries of his native land, and counted among his clientele, crowned heads of Europe. He was born in Langenschwalbach and studied in Wiesbaden and in the Universities of Würzburg, Berlin, and Prague. In 1868 he became assistant at the University eye clinic in Greifswald, and in 1869 took a similar position at the Wiesbaden eye clinic with his brother Alexander Pagenstecher. He then spent two lengthy periods of study in London, where he was active at Moorfields Hospital, and devoted himself to the study of pathology. After the death of his brother Alexander, he took over the leadership of two charitable eye institutions in Wiesbaden, where he became extraordinarily active in his specialty. He was the author of numerous papers on ophthalmology and (with C.Ph.Genth) of *Atlas der pathologischen Anatomie des Augapfels* (4 vols) Wiesbaden 1875 (French ed. Paris 1880), which was the earliest atlas of pathological anatomy of the eyeball, and of *Die Operation des grauen Staars in geschlossener Kapsel*, Wiesbaden 1877. His ambidextrous skill was remarkable. He was uniformly amiable and attentive to all his patients, high and low. His recreations were found in the study of nature and of art. He loved to visit the great picture galleries, and accumulated a comprehensive collection of paintings. Klinische Monatsblätter für Augenheilkunde 1932, 89:99; AJO 1932,15:974-975

Pagenstecher, Karl (1824-1865) German general practitioner of Elberfeld, Germany, who devoted especial attention to diseases of the eye, and who achieved a considerable reputation as an ophthalmic operator. Born at Nassau a. d. Lahn, a son of the well known physician, Heinrich Pagenstecher, he studied at Bonn, Göttingen, and Berlin, receiving his medical degree at Berlin in 1845. Having studied ophthalmology at Prague, Vienna, and Paris, he settled in 1847 at Elberfeld where he practiced until he death, at no time, however, relinquishing general practise entirely. For a number of years he spent each summer in study with Albrecht von→Graefe. In 1862 he became Superintendent of the Elberfeld City Hospital. His chief ophthalmic writing is " Ueber Verletzungen der Linsenkapsel, " (Zehender's Klin. Monatsbl.). American Encyclopedia of Ophthalmology 12,p. 9212

Palin, Anthony G. (? – 1986) British ophthalmologist. Palin graduated from Oxford and St.Thomas´ Hospital Medical School in 1934. He was appointed consultant ophthalmologist at Bristol in 1937 and served in the Royal Air Force during the war. On his return to Bristol until his retirement in 1972 he played a major part in establishing the Eye Hospital as one of the best units outside London. In 1970 he received a honorary membership of the Royal College of Surgeons of England.BJO 1986; 70:936.

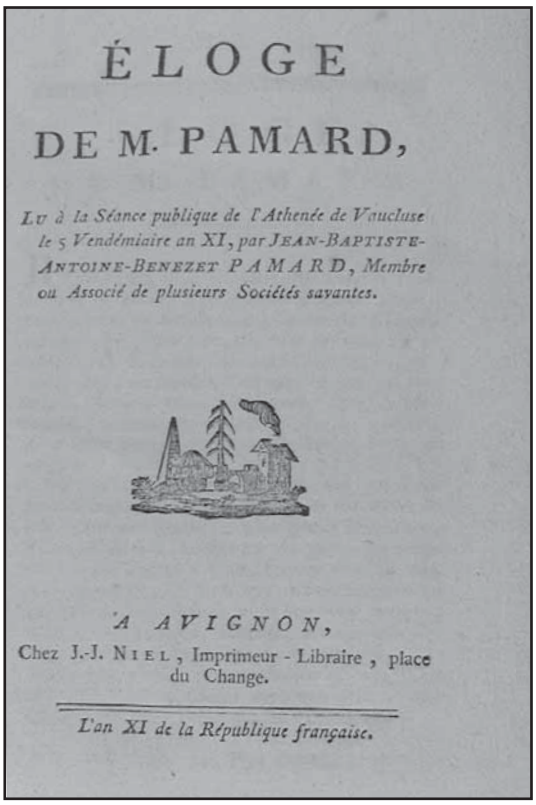
Pallen, Montrose Anderson (1836- ?) American New York gynecologist, who devoted considerable attention to ophthalmology. Born at Vicksburg, Va, son of a well-known gynecologist, Moses Montrose Pallen, he received his medical degree at St. Louis University in 1856. After a number of years spent in graduate work at London, Paris and Berlin, he settled in New York, where he soon became professor of gynecology at New York University. He wrote a number of journal articles on " Iridectomy " and " Corneitis"; also a prize essay, *The Ophthalmoscope* (1858). American Encyclopedia of Ophthalmology 12,p.9214

Pallucci, Natalis Giuseppe (1719-1797) Austrian Viennese surgeon and ophthalmologist. Born at Florence, Italy, he studied medicine in Italy, was appointed body-surgeon to the Grand Duke of Tuscany, practised for a time in Paris and then moved to Vienna where he became an Imperial Royal Surgeon, and spent the remainder of his life. As a cutter for stone he was unexcelled, but his chief performances were in the field of ophthalmology. Never a convert to the extraction method of dealing with cataract, he invented a very original instrument with which to perform the depression operation. It consisted of a trocar-canula. When the trocar was in place, the device was used to perforate the sclera. As soon, however, as the proper opening had been made, the trocar was withdrawn well back into the tube, leaving in the scleral perforation a blunt-ended canula with which the operation was completed without the slightest fear of injury to the iris or the ciliary body. Pallucci's ophthalmologic writings are as follows: 1. *Description d'un Nouvel Instrument pour Abattre la Cataracte, avec Tout le Succès Possible* (Paris, 1750- German trans., Leipsic, 1752.) 2. *Histoire de l´'Operation de la Cataracte Faite à Six Soldats Invalides*. (Paris, 1750.) 3. *Méthode d´Abattre la Cataracte*. (Paris 1752.) 4. *Lettre à M. le Marquis de . . . sur les Opérations de la Cataracte Faites par M. Pallucci*. (Paris, 1751.) 5. *Methodus Curandae Fistulae Lacrymalis*. (Vienna, 1762.) 6. *Descriptio Novi Instrumenti Pro Cura Cataractae.* (Vienna, 1763.) 7. *Della vera e placida maniera di curare la fistula dell´occhio* etc. Florence 1770. American Encyclopedia of Ophthalmology 12,p.9215.JPW

Palmer, Arthur Worra, ll (1861-1915). American ophthalmologist and oto-laryngologist of New York City. Born in New York City, he received his early education at the Friends' Seminary and at the City College. The degree of M.D. was received by him in 1883 at the New York Homeopathic Medical College and Flower Hospital, and that of *Oculi et Auris Chirurgus* at the New York Ophthalmic and Aural College in 1885. From that time onward he devoted himself exclusively to ophthalmology and oto-laryngology in New York City. Palmer was a member of the American Institute of Homeopathy, the American Homeopathic Ophthalmic, Oto-and Laryngological Societies, the American Medical Editors' Association, the National Society of Electro-therapeutics, the New York State Homeopathic Medical Society (since 1899), the Hahnemannian Association, the Academy of Pathological Science, the New York County Homeopathic Medical Society, and the Alumni Association of the New York Homeopathic Medical College and Flower Hospital. He was surgeon and professor of laryngology and rhinology at The New York Ophthalmic Hospital, and laryngologist to The Metropolitan Hospital and to the M.E. Church Home. He was, for many years, assistant editor of the *Journal of Ophthalmology, Otology, and Laryngology*, and in 1900 became its business manager as well. In 1904 he bought the *Homeopathic Eye, Ear and Throat Journal*, which, in conjunction with Dr. John L. Moffat, he edited for six years-i.e., until, in 1911, it was merged in the revived *Journal of Ophthalmology, Otology and Laryngology*. From 1911-1914 he was proprietor, business manager, and, in conjunction with Dr. Moffat, the editor of the *"Journal."* American Encyclopedia of Ophthalmology 12,p.9216-9217

Pamard, Alfred (1837-1920) French ophthalmologist, son of Paul Antoine Marie Pamard. He was Associé National de l´Académie de Médecine. He wrote : *Du glaucôme* Paris 1861 and with P.Pansier *Les Oeuvres de Pierre-François-Bénézet Pamard-Chirurgien et Oculiste. Editées pour la première fois d´après ses manuscrits*. Paris 1900.

Pamard, Jean Baptiste Antoine Benezet (1763- ?) French, the son of Pierre François and father of Paul Antoine, Pamard, and himself a famous Avignonese ophthalmologist. Born at Avignon, France, April 11, 1763, he studied first at Avignon, there receiving the degree of Master of Surgery in 1782. For a time continuing his studies at Paris, he settled at Avignon in 1787. He became laureate of the Royal Society of Surgery. In addition of a



ÉLOGE

DE M. PAMARD,

Lu à la Séance publique de l'Athenée de Vaucluse le 5 Vendémiaire an XI, par JEAN-BAPTISTE-ANTOINE-BENEZET PAMARD, *Membre ou Associé de plusieurs Sociétés savantes.*

A AVIGNON,

Chez J.-J. NIEL, Imprimeur - Libraire, place du Change.

L'an XI de la République française.

Paul Antoine Marie Pamard

number of general works, in particular a *"Topographie Physique et Medicale d´Avignon"* he wrote the following: 1. *Observation sur une Fistule Lacrymale, Opérée par un Procédé particulier avec le Journal du Traitement qui a Suivi l'Opération. (Annales de la Société Pratique de Montpellier,* an XI 1803.) 2. *Observation sur un Accident d'Apoplexie Survenu par Inanition après l' Opération de la Cataracte et Guéri Simplement par l'Usage des Aliments. (Ibid.,* an XI 1803.) 3. *Phénomènes Particuliers et Curieux qu'a Présentés, un Iris dans une Opération de Cataracte. (Ibid., 1808.)* American Encyclopedia of Ophthalmology 12,p.9218

Pamard, Paul Antoine Marie (1802-1872). French, Avignonese ophthalmologist, son of Jean Baptiste Antoine Benezet, and grandson of Pierre François Benezet Pamard. Born at Avignon, he studied at Montpellier and Paris, receiving the degree of Doctor of Medicine and Surgery in 1825. He settled in Avignon, where he succeeded his father as surgeon to the hospital. He was elected mayor of the city in 1853, and national deputy in 1861. His ophthalmologic writings are as follows: 1. *De la Cataracte et de son Extraction. (Thèse* 1825.) 2. *Relevé de Clinique Chirurgicale de l'Hôpital Civil et Militaire d'Avignon pendant le Premier Trimestre, 1831. (Transacts. Méd.,* Paris, 1832.) 3. *Recherches sur le Traitement de Diverses Maladies des Yeux. (Revue Médicale,* 1834.) 4. *Réponse à la Question Posée par Serre d'Uzès: Quelle est l'Influence de l'Operation de la Cataracte sur la Vie de ceux qui la Subissent? (Annal. d'Ocul.* 1839, Vol. II, p. 230-232.) 5. *Observations Ophtalmologiques. (Annal. d'Ocul.* 1841, Vol. V, p. 157-163.) 6. *Mémoire sur l'Iritis.* , (Mém. *de Chirurgie Pratique,* Paris, 1844.) 7. *De la Cataracte et de son Extraction par un Procédé Particulier. (Mém. de Chirurgie Pratique,* Paris, 1844, p. 1-79.) 8. *Observations Ophtalmologiques propres à Infirmer l´Opinion Générale Admise de la Nature Cancéreuse des Mélanoses. (Annal. d'ocul.,* 1853, Vol. XXIX, p. 25-31.) 9. *De l'Opération de la Cataracte chez les Vieillards. (Annal.* d'Ocul., 1854, Vol. XXXI, p. 224-228.) 10. *Corps étrangers de I´Oeil. (Annal. d'Ocul.* 1860, Vol. XLIII, p. 23-29.)American Encyclopedia of Ophthalmology 12,p.9218-9219

Pamard, Pierre François Benezet (1728-1793) French, Avignonese surgeon of the 18th century, son of Nicolas Dominique →Pamard, grandson of Pierre→Pamard, father of John Baptiste Antoine Benezet, and grand father of Paul Antoine Marie Pamard. All these five Pamards were surgeons, without a single failure in the succession. Moreover, the subject of this sketch was also known in ophthalmology, and his grand son, Paul Antoine Marie (q. v.) was a celebrated specialist in ophthalmology; a truly remarkable record for a single family. Born at Avignon, April 7, 1728, according to Pagel; but April 27, 1728, according to Truc and Pansier and to Hirschberg. He became master of surgery at Avignon, Feb. 13, 1744, and studied later at Montpellier. Going to Paris, he became a demonstrator of anatomy, but soon returned to Avignon. He grew famous as an operator, and had an enormous practice. He became Consul at Avignon in 1776. Pamard is specially to be remembered in the history of cataract. As early as 1758 he began to employ the extraction method of Daviel, but soon was aware of its very obvious defects. We are therefore indebted to him for the following truly great improvements in the cataract operation : 1. The adoption (for the patient of course) of the dorsal decubitus during the cataract extraction. As pointed out by →Hirschberg, he had been preceded in this matter both by Poyet and the Arabs; still, he revived the dorsal decubitus in the cataract operation, and gave to it its first great vogue. 2. The "trèfle," an instrument devised to effect fixation of the eyeball. This instrument was implanted in the cornea, about 2 millimetres from its limbus. One should, in this connection, recall the fact that Daviel and those who first repeated his extraction operation, performed fixation of the bulbus by means of a finger pressed loosely against the nasal aspect of the organ. 3. The triangular knife. In addition to the lance of Daviel, Pamard had tried La Faye's knife, and, though he found it a great improvement over the crude affair of Daviel, yet he also discovered that, in it, there also inhered a number of disadvantages, the chief of these being that, because of the narrowness of the blade, the iris would often fall across the edge and so be

wounded. Pamard's knife was a blade two lines and a half in width with a back wholly blunt, except at the very point, where, in order to give to the instrument a greater penetrating power there was a short edge. The width of the blade, providing an adequate support to the iris, holds that structure in its proper place. Pamard did not write much. In addition to three or four articles on cataract extraction, he published " *Diss. sur quelques Effets de l'Air dans nos Corps*"; also a "*Description d'une Seringue Pneumatique et ses Usages dans quelques Maladies tres frequentes avec des Observations*" (Avignon, 1791).American Encyclopedia of Ophthalmology 12,p. 9219-9220

Panas, Photinos (1832-1903) Anglo-Greco-Franco Parisian ophthalmologist. Born at Cephalonia, one of the Ionian Islands, while they were under British sovereignty, control and influence. He studied his profession at Paris, there receiving his medical degree in 1860. His thesis on this occasion was entitled "*Recherches sur l'Anatomie des Fosses Nasales et des Voies Lacrymales*." About this time he became a French citizen. In 1863 he was made associate professor *(agrégé)* and surgeon of the Central Bureau, his thesis being "*Des Cicatrices Vicieuses et des Moyens d'y Rémédier*." In 1864 he was made surgeon at the Bicêtre, in 1864 at Lourcine, and also at du Midi, in 1868 at Sainte-Antoine and Saint-Louis, in 1872 at Lariboisière, and in 1879 at the Hôtel-Dieu. In 1873 he began to lecture on ophthalmology, and in 1879 was made titular professor of the subject. His name is intimately connected with operations for the relief of ptosis, entropion, etc. According to →Hirschberg, the six great achievements of Panas may be stated as follows: 1. The ophthalmic clinic of the Faculty. 2. The best French textbook on ophthalmology which was written in the "Reform" period. 3. Together with others, the founding of the *"Archives d'Ophtalmologie"* (1881) the first, organ of ophthalmology originally established on French soil, which, in twenty-one volumes(1918), bears witness to the progress of ophthalmology in France. 4. Together with others; "The French Society of Ophthalmology" (1883) whose reports in twenty-one volumes record a vast amount of research and its results. 5. Ophthalmic appointments in the other great hospitals of Paris. 6. A new French school of ophthalmology, which united the hospital and the laboratory. Panas was succeeded by de →Lapersonne. Panas's ophthalmic writings are as follows: 1. *Leçons sur le Strabisme et les Paralysies Oculaires*. (1873.) 2. *Leçons sur l'Anat., la Physiologie. et la Pathologie des Voies Lacrymales*. (1876.) 3. *Lecons sur les keratites* (1876) 4. *Leçons sur les affections de l´appareil lacrymal* Paris 1877, 5. *Leçons sur les Maladies Inflammatoires des Membranes Internes de l'Oeil*. (1878.) 6. *Leçons sur les Rétinites et les Nevrites Optiques*.(1878, with figures.) 7. *Anatomie Pathologique de l'Oeil*. (1879, with 26 plates, in collaboration with Rémy.) 8. *Traité des Maladies des Yeux* (2 vols.) Paris 1894 ; 9. with Rochon-Duvignaud, *Recherches Anatomiques et Cliniques sur le Glaucome et les Néoplasmes Intraoculaires* Paris 1898 ; 10. *Leçons de Clinique Ophtalmologique professées à l´Hôtel-dieu* Paris 1899 and 11. *Considérations pratiques sur les Cataractes* Paris[no date]. In surgery, he wrote *Leçons d´Orthopedie de Malgaigne* (1862). Panas also developed an ophthalmoscope (which was manufactured by Collin, successor of Charrière) which he published in the Bulletins et Mémoires de la Société de Chirurgie de Paris 1875, vol.1,p.244. American Encyclopedia of Ophthalmology 12,p.9220-9221. Annales d´Oculistique 1903,129:80-86. Schett/Keeler The Ophthalmoscope, Vol.1, p.195. JPW

Pancoast, Joseph (1805-1882) American surgeon, of some importance in ophthalmology. Born in Burlington County, New Jersey he received his medical degree at the University of Pennsylvania in 1828. He settled in Philadelphia, and soon was widely celebrated as anatomist and surgeon. In 1831 he began to teach practical anatomy and surgery. In 1834 he was made physician to the Philadelphia Hospital, Blockley; in 1835 he became physician-in-chief to the Children's Hospital. In 1838 he was elected professor of surgery in the Jefferson Medical College. Six years later he published his *"Treatise on Operative Surgery,"* on which his fame as an author chiefly rests. Pancoast was much more widely known in the general surgical than in ophthalmology, and yet he performed many ophthalmic operations. He also devised several operations on the eye, as well as a number of useful eye instruments. The Pancoast needle for soft and mixed cataracts is still in common use; so is the Pancoast operation for the restoration of the eyebrow. Pancoast was in fact the first to demonstrate that, in extreme cases of internal strabismus, "the tendon of the inferior oblique muscle is often girdled by rigid connective tissue, " and that this

tendon must, be divided before the eye can turn to its normal position. For occlusion of the nasal duct he punctured the lachrymal sac and introduced a hollow ivory tube from which the earthy matter had been removed, and left it *in situ* to dissolve. Pancoast taught in Jefferson Medical College for more than thirtysix years. American Encyclopedia of Ophthalmology 12,p.9221

Pandey, Piyush Raj (1953-) Nepalese ophthalmologist. He is a graduate of Amrit Science College of Tribhuvan University (1972) and received MBBS degree from Calcutta University (1981) and M.D. degree from Tribhuvan University in 1997 (thesis: *Hospital based study of visual status of pseudophakic eyes following posterior chamber lens implantation*). He works as an ophthalmologist of His Majesty's General Hospital, Nepal since 1997. He is a recipient of various honors, e.g. Daibik Prakop Piditodwar Padak (Earthquake relief medal) (1989), Seva Padak (Excellent service medal) (1990) and Subha Rajyorohan Rajat Mahotsava Padak 2053 (Accession to the Throne Silver Jubilee Medal 1997). He has conducted many surgical and screening eye camps in various parts of Nepal, and has given many training courses. (HMG Nepal, P.O.Box 12354, Kathmandu, Nepal). (SM)

Panizza, Bartolomeo (1785-1867) Italian surgeon of moderate ophthalmologic importance. Born, the son of a physician, at Vicenza,, he received the degree of Doctor of Surgery at Padua. He afterwards studied at Bologna, Florence and Pavia. In 1812, becoming a surgeon in the army of Napoleon, be accompanied the Emperor's ill-starred expedition into Russia, and there was taken prisoner. On his release he returned to Pavia, where he attained, by competitive examination, the professorship of anatomy-a position which he held for forty-nine years. While in this position he discovered the gustatory function of the glosso-pharyngeal nerve. Panizza's only ophthalmic writing is entitled "*Annotazioni Anatomo-Chirurgiscbe sul Fungo Midollare del' Occhio e sulla Depressione della Cataratta*. " Pavia, 1821; a Supplement to the work, *Sul Fungo midollare dell´Occhio* Pavia 1826; Germ. trans., Weimar, 1828. This monograph contains the earliest account of an extirpation of an eyeball for medullary sarcoma of the retina. American Encyclopedia of Ophthalmology 12,p.9222

Pansier, Pierre (1864-1939) French ophthalmologist and historian. Pansier was born in Avignon and received his M.D. in 1892 at Montpellier, where he worked for some years as a clinical assistant in ophthalmology before returning to his native city. From 1900 he was chief ophthalmic surgeon to the hospital at Avignon. Pansier is best known as an historian of his specialty; he contributed the chapter "*Histoire de l'ophtalmologie*" to Lagrange and Valude's *Encyclopédie française de l'ophtalmologie* (1903).He also wrote: *Les manifestations oculaires dans l´hysterie* Paris 1892 ; *Traité de l´Œil Artificiel*, Paris 1895 ; *Traité d'électrothérapie oculaire.* Paris 1896; *Les Œuvres de Pierre François Bénezet Pamard* (with Alfred Pamard) Paris 1900; *Le Compendel de Bienvenu de Jérusalem pour la douleur et maladie des yeux* Paris 1901; *Histoire des Lunettes* Paris 1901 ; *Histoire de l´Ophtalmologie à l´École de Montpellier du XII au XVIIéme Siècle* Paris 1907 ; *Collectio Ophtalmologica Veterum Auctorum* Fasc.1 to 7, Paris 1903-1933. JPW

Panum, Peter Ludwig (1820-1885) Danish physiologist, born at Ronne, on the Danish island of Bornholm, received his M.D. at Copenhagen (1845), where he was a hospital physician for some years before devoting himself to phys- iological research and teaching at the Universities of Kiel (1853-1863) and Copenhagen (1863-1885). Panum wrote a classic account of an epidemic of measles (1847), was the first to investigate the chemical products of putrefaction (1856), published the first monograph on experimental teratology (1860) , studied the effects of ligation on coro- nary vessels (1862) , and investigated the pathology of embolism (1863-1864). He wrote: *Physiologische Untersuchungen über das Sehen mit zwei Augen*. Kiel 1858. American Encyclopedia of Ophthalmology 12,p.9234-9235.Albert.JPW

Paoli, Cesare (1813-1901) Italian ophthalmologist. Born at Assisi he received the degree of Doctor in Medicine, at Pisa, where, it seems, he practised for a short time. Moving in 1839 to Florence, he there became (in 1849) professor of ophthalmology, a position which he filled for more than fifty years. American Encyclopedia of Ophthalmology 12,p.9235

Papias Autolycus Laodicensis. An ophthalmologist of ancient Greco-Roman times, concerning whom we know almost nothing, except that he invented a prescription for the treatment of trichiasis. This prescription, which has been preserved by Archigenes, calls for mezereon mixed with frog's blood. With this combination the edge of the affected lid was lightly touched, after epilation, to hinder the return of the lashes.American Encyclopedia of Ophthalmology 12,p.9235

Pappenheim, Samuel Moritz (1811-1882) German physiologist, born in Breslau. Pappenheim received his M.D. there in 1835 with the thesis *De Caloris Capacitate Rudimenta* and practiced a time in his town. Later, as an assistant to Purkinje, he began a promising career in physiological research, publishing a number of monographs and articles. In the early 1840s he was hospitalised for mental illness; released, he moved to Paris, continuing his physiologic studies under Flourens. In 1849 be embarked on a scientific voyage to the Americas and disappeared for ten years; friends found him in Havana, sick with yellow fever, and sent him back to Germany. He spent his last twenty years in Berlin, an obscure eccentric. He authored: *Zur Kenntnis der Verdauung im gesunden und kranken Zustande* etc. Breslau 1839; *Die specielle Gewebelehre des Gehörorgans etc.* Breslau 1840; *Die specielle Gewebelehre des Auges mit Rücksicht auf Entwicklungsgeschichte und Augenpraxis* Breslau 1842. Albert. JPW

Pararajasegaram, Ramachandra (1928-) Sri Lankan ophthalmologist, Former President of the International Agency for the Prevention of Blindness, WHO Consultant and Technical Advisor Lions Sight First Program (1990-). He completed undergraduate Medical Education in Sri Lanka with qualified M.B., B.S in 1951, with Merit of distinctions in all subjects (Highest ranking Medical Graduate 1950 to 52). He then received postgraduate training in the UK from September 1954 to 1957, when he received Postgraduate degrees in General Surgery, Internal Medicine and Ophthalmology, Fellow of the Royal Colleges of Edinburgh, Fellow of the Royal College of Surgeons of England, Diploma in Ophthalmology, University of London, Member Royal College of Physicians of Edinburgh later elected Fellow and Fellow of the Royal College of Ophthalmology, England. On home coming, the degree of Doctor of Science was conferred on him by University of Sri Lanka. He has worked as a Consultant Ophthalmologist at the Eye Hospital Colombo (1957-1964), Visiting Lecturer in Ophthalmology, University of Ceylon Medical School (1957-1964) and a Member, Postgraduate Board in Ophthalmology. He also served as a Member Faculty and Examiner, Master in Community Ophthalmology, PICO, Pakistan Visiting Faculty, ICEH, London and Visiting Faculty Member, Korat course in Eye Health Management. He has worked as the Founder Secretary and Later President of the Ceylon National Society for Prevention of Blindness, President of the Ophthalmological Society of Ceylon, President of the Asia Pacific Academy of Ophthalmology (1981-1987), Honorary Consultant Ophthalmologist to Royal Commonwealth Society for the Blind in Ghana in 1976, Consultant Ophthalmologist, Royal Australian College of Ophthalmology in Trachoma Project 1978 and President of the International Society of Geographic and Epidemiological Ophthalmology. He has been affiliated with the World Health Organization, e.g. Short term Consultant in South East Asian Countries (1976 - 1981), Member WHO Program Advisory Group (1978 - 1982), Member WHO Expert Advisory Committee on Trachoma and Prevention of Blindness Regional Adviser, Prevention of Blindness for South East Asia (1982 to 1988), and WHO Consultant and Technical Advisor Lions Sight First Program 1990 to date. He worked extensively for the International Agency for the Prevention of Blindness, and is the Founder Member, Regional Chairman, South-East Asia (1978 to 1986), Senior Vice President and President-elect (1990 to 1994) and President (1994 to 1999). He successfully organized the Sixth General Assembly in Beijing (1999) under auspices of the Government of China and under co-sponsorship of the WHO and Japan National Society for the Prevention of Blindness. In the International Ophthalmology, he served as a Member of the Advisory Committee for the International Council of Ophthalmology (ACICO) (1992-1994, 1999-to date) and a Member of the International Council of Ophthalmology (1994 to 1999). He is a recipient of many honor awards and they embrace Jose Rizal Medal, from the Asia-Pacific Academy of Ophthalmology (APAO)(1995), Distinguished Service Award APAO (1981), Holmes Memorial Lecture, APAO (1985), Elizabeth Gass Memorial Lecture at the International Society of Geographic

Ophthalmology, Prevention of Blindness Award, Saudi Ophthalmological Society, Prevention of Blindness Award Jordanian Ophthalmological Society, College of Ophthalmology Foundation Lecture, Sri Lanka First B.P. Koirala Lecture, SAARC Congress (1999) and International Prevention of Blindness Award AAO, Dallas 2000. His publications include Chapters in *Modern Ophthalmology* Ed. Sorsby - Butterworth (1966), *Pattern of Glaucoma in Sri Lanka*, Transactions of the APAO, Singapore (1968), *Nepal Blindness Survey* (1983), *Sunlight and Cataract in Nepal*, International Journal of Epidemiology (1984), *Global Data on Blindness*, WHO (1995), *Vision 2020 from Strategy to Action*, Editorial AJO September (1999) and Various contributions to WHO publications. (Mailing address: Programme for Prevention of Blindness and Deafness, WHO, 1211 Geneva, 27, Switzerland. Phone: +4122-791-3886; fax: +4122-791-4772; e-mail: parar@who.ch) (SM)

Parent, H. (1849-1924) French ophthalmologist born in Neuvireuil, Pas-de-Calais, France. Parent entered the Ecole de Médecine Militaire de Strasbourg, continuing his military medical school first in Montpellier, later in Paris Val-de-Grâce. He received his medical degree at Paris in 1874 and became Adjunct Major at the Alger Division for a short time, quitting the army in July 1875 to enter civil life as an ophthalmologist. He became an pupil of X. Galezowski, and during the first twenty years of his scientific life, all his papers were published in his master´s review, the *Receuil d´Ophtalmologie*. During that time Parent developed his ophthalmoscope with metric refraction (1880) and his ophthalmoscope with cylindric glasses known by the practioners of his time under the name Parent´s ophthalmoscope. Parent became (1891) editorial secretary to the Archives d´Ophtalmologie, a position he held until 1900. It is during that time that his scientific output increased remarkably. In 1891 and 1892 he published there the most important paper of his career, about the theory of the procedure of optometric ophthalmoscopy (after Cuignet), or Skiascopy. He edited for the Société Francaise d´Ophtalmologie, its 1895 *rapport* on the comparative value of objective optometry. Parent was a founding member of the Société Francaise d´Ophtalmologie and founding member and former President of the Société d´Ophtalmologie de Paris. Annales d´Oculistique 1924, Vol.161. JPW

Parfait-Landrau Jean François, b. (1797- ?) French physician and oculist who practiced in Périgueux and Lyons. In 1828 he made the first known observations of synchisis scintillans. He was the father-in-law of the better known ophthalmologist, Louis Rivaud-Landrau and wrote: *Mémoire sur un nouveau procédé à introduire dans l'opération de la cataracte par extraction* Paris 1827. Albert

Henri Parinaud

Parinaud, Henri (1844-1905) French ophthalmologist born at Bellac, France. Parinaud received his medical training in Limoges and Paris under Guéneau de Mussy, Lannelongue and Bouchut. His doctoral thesis *Etude sur la névrite optique dans la méningite aigue de l´enfance* (1877) drew the attention of the famous neurologist and psychiatrist Charcot who invited him to work with him. After this he became head of the eye clinic under Xavier Galezowski and later founded his own ambulantorium for the poor, which was to attract students and practitioners from all over the world. One of the most important ophthalmologists of his time in France, a prolific author, particularly interested in the eye in relation to the general nervous system, Parinaud was the first to describe the disease later known as Parinaud's conjunctivitis (his doctoral thesis). He also wrote: *Échelle Optométrique* Paris 1888 ; *La Vision* Paris 1898 and *Le strabisme et son traitement* Paris 1899. Parinaud was also a musician and composed under the pseudonym Pierre Erick. American Encyclopedia of Ophthalmology 12,p.9360-9361; Annales d'Oculistique,1905,133:334-337. JPW

Park, Byung Kook (1921-) Korean ophthalmologist, Professor Emeritus of Pusan National University. He graduated from the College of Medicine Yonsei University in 1943. He was appointed Instructor at the Department of Ophthalmology of Pusan Municipal Hospital in 1950. He had worked for the Department of Ophthalmology of Pusan National University as an Assistant Professor and Chairman since 1957. He was granted a Ph.D. from Pusan National University in 1964, and promoted to Professor in the same year. He had served as the Professor until 1984, and then he retired. He also served as Director of the Pusan National University Hospital during 1968-1969 and 1971-1972 and the Dean of the College of Medicine of the Pusan National University during 1972 -

1974, and 1976- 1980. He served the Korean Ophthalmological Society as the President from 1976 to 1978 and then as a Member of the Board of Councillors until now. He worked for the Pusan Ophthalmology Society as the President in years of 1959, 1965, 1968, 1975, and 1976. (SM)

Parker, James Pleasant (1854-1896) American ophthalmologist, the founder and for many years the editor of the *Annals of Ophthalmology and Otology.* Born in Alabama, he studied and practised pharmacy for a few years, and then began to devote himself to medicine. His medical degree was received from Jefferson Medical College in 1886. In 1886 and 1887 he studied ophthalmology and oto-laryngology in Philadelphia and New York, and late in 1887 settled in Kansas City. In 1891 he began to publish the *Annals* and the following year moved to St. Louis. The pathetic story of Parker and his connection with the journal for which he gave his life, can best be told in the language of the Editor, Casey →Wood, in the *Annals* itself for January and April, 1896: "As a result of Parker's ceaseless industry and good management this literary venture was successful from the beginning, but, unfortunately Parker lost all his money by the failure of a Kansas City Bank, just at the critical moment when he moved to St. Louis, in 1892. Instead of being discouraged by this disaster he seemed to regard it merely as an incentive to greater efforts. Henceforth, although his health was never very good, he worked literally day and night to advance the interests of the journal, and, as his friends afterwards discovered, denied himself, for many months, even the ordinary necessaries of life that the *Annals* might be regularly issued and present a creditable appearance. This necessity for the practice of a close economy forced Parker to forego the pleasure and profit of attending medical meetings and prevented him from cultivating the acquaintance of many brother ophthalmologists, although well-known to these through the interchange of letters. "These deprivations and the lack of proper rest and recreation doubtless contributed to the fatal termination of an attack of pneumonia, which he acquired in December of last year. In spite of all warnings he persisted in his labors until the last; indeed, his attendants believe that the January number of the Annals was gotten out at the expense of his life" American Encyclopedia of Ophthalmology 12,p.9367

Parker, Peter (1804-1888) American medical missionary and diplomat, born in Framingham, Massachusetts. Parker studied theology and medicine at Yale University, receiving his M.D. in 1834. In the same year he was ordained to the Presbyterian ministry and embarked for Canton as the first Protestant medical missionary to China. In 1835 he opened a hospital in Canton, which he directed until his return to the United States in 1857. As a physician, Parker specialized in the treatment of eye diseases, particularly cataract. From the mid-1840s he was increasingly involved in diplomatic activities, pursuing an aggressive colonial policy on behalf of the United States. He spent his last thirty years in Washington, D.C. He edited with Daniel J. Macgowan, *Eighth quarterly report of the Ophthalmic Hospital at Canton*. Canton, China: [s.n.], 1838,1840.

Parks, Marshall M. (1918-) American ophthalmologist. When Marshall Parks began his residency at Illinois' Great Lakes Naval Hospital after serving in World War II, he was dismayed at the lack of interest among his colleagues in treating children. Ophthalmology was primarily a geriatric specialty until Parks almost single-handedly created the subspecialty field of pediatric ophthalmology. He is world-renowned for his contributions to understanding and treating typical childhood disorders in which the eyes do not work together (amblyopia) or turn inward or outward (strabismus). He helped to build up the reputation of Children's National Medical Center in Washington, D.C., where he then trained many of the world's pediatric ophthalmologists. He currently practices in Washington, D.C. and in Dallas, Texas.

Parrish, Richard K., (1915-1988) American ophthalmologist. He went to the Indiana University School of Medicine, receiving his M.D. in 1941; his residency was in Indiana University School of Medicine, Indianapolis, 1956; he was certified by the American Board of Ophthalmology. Parrish authored the American Academy of Ophthalmology's manual *An Introduction to Visual Optics*, 1967 and 1972.

Parry, John Rupert (1898-1966) British ophthalmologist, native of Talgarth, Breconshire, he was educated at Christ College, Brecon, and at University College, London and Cardiff. Parry qualified in 1921 and took the M.B., B.S. (London) the next

year and F.R.C.S. (Edinburgh) in 1931 After various resident hospital posts, he was appointed Honorary Ophthalmic Surgeon to Cardiff Royal Infirmary in 1933 and eventually Consultant in Ophthalmology to the United Cardiff Hospitals and the Welsh Regional Hospital Board until his retirement in 1961.Brit.J.Ophthal.1967,51:432

Parsons, Sir John Herbert (1868-1957) British ophthalmologist. Parson´s death in his 90th year, marked the end of an epoch in the history of British ophthalmology. One of the band of great clinical leaders who retained for ophthalmology in Britain at the end of the 19th and the beginning of the 20th century the proud position in the world it had inherited fifty years previously from Sir Williarn→Bowman, →Nettleship, →Doyne, →Gunn, →Collins, →Fisher, →Lawford, →Paton, and others-he outstripped them all in intellectual brilliance and force of character. Moreover, unlike them, he grasped the significance of the changes which at that time were apparent in the advance of medicine. Alone among them he realized that advances in ophthalmology did not lie solely in the clinic or in the pathological laboratory, that a new age was emerging wherein clinical pictures were to be interpreted in terms of physiology, physics, and chemistry; and he had the energy and ability to follow out his convictions. Greater as an original scientific thinker and philosopher than as a clinician, he dominated British ophthalmology in the lean and difficult years between the wars, striving to cherish and maintain the spirit of research and succeeding by his personal example, his forceful personality and his transparent integrity. After the war his purpose was achieved when he formally opened the Institute of Ophthalmology in London. Parsons was born in Bristol. His education was commenced at the University College, Bristol, aided by his winning successively the Gilchrist, John Stewart, and Sharpey Scholarships and the first entrance scholarship to the Bristol Royal Infirmary; it was completed at St. Bartholomew's Hospital, London. In 1890 he took his B.Sc. degree with honours in physiology, and in 1892 he qualified in medicine. Thereafter he became assistant in the Department of Physiology at University College, and for some years engaged in general practice in the London suburb of Finchley. But, through physiology, his interests concentrated progressively on ophthalmology and he became a clinical assistant at Moorfields Eye Hospital. In 1900 he took his M.B. London and the F.R.C.S. England, and, aided by a British Medical Association Research scholarship, gave up general practice and threw himself into the whole-time pursuit of ophthalmology in its widest aspects with a determination of purpose and brilliance in achievement rarely equalled. Successively clinical assistant, curator and librarian at Moorfields, he was elected to the surgical staff of that hospital in 1904; he became ophthalmic surgeon to University College Hospital and for a time was ophthalmic surgeon to The Hospital for Sick Children, Great Ormond Street. To him clinical ophthalmology was insufficient; he must correlate it with all the workings of the visual apparatus-its optics, its physiology, its neurology, and its psychology; he saw the working of the eye in terms of physics and chemistry, of vision in terms of biology. Physiology and optics were his first loves, particularly the control of the intra-ocular pressure; there followed fundamental researches on neurology, particularly the innervation of the pupil; in ophthalmic pathology he became a world authority; and in his later years, through the avenue of colour vision, he devoted most of his energies to the perceptual and psychological aspects of vision and sensory perception in their widest sense. Out of these activities a vast stream of papers flowed from his pen. Parsons made some 140 contributions to the *Transactions of the Ophthalmological Society of the United Kingdom* alone. In addition there were several books. The first four were relatively small: *Elementary Ophthalmic Optics* (1901), *The Ocular Circulation* (1903), and two translations from German works: Boldt's *Trachoma* (1904) and von Hanke's *Treatment of Diseases of the Eye* (1905). His most popular work was his *Diseases of the Eye*, an excellent, comprehensive and uniquely compact manual for students and practitioners which first appeared in 1907 and continually demanded new editions. But his first classical work was his monumental treatise, *The Pathology of the Eye*, which appeared in four volumes (1904-1908). As curator at Moorfields he had grounded himself well in pathology, and in this great work ophthalmic pathology was for the first time integrated into a self-contained discipline. The book, for its time, was superb, and through it Parsons established himself in a unique position and became recognized as a world authority. His second classical work appeared in 1915: *An Introduction to the Study of Colour Vision*. Herein he served a great scientific need by presenting in a factual way a vast and difficult subject which hitherto had been obscured,

by numberless nebulous theories, through the thickets of which he hacked with uncompromising criticism. His later interest in psychology was ushered in by a small book, *Mind and the Nation; a Study in Applied Psychology* (1918). This was followed by the greatest book he ever wrote: *An Introduction to the Theory of Perception* (1927), wherein were expounded his views on the evolutionary development of the neurology and psychology of perception as applied to all the senses throughout the animal kingdom. It was an immense contribution to science in a field of knowledge muddled by psychological concepts and so wide that its integration could be attempted only by one of outstanding learning and critical capacity. This was followed in his later years by a small monograph *The Springs of Conduct* (1950) in which were summarized his neuro-psychological theories with their firm biological basis. In 1904 he received the Middlemore Prize; and again in 1914. In 1907 he received the Nettleship Gold Medal for his pathological researches. In 1919 he received the Doyne Medal at Oxford; in 1925 he delivered the Bowman Lecture on the "*Foundation of Vision*"; in 1929 he was invited to assist in the opening of the Wilmer Institute of the Johns Hopkins University; in 1936, going to America again as the guest of the American Academy of Ophthalmology and Otolaryngology, he was presented with the Lucien Howe Medal of the American Ophthalmological Society. Re received the honorary degree of D.Sc. from Bristol University, that of LL.D. from Edinburgh; and his scientific achievements were crowned by his election as a Fellow of the Royal Society in 1921. Parsons joined the Ophthalmological Society of the United Kingdom in 1900 and remained one of its greatest supporters until age and deafness precluded his active participation in its work; in 1925 he was its president. Successively secretary and vice-president of the Section of Ophthalmology of the B.M.A., he was president in 1923, and again in its centenary year, 1932. He performed the responsible task of being chairman of the Editorial Committee of the British Journal of Ophthalmology for 22 years, from its foundation in 1917 to 1948. He was the only ophthalmologist to become president of the Royal Society of Medicine (1936-38). He was one of the founder members of the British Council of Ophthalmologists, remained as its moving spirit; and was largely responsible for its dissolution and the creation in its place of the Faculty of Ophthalmologists. Moreover, in the field of international ophthalmology, he played a prominent part and was one of the small band of men who succeeded at Scheveningen, in 1927, in re-establishing the continuity of International Congresses of Ophthalmology which had lapsed since the outbreak of the first World War. In addition he was constantly and intensely active in numerous committees of national importance. He was a member of the *Glass-workers' Cataract Committee* set up by the Royal Society (1906), of the *Departmental Committee on Sight Tests* set up by the Board of Trade (1910), of the *Home Office Committee on Factory Lighting* (1913), of the *Committee on Eyestrain in Cinemas* of the Illuminating Engineering Society (1919), of *the Committee on the Causes and Prevention of Blindness* set up by the Ministry of Health (1920), and on the B.M.A. *Special Committees on Tests for Motor Drivers* (1929-1931) and on *Miners' Nystagmus* (1935-6; 1938-40). In the first World War, with the rank of Colonel, he was appointed Ophthalmic Consultant to the home forces. In 1919 he joined the Advisory Medical Council of the Air Ministry; in 1922 of the Admiralty. Just before the second World War he became civil consultant to the Royal Air Force, and shortly thereafter joined the *Flying Personnel Committee* which concerned itself with all matters affecting the safety and efficiency of the R.A.F. For these public works as well as for his scientific eminence he was created C.B.E. in 1919 and knighted in 1922. Of the greatest importance to ophthalmology, however, was his participation in the work of the Medical Research Council on which he served from 1928 to 1932. A close friend of its first Secretary, Sir Walter Fletcher, and for long the chairman of its Committee on Vision, he bent all his powerful influence to stress the scientific and national importance of research in visual problems; and he succeeded. It was due to his efforts and his encouragement that a nucleus of research was kept alive in Britain in the years between the wars, for it was he who was responsible for the provision of opportunities and funds for original work for such men and women as :"Lythgoe, Craig, Katharine Tansley, Ida→Mann, Dorothy Campbell, and →Duke-Elder, when these would otherwise have been completely lacking. BJO 1957,41:705 (by Duke-Elder)

Pascheff, Constantin Miklaikov (1873-1961) , Bulgarian ophthalmologist. Pascheff was born in Sliven, Bulgaria.He first studied medicine in Constantinople, than in France where

he received his M.D. in 1899 at Lyons and, after ophthalmologic studies in Paris (under Panas, Kalt,Landolt and Galezowski), Berlin (1903), London (1905) and Vienna (1906), joined the staff of the Alexander Hospital in Sofia, where he taught with the rank of professor from 1919. His research and writings focused on the pathology of the conjunctiva, cornea, and retina; sympathetic ophthalmia and the bacteriology of the eye. He wrote: *Étude sur le renversement temporaire de la cornée* Lyon 1899 ; *Hygiene des Auges*, Sofia 1905 ; *Lésions de l´Appareil Visuel pendant les Guerres Balkaniques*, Sofia 1924, *Ophtalmologie Générale* Sofia 1925, *Spezielle Ophthalmologie* Sofia 1929, *Die Blindheit* Sofia 1931. Albert. JPW

Passavant, Gustav (1815-1893) German surgeon, of moderate ophthalmologic importance. Born at Frankfort-on-the Main, he studied at Berlin and Vienna, at the latter institution receiving his degree in 1840. From 1843 until his death he practised in his native city, being widely known as a surgeon. He was made Privy Sanitary Councillor shortly before his death. His only ophthalmologic writing was "*Methode der Korelyse*" *(Arch. f. 0.,XV, i,*259-264,1869).American Encyclopedia of Ophthalmology 12,p.9369

Paton, Leslie Johnston (1872-1943) Scottish ophthalmologist. Two discoveries might have been placed to his credit had he written about them earlier. The first was the Foster Kennedy syndrome of optic atrophy in one eye combined with papilloedema in the other, which he mentioned to Sir William→Gowers, who described it in a lecture. Paton's priority in this matter has been generously acknowledged in America, but was not so well known in Britain. The second was the organism responsible for angular conjunctivitis, which was isolated by him before the publication of the results of Victor→Morax and Theodor→Axenfeld. But his literary output, if restricted, was of a very high standard and three papers of his are of outstanding importance. His work on the pathology of papilloedema in association with Gordon Holmes, has been accepted as final everywhere. Some years ago he published in the BJO a masterly review of optic atrophy in tabes, and his paper on the demyelinating diseases accompanied by optic neuritis, which he delivered at Glasgow on the award of the William Mackenzie medal, was another noteworthy performance. It was peculiarly appropriate that he should have received the medal at Glasgow, for from thence he had his early schooling, and it was from Glasgow that his wife came. She was indeed his loyal helper, who in his early days supplied the encouragement and optimism without which no man, however great, can succeed, and in his later days saw to it that he was not overworked. It was also her hand which was responsible for drawing many lucid diagrams which illustrated his lectures and papers. Leslie Johnston Paton was born in Edinburgh. After leaving Glasgow he went to Cambridge as a scholar of Caius College and he had a distinguished academic career. He then returned to Glasgow, started training in Medicine there and completed his medical education at St. Mary's Hospital, where he served as house surgeon and Demonstrator of Anatomy before being chosen assistant ophthalmic Surgeon to the Hospital in 1902. His Senior colleague was Henry Juler. In due course he succeeded to the senior post and on retirement became consulting Ophthalmic Surgeon and later Vice president of the Hospital. Paton worked with Marcus→Gunn for many years, both at Moorfields and at the National Hospital, Queen Square. In 1907 he became Assistant Ophthalmic Surgeon at Queen Square, and it was here that he laid the foundation of his international reputation in the field of ophthalmic neurology. He became president of the Ophthalmological Society of the United Kingdom in 1929, and President of the Section of Neurology of the Royal Society of Medicine in 1930. He also served as Treasurer of the English Speaking Ophthalmological Congress held in London after the last War, and had been Chairman of the Council of British Ophthalmologists and Treasurer of the International Ophthalmological Council. Paton was an honorary member of many foreign Ophthalmological Societies, and an honorary fellow of the American Medical Association. BJO 27,332-334, 1943

Paton, Richard Townley (1901-1984) American pioneer ophthalmologist, born in Baltimore. Graduated from Princeton University 1925. He then had two years of medical education at Cambridge University, England and completed his medical studies, internship- and residency in the Johns Hopkins University School of Medicine. He was the chief resident of Professor Holland→Wilmer, for whom the Wilmer Institute was named. He moved to New York in 1932 after completion of his ophthalmologic training.

He pioneered corneal transplantation and in 1944 founded the world's first eye bank: the Eye Bank for Sight Restoration. The Eye Bank, initially controversial, led to international acclaim and many awards. He was cited by the government of Iran with special gratitude from the Shah and received many honorary lectureships and a vice-presidency of the American Academy of Ophthalmology. Paton wrote and edited several books on corneal surgery and published many scientific papers. Amongst other books: *Keratoplasty* New York 1955; with Katzin & Stilwell *Atlas of Eye Surgery* New York 1957. He was a founder of the Eye Bank Association of America, Surgeon-in-Chief of the Manhattan Eye and Ear Hospital. Many of Paton´s first transplants were donations from consenting prisoners executed at Sing-Sing during the 1930s and 1940s. AJO 1984,97:807

Pattison, Geoffrey Norman (1913-1970) British ophthalmologist, formerly Consultant Ophthalmic Surgeon to the Gloucester Royal Eye Hospital. He was born in County Durham, and like his brother, the distinguished Newcastle neurosurgeon, A. R. D. Pattison, he was educated at Durham School and at Durham University Medical School from which he graduated M.B., B.S., in 1938. After qualification and house appointments Geoffrey Pattison travelled extensively as ship's surgeon and on the outbreak of war joined the R.A.M.C. He saw active service in Crete but spent most of his four years in the M.E.F. as an ophthalmic specialist in hospitals in the Canal Zone and Palestine. On his return to England in 1946 he obtained the Oxford D.O. and the D.O.M.S. and a registrar appointment at the Birmingham and Midland Eye Hospital. In 1947 he became consultant ophthalmic surgeon to the Gloucester Royal Hospital and held this post for 15 years. In 1962 Pattison contracted poliomyelitis, and for many months lay in an iron lung. Gradually the truth became apparent; he had permanently lost the use of both arms and hands, and the respiratory muscles were so badly affected that he was to be completely dependent on a respirator during his sleeping hours for the remaining eight years of his life. Throughout his illness, however, he was motivated by two desires, the first how to provide for his wife and young family, and the second how best to continue his medical work. Gifted with a great command of spoken and written English he conceived the idea of running weekend refresher courses for opticians, and for two years he ran a series of highly successful and well-attended seminars. Throughout this period he lectured, and wrote abstracts and reviews, articles for the disabled, and a handbook for casualty surgeons. He published a description of a new technique for cataract section; knowing that he would never again use it himself. But teaching was not enough. The realization that the conquest of his own disability had given him insight into the anxieties and frustrations of others led to a study of psychology, and this interest became another driving force in his life. After three years study in 1968 he obtained the D.P.M. and began to treat patients again. But his disabilities increased; hypertension and a severe coronary attack restricted his powers, but never his spirit. He worked unceasingly to the last days of his life which were spent formulating new methods in vocational guidance. BJO 1970,54:832

Paufique, Louis (1899-1981) French ophthalmologist, an uncontested master of ophthalmology in France. Born in Lyon, he spent his whole life in this city that he loved and that he served in various ways. He chose ophthalmology from the beginning of his medical career and he was the first in France to set up a department of eye surgery in a hospital. Those who knew the Antiquaille Hospital during that early period may recall its poverty, but above all they recall the presence of Louis Paufique who attracted a huge number of patients from all parts of France and from foreign countries. There was an ever increasing number of assistants who gave him intelligent and devoted help.It is impossible to summarize the work he did and the work he inspired in ophthalmology, but the techniques of lamellar keratoplasty, scleral resection, indentation, and vitreous graft won him an international reputation. In 1956, he was appointed head of the Lyon University Clinic of Ophthalmology. His friendship with Prime Minister Pinay facilitated the realization of what was to become the finest French clinic of ophthalmology. His former assistants at the Antiquaille Hospital, who had become professors, continued to work with him or headed university departments of ophthalmology in various cities in eastern France. His retirement in 1969 did not mark the end of Professor Paufique's activity. Appointed chairman of the Board of Directors of the Lyon Hospices Civils, he managed this considerable health center until his death. He received the highest distinctions: he was awarded the Grand Croix de I'Ordre du Mérite and was named a Commandeur de la

Legion d'Honneur, a member of the Académie de Médecine, a member of the Académie Internationale Ophtalmologie, and an honorary member of the Instituto Barraquer. He delivered the Bowman lecture. AJO 1982,93:130-131

Pauli, Friedrich (1804-1868) German surgeon, born at Landau in der Pfalz (Palatine), Germany. Pauli received his M.D. at Göttingen in 1824 with the prize winning thesis *Comment. physiol.-chir. De vulneribus sanandis* and, after further surgical and ophthalmologic training in Berlin, Munich, Prague, Vienna and Paris, settled (1828) in his native town, where he practiced for his whole life with great distinction as a physician, plastic surgeon and cataract surgeon. He was one of the first to make strabismus operations on the living eye and coined the expressions phacomalacie, phacosclerom, staphylaematom. He was a prolific writer publishing about 15 monographies on various subjects and contributing a great quantity of papers, mostly of surgical character, to German periodicals. In ophthalmology he wrote: *Ueber den grauen Staar und die Verkrümmungen, und eine neue Heilart dieser Krankheiten*. Stuttgart 1838 and *Mémoire sur la nature de l´ophtalmie d´Egypte*, Würzburg1858 (which is, in book form, his contribution to the Brussels, first International Congress of Ophthalmology in 1856); *Untersuchungen und Erfahrungen auf dem Gebiete der Chirurgie*. (Leipsic, 1844) American Encyclopedia of Ophthalmology 12,p.9398.

Pavan-Langston, Deborah (1940-) American ophthalmologist and research scientist born in Boston, Massachusetts she received her A.B. from Harvard University (Radcliffe College) in 1961,and M.D. from Cornell University in 1965, trained in Internal Medicine at Columbia Presbyterian Hospital in New York City, and then returned in 1966 to Harvard Medical School and the Massachusetts Eye and Ear Infirmary as the first woman resident in Ophthalmology. After a five year combined research (working in virology with Nobel laureates JD Watson and John Enders) and clinical residency, she became a Cornea Fellow in service with Claes H. Dohlman at the Infirmary, and established the Virology Research Laboratory at the Schepens Eye Research Institute (then, Retina Foundation). Staying on as the Director of Cornea at the Infirmary and Associate Scientist at the Institute, Pavan-Langston combined basic virologic research with clinical studies over a 28-year period. Her work within academic ophthalmology has had a major focus on ocular viral infections with particular emphasis on herpetic disease, the most common cause of infectious corneal blindness in the industrialized world. In 1978 she resigned as Director of Cornea to spend more time in basic research and clinical studies. Her patient group served as the source of clinical material for therapeutic outcome trials on all major ocular topical antivirals (vidarabine) (*Vidarabine therapy of simple and IDU-complicated herpetic keratitis*. Trans Am Acad Ophthalmol Otolaryngol 1976; 81:813-825), trifluridine, (*Trifluorothymidine and idoxuridine therapy of ocular herpes*). Am J Ophthalmol 1977; 84:818-825, acyclovir (*Acyclovir and vidarabine in therapy of ulcerative herpes simplex keratitis - A masked clinical trial*). Am J Ophthalmol 1981; 92:829-835, long-term use of oral antivirals (acyclovir) (*Long-term oral acyclovir: Effect on recurrent infectious herpes simplex keratitis in grafted and non-grafted patients*), Ophthalmology, 103:1399-1405, 1996, and (famciclovir) to prevent herpes in recurrence-prone patients, as well as studies on herpetic panuveitis, dendritic conjunctivitis, efficacy of the first major beta-blocker, timolol , in glaucoma [*A double-masked clinical trial comparing timolol ophthalmic solution to pilocarpine in therapy of open angle glaucoma*. Am J Ophthalmol 1978; 86:9-18.]. Combined laboratory and clinical studies include work on ELISA and PCR diagnostic tests in herpetic or zoster keratitis or uveitis, varicella/zoster dendritic keratitis (*Delayed Herpes zoster pseudodendrites: polymerase chain reaction detection of viral DNA and a role for antiviral therapy*), Arch Ophthalmol, 113: 1381-1385, 1995; intraocular penetration of major antiviral agents, and herpetic corneal latency in humans (Herpetic keratitis: *Persistence of viral particles despite topical and systemic antiviral therapy*), Arch Ophthalmol. 111: 522-527, 1994; Extraneuronal herpetic latency: *animal and human corneal studies*. Acta Ophthalmol 1989; 67 (suppl. 192), 135-141; *Detection of HSV thymidine kinase and latency-associated transcript gene expression in human herpetic corneas by polymerase chain reaction amplification*. Invest Ophthalmol Vis Sci. l991; 32:1808-1818. Many of her laboratory studies complemented or preceded and lead to the clinical studies. These included antiviral therapeutic efficacy and toxicity, corneal wound healing, new animal

models of disease, molecular virology of trigeminal and corneal viral latency, and new drug delivery systems (*Intraocular penetration of Ara-A and IDU-therapeutic implications in clinical herpetic uveitis*). Trans Am Acad Ophthalmol Otolaryngol 1973; 77:OP455-466; *Corneal wound healing and antimetabolite therapy*. Arch Ophthalmol 1977; 95:2062-2067. She was appointed Senior Scientist at the Institute in 1981, Surgeon and Director of Clinical Virology at the Infirmary in 1985 and Associate Professor of Ophthalmology at Harvard in 1986. Pavan-Langston became a Fellow of the American College of Surgeons (1976), and has received the William Friedkin Award (1975), the Award of Merit, the Honor Award, and the Senior Honor Award of the American Academy of Ophthalmology (1979, 1985, 1996), membership of the American Ophthalmological Society, the William Shannon Award of the National Eye Institute, Bethesda (1991), and the Distinguished Service Award of the Infirmary (1999). In 1996 Pavan-Langston was the first woman to receive the Castroviejo Medal (Lecture: *Ocular Herpes Simplex*). She has served or serves nationally as Chairperson of the FDA Ophthalmic Drugs Committee, the FDA Orphan Drugs Committee, Chairperson of the Microbiology Section of ARVO, the Advisory Board of the Society of Contemporary Ophthalmology, the NIH Ophthalmic Scientific Advisory Task Force for Program Planning Committees, the NIAID Collaborative Antiviral Study and Therapy Groups, the Committee on Drugs and the Committee on Education Modules of the American Academy of Ophthalmology, the Scientific Advisory Board of the Varicella/Zoster Research Foundation, and the Committee on Appointments of the American College of Surgeons. Pavan-Langston has also served on a number of editorial boards including the "*American Journal of Ophthalmology*," the "*Journal of Antiviral Research*", and is Ophthalmic Editor-in-Chief of "*Current Concepts*," an AMA continuing medical education publication. She is a reviewer for numerous medical publications including all major ophthalmic journals and the New England Journal of Medicine. Her bibliography lists some 203 publications plus 5 books [*Handbook of Ocular Drug Therapy and Ocular Side Effects of Systemic Drugs*. Little Brown and Co., Boston, l991 (464 pp)]. *The Manual of Ocular Diagnosis and Therapy*, (4th ed., Lippencott Co., Boston, 1996 (488 pp), is distributed in multiple languages throughout North and South America, Europe, and Asia. Currently, she pursues her work on a full-time basis at Harvard Medical School and the Infirmary as research clinician, teacher, and author. (Harvard Medical School, Mass. Eye & Ear Infirmary , 243 Charles St. Boston,MA 02114. USA; phone: 1- 617-573-4041, fax: 1-617-573-4369, e-mail: dpl@vision.eri.harvard.edu)(SM)

Payne, Brittain Ford (1899-1976) American ophthalmologist. Payne was born in Madisonville, Texas, and attended Rice Institute and the University of Texas Medical School. He completed his residency in ophthalmology at the New York Eye and Ear Infirmary in 1931. He subsequently served as Director of the Eno Laboratory and Executive Surgeon Director in Ophthalmology at the Infirmary and Chief of Ophthalmology at Lenox Hill Hospital, New York City. During World War II, he served as an ophthalmologist in the Pacific Theater of Operations. He was influential in establishing civilian ophthalmology in the Philippine Islands after arriving there in 1944. After World War II he served as a civilian consultant in ophthalmology to the United States Air Force. Payne served as chairman of the American Board of Ophthalmology, was a founding member and president of the Pan American Association of Ophthalmology, and an active member in other ophthalmic societies. AJO 1977,83:280

Payne, Charles Emery (1882-1918) American oculist and aurist of Brooklyn, N. Y. Born in Camden, Me., he received the medical degree in 1903 at the New York Homeopathic Medical College. For fourteen years he practised in Brooklyn. He was consulting laryngologist and rhinologist to the Jamaica and Cumberland St. Hospitals, attending physician to the Home for Consumptives, a member of the Advisory Board to the Peck Memorial Hospital, and laryngologist, rhinologist. and assistant oculist and aurist to the Brooklyn Nursery and Infants Hospital.AJO 1919,2:166

Pearlman, Jerome T. (1933-1979) American ophthalmologist. Pearlman was internationally known for his research on retinitis pigmentosa, his clinical studies on retinal physiology, and his laboratory investigations of retinal degenerations. Born in Chicago he received the Bachelor of Science degree from Dartmouth College and obtained the M.D. degree from Northwestern University in 1957. Thereafter, four years of

postdoctoral training in pathology and ophthalmology preceded residency training in ophthalmology at the University of Iowa from 1961 to 1964. During ophthalmology residency training and for two subsequent years of postdoctoral fellowship at the University of Iowa, Pearlman worked under the tutelage of Hermann M. Burian. While engaged in this postresidency training, he received the degree of Master of Science in Ophthalmology. In 1966 and 1967 he completed an additional year of postdoctoral fellowship under the supervision of Frederick Crescitelli at the University of California, Los Angeles. From this fellowship, collaboration with Dr. Crescitelli extended throughout the remainder off Pearlman's life. In 1967, he joined the ophthalmology faculty of UCLA and, at the time of his death, he held the appointment of professor of ophthalmology and member of the Jules Stein Eye Institute. As a scholar and investigator, he wrote almost 100 articles on retinitis pigmentosa, retinal electrophysiology , laboratory studies of retinal degenerations, psychosomatic ophthalmology, and the history of ophthalmology, with extraordinary courage and scientific acumen, he pursued his research throughout his illness and, during the final week of his life, completed a major treatise on *retinitis pigmentosa*. Honors and distinctions were extended to Pearlman throughout his academic career. He was president of the Los Angeles Society of Ophthalmology, vice-president and editor of the International Society for Clinical Electroretinography, recipient of the American Academy of Ophthalmology Honor Award, and an elected member of the Retina Society. In 1978, he was singularly honored by the Southern California Chapter of the Retinitis Pigmentosa Foundation.AJO 1979,87:847-848

Péchin, Alphonse (1851-1915). French ophthalmologist, president of the General Syndicate of French Oculists. The Ophthalmoscope,1915,p.588.

Peck, Edward Sprague (1847-1915) American, New York ophthalmologist and oto-laryngologist. He received the degree of Bachelor of Arts at the University of Vermont in 1864, and the medical degree at the same institution in 1868. Having practised both in Vermont and in New York City for a number of years, he went abroad and studied ophthalmology at Berlin, Erlangen, Zürich, Vienna and London. Having served for a time in the Turco-Serbian war, Peck returned to the U.S. in 1878. Settling in New York as ophthalmologist and oto-laryngologist, be became professor of diseases of the eye at the University of Vermont, but continued to reside in New York City. He was a member of a number of medical societies, and held, at various times, a number of hospital appointments. American Encyclopedia of Ophthalmology 12,p. 9399 The Ophthalmoscope, 1916,p.111-112

Peckham, John, Archbishop of Canterbury (1230(?)-1292) British Franciscan and scientist. Peckham was educated at Oxford and in Paris. He entered the Franciscan order about 1250, taught theology in England and on the Continent, and was elected Archbishop of Canterbury in 1279; his tenure was marked by a vigorous program of reform. A poet and the author of numerous scientific and theological treatises, Peckham is best remembered for his works on optics, particularly the *Perspectiva communis*, in which he summarizes and attempts to reconcile the optical theories of his predecessors: Aristotle, Euclid, Augustine, al-Kindi, Ibn al-Haytham (Alhazen), Ibn Rushd, Grosseteste, and Bacon: *Perspectiva communis*. ca.1482 (it contains one the first *printed* diagrams of the eye).

Pellier de Quengsy, Guillaume (1750/51-1835) A famous French, Montpellensian ophthalmologist, renowned for having invented a number of modifications in the cataract operation, and for having produced the first extensive work devoted to ocular surgery exclusively. He also plays an important role in the history of corneal transplantation. He was born in 1750 or '51, the son of a surgeon and ophthalmologist of some repute, who was, in fact, a Master of Surgery as well as the city ophthalmologist at Bar-le-Duc and Metz. The subject of this sketch had an elder brother who was an ophthalmologist for years at Nancy, France. He then practised both in England and in Scotland where he rose so high in favor that he received the freedom of the city of Aberdeen. The younger brother the more immediate subject of our attention and by far the greatest personage of the three, received his medical degree, presumably in France but no one knows exactly where. He studied ophthalmology with his father, restricted all his practice to the one specialty (a somewhat rare proceeding, or exclusion, in those days) and, by 1772, was becoming well known in his branch. There was always a little of the charlatan in Pellier de Quengsy, a

fact to be accounted for, in part at least, by the low ideals of the time. Thus, be was, throughout the earlier portion of his career, decidedly itinerant. According to Truc and Pansier: "If we follow him in his peregrinations as a nomad oculist, we find him at Auxerre in July, 1772, at Langres in April and May, 1773, at Avalon in July, at Thonon de Savoie in October. In January, 1774, he is at Verdun, in February at Varemies and Sainte-Ménéhold; on the 20th of May, he operates at Angoulême. From there he goes to Valenciennes. In June he is at Brussels; in July at Noyon; in August at Beauvais; in September at Chartres ; in November at Evreux, finally at Toulouse, where he established himself for a time, pensioned by the city. In February, 1775, he makes a tour to Rheims, and finds himself at Poitiers in April. He returned to Toulouse, whence he makes frequent excursions to Agen and Bordeaux." In 1776, however, he seems to have tired of his Bedouin life and to have made himself a permanent home at Montpellier. In 1799, he was one of the founders of the Society of Practical Medicine at Montpellier. In 1810 and again in 1822, his name appears as that of an ophthalmologist on the membership roll of the same institution. He was also for a time the president of this society. In 1779 he became brevetted oculist to the city. However, in spite of his fixed abode for many years at Montpellier, he made a large number of professional journeys at this very epoch of his life to Marseilles, Mînes, Toulouse, Dijon, Besancon, Varennes, and even to Colmar and Strasbourg. Besides his wandering tendency, he was not averse to the use of the public prints for the purpose of increasing his reputation with the laity; but it must be said in this connection that never does he seem to have told an untruth in any of his advertisements, in fact his use of printer's ink was chiefly for the purpose of exposing lies which he had found in the advertisements of other ophthalmologists. At the time of the Revolution he dropped the words, “de Quengsy”, from his name, and became a simple citizen as “Guillaume Pellier” Pellier's most important writings are as follows: 1. *Recueil des Mémoires et d'Observations tant sur les Maladies qui Attaquent l´Oeil et les Parties qui I'environment*," etc. (Monpellier, 1783.) 2. *Précis ou Cours d'Opérations sur les Yeux Puisé dans le Sein de la Pratique et Enrichi de Figures en Taille-douce qui Representent les Instruments qui leurs Sont Propres, avec des Observations*,," etc. (2 vols.; Paris and Montpellier; 1789 and 1790. The *first* extensive work to be devoted to the surgery of the eye exclusively.) 3. *Observations sur I'Utilité de l´Arteriotomie dans I'Amaurosis, on Goutte Serene Provenant d'un Engorgement Sauguin*. (Journ. de Médecine de Montpellier, 1803.) 4. *Mémoire sur la Conversation de la Vue*. (Histoire et Mém. de la Soc.de Méd. Prat. de Montpellier, 1806,) 5. *Sur I'Utilité du Séton Appliqué à l'Oeil Affecté de Maladies Graves*. *(Jour.de Méd.de Montp,ellier, XXII,* 1813.) American Encyclopedia of Ophthalmology 12,p.9403-9405

Pemberton, Henry (1694-1771) British, London ophthalmologist, to whom ophthalmology owes the words "accommodate" and "accommodation." Born at London in 1694, he received his professional degree at Leyden (Netherands) in 1719, and practised for a time at Paris. Soon, however, because of ill health, he resigned his medical practice, and became a student of mathematics. His writings are as follows: 1. *Dissertatio Physico-Medica Inauguralis de Faculate Oculi qua ad Diversas Rerum Conspectarum Distantias se Accomodat pro Gradu Doctoratus Eruditorum Examini Submittet Henricus Pemberton Anglo-Britannicus*, ad diem 21. 1719, Lugduni Batavorum. 2. Translation and Improvement of the *London Dispensatory* (London, 1746.) 3. *A course of Lectures on Physiology*. (London, 1773.) 3. *A View of Sir Isaac Newton´s philosophy* London 1728 American Encyclopedia of Ophthalmology 12,p.9405-9406.JPW

Pentammon. The second best oculist of Egypt in the 6th century B.C. His one superior was →Nebenchari. There is an interesting story about these two men which has been preserved by Herodotus. Cambyses, son of Cyrus, king of Persia, finding that his mother, Kassandane, was blind, sent to Amasis, king of Egypt, beseeching him to dispatch to her aid the greatest of Egyptian oculists, whoever that might be. Amasis sent to her Nebenchari. This oculist, on arriving in Persia, found his royal patient afflicted with senile cataract. For some reason, however, he hesitated to perform an operation, until one day, happening to learn that his king, Amasis, had also gone blind from the same affection, and that he had been successfully operated on by Nebenchari's great rival, Pentammon, the timorous Nebenchari took heart, operated (by couching) and restored to Kassandane her sight. American Encyclopedia of Ophthalmology 12,p.9414

Percival, Archibald Stanley (1862-1935) British ophthalmologist, who was educated at Repton (1876-1880) and Trinity College, Cambridge, where he took his B.A. with 1st class honours in the Natural Sciences Tripos in 1884. He proceeded to his M.A. in 1888. In 1884 he entered St. George's Hospital for his clinical work. He qualified M.R.C.S. in 1886, and took the M.B., B.Ch., Cantab., in 1888. Percival's year at St. George's contained a large entry and he was not lucky enough to be elected to house office at his mother hospital. Instead he became house physician to the Hospital for Consumption, Brompton, and later, house surgeon to the Royal Westminster Ophthalmic Hospital. It was doubtless his experience here that led him to take up ophthalmology as his life's work. He settled at Newcastle-upon-Tyne and was elected ophthalmic surgeon to the City Hospital and to the Children's Hospital. In Newcastle he remained until he retired to his native place in 1928. Percival was on the staff of and ultimately became senior surgeon to the Northumberland and Durham Eye Infirmary. During the War he served as ophthalmic surgeon to the Northern War Hospital. Practising, as he did, in a mining centre it was natural that he should have become an authority on miners' nystagmus. He held strong views on the dangers of in-breeding among the population of pit villages as being largely responsible for the condition of miners' nystagmus and was inclined to advocate measures which unfortunately were impracticable, as a cure. From his school days Percival's mind gave evidence of a strong mathematical bent and his chief enjoyment in life was higher mathematics. Most of his ophthalmological writings thus dealt with the optical side of his specialty, and in this respect he held an unrivalled place among clinicians in England. Percival contributed numerous papers to the BJO, on bifocal lenses, decentred lenses, prisms and other optical problems. In 1899 he brought out a manual for students, entitled, "*Optics*." This, though nominally addressed to students, was far above the mental capacity of the average medical student, and was really a higher mathematical treatise. He also wrote a book on "*Geometrical Optics*," and on the *Prescribing of Spectacles* (2nd edition 1912) and *Practical Integration*. BJO 1936,20:123-124

Pergens, Eduard (1862-1917) Belgian ophthalmologist. Pergens was born and died in Maaseik. He obtained the Ph.D. (1883) and the M.D. (1888) degrees at the Leuven University. He studied ophthalmology abroad and as an adjunct of Pierre Désiré →Lebrun at the *Insitut Ophtalmique du Brabant*. He returned to his native town at Lebrun's death. He wrote about 80 ophthalmological papers of which the most interesting are perhaps the *first description of lenticonus posterior* (1897), his contributions to *history of medicine* (1896, 1899, 1910) and his major contribution on *visual acuity* (1904 to 1913). Other contributions include an *operation for ptosis* (1894), *Fukala's operation* (1895), *amblyopia from hematemesis* (1896), *about tinted glasses* (1896, 1897), *monocular diplopia* (1897), *phlebotomy and revulsion in the treatment of ocular diseases* (1898), *the action of X-rays on the retina* (1898), *malignant orbital tumours* (1899), *visual illusions* (1900) and *scleroderma pigmentosum* (1908). Pergens was altogether an internationally known zoologist and paleontologist specialized in the Bryozoa. He wrote 25 paper on this subject, among which descriptions of many new genera and species. His colleagues named after him the new genera Pergensella and Pergensia. His collection of fossiles is now in the Maastricht Museum of natural history. (Verriest) AJO,1:380.

Perkins, Thomas Tounge (? – 1918) American eye, ear, nose and throat specialist of Cliftondale, Mass. Born in Auburn,Me., he later resided in West Durham, Me., and Lynn, Mass. He was a graduate of the Massachusetts Institute of the Boston University, of the Harvard Medical School in 1901. He seems to have settled soon after his graduation in Cliftondale, and to have practised there continuously. In his later years he became an ophthalmologist and otolaryngologist, as well as an expert with the microscope. He was a Universalist, a Royal Arch Mason.AJO 1919,2:166-167.

Perrin, Maurice Constantin (1826-1889) French physician and ophthalmologist. Perrin was born, and died, in Vezelise (Meurthe), France. He received his medical degree in Paris 1851, with the thesis *De l´Huile de Foie de Morue et de ses effets dans la phtisie Pulmonaire*. Already in 1846, Perrin had been admitted into the military health service as surgeons pupil at the medical school of Val-de-Grâce. In 1849 he became “sous aide” (“under assistant”). His zeal and hard work attracted the attention of his chiefs and soon he was named Assistant Major 2nd class, 1854 1st class, 1858 Physician Major 2nd class,

1862 1st class, head physician 2nd class in 1868 and 1st class 1871 to finish Medical Inspector, the highest medical position in the French army. In the meantime he had been, in 1856, professor of medicine at Val-de-Grâce, later professor for medical interventions and lecturer in ophthalmology at he same school. In 1874 , Perrin became assistant-director of the medical school, and a short while later its director. Perrin received the highest French government´s honors, being first *Chevalier* de l´Ordre de la Légion d´Honneur (1856), then *officier* (1871) and finally at his retirement *Commandeur* de l´ordre de la Légion d´Honneur (1886). He was elected Member of the Academie de Medecine in 1873. Perrin invented an artificial eye to practice the use of the ophthalmoscope (1866) and an Optometer (1869, with Mascart) “to recognize and measure anomalies of spheric and cylindric refraction”. He wrote a *Traité pratique d´Ophtalmoscopie et d´Optometrie* (Text volume and Atlas), Paris 1870-1872 ; and (with Poncet contributing the *Anatomie pathologique*) *Atlas des maladies profondes de l'oeil comprenant l'ophthalmoscopie* 1879 (which is a second edition of his “Traité”). JPW

Peter the Spaniard (13th century) A distinguished physician (afterwards Pope John XXI) who was born at Lisbon near the beginning of the 13th century, and who died May 16, 1277, in his palace at Viterbo, Italy, as the result of injuries inflicted by a caving wall. He was a prolific writer , partly scientific and partly superstitious. Thus, he recommends for epilepsy the continuous suspension from the neck of a bit of paper on which are written the names of Saints Caspar, Melchior, and Balthasar (the three wise men from the East). He was, also convinced that diarrhea could be occasioned in any one by packing that person's feces in hollow bones and then laying these in a river. The flow from the bowels would continue, he thought, as long as the bones lay in the stream. Peter's best known work is entitled *Summuloe Logicales*. His medical works are: *Thesaurus Pauperum*, and *Liber de Oculis*. No less a person than Michael Angelo Buonarotti is said to have copied the last named book, three centuries later, for his own personal use (Hirschberg). The so-called *Liber de Oculi*s would seem to be properly designated Breviarium Magistri Petri Hyspani de Egritudinibus Oculorum et Curtis. In addition to a brief introduction, the work consists of four parts. Of these, the first is a mere condensation from Constantinus Africanus; the second, a Tractatus Mirabilis. Aquarum Quem Composuit Petrus Hispanus; the third, a literal copy of the first "Book" of the *Liber Oculorum* of Master Zacharias; while the fourth is merely a collection of prescriptions, for the most part worthless. A first German translation was provided by A-M. Berger: *Die Ophthalmologie (liber de oculo) des Petrus Hispanus (Petrus von Lissabon, später Papst Johannes XXI) ... zum ersten Male herausgegeben, in's Deutsche übersetzt* München 1899.American Encyclopedia of Ophthalmology 12,p.9618. JPW

Peter, Luther C. (1870-1943) American ophthalmologist. He was well known to British ophthalmologists by his disquisitions on perimetry and on squint at the Oxford Congresses of 1920 and 1932, and to those who attended the International Congress of Ophthalmology at Washington in 1922 as its Secretary. Peter's earliest interest was in neurology, from which he gravitated into ophthalmology, in which branch of medicine and surgery he had held professional posts at the University of Pennsylvania. He was President of the American Academy of Ophthalmology and Otolaryngology in 1928. His book on perimetry ***The Principles and Practice of Perimetry*** Philadelphia and New York, 1916, appeared in four editions and that on the extra-ocular muscles: Peter, Luther C. *The Extra-Ocular Muscles: A Clinical Study of Normal and Abnormal Ocular Motility*. Philadelphia 1927, in two editions. BJO 27,281-282,1943

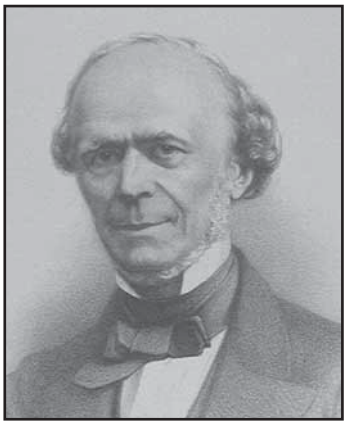
Peters, John Charles (1819-1893) American physician of New York City. Peters studied medicine and especially pathology at Berlin, under Schoenlein, and at Vienna, under Rokitansky and Skoda; he received his M.D. at Vienna in 1844. Settling in his native city, he built a large practice in general medicine, specializing in neurology and gynecology; he was also an authority on cholera, and wrote a number of articles and monographs on this disease. For many years he edited the North American Journal of Homeopathy. On ophthalmic subjects he wrote: *A treatise on diseases of the eyes, including diseases of the eyelids, inflammations of the conjunctiva, sclerotica, and cornea; also, catarrhal, rheumatic, scrofulous, and purulent ophthalmia*. Based on Theodore J. Rückert's "*Clinical Experience in Homeopathy*." New York 1854 and *A treatise on internal diseases of the*

eyes, including diseases of the iris, crystalline lens, choroid retina, and optic nerve. Based on Theodore J. Rückert's "*Clinical Experience in Homeopathy*." New York 1856. American Encyclopedia of Ophthalmology 12,p.9618-9619.Abert

Petit, Etienne-Pourfour du (18th century) Son of the great François-Pourfour du Petit, and himself a physician of some note. He was born at Paris, and there received his professional degree in 1746. The place and date of his death are unknown. He wrote *Remarques Addressées a 1'auteur du Mercure de France sur l´extrait du Mém. de Daviel,* etc. In this remarkable composition he attempted, but without success, to show that cataract extraction was not original with Daviel, but had been already described by the medieval Arabians, Avicenna and Rhades. American Encyclopedia of Ophthalmology 12,p.9619

Petit, François Pourfour du (1664-1741) French surgeon of Paris.Petit received his medical degree at Montpellier in 1690. Petit was from then a military surgeon for some twenty years. From 1713 he lived and practiced in Paris, contributing numerous papers to the transactions of the Académie des Sciences, especially on the anatomy and pathology of the eye and the physiology of vision. He published: *Lettre d´un médecin des hopitaux du Roy…contient un nouveau système du Cerveau etc.*. Namur 1710 (Petit´s theory of contralateral innervation) ; *Sur l´opération de la Cataracte* (Mémoires de l´Académie des Sciences 1724) ; *Lettre de M. Petit, Docteur en Médecine, de l´Académie des Sciences, dans laquelle il démontre que le cristallin est fort près de l'uvée, et rapporte de nouvelles preuves qui concernent l'opération de la cataracte*. Paris 1729 ; *Mémoire sur plusieurs découvertes faites dans les yeux de l´homme* (Mém.Acad.Sciences 1723) ; *Mémoire dans lequel est démontré que les nerf intercostaux fournissent des rameaux qui portent des esprits dans les yeux* (Mém.Acad.Sciences 1727–Discovery of the vasomotor nerves) ; *Différentes manières de connaître la grandeur des chambres de l´humeur acqueuse dans les yeux de l´homme* (Mém.Acad.Sciences 1727–He describes here his ophthalmometer) ; *Mémoire sur le cristallin de l´œil de l´homme, des animaux à quatre pattes* etc. (Mém.Acad.Sciences 1730). American Encyclopedia of Ophthalmology 12,p.9620. Albert.JPW

Petit, Jean Louis (1674-1760) French surgeon of great celebrity, and perhaps the finest operator of his time in France. Born at Paris, he was taught anatomy by the great Littré while still a mere boy in his father's house. In 1692, be became military surgeon, and, in 1697, assistant Major-Surgeon in the Hospital at Tournay. In 1700 he returned to Paris, and, after a brief course of study, received the degree of Master of Surgery. He wrote a number of works, the most important of which are: *The Art of Caring Diseases of Bone*, etc. (Paris, 1705) ; *Treatise on the Diseases of Bone*, (2 vols., 1723) and *Treatise on the Surgical Diseases and the Operations which are Proper for Them* (3 vols., Paris, 1774). The last-named work, his most important writing, appeared posthumously. In 1708 he extracted from the anterior chamber of the eye a dislocated cataract via an incision in the cornea. This operation, however, he was not the first, but the second, to perform. St. Yves had carried out a precisely similar procedure in 1707.American Encyclopedia of Ophthalmology 12,p.9620-9621



Joseph Pierre Eléonor Pétrequin

Pétrequin, Joseph Pierre Eléonor (1809-1876) French, one of the greatest of Lyonese surgeons and ophthalmologists. Born at Villeurbanne, near Lyons, he graduated at Paris in 1835. Two years later he travelled for a time in Italy; in 1839 in Swabia and northwestern France. In 1838 he became assistant major-surgeon at the Hôtel Dieu of Lyons, in 1844 surgeon-major, and in 1855 titular professor of surgery at the Hospital of the Preparatory School of Medicine and Pharmacy. He died June 3, 1876. Among his more important works of a general character should be mentioned: *1. Traité Medico-Chirurgical et Topographique.* (Paris, 1843. Many editions and translations. 45 pp. are devoted to diseases of the eye.) 2. *De l' étude des médecins de I'Antiquité.* (Paris, 1858.) 3. *Etudes méd., Historiques et Critiques sur les Médecins de 1'Antiquité et en Particuliers sur Hippocrate, Galien, Paul d'Egine*, etc. (Paris, 1859.) 4. *Mélanges d'Histoire de Literature et de Critique Médicales sur les Principaux Points de la Science et de 1'Art.* (Paris, 1864.) 5. *Chirurgie d'Hippocrate.* (2 vols., Paris, 1877-1878. One of the most important of all medico-historical compositions.). His ophthalmic writings, appeared entirely as articles in the *Annales d´Oculistique,* from the first to the thirty-eighth volumes inclusive, and

concern almost every important topic. American Encyclopedia of Ophthalmology 12,p.9621.

Petrus Hispanus *see* **Peter the Spaniard**

Peyrot, Jean-Joseph (1843-1917) French ophthalmic surgeon. Peyrot was born in Périgueux, France.He received his M.D. in 1876 in Paris, where he remained, becoming a well-known general and ophthalmic surgeon. He wrote: *De la valeur thérapeutique et opératoire de l'iridectomie*. Paris 1878. JPW

Pfaff, Christoph Heinrich (1773-1852) German internist at Kiel, Germany, of some importance ophthalmologically. Born at Stuttgart, Mar. 2, 1773, he studied at Stuttgart and at Göttingen, returning, however, to Stuttgart to receive his degree in 1795. His dissertation was entitled "*De Electricitate sic Dicta Animal*." In 1801 he was made full professor of medicine, physics and chemistry at Kiel. In 1795 he published at Leipsic, *Ueber thierische Electricität und Reizbarkeit*, in which he announced a number of discoveries in connection with the ophthalmic electrical responses. He also wrote a number of works of a general character. In 1841 he was operated on by →Jaeger in Vienna for " glaucomatous cataract," but (as has so often happened after operations on the eyes of ophthalmologists) with disastrous results. American Encyclopedia of Ophthalmology 12,p.9622-9623

Pfeiffer, Norbert (1958-) German ophthalmologist. Pfeiffer received his medical education in Gießen, Frankfurt, Würzburg, Freiburg, (all Germany) and in Cambridge, Newcastle upon Tyne, UK. He received his M.D. in 1985 and became ophthalmologist 1990 in Freiburg under Mackensen and Grehn. His Academic path was: 1977 Commencement of medical studies at the Justus-Liebig-Universität Gießen. 1979 medical pre-examination, 1979 Change to Albert-Ludwigs-Universität Freiburg, 1980 First part of the Medical examination, 1980-1981 First clinical year at Newcastle Medical School/England. Summer academy: *Brain Structure and Memory*.1982-1983 Full-time basic research at the Dept. of Pharmacology of Freiburg University (Prof. Dr. med. K. Starke). 1984 Second part of the Medical Examination. 1984-1985 Preregistration Year: Surgery at Addenbrooke's Hospital/Cambridge University; Medicine and Ophthalmology at Karlsruhe;1985 Third part of the Medical examination, American Medical Exam (ECFMG); 1985 Registration (Approbation as M.D.).1985 Graduation as "Doktor der Medizin" with summa cum laude (Thesis: *Opioid-receptors in the rabbit-ear artery*.) Scientific career : 1985 Junior doctor at the University Eye-Hospital, Freiburg; 1988 Three weeks study leave to Moorfield's Eye Hospital, London; 1990 Facharzt für Augenheilkunde (fully qualified ophthalmologist) 1990 Oberarzt (Senior doctor) at the Department of Ophthalmology Freiburg University from 1.4.1990; 1990 Change to Johannes Gutenberg-Universität Mainz, Dept. of Ophthalmology as a "Oberarzt"; 1992 Habilitation and venia legendi for Ophthalmology; 1992 Leitender Oberarzt (deputy head of the department);1995 Head of department (interimistic) in Mainz. 1996 Appointment as Professor of Ophthalmology and Head of Department at Mainz University. Scholarships and awards 1978-1985 Scholar of the Studienstiftung des deutschen Volkes; 1980 Scholarship for studies abroad of the Studienstiftung des deutschen Volkes; 1985 Scholarship of the British Council and travel grant of the Dr.- Carl-Duisberg-Stiftung ; 1990 National winner of the "Chibret Award"; 1993 Glaucoma Award of the German Ophthalmological Society; 1993 Film Award of the German Ophthalmological Society; 1994 Award for the best presentation , 67th meeting of the Rhein-Mainische Augenärzte; 1995 "Prix Galien" for pharmacological developments in glaucoma therapy;1997 "Best lecturer-Award" Mainz-University. He coauthored: Illes P, Pfeiffer N (1985) *Regulation of blood pressure by peripheral opioid mechanisms*. in: Bevan, J. A. et al. (eds.): *Vascular Neuroeffector Mechanisms*. Elsevier Science Publishers, 175-180; Starke K, Illes P, Ramme D, Ensinger H, Hedler L, Szabo B, Kügelgen I v, Pfeiffer N, Limberger N (1987) *Peripheral pre-junctional opioid receptors in cardiovascular control*. In: A. Nobin, C. Owman and B. Arneklo-Nobin (Eds.), *Neuronal Messengers in Vascular Function*. Elsevier Science Publishers, 247-269; Pfeiffer N (1995) *Glaukomchirurgie mit Antimetaboliten*. *Atlas der Ophthalmologischen Operationen*. Jaffe N (Hrsg). Georg ThiemeVerlag Stuttgart, New York; Pfeiffer N (1995) *Nahtloser Wundverschluß bei Kataraktchirurgie*. *Atlas der Ophthalmologischen Operationen*. Jaffe N (Hrsg). Georg

ThiemeVerlag Stuttgart, New York; Pfeiffer N, Fontana R, Grehn F (1995) *Die Trabekulektomie*. Thieme Videothek. 34 Min. Georg ThiemeVerlag Stuttgart, New York; Pfeiffer N, Pitz S, Hertel F (1996) *Leitlinien medikamentöser Therapie von Hornhaut- und Bindehauterkrankungen*. In: *Das äußere Auge*. Kampik A und Grehn F, Enke, Stuttgart, 25-36; Pfeiffer N (1997) *Dorzolamid: erste klinische Erfahrungen*. *Das Glaukom in der Praxis*. Prünte C, Flammer J (Hrsg). Karger, Basel, pp 184-191; Pfeiffer N (1977) *Novel medical glaucoma therapies: how do they alter our standards*? In: *Proceedings of the Xith Congress of the European Society of Ophthalmology*. Süveges, I; Follmann P. (eds). Monduzzi editore, pp 355-358 Bologna; Schmitz S, Dick B, Jahn R, Frisch L, Pfeiffer N (1998) *Klinische und ultraschallbiomikroskopische Untersuchung der Silikonöladhäsion auf Intraokularlinsen*. In: *11. Kongreß der DGII*, 1997 Ohrloff C et al. Springer-Verlag, Berlin, Heidelberg, 371-376; Dick B, Greiner K, Pfeiffer N (1998) *Langzeitstabilität der Heparinbeschichtung von PMMA-Intraokularlinsen*. In: *11. Kongreß der DGII*, 1997 Ohrloff C et al. Springer-Verlag, Berlin, Heidelberg,74-80; Stoffelns B, Dick B, Greiner K, Pfeiffer N (1998) *Vorgehen bei Luxation einer Intraokularlinse in den Glaskörperraum*. In: *11. Kongreß der DGII*, 1997 Ohrloff C et al. Springer-Verlag, Berlin, Heidelberg, 378-381; Özer-Arasli A, Schwenn O, Dick B, Pfeiffer N (1998) *Endophthalmitis nach Kataraktchirurgie*. In: *11. Kongreß der DGII*, 1997 Ohrloff C et al., Springer-Verlag, Berlin, Heidelberg, 433-440; Greiner K, Dick B, Schwenn O, Pfeiffer N (1998) *Perioperative Komplikationen bei Kataraktoperationen unter Substitution der oralen Antikoagulation durch Heparin*. In: *11. Kongreß der DGII*, 1997 Ohrloff C et al., Springer-Verlag, Berlin, Heidelberg, 442-444; Pfeiffer N (1998) *Glaukomtherapie*. In: *Augenheilkunde in Deutschland*. Biermann Verlag, Zülpich, 77-83; Schwenn O, Pfeiffer N (1997) *Keratoplastik und Glaukom*. *Sitzungsbericht der 159. Versammlung des Vereins Pheinisch-Westfälischer Augenärzte*. Berg P Hrsg Zimmermann-Druck & Verlag Balve, 77-82; Pfeiffer N (1998) *Dorzolamid*e. In: C. T. Dollery (Ed) *Therapeutic drugs*. Churchill Enke Livingstone London, in press; Pfeiffer N, Hopf HC (1998) *Sehstörungen*. In: Hopf, Deuschl, Diener, Reichmann (Hrsg) *Neurologie in Praxis und Klinik*. Thieme, Stuttgart, under press; Pfeiffer N (1998) *Stufenplan der medikamentösen Glaukomtherapie*. in: *Neue Perspektiven in der Diagnostik und Therapie der Glaukome*. Pillunat L (Hrsg). Enke, Stuttgart, under press. Pfeiffer, N (1998) *Antimetaboliten in der Glaukomchirurgie*. In: *Glaukom*. Schmidt H (Hrsg.) Thieme-Verlag, Stuttgart, 1999; 59-68; Pfeiffer N (1998) *Bedeutung der Prostaglandine in der ophthalmologischen Therapie*. In: *Nutzen und Risiken der Prostaglandintherapie in der Humanmedizin*. Mutschler (Hrsg.) Wissenschftl. Verlagsgesellschaft, 1999; Dick, B, Pakula T, Hirschmann T, Pfeiffer N.: *Viskoelastika: Ein aktueller Vergleich und praktische Konsequenzen*. *12. Kongreß der DGII*, 1998 Ohrloff C et al., Springer-Verlag, Berlin, Heidelberg, 267-277; Pfeiffer N *Lack of knowledge about glaucoma: A possible risk factor for blindness from the disease*. in: *Pathogenesis and risk factors of glaucoma*. Gramer E and Grehn F (eds), Springer, 1999; 22-25 . Countless papers were published in various German, American and British papers. Pfeiffer is member of the German Ophthalmological Society (DOG), ARVO and other societies. .Address: Department of Ophthalmology, Mainz University, D-55101 Mainz, Germany Phone: ++49 6131 177286 Email: pfeiffer@augenklinik.uni-mainz

Pflüger, Ernst (1846-1903) Swiss ophthalmologist. Pflüger was born in Bären an der Aare, Switzerland. He studied in Bern, Utrecht, and Vienna under Henri Dor, Frans Cornelis Donders, and Ferdinand Arlt. He received his M.D. in 1870. He settled in Lucern opening a practice for ophthalmology and otology. He became professor extraordinarius in 1876 and from 1879 until his death was professor of ophthalmology at Bern following Henri Dor as chairman. Pflüger designed a new refraction ophthalmoscope, a new perimeter and was a pioneer in retinoscopy, which he named *skiascopy* or (in German) *Schattenprobe*. Pflüger was particularly interested in intra-ocular circulation, perception of colours,refraction anomalies and glaucoma. He wrote: *Bericht über dioptrische Untersuchungen.* Wien: 1857; *Beiträge zur Ophthalmotonometrie* Karlsruhe 1871; *Tafeln zur Bestimmung der Farbenblindheit*. Bern 1880 (2nd ed. 1882); *Methode zur Prüfung des Farbensinnes mit Hilfe des Flor-Contrastes .. Method of testing for color-perception using the tissue-paper contrast* Bern: n.date (second ed.1882); *La myopie scolaire*. Paris 1887; *Kurzsichtigkeit und Erziehung* Wiesbaden 1887; *Die operative Beseitigung der durchsichtige Linse* Wiesbaden 1900; *Valeur comparative de l´énucléation et des operations susceptibles de la remplacer* Paris 1900. American Encyclopedia of

Ophthalmology 12,p.9623-9624; Albert 260. Annales d´oculistique (with photograph) 1903,130:305-313.JPW

Phelps, Charles Dexter (1937-1985) took his medical degree at the University of lowa. He interned at Boston City Hospital (1963-1964), and stayed to do another year of internal medicine before returning to lowa City to begin a residency in ophthalmology. He did a preresidency fellowship with Mansour Armaly which kindled an interest in glaucoma. He later took a glaucoma fellowship with Bernard →Becker in St.Louis and was than invited by Frederick C.→Blodi to return to Iowa City to be Iowa´s Glaucoma Specialist. In 1983, Blodi having resigned from his chairmanship, Charles D. Phelps succeeded in 1984. AJO 1985,100: 863. Ach Ophthalmol 1985,103:1884

Phillips, Charles (1811-1870) Belgian general and ophthalmic surgeon. Phillips was born in Liège, Belgium, where he received his M.D. and practiced until 1834. After several years in Paris and in Berlin (as Dieffenbach's assistant), he settled in St. Petersburg, where, by his own account, he performed three hundred strabismus operations. Phillips wrote: *Du bégaiement et du strabisme, nouvelles recherches*. Paris, Bruxelles and Liège 1841 ; *De la ténotomie sous-cutanée, ou des opérations qui se pratiquent pour la guérison des pieds-bots, du torticolis ... du strabisme, de la myopie, du bégaiement* Paris 1841. Albert

Phillips, Richard Jones (1861- ?) American ophthalmologist of Philadelphia. Phillips received his M.D. at Jefferson Medical College in 1883, and practiced ophthalmology in Philadelphia until his retirement in 1925. He taught at the Philadelphia Polyclinic and College for Graduates in Medicine, and was ophthalmologist to the Presbyterian Orphanage. He wrote: *Spectacles and eyeglasses: their forms, mounting, and proper adjustment*. Philadelphia 1892.Albert

Philps, Alan Seymour (1906-1956) British ophthalmologist, born the son of Mr. Francis John Philps, former editor of the Financial Times. From Aldenham School he entered St. Bartholomew's Hospital in 1924, qualifying in 1929. Following an appointment as house surgeon to Professor George Gask and Sir Thomas Dunhill, Philps obtained his F.R.C.S. in 1931.He was for a few years on the medical staff of the London Transport Board, then his interest turned to ophthalmology, and various junior eye appointments followed: house surgeon to the Royal Westminster Ophthalmic Hospital in 1936, out-patient officer at Moorfields, and chief assistant in the Eye Department of St. Bartholomew's 1937. In 1938, Philps was appointed assistant surgeon to the Royal Westminster Ophthalmic Hospital and full surgeon in 1944. He was also ophthalmic surgeon to the Victoria Hospital for Children and to the Miller General Hospital, Greenwich. During the early years of the war he worked for the Emergency-Medical Services in the St. Albans Sector. Joining the R.A.M.C. in 1942, he was appointed to the Colchester Military Hospital, and for a time was adviser in ophthalmology to the War Office. Later, Philps served abroad, taking part in the Normandy landing and the advance into Belgium. During the latter part of his service he was ophthalmic adviser at Millbank Hospital and attained the rank of Lt.-Col. After demobilization in October, 1946, he returned to his hospital and consultant duties. In 1947 he was elected assistant ophthalmic surgeon to St. Bartholomew's Hospital and in 1948 was appointed surgeon-in-charge of the Eye Department. With the inception of the National Health Service in 1948, he became consultant ophthalmic surgeon to the Mid-Herts group of hospitals and secretary of the Ophthalmic Advisory Committee of N.E..Metropolitan Regional Hospital Board. In 1951 he was appointed by the London University to be a teacher of ophthalmology at the Institute of Ophthalmology and at St. Bartholomew's Hospital Medical School. Gifted with great manual dexterity, Seymour Philps was a brilliant surgeon. Interested an all branches of his specialty, he was a wise and most sympathetic clinician with a flair for teaching. Latterly he had a large private practice, but his hospital and the welfare of the patients he saw there always came first. In addition to contributing to medical journals and the *Encyclopaedia of Medical Practice*, Philps was the author of *Ophthalmic Operations* (1950). This work was profusely illustrated with his own exquisite drawings and photographs. In 1953, shortly before the onset of his illness, he was invited to visit Australia by the Ophthalmological Society of the Dominion, where he addressed numerous meetings. He returned by way of America and Canada. He also visited many eye clinics in Europe, thus widening his already extensive knowledge. BJO1956,40:318

Physick, Philip Syng (1768-1837) American surgeon, renowned as an operator on the eye, especially for cataract and artificial pupil. Born in Philadelphia he there received his early education, and later a collegiate training at the University of Pennsylvania. After about three years of study with a Philadelphia preceptor, he became, in 1789, a student of surgery at London, England, being in fact a private pupil of John Hunter; and living in his house. In 1791 he went to Edinburgh, and one year later received at the Edinburgh University his doctorate in medicine. Returning to Philadelphia, he became at once successful. In 1794 he was appointed surgeon to the Pennsylvania Hospital; six years later, lecturer on surgery at the University of Pennsylvania, and, in 1805, full professor of that subject. In 1818, however, he resigned this chair to accept the chair of anatomy, a position which he held till 1830. Physick was the first to suggest the use of animal ligatures in surgery. He also invented the tonsillotome, and was first to use a syringe and gum elastic catheter for the purpose of washing out the stomach in cases of poisoning. He invented a punch-forceps, wherewith to remove a piece of the iris for artificial pupil. As a writer, he was almost sterile. As a teacher, he was methodical and clear, but so cold, distant and forbidding in his manner that his pupils disliked him. American Encyclopedia of Ophthalmology 13,p. 9719

Picha, Joseph (? – 1886) Austrian, Viennese military surgeon and ophthalmologist. The date and place of his birth are not known. His medical education, however, was received at the Medico-Chirurgical Josephs Academy at Vienna. In 1863 he was upper physician in the Austrian army, which he accompanied on the expeditions of 1864 and 1866. In the last named year he became assistant to →Stellwag von Carion at the Josephs Academy. He was placed at the head of the eye department of Garnison Hospital No. 1, at Vienna, and there remained for nine years. Having held a number of other official positions, he died,aged only 47. Picha's chief ophthalmologic writing was a work entitled "Gemeinfassliche Darstellung der Refractionsanomalien, mit Rücksicht auf Assentirung und Superarbitrierung." This excellent treatise was crowned with the Brendl prize, and in 1874 was adopted as the official work upon its subject in the Austrian army. American Encyclopedia of Ophthalmology 13,p.10215

Pickard, Ransom (1868-1953) British ophthalmologist. Pickard graduated at Bart's in 1889, and after holding house appointments there and taking the higher qualifications went to Moorfields. He settled in Exeter in the early '90s of the 19th century, and carried on a general practice there. On the formation of the Territorial Army he was largely instrumental in raising the 1st Wessex Field Ambulance and in 1914 he went to France with a regular division; he was soon appointed a C.M.G., and later became A.D.M.S. of the 48th division. For his work in Germany after the armistice he was made a C.B. On his return to Exeter he began to specialize in ophthalmology. Having early learnt to regard his patients as an entity and not to pay sole regard to the narrow limits of the eye, he was ready to tackle any general operation, and aural surgery particularly interested him. He was appointed Surgeon to the West of England Eye Infirmary (founded the year after Moorfields), and served there with skill and devotion until his retirement. Always ready to learn, he was one of the first to undertake trephining, and when the slit lamp was introduced he went to Vienna to study its uses. Throughout his career he made an estimation and drawing of the size and depth of the cup in every patient, and this led him to investigate the subject of cavernous atrophy and its relation to glaucoma, on which he wrote several papers. His remarks in discussions at the meetings of the local Medico-Chirurgical Society showed his wide knowledge of general medicine and surgery. He was particularly proud of being elected President of the Ophthalmic Section of the Royal Society of Medicine, an honour which rarely went to a provincial surgeon. Ransom Pickard made an active contribution to each phase of life in which he took part. He held every office open to a layman in the Methodist connexion; he was elected mayor of Exeter in 1927; and he was a Vice-President of the University College of the South-West. BJO 1953,37:256

Pickering, Edward Charles (1846- ?) American scientist born in Boston, Mass., he graduated from the Lawrence Scientific School, Harvard (1865), where he taught mathematics (1865-67). In 1867-76 he was Thayer professor of physics in the Massachusetts Institute of Technology, and since then professor of astronomy and director

of the Harvard College observatory. He established the first, physical laboratory in the United States, made a special study of the light and spectra of the stars, and devised the meridian photometer with which he made nearly a million and a half measures of the light of the stars. With four telescopes, two at Cambridge, Mass., and two at Arequipa, in Peru, he made observations in both the Northern and Southern hemispheres, and secured over 200,000 photographs of the stars. His researches yielded many important discoveries, and he was a leading authority on the subject of stellar spectroscopy. He was awarded several medals for astronomical work, and was a member of many important scientific societies in Europe and. America. His publications include *Elements of Physical Manipulation (2* parts, 1873-76), and he edited *The Theory of Color in its Relation to Art*, by Bezold (1876). American Encyclopedia of Ophthalmology 13,p.10215

Pieringer, Joseph (1800-1879) Austrian ophthalmologist. Born at Kleinzell, Upper Austria, he received his medical degree in Vienna, and, turning attention to ophthalmology, became assistant first to →Jaeger, then to →Rosas. In 1828 he removed to Gratz (Graz) in order to accept the chair of ophthalmology in the University at that place. Here he taught and practised until 1860. According to Hirschberg, "Aside from several essays and popular writings he left but one sole offspring of his intellect-but that was a lion." The title of this work was *"Die Blennorrhöe am Menschlichen Auge; eine von dem deutschen Aerztlichen Vereine in St. Petersburg gekrönte Preisschrift"* (Gratz, 1841). In this work the author arrives at several important conclusions. American Encyclopedia of Ophthalmology 13,p. 10216-10217

Pike, Norman Howard (1873-1944) British ophthalmologist. Pike obtained at Guy´s Honours in medicine and obstetrics in the London M.B., B.S. and in 1896 was appointed Resident Obstetrical Assistant. The following year he acted as House Physician to Dr. Hale White.He worked in general practice for ten years before specializing in ophthalmology and Oto-Laryngology. In 1907 he left his practice with wife and children and went to study in Vienna. The results of his clinical researches in Vienna appeared in the Nov. & Dec. issues of *Journal of Laryngology, Rhinology and Otology* of 1908. On his return to England , he worked as clinical assistant at Moorfields and as House Surgeon at the Royal Ear Hospital, Soho, prior to his appointment 1909 as surgeon to the Eye,Ear, Nose and Throat Hospital in Cheltenham. Pike was President of the Midland Ophthalmological Society in 1931-32. BJO 1944; 28:371-372.

Pilz, Joseph (1818-1866) Bohemian ophthalmologist, author of the justly esteemed *"Lehrbuch der Augenheilkunde."* Born in Bohemia he received his medical degree in 1843 at Prague, was from 1845-47 assistant in ophthalmology, in 1849 privatdocent, in 1854 extraordinarius, and in 1857, national ophthalmologist for the Kingdom of Bohemia. He died suddenly of apoplexy at the early age of 48. Pilz's ophthalmic writings are as follows: 1. *Ueber die Gefässentwicklung in der Hornhaut. (Prager Vierteljahrschr., XX.)* 2. *Ueber Hornhautexsudate. (Ibid., XXIV.)* 3. *Die Pathologie des Krystallinsensystems. (Ibid., XXV.)* 4. *Ueber Bindehautentzündungen und Trachom. (Ibid., XXVIII.)* 5. *Ueber Hypertrophie und Atrophie der Sclerotica, mit Vorzügl. Rücksicht auf Staphylombildung. (Ibid., XXXIV.)* 6. *Ueber Entzündung der Sclerotica. (Ibid., XXXVI.)* 7. *Therapie des Trachoms. (Ibid., XLIT.)* 8. *Entzündung der Regenbogenhaut. (Ibid., LXXIII.)* 9. *Lehrbuch der Augenheilkunde*. (Prague, 1859.) 10. *Compendium der Operativen Augenheilkunde*. (Prague, 1860.) 11. *Diagnostisch- therapeutischen Compendium der Augenkrankheiten*. (Prague, 1862.) American Encyclopedia of Ophthalmology 13,p. 10225

Pines, Noah (1888-1959) Russian Jewish ophthalmologist. Born in Moscow he spent turbulent years as a student during the recurrent pogroms which occurred in Russia at the time. He qualified in medicine in Kiev in 1911 and when war broke out joined the Russian Army in which he achieved considerable distinction. At the time of the revolution he came to England and there took a medical degree; knowing no English he answered all his papers in Latin. Although practising ophthalmology all his life, he decided at the age of 63 to take out a special academic qualification and succeeded! Soon after his arrival in England he became a founder member of the consultant staff of the London Jewish Hospital, and was a constant attender and frequent speaker at ophthalmological meetings. His sterling work among the casualties during the bombing of London in the second world war was officially recognized by the Order of St. John of Jerusalem. A careful clinical

observer with a sound knowledge of general medicine, he will probably be best remembered for his work on vascular conditions in the fundus, particularly those associated with arteriosclerosis. BJO 1959,43:256

Pinto, da Gaina (1853- ?) Portuguese ophthalmologist. C. A. Claudio Julio Raymundo da Gama Pinto was born at Goa, East Indies, in 1853. He studied at Porto, Lisbon, Paris, Vienna and Heidelberg. For a time he served on the Health commission in Portuguese India. Later he was Professor of Medicine in Goa, but moving to Heidelberg and devoting himself to ophthalmology exclusively, be became in 1880 Assistant to the Eye-Clinic in Heidelberg University. In 1885 he was made privatdocent. He wrote *"Untersuchungen über Intraoculare Tumoren. Netzhautgliome"* (Wiesbaden, 1886).American Encyclopedia of Ophthalmology 13,p. 10227

Pipino, W. C. (1851-1896) American ophthalmologist and otologist of Des Moines, Iowa. He was born in Baltimore, Md., at the age of 35 moved to Des Moines, where he acquired a wide reputation, and where he died in 1896 from injuries received when thrown from a horse. American Encyclopedia of Ophthalmology 13,p. 10228

Piringer *see* **Pieringer**

Piscis, Johannes de. A French physician of the 14th century, who devoted some attention to ophthalmology. He is not to be confounded with Johannes de Piscibus, civis Beneventanus, who, in 1396, was appointed physician to Boniface IX, nor with Johannes de Pisiis (Jean des Pois), who became a bachelor of medicine at Paris in 1395. Johannes de Piscis, the subject of this sketch, was descended from a family in Languedoc, one member of which was a bachelor of law at Montpellier, Petrus de Piscis. However, the dates of the birth and death of Johannes are unknown. Johannes wrote a *Pratica*,, which, according to Truc and Pansier, was already lost in 1765. There remain, however, two fragments in the Bibliothèque Nationale, at Paris, the first of which, a so-called " antidotary, " or receptaculum for formulas and recipes, contains a short division or chapter, entitled "*Pour la Douleur des Yeux*." The second of the fragments, which contains three chapters on the eye, is also a simple antidotary, and, moreover, is merely an extract from the works of Gérard de Solo.American Encyclopedia of Ophthalmology, Vol.9, p.6723-6724

Pitcairn, Archibald (1652-1713) Scottish ophthalmologist. Born at Edinburgh, Scotland, he was bred for both the bar and, the pulpit, but later studied medicine at Montpellier, Paris and Edinburgh. At the last named institution he received his medical degree. He also began to practice in Edinburgh, but was soon (in 1692) called to Leyden, Holland, to the chair of medical practice. On entering this position he presented an " *Oratio qua Ostenditur, Medicinam ab Omni Philosophorum Secta esse Liberam*, " in the course of which he presented his "*Theoria Morborum Oculi*." In this he pointed out certain matters, of much historical importance for the development of a correct etiology of *mouches volantes.* It had been supposed that these appearances were owing, in greater part, to opacities either on or in the cornea, and also, to some extent, to obstructing bodies in the pupil or the lens. Pitcairn showed that the distance from the cornea (a fortiori from the pupil or the lens) to the retina is far too small to permit of images of matters so located being cast upon the retina. →Deschales had already shown (in 1674) by a simple, but excellent, diagram that *mouches volantes* must of necessity be seated in the vitreous, and not very far in front of the retina. Nevertheless Pitcairn performed an experiment whereby he showed conclusively that corneal, pupillary and lenticular opacities can only diminish the quantity of light permitted to reach the retina, that, in other words, they have no power to cast upon the retina either an image or a shadow of themselves. This he did by placing in water a glass sphere, and showing that parallel rays which fell upon it were brought to a focus only at 31/2 diameters behind its posterior surface. He also pointed out the folly of attempting to remove such disturbances of vision by treatment directed to the cornea. Pitcairn wrote a number of other books, which, however, possess no special interest for ophthalmologists. He seems to have been an invalid for the greater portion of his life. American Encyclopedia of Ophthalmology 13,p.10229-10230

Pitts, Barton (1859-1920) American ophthalmologist of St. Joseph, Mo. He was born in Accomac Co., Va. His medical degree was received at the University of Maryland,

Baltimore, in 1881. For a very short time he engaged in general practice in Virginia, then moved to St.Joseph. Here, as it seems, he practised from the beginning of his residence the eye, ear, nose and throat alone. He was. for several years, Professor of Ophthalmology at Ensworth Medical College.AJO 1920,3:631-632.

Pixley, Charles H. (1844-1919), American optical expert, along with F. A. Hardy and Co., Chicago, was born in Miliford, Michigan. He invented and perfected the *Hardy ophthalmometer*, and other instruments and wrote on optical subjects for the Hardy Messenger. AJO 2, 1919, p.770

Plateau, Felix (1841-1910) son of Joseph Plateau and professor of zoology at the Ghent University since 1870, wrote in 1866 a paper in which he showed that the cornea is flat in fishes and amphibians (a convex surface should not have much convergent power in water). (Verriest)

Plateau, Joseph A.F. (1801-1883) Belgian physiologist, born in Ghent. Although obliged by his testor to study jurisprudence at the same time, but helped by the celebre Adolphe Quételet (1796-1874, founder of the biometrics and statistical sciences), he obtained the Ph.D. degree in physics and mathematics at the University of Liège in 1829. He was appointed in 1835 as professor of physics at the Ghent University. Already in his 1829 thesis on the *impressions produced by the action of light on the eye*, and in a survey paper in 1834 we find mention of the phenomena that gave him celebrity: the *persistance of visual impressions* (study which led to the discovery of the apparent movement of drawn figures by means of the *phenakisticope* in 1833 and to the later discovery of cinema, the successions of positive and negative after-images (he even realized mixtures of colours of images and after-images), *irradiation* (that he carefully measured) and the *contrast phenomena as colored shadows*. He ascribed the *alternation of colors in the after-images and the contrast phenomena to antagonist mechanisms*, the existence of which was denied by →Fechner and by von →Helmholtz and which were demonstrated only much later by →Hering. Plateau showed also that blue and yellow are complementary colors, and that irradiation is not due to the aberrations of the eye. Very early in his scientifical career (1829) Plateau commited the fatal experience of looking to the sun with both eyes during twenty seconds. He was never cured and became totally blind in 1843. He then created a staff of observers so that his scientific activity did not diminish. In this period he published more on mathematics and pure physics (as on *surface tension and on the behaviour of liquids in the absence of gravitation*), but in the same time he discovered the principle the fiber optics and in 1872 he made a fundamental contribution to the measurement of the relationship between reflectance and lightness. Moreover he published in 1877 a complete analytical and annotated lists of references (from Antiquity) relating to the subjective visual phenomena that he so well described. His last paper (1882) concerns his visual sensations, despite blindness, in the frame of the recent discovery of the occipital visual centers. (Verriest) Annales d´Oculistique, 1883, 90:150-160

Plater, Felix (1536-1614). Swiss professor of medicine at Basel. He was the first to declare explicitly that, the images of objects in the external world (after being distinctly produced by the lens) were received upon the retina. The function of the lens as the image-forming portion of the eye, had been correctly determined, just a few years previously, by the mathematician, →Maurolycus, but Maurolycus had not definitely and positively conceived the idea of the screen-like function of the retina. This was done by Plater, who even proceeded a little further, declaring that the retina was the essential portion of the visual apparatus. American Encyclopedia of Ophthalmology 13,p.10257

Platner, Johann Zacharias (1694-1747). German anatomist, surgeon ophthalmologist, of Leipsic, Germany. Born in Chemnitz, he studied his profession both at Leipsic and at Halle. He was appointed extraordinary professor of anatomy and surgery at Leipsic, and, three years later, received the ordinary appointment to the chair of these, as well as to certain other branches in the institution. He was also for a long time Dean of the faculty. An excellent operator, he was also a clear and forceful writer. Ophthalmic compositions are as follows: 1. *Diss, de Fistula Lacrimali.* (Leipsic, 1724.) 2. *Diss. de Scarificatione Oculorum.* (Leipsic, 1728. Really a revival of ancient methods.) 3. *De Chirurgia Ocularia*. (Leipsic, 1735.) 4. *De Motu Ligamenti Ciliaris in Oculo*, (Leipsic, 1738. Contends that the ciliary body performs motor and secretory functions.) 5. *De Vulneribus, Superciliis Illatis,*

cur Caecitatem Inferant ad Locum Hippocratis Proprium. (Leipsic, 1741.) 6. *De Noxis ex Cohibita Suppuratione in Nonnullis Oculorum Morbis*. (Leipsic, 1742.) 7. *Jo. Zach. Platneri, D. et Prof. Med. Lips. Institutiones Chirurgiae Rationalis tum Medicae tum Manualis in Usus Discentium. Adjectae sunt Icones Nonullorum Ferramentorum Aliarumque Rerum, quae ad Chirurgi Officinam Pertinent.* (Leipsic, 1745.) *Institutiones chirurgiae rationalis tum medicae tum manualis in usus discentium et de fistula lacrymali*. Venice 1747;8. *Opusculorum* tomus 1. *Dissertationes*, Tomus II. *Prolusiones*]. Leipsic 1749. 9. *Ars medendi singulis morbis accommodata*. Leipsic 1765. American Encyclopedia of Ophthalmology 13,p.10258. JPW

Platter *see* **Plater**

Plempius, Vopiscus Fortunatus (1601-1671). Born at Amsterdam, and professor at Louvain (Leuven), he was at first a bitter opponent of Harvey, but later presented a complete right-about-face, warmly supporting, then, the doctrine of the circulation of the blood. He was a very prolific writer, but none of his works, save one, relates to ophthalmology. The book in question is entitled *"Ophthalmographia, sive Tractatio de Oculi Fabrica, etc. "* (Amst., 1632; Louvain, 1648). This book is not especially original, but is memorable nevertheless for being the very first (after 28 years even so) to espouse the revolutionary, and, for the most part, absolutely correct, optical doctrines of Johannes→Keppler (q. v.). American Encyclopedia of Ophthalmology 13,p.10259

Joseph Jacob Plenck

Plenck, Joseph Jacob (1738-1807) Austrian anatomist, surgeon, obstetrician and ophthalmologist, who gave the first course of lectures on eye-diseases ever delivered in Hungary. Born at Vienna, he there received his medical degree and, for a time, was professor at Basel, of anatomy, surgery and obstetrics. In 1770 he was called to Tyrnau, and almost immediately thereafter to Budapest. In the last named city he added ophthalmology to his list of branches. In 1783 he was called to the chair of chemistry and botany at the Joseph's Academy in Vienna, and soon thereafter held a number of official positions in the service of the Austrian Government. He was ennobled in 1790, and died at Vienna. His writings, though numerous and valuable, possess but little ophthalmologic importance, excepting only the *"Doctrina de Morbis Oculorum,"* (Vienna, 1777, Italian edition 1781, German 1788,Spanish 1797), pronounced by →Hirschberg to be an excellent compendium, "*the first . . . which made conveniently accessible to students and physicians the achievements of the ophthalmologic renaissance of the 18th century.*". "Doctrina de Morbis Oculorum" was translated into Dutch "*Verhandeling over de Oogziekten*" and this Dutch text was translated into Japanese in 1798-1799, and was named "*Taisei Ganka Zensho* (Handbook of Western Ophthalmology). The book was amended by→SUGITA Ryukei and published in 1815 under the title Ganka Shinshyo: New Textbook of Ophthalmology. This book was used in many Japanese Medical Schools and gave decisive impact in the dawn of modern Ophthalmology in Japan.(SM) American Encyclopedia of Ophthalmology 13,p.10259

Pliny, Caius Plinius, Secundus (23-79 A.D.) , called "the Elder" by way of distinction from his nephew of the same name. An ancient Roman military officer, imperial governor, and (by far the most important matter for our purposes) encyclopedic scholar. Born at Novum Comum (Como) in Upper Italy, he was for the most of his life engaged in military or administrative duties. Thus, under Claudius, he was *prefectus aloe* (a commander of horse) in Germany; under Vespasian, imperial governor in several provinces; and, under Titus, commander of the fleet at Misenum. He died, A.D. 79, in the eruption of Vesuvius which destroyed Herculaneum and Pompeii. The account of his death is given with much detail by his nephew, the Younger Pliny, in Book V1, Letter 16, of his *"Epistoles"* In addition to works on war, biography, grammar, history and rhetoric (not one of which has come down to our day) he wrote the famous *Historia, Naturalis, or* "Natural History," which has been preserved entire. This monumental work is indeed the greatest treasury of ancient Greco-Roman knowledge that we now possess. Compiled from about 2,000 writings of 474 authors, it deals, in the following order, with astronomy, physics, geography, ethnography, anthropology, zoology , botany, mineralogy, pharmacology, medicine, painting, sculpture, the engraving of gems and comparative geography. The enormous work was planned, executed and revised in the space of two years.(77-78 A. D.). As a result, in part, at least, of the haste with which the book was put

together, it contains (in spite of its very great value) a large number of mistakes. Then, too, Pliny was, as it seems, by nature a very careless writer, and, in addition, a man devoid of critical acumen and deeply tinctured with superstition. It is chiefly, of course, the medical portions of the great book of Pliny that are of interest to physicians. Pliny, however, we may say at the outset, was not favorable to doctors, as the following extract from his writings abundantly prove: "*And there is no doubt that they all busy themselves with our lives, in order by the discovery of some new thing or another to win reputation for themselves. Hence flow those pitiable disputes over the sick; for no one has the same views as another; hence also that inscription upon the tombstone of the unfortunate victim: "He died by reason of the confusion of the doctors." This spurious art is changed so often and so lamentably and we are driven to and fro by the breath of the spirits of Greece. Again: "There is, alas, no law against incompetency, no striking example is made. They learn by our bodily jeopardy, and make experiments until the death of the patients. And the doctor is the only person not punished for murder.*" In spite, however, of Pliny's all too plainly expressed disgust and contempt for medicine and doctors, his observations on matters connected with the eye are of interest to the modern ophthalmologist some of them for one reason and some for another.American Encyclopedia of Ophthalmology 13,p.10263-10290.

Pockley, Francis Antill (1857-1941) Australian ophthalmologist. Pockley was born in 1857, the son of Captain Robert Pockley, a well-known seaman of that epoch. His ancestors were Yorkshire men, where they have been located for centuries. Pockley started on a business career , after education at Sydney Grammar School, and later came to Edinburgh to study medicine. His academic career was one of great brilliancy. He was House Surgeon at Edinburgh undertook post-graduate work at Vienna and returned to Australia as surgeon-superintendent of an emigrant ship.He began in general practice in Sydney, but quickly settled on an ophthalmic career, having been one of the first four men in New South Wales to become full-time eye specialists. He was appointed lecturer in the newly organized medical school of Sydney, and ophthalmic surgeon to the Prince Alfred Hospital.He retained his lectureship for the record period of 37 years, and was held in high estimation throughout Australia. At various times he was president of the N.S.W. Branch of the B.M.A. and president of the Australian Medical Congress of 1911 ; he also took a leading part in the foundation of the Royal Australasian College of Surgeons. BJO 26,334-335,1942

Poincaré, Emile-Léon (1828-1892) French physiologist and ophthalmologist. Born at Nancy, France, he received the degree of M. D. at Paris in 1852, presenting as dissertation "*De l'Ophtalmie Purulente des Nouveaux-nés*." Settling as general physician in Nancy, he there taught physiology from 1858 till 1872. From 1870 until his death he was also professor of hygiene.American Encyclopedia of Ophthalmology 13,p.10297

Pokharel, Gopal Prasad (1951-) Nepalese ophthalmologist, Professor of Ophthalmology at Manipal College of Medical Sciences, Pokhara. He graduated from Stanley Medical College, University of Madras, in 1975 and received M.D. degree in 1986 from the R. P. Center of Ophthalmic studies of the All India Institute of medical Sciences, New Delhi. He further studied at Johns Hopkins University as a Hubert H. Humphrey Fellow from 1992 and Master of Public Health was conferred on him in 1994 from the School of Hygiene and Public Health of the Johns Hopkins University, U. S. A. He worked at the Nepal Eye Hospital in Kathmandu as Deputy Director (1993-1997) and Director of King Mhendra Memorial Eye Hospital, Bharatur, Napal (1988-1993). He has been involved as a medical officer in the Nepal Blindness Survey in association with WHO, and worked not only in Nepal but in Sikkim, Ladakh of India and Tibet. He also works in trachoma control programs in association with Helen Keller Foundation and Swiss Red Cross. He conducted many eye camps and developed Vitamin A Child Survival Program. He has been associated with Netra Jyoti Sangh (NNJS) (National Society for Comprehensive Eye Care) since 1995 and directed population based epidemiological evaluation in the western region of Nepal, and the outcome was published as *Prevalence of blindness and cataract surgery in Nepal*, Br. J. Ophthalmol. June, 1998" and *Visual functioning and quality of life outcomes among cataract operated and unoperated blind populations in Nepal*. Br. J. Ophthalmol. June, 1998. Other publications of his field work include *The impact of nutrition education and mega-dose vitamin A supplementation on the health of children in Nepal*. Bull. W.H.O, 1966" (Eye Care Himalaya, P.O. Box 2389, Kathmandu, Nepal) (SM)

Pokhrel, Ram Prasad (1937-) Nepalese ophthalmologist, Chairman of NEPAL NETRA JYOTI SANGH (National Society for Comprehensive Eye Care). He graduated from K.G. Medical College of Luknow University, India, in 1959 with MBBS. He extended his study in London from 1962 and received Diploma of Ophthalmology in 1967 from the Royal College of Physicians and F.R.C.S. from the Royal College of Surgeons of Edinburgh in 1970. He was nominated to the Fellow of International College of Surgeons, USA., in 1983. He has held the following positions: Senior Ophthalmic Surgeon and Head of the Eye Department of Bir Hospital Kathmandu (1971-1991), Executive Director and Head of the Eye Department-Nepal Eye Hospital, Kathmandu (1974-1992) and he is in the present position as above since 1992. He has many conjoint appointments and they are Honorary Professor and Examiner, Department of Ophthalmology, Institute of Medicine, Tribhuvan University, Kathmandu, Principal Investigator of Vitamin A Research Project (Joint project of Nepal Nutrition Intervention Project, Sarlahi and Johns Hopkins University, U.S.A., Chairman of the Charity International Nepal and Kathmandu Medical College and Technical Advisor/Senior Ophthalmologist of Nepal Eye Hospital, Kathmandu. He has been active in National and International professional societies and the positions he has held are President of Nepal Ophthalmic Society, Global Advisor WHO Blindness Program Central Committee in Geneva (1985-1989), Chairman of the Organizing Committee of First Ophthalmic Conference of SAARC Countries (1991), Secretary General of Nepal Netra Jyoti Sangh (1978-1992), Secretary General of Nepal Eye Hospital (1974-1991), President of the XVI Congress of the Asia-Pacific Academy of Ophthalmology (APAO), Vice-President of the APAO(1995-1999) and Senior Vice President of the IAPB (International Agency for Prevention of Blindness) (1994-1998). He published many scientific papers and wrote books, and some examples are *Epidemiology of Blindness in Nepal*. Bull.WHO 1985.63.375.386; *Night Blindness during Pregnancy and Lactation in Rural Nepal*. J. Nutr. 1996; 125:2122-2127 and *Epidemiology of Xerophthalmia in Nepal: A pattern of household poverty, childhood illness and mortality*. Arch. Ophthalmol.1995;113;425-429. He worked actively for the prevention of blindness, both in domestic societies and international organizations. In recognition of his contributions, many organizations conferred Honors and Awards on him: they embrace Mahendra Vidya Bhusan "A" Class First Nepali to do fellowship in Ophthalmology 1971; Gorkha Dakshin Bahu IV Class: His Majesty Government of Nepal for developing eye care services in rural areas through mobile eye camps 1972; Gorkha Dakshin Bahu II class His Majesty's Government of Nepal for clearing the cataract backlog from Nepal 1983; Asia Pacific Congress of Ophthalmology, Bangkok 1983: "Distinguished Award for Ophthalmic Contribution in Asia". Dharma Pahari Award: Nepal Medical Association for outstanding contribution is establishing "Nepal Eye Hospital" and a chain of eye hospitals within the country and making Nepal self-reliant in Ophthalmic Manpower 1986; The Association of Nepalese in America Award in appreciation of dedicated contributions to"Blindness Eradication in Nepal" 1987; Trishakti Patta III Class: His Majesty's Government of Nepal for development of technical manpower in eye care 1989; The Jose Rizal Medal: For excellence in Ophthalmology in the countries of Asia and the Pacific on 13 May 1991. Kyoto, Japan by the Asia Pacific Academy of Ophthalmology and The Takeo Iwahashi Award, Japan Ist May 1995: For mobilizing national and international activities for blindness prevention.(National Society for Comprehensive Eye Care, P.O. Box 335, Kathmandu, Nepal. Phone:977-1-261921; Fax 977-1-260558, Email: kath@nnjs.wlink.com.np) (SM)

Polack, A. (?-1953) French ophthalmologist. Polack was a long time director of the Rothschild Foundation and professor at the Institut d´Optique. He was particularly interested in refraction and also in colour vision. He wrote: *La Vision Des Couleurs Et L'Art Pictural* Paris 1936 JPW

Polaillon, Joseph François Benjamin (1836-1902) French surgeon born in Lyons. Polaillon received his M.D. in 1865 at the Paris Faculté with the thesis *Etude sur les ganglions nerveux périphériques*; settling in Paris, he lectured at the Faculté and was surgeon at the Hôpital de la Pitié. He was a member of the Académie de Medecine. He wrote *Thèse sur les milieux réfringents de l´Œil* Paris 1866 ; *Etude physiologiques sur les effets toxiques de l´Inee* Paris 1875 ; *Observations sur l´Ovariotomie* Paris 1877. JPW

Poland, Alfred (1822-1872) British, London surgeon, who, for a very short time, engaged in the practice of ophthalmology. Born in London he became a special scholar of Aston Key in Guy's Hospital. In 1843 he became a Member, and in 1847 a Fellow of the R. C. of England. In 1845 he was made anatomical prosector at Guy's, and a few years later, professor of surgery. For a number of years he was chosen surgeon at Moorfields., and, in 1861, after retirement, he accepted the supervision of the Ophthalmic Section Guy's Hospital. Soon, however, he abandoned ophthalmic work entirely. In the course of an operation, he became infected with pus and, five years later, after much ill-health and suffering, he died, aged only 51. Poland's ophthalmic writings are as follows: 1. *On the nerves of the Orbit in Mammalia and Man*. (Crowned by the College of Surgeons with their triennial prize.) 2. *Anophthalmos*. (0.H.R.I., p. 1854.) 3. *Medico-Legal Observations*. *(Ibid.*,III, p. 198, 1861-1862.) 4. *Protrusion of the Eyeball*. ibid., 1, p. 21, p. 68., and 11, p. 216. American Encyclopedia of Ophthalmology 13,p.10300

Pollak, Simon (1814-1903) American ophthalmologist, of foreign birth, founder of the first eye and ear clinic in St. Louis. Born at Prague, Bohemia, he received his medical degree in 1835 at the University of Vienna. Two years later, he came to America, and, in 1838 began to practise at Nashville,Tenn. Here he remained for six years, and then moved to St. Louis, where be practised for fifty-eight years. In 1852 he, in conjunction with Yeatman, Eliot and others, founded the Missouri School for the Blind. He was also one of the founders, in 1850, of the St. Louis Academy of Science. Ten years later he instituted the eye and ear clinic at Mullanphy Hospital, the first of the kind in St. Louis. Pollak, throughout the Civil War, was a member of the U. S. Sanitary Commission and of the Western Sanitary Commission. American Encyclopedia of Ophthalmology 13,p.10307

Pollock, Charles Frederick Scottish ophthalmologist born in Dumfries and educated in Glasgow, Tübingen and Vienna. He graduated M.D. at Glasgow University in 1882 and became F.R.C.S.Edinburgh in 1884. He was a time Ophthalmic Surgeon to the Royal Hospital for Sick Children, Glasgow as well as Surgeon for Diseases of the Eye at the Glasgow Central Dispensary. He published „*The normal and pathological histology of the human eye and eyelids*.“London 1886 and „*Leprosy as a Cause of Blindness*“ The Ophthalmoscope, 1916,p.111.

Polony (18th century) A French charlatan, of some real merit. He succeeded Dubois at Nîmes in 1737. The following advertisement of Polony in "*Le Courrier d'Avignon"* for the 24th of May, 1737, is translated from the work of Truc et Pansier, "*Histoire de 1'0phtalmologie à l´Ecole de Montpellier*," p. 271. This advertisement, is the only extant document concerning Polony , " Sieur Polony, famous oculist established at Nimes for several months and who has fixed his abode in the same quarters in which M. Dubois, also an oculist, formerly resided, has just depressed a cataract for M. Astruc, citizen of Lunel le Vieux in Languedoc, who was blind for a number of years. The operation was performed, with all the capacity and dexterity possible, in the space of five minutes. He it was who some time ago restored the sight to M. le Prieur de Sérignac, of the diocese of Uzè, to M. Nicolas, citizen of Bouzignes, and to another citizen of the same place. The two Siol brothers, of the city of Bagnols, to whom he has rendered the same service cannot sufficiently praise the skill of this man's hands. He has also performed divers other cures with success, such as cutting for stone, destroying cancers, etc. His operations are done in the presence of all such physicians and surgeons as can be got to attend." American Encyclopedia of Ophthalmology 13,p.1307

Polyak, Stephen L. (1890-1955) American anatomist, one of the greatest American authorities on the anatomy of the visual system. Polyak was born in Croatia and received his medical degree at the University of Zagreb. He was a health officer in the Serbian Army in the first world war. He taught neurology at the University of Zagreb from 1920 to 1928, when he went to the United States. He was an assistant professor of neuro-anatomy at the University of California, then went to the University of Chicago as an assistant professor of neurology in 1930. In 1938 he entered the anatomy department and became Professor of Anatomy, when he began his research into the anatomy of the eye. His book on the retina *RETINA: The Anatomy and the Histology of the Retina in Man, Ape, and Monkey, Including the Consideration of Visual Functions, the History of Physiological Optics, and the Histological Laboratory Technique* Chicago 1941, is a classic, and before

he died he had just finished a volume, ---*The Vertebrate Visual System* -, that was to be published early in 1956. BJO 1955,39:320

Oleg Pomerantzeff

Pomerantzeff, Oleg (1910-1993) Russian engineer. Pomerantzeff was born in St. Petersburg, Russia. His father died in 1917 and the family fled by boat from Odessa to Constantinople in 1921. Through Czechoslovakia, where he developed but recovered from rheumatoid arthritis, he reached Belgium. He was taken care of by the Institut St. Georges de Namur (sponsored by *La Libre Belgique* a Belgian news paper) and finalized his high school training as a brilliant student at the Collège Nôtre-Dame de la Paix in Namur (Belgium). At the school, he became the lifelong friend of Dr. Charles L.Schepens. He received a grant to study civil engineering at the University of Louvain in Belgium. As a civil mining engineer he worked in Yugoslavia and was active in the resistance during World War II. After having been imprisoned by the Gestapo, he made it to the southern part of France where he continued working for the underground movement. Some time after the war he left France for Brazil. In 1962, on the invitation of Dr. Charles Schepens, he joined the Retina Foundation in Boston, now called the Schepens Eye Research Institute, an affiliate of Harvard Medical School. This move coincided with the birth and very early development of the laser and Oleg Pomerantzeff immediately took a strong interest in this new light source. He became a prolific inventor of diagnostic and therapeutic optical instruments. With Dr. Schepens, he further developed the small pupil binocular indirect ophthalmoscope. He was the first to use extensive computer ray tracing to obtain a considerably more accurate description of the complex optics of the eye. Above all, he will be remembered as the inventor of the Scanning Laser Ophthalmoscope. He successfully formulated for the first time the three ingredients of the electronic ophthalmoscope: time-resolved imaging using a scanning laser with a small central illuminating pupil and much larger surrounding collecting exit pupil. This original design, intended for imaging only, was augmented with high-speed acousto-optic laser modulation by his assistant Dr. Robert H. Webb, enabling microperimetry directly on the retina. The second generation instrument was also made co focal. Dr. Frans J.Van de Velde (Schepens Eye Research Institute, Boston, brought this instrument to the therapeutic level by incorporating various laser sources for precise retinal microphotocoagulation, PDT and TTT. Oleg Pomerantzeff died in Toulouse, France in 1993 as a result of the long term complication of his rheumatoid arthritis. FrVV

Pomeroy, Oren Day (1834-1902). American, New York oculist and aurist, inventor of Pomeroy's ear syringe, Pomeroy's aural specula, and many other instruments in almost universal use. He was born at Somers, Conn., of old New England ancestry. His liberal education was received at Monson Academy, Mass., and his medical training at Berkshire Medical College, at the Medical Department of the University of the City of New York, and at the College of Physicians and Surgeons of the City of New York. At the last named institution he graduated in 1860. He settled at once in New York City as ophthalmologist and otologist, and there continued to practise in these specialties until a few years before his death. He was President of the New York Ophthalmological Society in 1872. He was eye and ear surgeon to the Northern Dispensary, to the New York Foundling Asylum, and surgeon to the Manhattan Eye and Ear Hospital. He was also for a number of year assistant at the Eye and Ear Clinic of the College of Physicians and Surgeons. He wrote a number of journal articles and two or three text books. American Encyclopedia of Ophthalmology 13,p.10311-10312

J. L. C. Pompe van Meerdervoort

Pompe van Meerdervoort, J. L.C. (1829-1908) Dutch army surgeon, Teacher of Medicine in Nagasaki. He graduated from Utrecht Army Medical School in 1849, and came to Nagasaki in 1857 as an attaché to transfer a new ship (Japan order by Tokugawa Government) to Japan. He was asked to teach medicine in Nagasaki: he established the formal curriculum of teaching at the Medical School and built the first Hospital of western Medicine 1861. He imported "Iconographie Ophthalmologique" of Julius Sichel to teach Ophthalmology. When leaving Japan, he gave the Iconographie to his student, and the book is now in possession of Chiba Univeristy Library. During his stay from 1857 to 1862, he taught 135 students and they became the leaders of Medical Education after the Meiji Restoration. Bauduin came as his successor to the Medical School. After many changes of administrative systems, this Medical School developed to the present Nagasaki University.(SM)

Pope John XXI *see* **Peter the Spaniard**

Porta, Giambattista della (1538-1615) Italian physicist who was born and who died at Naples. He traveled for years in search of further knowledge, throughout the civilized world. Returning to Naples, he established in his own dwelling a scientific association which he called "*The Academy of the Secrets of Nature*". His first book, "*Magia, Naturalis," contains* but little of interest to ophthalmologists. His second work, however, *"De Refractione," is* truly a memorable volume. The *first* "book" of this compact little treatise is devoted to the general principles of refraction. The *second* treats of the burning-glass. In the *third,* the eye itself is described and enlarged upon, chiefly as an optical instrument. In these three books the author displays but little originality. In the *fourth* book, however, he adduces original and very striking evidences against the theories of the ancients regarding the nature of light, and in favor of the explanations which, in his day, had recently been expounded. The *fifth* book treats of perspective. In this he commits the curious blunder of declaring that the pupils of the aged are large, of the young, small. His *sixth* book, which treats of single and double vision, is perhaps the poorest of the work. It is full of errors, and exhibits no originality. Book *seven* is devoted to entoptic phenomena. In this division of his volume he declares that "the rainbow round a lantern" is not produced, as Aristotle taught, by moisture in the atmosphere, but is formed within the eye. The reasons which he adduces in support of his position are very interesting: (1) The rainbow is always absolutely circular, whatever the shape of the flame. (2) It diminishes in size as we approach the flame, but enlarges as we recede from it. (3) If a person looks at the flame through a small hole in a paper, the rainbow is then observed not around the lantern, but between the eye and the paper. (4) Diseased eyes observe the rainbow, whether the atmosphere be moist or dry. In the *eighth* book he expounds in excellent fashion (and is the first to do so) the passage of rays of light through three successive media of differing density. The *ninth* and last book treats in mediocre fashion of rainbows and of color. Porta wrote: *L´Arte del ricordare dell´eccel* Naples 1583; *De Refractione Optices* Naples 1593; *Magiae Naturalis* 1558 (dito *libri viginti* Hanover 1619); *Natural magick* London 1658. American Encyclopedia of Ophthalmology 13,p.10314-10315

Porten, Sally van der. (1819-l875.) German ophthalmologist. He wrote a dissertation on the cataract operation. He also lectured in the Hamburg Medical Society on the pathological anatomy of opacities in the crystalline lens.American Encyclopedia of Ophthalmology 13,p.10315

Porterfield, William (1695-1771. Scottish physician. He was born in Ayrshire, Scotland, of a very respectable family. His early education seems to have been received at Glasgow; his medical degree, however, at Rheims, in 1717. In 1721 he became Fellow of the Royal College of Physicians of Edinburgh, and in 1724 was made professor in the Edinburgh University. He invented a useful "optometer," based on Father Scheiner's experiment, and was the very first to furnish the correct explanation of that proceeding. The word "optometer," itself, was his invention. Porterfield wrote: 1. *Demonstration of the Strength of Bones*. (Edinb. Med. Essays and Observat., 1733, 1.); 2. *Essay on the Motions of the Eyes.* (Ib., 1737, IV.); 3. *Treatise on the Eye, the Manner and Phenomena of Vision*. (2 vols., Edinburgh, 1759.) American Encyclopedia of Ophthalmology 13,p.10315-10316; [GM 1484.2]

Portney, Gerald L. (1937-1977) American ophthalmologist, chairman of the the department of Ophthalmology at the University of California, Davis, and secretary of the Association of University Professors of Ophthalmology. He was born in Dayton, Ohio, and spent most of his youth there. After graduating from Northwestern University in 1958 with a B.A., he attended Northwestrn Medical School and received his M.D. in 1962. He interned at the Cook County Hospital and was a resident in ophthalmology at the Illinois Eye and Ear Infirmary from 1963 to 1966 where, influenced bv Dr. Peter C. Kronfeld, he developed an intense interest in glaucoma. Dr. Portney was a National Institutes of Health fellow in the School of Public Health at the University of Michigan in 1966 and simultaneousIy received a Master of Arts degree in mathematics from the Rackham Graduate School. As chief of ophthalmology for the United States Public Health Service, Indian Health Service, in Arizona from 1967 to 1969, he studied trachoma prevalence and

epidemiology among the San Xavier Papago Indians. He joined the faculty at Stanford University as an assistant professor in 1969. In 1971 he was appointed chairman of the Department of Ophthalmology at the University of California, Davis, with the rank of associate professor. During the six years he spent at the Davis campus, he attracted a dynamic young faculty to assist him in the development of clinical and research facilities in this newly established eye department. His background in mathematics led to the development of photogrametric methods to study subtle changes in glaucomatous optic nerve heads. Adding to the work of Elschnig and Kronfeld, he dramatically demonstrated the evolution of glaucomatous atrophy of the optic nerve. These carefully documented findings were presented in 1975.. He compared the efficacy of a number of projection perimeters, and over the past year programmed and developed a new automated perimeter. He authored or co-authored over thirty scientific papers in ophthalmology and completed a teaching textbook on glaucoma, published posthumously. Portney served on the American Committee on Optics and Visual Physiology and on the Armed Forces Committee on Vision. He was a member of the advisory boards of the Northern California Basic Science Course in Ophthalmology and the Ophthalmology Update Course. He was affiliated with a number of ophthalmologic societies including the International Perimetric Society, the Association for Research in Ophthalmology, the American Academy of Ophthalmology and Otolaryngology, the Pacific Coast Oto-Ophthalmologic Society, the San Francisco Ophthalmologic Round Table, and the Alta California Ophthalmologic Society. He was a member of the board of directors and served on the scientific committee for the Northern California Society for the Prevention of Blindness , he was a member of the American Medical Association, the California Medical Association, and the Yolo County Medical Association. He had just been nominated as president-elect for the California Medical Association Section of Ophthalmology. AJO, 1977,84:595-596

Porzio, Simone (1497-1554) Italian philosopher of Naples, pupil of Pomponazzi. He taught philosophy in Pisa and later, from 1546 on, in Naples. He wrote *De coloribus* Florence 1548; *De Coloris Oculorum*" Florence, 1551; *Trattato de colori de gl´occhi* Florence 1551 ; *De Rerum Naturalium principiis Libri II* Naples 1553 ; *Opus physiolog. In quo tractatus num ars chymica verum aurum efficere queat* ? Messina 1618 American Encyclopedia of Ophthalmology 13,p.10316.JPW

Post, Alfred Charles (1806-1886) American surgeon, of considerable importance in ophthalmology. He was born in New York City and received both his classical and his medical education at Columbia University, taking the Medical degree in 1827. After a number of months in London, Paris, Vienna and Berlin, he settled in his native city and was soon successful, especially in ophthalmic and aural surgery. In 1851 he was made professor of surgery at Columbia, and, in this capacity, gave many lectures on the eye. He published, in 1841, a tiny volume *"Observations on the Cure of Strabismus, with an Appendix on a New Operation for the Cure of Stammering."* This contained a number of excellent colored plates, showing the anatomy of the parts involved, the instruments used, and the methods of employing them. Post also reported a case of blepharoplasty in 1842, and another in 1878. His skill in the strabismus and cataract operations is said to have been of a high degree. American Encyclopedia of Ophthalmology 13,p.10316-10317

Post, Jr., Martin Hayward (1886-1969) American ophthalmologist of St. Louis. Post served on the staff of Washington University for 48 years. Hayward Post came from a distinguished family of St. Louis ophthalmologists ; his father and his brother were both professors of ophthalmology at Washington University. Post was born in St. Louis and attended Smith Academy in St. Louis and was graduated from Amherst College in 1908. He received the degree of Doctor of Medicine from the Johns Hopkins Medical School in 1912 and was licensed to practice in Missouri the same year. He interned at St. Louis City Hospital in 1912-1913. His training in ophthalmology was with his father and in clinics in this country and abroad. After serving in World War I, he returned to St. Louis and became an instructor in clinical ophthalmology at Washington University in 1921, becoming professor of clinical ophthalmology in 1948, and professor emeritus at the age of 65 years. He retired from active practice in 1963. Post's interest in ophthalmology can best be shown by his activity over the years in a number of organizations. He was a long time member of the American Medical Association, serving as chairman of the Section on Ophthalmology in 1949. He was the first vice president of the American Academy of

Ophthalmology and Otolaryngology in 1956. He served as a member of the American Board of Ophthalmology being appointed for two terms, the first in 1944, and the second in 1947. He was a long-time enthusiastic member of the American Ophthalmological Society and, at the time of his death, was one of the senior active members. Post published a number of clinical and research papers dealing with a wide variety of subjects. The best known of these had to do with bacteriology of the eye. Post's solution became a common and favorite method of sterilization of sharp instruments for many years in many eye operating rooms. AJO 1969,68:164

Post, Martin Hayward (1851-1914) American ophthalmologist born at St. Louis. The subject of this sketch received the degree of Bachelor of Arts at Washington University in 1872, as honor man of his class. After a brief period of teaching in the public schools, he proceeded to study medicine at the St. Louis Medical College, where he was graduated in 1877. He was then for a time a student of general surgery with Dr. John T. Hodgen, but later studied ophthalmology with Dr. John→Green, with whom he very shortly became associated in practice. Some years later he studied ophthalmology under →Donders, at Utrecht, and under →Nettleship, in London. Returning to St. Louis, he continued the association with Dr. John Green, and was soon known as one of the great operators and writers. Post was a Fellow of the American College of Surgeons, a Member of the American Academy of Medicine, of the St. Louis Academy of Science, the American Ophthalmological Society, the Medical Society of City Hospital Alumni, etc. He was recording secretary of the St. Louis Medical Society in 1880 and 1881. He was once chairman of the Ophthalmological Section of the St. Louis Medical Society, and was President of the American Ophthalmological Society at the time of his death. He was an honorary member of the Phi Beta Kappa. He was long a member of the Board of Managers of the Missouri School for the Blind, "being appointed and reappointed by Democrat governors though himself an outspoken Republican in politics." He had a son Martin Hayward Post, Jr., who also became an ophthalmologist of St. Louis. American Encyclopedia of Ophthalmology 13,p. American Encyclopedia of Ophthalmology 13,p.10318-10322. The Ophthalmoscope,1914,p.691.

Pott, Percival (1713-1788) British, London surgeon, probably to be regarded as the inventor of discission as a routine measure for the treatment of soft cataract. He was born in London and performed most of his operations at St. Bartholomew's Hospital. As a general surgeon, he had no equal in his day, and his work on the general subject both were and still are of extreme importance. "*Pott's disease*" was quite appropriately named for him, and, in fact the knowledge of the various arthropathies, as well as of hydrocele hernia, etc., was very much enlarged by this surgical genius. Before his time, discission had indeed been performed for soft cataract. Thus the procedure is mentioned, first of all, by Celsus, who, however, as well as all succeeding writers, until the 18th century, mentions the operation as a makeshift merely, i. e., to be employed when, after a depression, the lens will not remain on the floor of the vitreous chamber. The quack, Thomas Woolhouse, in 1706, proposed, and may possibly have performed, discission as a regular method of treatment for soft cataracts. The subject of this sketch, however, in 1772, reported the results of discission as a regular means of treatment for soft cataract, and should, therefore, probably be regarded as its inventor. Pott wrote, in addition to works and articles of a general character, the following: 1. *Observations of that Disorder of the Corner of the Eye, Commonly Called Fistula Lacrymalis*. (London, 1758, '62, '65, '69, '75; Ger. trans., Dresden, 1771.) Long an authority in many lands it contained, however, but little that was new, and even that little was not of any particular importance. 2. *Chirurgical Observations Relative to the Cataract, the Polypus of the Nose,* etc. (London, 1772.) Contains the description of the discission operation, as a regular performance.3.*The chirugical works of Percivall Pott* 3 vols. London 1779. American Encyclopedia of Ophthalmology 13,p.10328-10329.JPW

Potter, Richard (1799-1886) British physicist, born in Manchester, England. Potter was largely self-taught in science until he entered Queens College, Cambridge, in his thirties. He received a medical degree in 1841, but chose the teaching of physical sciences over the practice of medicine, and from 1841 to 1865 was professor of natural philosophy and astronomy at University College, London; he spent his last years at Cambridge. Potter published treatises on mechanics, optics, hydrostatics, and hydrodynamics, in addition to

numerous journal articles. He wrote: *An elementary treatise on optics* London 1847. Albert

Poulard, ? (1873-1950) French ophthalmologist. Poulard was born at the Mont Saint Michel, in France. He studied medicine in Rennes, moving to Paris in 1892 and starting his intership in 1898. Poulard was a pupil of Panas and Delens before becoming head of the ophthalmic clinic of de la Personne. He was named ophthalmologist of the Hopitaux in 1906, and was first for a certain time in the Hopital Beaujon becoming soon head of the service of ophthalmology of the hospital group Necker/Enfants malades where he worked for many years. Poulard succeeded Victor Morax at the hospital Lariboisière before retiring due to the age limit, in 1936. Like Javal, Poulard slowly became blind. When he died he was totally blind. Poulard published *Précis d´ophtalmologie* Paris (?) and *Traité d´Ophtalmologie*, 2 vols. Paris 1923, and with Baillart and Bourgeois *Ophtalmologie & Otologie dans la pratique médicale* in: *Traité de pathologie médicale*, vol. XXVI, Paris 1922. Annales d´oculistique 1951,184:191.JPW

Poulet, W *see* **Wayenborgh, J-P**

Pourfour du Petit, François *see* **Petit, François Pourfour du**

Pouteau, Claude (1725-1775) French surgeon of Lyons, son of a surgeon. Pouteau studied surgery under his father, Ledran, Morand, and Jean Louis Petit. He worked from 1744 in the Hôtel-Dieu in Lyons and became the successor of Grassot as first physician. In 1747 Pouteau became chief surgeon to the Hôtel Dieu in Lyons where he enjoyed great success as a tracheotomist, stone-cutter and ophthalmologist. He wrote: *Mélanges de chirurgie*. Lyon 1760 (German edition the same year); *La Taille au niveau, avec addition de plusieurs instruments* Paris 1763 ; *Œuvres Posthumes* Paris 1783. American Encyclopedia of Ophthalmology 13,p.10330. Albert

Powell, Baden (1796-1860) physicist, born at Stamford Hill, England, received a B.A. in mathematics at Oriel College, Oxford in 1817, and after his ordination in 1820 was a clergyman until 1827, when he became professor of geometry at Oxford. He held this position until his death, although from 1854 he resided in London. Powell conducted valuable experimental work on radiant heat and on the dispersion of light, and was a proponent of the wave theory of light. Powell wrote: A general and elementary view of the undulatory theory, as applied to the dispersion of light and some other subjects. London 1841. Albert

Powell, Charles Bertram (1871-1914). American ophthalmologist and otolaryngologist of Bemidji, Minn., born in Wabasha County, Minn. He received the degree of doctor in medicine at the University of Minnesota in 1894. Settling in Bemidji, he was soon a successful ophthalmologist. American Encyclopedia of Ophthalmology 13,p.10331

Powell, James W. An early American ophthalmologist, whose life dates are unknown. He published in 1847 an octavo volume of 140 pages, entitled *"The Eye: Its Imperfections and Their Prevention."* The work is a mere compilation, is badly written, and was solely intended to advance the commercial interests of its author. He had been a pupil of Dr. Arthur Jacob, of Dublin, and was a member of the Royal College of Surgeons of Ireland. American Encyclopedia of Ophthalmology 13,p.10331

Power, Henry (1829-1911). British ophthalmologist. Born at Nantes, France, he studied at St. Bartholomew's Hospital, and became in 1851 both L. A. A. and M. R. C. S. (Eng.). In I854 he became F. R. C. S., and one year later received the degree of M. B. (London), winning the gold medal and scholarship in surgery. He was then, at various times, demonstrator of anatomy at the Westminster Hospital, assistant surgeon, surgeon to the Royal Westminster Ophthalmic Hospital, assistant surgeon to the Westminster Hospital, ophthalmic surgeon to St. George's Hospital, and, finally, ophthalmic surgeon to St. Bartholomew's. The last position he held for nearly a quarter of a century. He was an original member of the Ophthalmological Society of the United Kingdom, once a member of its council, twice its vice-president, and for three years its president. Among Power's most important literary works we may mention the following: 1. The sixth, seventh, eighth and ninth editions of *Carpenter Physiology* (all edited by Power, 1864-1876). 2. *Illustrations of some of the Principal Diseases of the Eye*. (London 1869.) 3. Stricker's *"Manual of Human and Comparative Histology*. (Eng. Trans. by Power for New

Sydenham Society.) 4.Erb "*On Diseases of the Nervous System"* (Eng. Trans. by Power for v. Ziemssen's Cyclop.). Power was editor of *Mayne´s Expository Lexicon*. American Encyclopedia of Ophthalmology 13,p.10332. The Ophthalmoscope, 1911,p. 156-158 (by G..→Hartridge and by Walter H. →Jessop). Albert. JPW.

Power, John Hatch (1806- ?). Irish surgeon, who devoted considerable attention to the eye. Born in Dublin he became a pupil of Robert Adams, in 1831 Licentiate and in 1844 Fellow of the Royal College of Surgeons of Ireland. In 1835 be was made prosector at the Richmond Hospital School, in 1838 M.D. (Glasgow) in 1847 surgeon at the Jervis Street Hospital and Fellow of' the Council of the Royal College of Surgeons. In 1851 he was appointed professor of anatomy, and in 1861 professor of surgery at the Royal College. His *"Surgical Anatomy of the Arteries"* passed through three editions, and was adopted by the Medical Department of the United States Army as the official guide for surgeons in field and in hospital. Power's only (or chief) ophthalmologic writing was an article in the *Dublin Hospital Gazette*, entitled "*On the Structure of the Optic Nerve in Relation to Reversed Retinal Vision*. " The date of Power's death is not now ascertainable.American Encyclopedia of Ophthalmology 13,p.10332-10333

Powers, George Hermon (1840-1913). American professor of ophthalmology and otology in the University of California. Born at Chelsea, Mass., of English ancestry, he received the degree of Bachelor of Arts at Harvard College in 1861, and that of M. D. at the Harvard Medical School in June, 1865. For the next few months he studied with Dr. H. W. Williams, of Boston, and early in the following year settled in San Francisco as ophthalmologist. For many years he taught diseases of the eye, ear, nose and throat at Toland Medical College, and, in fact, continued in this chair after the incorporation of the college with the University of California. American Encyclopedia of Ophthalmology 13,p.10333

Prachakvej, Prachak (1935-) Thai ophthalmologist, Professor of Ophthalmology, Chulalongkorn Hospital Medical School, Bangkok. Born as the son of Prof. L.→PRACHAKVEIASITH, he graduated from Chulalongkorn University of Medical Sciences in 1960 and received his M.D. degree. He continued postgraduate studies in the U.S.A., at University of Pennsylvania (1964), at Brooklyn eye and Ear Hospital (1967), at the University of California, San Francisco (1968): he has been named a Fellow of the American Academy of Ophthalmology, of the International Society of Eye Surgeons since 1968, and Fellow of the American College of Surgeons since 1972. He received the Diploma of Thai Board of Ophthalmology in 1972 and was named a Fellow of International College of Surgeons. He serves as the Professor of Ophthalmology of Chulalongkorn University Hospital Medical School since 1987, and worked as the Chairman of the Department of Ophthalmology (1992-1995). He had held many professional positions in National Organizations, including Chairman, The Ophthalmic Examination Board of Thailand (1985-1995), President of the Ophthalmological Society of Thailand (1987-1991) and President of the Royal College of Ophthalmologists of Thailand (1991-1996). In International Organizations, he served as the Secretary General of the 8th Congress of the Asia-Pacific Academy of Ophthalmology (APAO), Regional Secretary of APAO (1981-1983, 1983-1985), Vice-President (1995-1996) and the President of APAO (1997-1998), Regional Secretary of the International Society of Geographical Ophthalmology (1999-) and a Council Member of the International Council of Ophthalmology (1999-). He has published many scientific papers and wrote textbooks, e.g. "*Intraocular lens implantation in the year 1982-1988 at Chulalongkorn University Hospital, Bangkok*, Trans. XII APAO: 697, 1989", *Trachomatous entropion correction, use of orbital septum and levator aponeurosis*. Arch Ophthalmol. 96: 874, 1978", "*The status of blindness and low vision in Thailand*. Proc of Hoya Vision Care First Asia-Pacific International Conference: 26, 1998" and "*Therapeutic Drugs for ocular diseases*, Sriboon Publishing Co. Bangkok, 1986". He is the recipient of many Awards, e.g. APAO Distinguished Service Award (1981), Chulalongkorn University Distinguished Award (1985), Distinguished Service Award of the First Thailand-Japan Joint Meeting in Ophthalmology. In recognition of his meritorious service, the King of Thailand conferred on him "*The Most Noble Order of the Crown*", the highest class decoration in Thailand. (SM)

Luang Prachakvejasith

Prachakvejasith, Luang (1893-1986) Thai ophthalmologist, Professor of Ophthalmology of Faculty of Medicine, Chulalongkorn University. The founder of the first Eye Department of Thailand and respected as the Father of Ophthalmology in Thailand. He graduated from Sirirai Medical School of Chulalongkorn University, Bangkok, and received his M.D. degree in 1915. He then worked as an Ophthalmic Assistant at Chulalongkorn Red Cross Hospital (1915-1922) and continued his Ophthalmology practice in India (1923-1925). In 1924, he founded the Department of Ophthalmology at the Chulalongkorn Red Cross Hospital: this is the first full scale Department of Ophthalmology in Thailand. Conjointly with the Hospital service, he fulfilled his duty as Colonel of the Royal Thai Army in 1940. In 1947, the Hospital became affiliated to the Faculty of Medicine of Chulalongkorn University, and he was appointed the Professor and Chairman of the Department of Ophthalmology: he served in this position until his death. He founded the Ophthalmological and Otolaryngological Society of Thailand in 1956 and served as the First President of the Society (1956- ?). He was active in the Prevention of Blindness in Thailand and wrote "*The treatment of trachoma by carbonic snow*" in the Medical Journal of the Siamese Red Cross, Chulalongkorn Memorial Hospital Vol. 1, 1918. In recognition of his meritorious service, the King of Thailand conferred upon him "*The Knight Commander of the most exalted Order of the White Elephant*". His footsteps are followed by his son Prachak→PRACHAKVEJ. (by Prachack PRACHAKVEJ). (SM)

Pradhan, Damodar (1952-) Nepalese ophthalmologist, Secretary of Nepal Netra Jyoti Sangh, Sirha (National Society for Comprehensive Eye Care). He graduated from All India Institute of Medical Sciences in 1975 with MBBS degree, and then received MS (Ophth) in 1989 from Postgraduate Institute of Medical Education and Research, Chandigarh, India (thesis: *Immunological status in herpes simplex viral keratitis in man*). He received further training in Public Administration in 1982 from the Ministry of General Administration, Kathmandu, in Management of Eye Care Delivery at the National Institute of Health, U.S.A. and Madurai, Tamilnadu, India (1994) and also training in Phacoemulsification at Storm Eye Institute, Charleston, U.S.A. (1998). He has been working as Assistant Program Director of Nepal Netra Jyoti Sangh since 1989 at Sagarmatha Choudhary Eye Hospital. He is a member of American Society of Cataract and Refractive Surgery. Many of his publications include *Cell mediated immunity in herpes simplex keratitis in man*. Acta Ophthalmol. 68: 519, 1990 and *Do anterior chamber IOLs have a role in developing countries? Results of clinical trials in Nepal*. Ophthalmologica, 95: 504, 1998. He is a recipient of Helen Keller International Humanitarian Award (1998) and Distinguished service award of the Asia-Pacific Academy of Ophthalmology (1999). (Sagarmatha Choudhary Eye Hospital Lahan, Sirha, Sagarmatha Zone, Nepal, phone: +977-60402, Mailing address: c/o United Mission to Nepal. P.O.Box 126, Kathmandu, Nepal) (SM)

Prefontaine, Louis A (1866-1905) . American ophthalmologist of Springfield, Mass. Born in 1866, be graduated in medicine at the University of Pennsylvania in 1892, and then for eighteen months was interne in a hospital. He studied ophthalmology at the New York Eye and Ear Infirmary from Jan., 1895, till July, 1896. For the next two years, because of chronic nephritis, he practised in Mexico. Returning to the U. S., he settled at Springfield, Mass., where he was ophthalmologist to Mercy Hospital and Springfield Hospital, and soon became well known as an operator.American Encyclopedia of Ophthalmology 13,p.10335

Pregl, Fritz (1869-1930) Austrian ophthalmologist best known for his work in analytical chemistry, which earned him the Nobel Prize in chemistry in 1923. Pregl studied medicine at the University of Graz, then specialized in ophthalmology and did physiological research. He studied chemistry in Germany with Carl Hufner, Wilhelm Ostwald, and Emil Fischer. Pregl returned to the medical-chemistry laboratory at the University of Graz, worked on organic microanalysis. Professor of medical chemistry at University of Innsbruck (1910) and Graz (1913). His influential textbook *Die quantitative organische Mikroanalyse*, first published in 1917, went through many editions. *Dictionary of Scientific Biography*, vol XI, pp. 128-129.(James Ravin)

Pretz, George Rupp (? – 1918) American ophthalmologist and otolaryngologist of Lebanon, Penna., born at Steelton, Penna. He graduated at the Steel High School,

Gettysburg College, and in 1909, at the Johns Hopkins University, Medical Department. He settled, at first as general practitioner in Lebanon; but later decided to limit his practice to the eye, ear, nose and throat. He was ophthalmologist and otolaryngologist to the Good Samaritan Hospital at Lebanon, and a Fellow of the A.M.A. He was also a prominent Mason. At the very beginning of America's entry into the war he tendered his services to the War Department, was lieutenant and was called for duty at Camp Greenleaf where he died. AJO 1919,2:166-167.

Preyer, Thierry William (1841-1897). Anglo-German physician, of slight ophthalmic importance because of his "*Farben- und Temperatursinn* " (1881). Born at Moss-Side (near Manchester) England he received his general education at London, Duisburg and Bonn. He then studied medicine at Bonn, Berlin, Vienna, Heidelberg and Paris. His Ph.D. was received in 1862, his M.D. in 1866 In 1869 he was full professor of physiology at Jena. In 1888 he removed to Berlin, where he was privatdocent in physiology till 1893. American Encyclopedia of Ophthalmology 13,p.10370

Preziosi, Luigi Count Sir (1888-1965) Maltese ophthalmologist and politician. He graduated at the Royal University of Malta, in 1907 and subsequently specialized in ophthalmology under Cirrincione at Rome. In 1920 he obtained the Diploma of Ophthalmology at Oxford. He spent all his life in an active practice in his native island working continuously until the time of his death. He was unusually interested in trachoma- a disease prevalent in Malta- in its earlier years, but attained his greatest reputation internationally by devising an original operation for the treatment of glaucoma in 1924, an operation which is still practised extensively, in many, countries today. The son of the seventh Count Preziosi of Malta, he was one of the aristocrats of that island and apart from his strenuous professional activities he took a large part in public life. He was elected to the Senate of Malta in 1927 and became its President in 1932. In 1944 he was elected President of the National Congress and in 1947 President of the National Assembly. In 1948 he was knighted, partly for his medical and partly for his public work. In 1949 he retired from politics and devoted himself entirely to ophthalmology for the remainder of his life.Brit.J.Ophthal.1965,49,608

Prichard, Augustin (1818-1893). English, Bristol ophthalmologist, the first to propose enucleation of an injured eye for the prevention of sympathetic ophthalmia, and the inventor of numerous ophthalmic instruments. He was born at Bristol, the second son of Dr.James Cowles Prichard, a famous ethnologist. From 1834 to '39 he served as surgeon's apprentice to his uncle, Mr. J. B. Estlin, founder of the Bristol Eye Dispensary. He also studied at the British Medical School and Infirmary, and at St. Bartholomew's Hospital, London. He received the degrees of M.R.C.S. (Eng.) and L.S.A. in 1840. In 1840 and '41 he studied at Berlin, receiving the degree M. D. For a year he studied ophthalmology at Vienna and Paris. Returning to England in 1842, he settled in Bristol, was shortly appointed lecturer on surgery and anatomy, and, in 1849, was elected surgeon to the Infirmary. In this same year he received the F.R.C.S. Eng. At the end of twenty years he was obliged to resign his surgeoncy at the Infirmary, because of a regulation of the institution. He continued, however, in private practice for many years, and had an international reputation as an operator. Prichard was a founder of the Bristol Medico-Chirurgical Society, and for many years was surgeon to Clifton College. At two of the annual meetings of the British Medical Association he delivered the address on surgery. In 1893 he retired from practice. Prichard's chief claim to remembrance will eventually rest upon his reputation as an operator. He wrote: *Ten years of operative surgery in the provinces* 2 parts, London 1862-1863. JPW

Priestley, Joseph (1733-1804) Born in Fieldhead, near Leeds, England. In 1755 he became minister to a small congregation at Needham Market, in Suffolk. In 1758 he quitted Needham for Nantwich, and in 1761 he moved, as teacher of languages and belles lettres, to an academy at Warrington. At this time he published a *History of Electric Science* (1767). In the same year he moved to Leeds, having been appointed minister of the Mill Hill dissenting chapel there. The fact of a brewery being beside his dwelling gave a new direction to his energetic and versatile mind; he began to study chemistry, and in 1774 made his epoch-making discovery of oxygen. In 1780 he became minister of a dissenting chapel at Birmingham. In 1791 he was elected to a charge at Hackney; but his

honestly-avowed opinions had made him unpopular, and he (1794) came to America, where he was heartily received. Priestley's theological views were far in advance of his time. His chemical work on gases was of the highest value. He invented the pneumatic trough, and was the first to apply carbon dioxide in "aereting" waters. He also wrote *The History and present State of Discoveries relating to Vision, Light and Colours* (London 1772) and *A Familiar Introduction to the Theory and Practice of Perspective* (London 1780) American Encyclopedia of Ophthalmology 13,p.10372; Albert.

Prijot, Emile (1925-) Belgian ophthalmologist. Prijot was born in Liège. He is the son of Henri Prijot (1893-1965), also an ophthalmologist. During his student's years he worked in a laboratory of biochemistry. He obtained the M.D. degree in Liège in 1950. After one year in Friedenwald's department in Baltimore, he entered the Liège department of ophthalmology where he has been successively resident, adjunct departmental head and associated professor after obtaining in 1961 the special doctorate with a thesis on *tonometry and tonography*. He organized in 1963 a department of contactology (with Christiane Marichal-Courtois) and in 1964 a department of electrophysiology. In 1982 he succeeded to Roger→Weekers as head of the department and professor of ophthalmology. His thesis in 1961 was the result of 10 years of research with Roger Weekers on *physiopathology of glaucoma* and more particularly on *aqueous veins* (1950), *aqueous humour dynamics*, *electronic tonometry and tonography* (from 1951), *relation between ophthalmotonic consensual reaction and aqueous humour dynamics* (1956), *preganglionic cervical sympathectomy and aqueous flow* (1957), *influence of ocular rigidity* (1958), *early diagnosis of glaucoma and action of sympathicomimetic drugs*. From 1961 he became involved in other research and clinical fields: *pleoptic and surgical treatment of early convergent squint, toxoplasmosis, contact lenses* (report for the Belgian Ophthalmological Society in 1967 with P. Cochet and Christiane Maréchal-Courtois), and *microsurgery* (from 1970). (Verriest)

Prochaska, Georg (? – 1820). Born at Lipsitz, in Moravia, he studied at first philosophy, then medicine. In 1776 he received his medical degree at the University of Vienna, and at once became assistant to→Beer. In 1780 he moved to Prague in order to accept the chair of anatomy in the university at that place, but in 1791, he was called back to Vienna, where he was made professor of anatomy, physiology and ophthalmology. He left no writings on ophthalmology, but was a celebrated operator on the eye, having performed, according to some reports, no fewer than 3,000 cataract operations. American Encyclopedia of Ophthalmology 13,p.10387

Prommindaroj, Kobchai (1924-) Thai ophthalmologist, Professor Emeritus of the Faculty of Medicine, Chulalongkorn University. He graduated from Siriraj Medical College, University of Medical Sciences, Bangkok, and received his M.D. degree in 1946. He received Ophthalmology training at the Department of Ophthalmology of Chulalonkorn Hospital under Prof. PRACHACKVEJASITH P. and studied further at the Chicago Eye and Ear Hospital U.S.A. with a Fulbright Fellowship in 1950-1952, and he has since been named a Fellow of the International College of Surgeons. He served as the Head of the Department of Ophthalmology of the Faculty of Medicine, Chulalongkorn University in 1957-1985. He was granted the China Medical Board Scholarship of the Rockefeller Foundation and made advanced study in Ophthalmology at the New York Eye and Ear Infirmary in 1962-1964, and was elected a Fellow of the American College of Surgeons. On homecoming, he was appointed the Professor of Ophthalmology of Chulalongkorn University in 1968 and served until retirement in 1987. He established the formal 3-year course of Ophthalmology Residency Training at the Hospital. His interest covered a wide area of Ophthalmology and he introduced modern techniques, e.g. keratoplasty, retinal detachment surgery and cataract with intraocular lens implantation. During his tenure, he founded the Thai Red Cross Eye Bank in 1965 and served as the Chairman in 1974-1988. He also served as the Chairman of the Thai Board of Ophthalmology, Medical Council of Thailand, in 1971-1987, and the President of the Ophthalmological Society of Thailand in 1975-1981. He organized and served as the President the 8th Congress of the Asia-Pacific Academy of Ophthalmology in 1981. The Academy granted him its highest honor “Jose Rizal Medal” for his distinguished contributions to the Academy. He served as the Advisor to the Ministry of Public Health, and contributed to the Eye Care in the rural area and also in the Cambodian refugee

camps. In recognition of his meritorious service, the Government conferred on him in 1968 "*Royal Decoration of the Knight Grand Cross* (First Class) of the *Most Exalted Order of the White Elephant*" and "*Royal Decoration of the Knight Grand Cross* (First Class) of the most Noble Order of the Crown of Thailand.(SM)

Provost, Addison John (1863-1918) American ophthalmologist and oto-laryngologist of Oshkosh, Wis. He was born in Theresa, Dodge county, Wis., moved with his father's family to Menasha, and later to Rudolph, in Wood county. For a time he worked as conductor on a railway, whereby he earned the means for a medical education. His medical degree was received at the Hahnemann Medical College, Chicago, 1891. For a time he practised at Monroe, Wis. Where he married. Shortly afterward the couple moved to Monticello, later still to Merrill, and, finally, to Oshkosh, where he practised as specialist in diseases of the eye, ear, nose and throat for many years. He enlisted in the medical (ophthalmic) department of the army, and, with the rank of captain, was stationed first at Ft. Riley, Kansas, later at Ft. Bliss.American Encyclopedia of Ophthalmology 14,p.10415-10416

Pruett, Ronald C. (1937-) American ophthalmologist. Pruett received his MD degree from the University of Pennsylvania Medical School, Philadelphia in 1963. Following internship at the Hospital of the University of Pennsylvania, Dr. Pruett did his residency in ophthalmology at Massachusetts Eye and Ear Infirmary (1965-1968). His postgraduate studies included a research fellowship (1965) at the Howe Laboratory of Harvard Medical School and a vitreoretinal fellowship 1968-69 at the Schepens Eye Research Institute (SERI) and Massachusetts Eye and Ear Infirmary, Boston. Dr. Pruett is Clinical Senior Scientist, SERI; Associate Clinical Professor of Ophthalmology, Harvard Medical School; and Surgeon in Ophthalmology at the Massachusetts Eye and Ear Infirmary. He is President of Schepens Retina Associates.
E-Mail: rcp@schepens.com

Puget, Louis de (1629-1709) French scientist born in Lyons. Puget was a naturalist and physicist. He studied the properties of magnets and the anatomy of insects. Being a wealthy, independent individual, he was able to devote his entire life to research. Puget built up a fantastic collection of microscopes and magnets. He published *Lettres écrites à un philosophe sur les effets de l´aimant* (1702) ; *Observations sur la structure des yeux de divers insectes et sur la trompe des papilIons* Lyons 1706. Puget also was very interested in Greek and Latin literature and translated and versified many of Homer´s *Odes* into French. A long "eloge" (a kind of obituary) was published in the *Journal de Trévoux,* Sept 1710, p.1575-1589. JPW

Pugh, Mary Agnes (1900-1972) British ophthalmologist, formerly attached to Moorfields Eye Hospital and the Institute of Ophthalmology. Born in Cardiff in 1900, Mary Pugh was educated at Cardiff High School and entered Cardiff Medical School in 1918. Her clinical training was at Charing Cross Hospital, London, where she qualified in 1926. She was House Surgeon at the Birmingham and Midland Eye Hospital and later at the Western Ophthalmic Hospital and was appointed to the newly formed Squint Department at Moorfields Eye Hospital, City Road, in 1928, shortly afterwards being made Medical Officer in Charge. She held this post until 1948 when she became a part-time research worker at the Institute of Ophthalmology, which she continued until she retired. Throughout she conducted a successful private practice. Miss Pugh's work at Moorfields led her to devise the Pugh Orthoptoscope. This was the most advanced instrument of its time for the investigation and treatment of squint and heterophoria incorporating most of the elements of our modern instruments. It enabled every known aspect of a squint or heterophoria to be observed, measured, and corrected; its versatility and its many novel features proved to be invaluable aids to treatment. Although she had the help of only one nurse in her Department at Moorfields, her work was notable for the breadth and depth of her medical assessment of all her patients-of their general health and social conditions and of their relation to their families-in addition to meticulous ophthalmic investigation and supervision while under treatment. Investigation of each case by a specialist medical officer with the necessary support is expensive and time-consuming but, especially in psychologically determined squints, we still lag behind her pioneer work. Her experience as Medical Officer in Charge of the Squint Department at Moorfields led to her book

"*Squint Training*" published in 1936 (reviewed in AJO, vol.19,p.714). After a detailed statement of her clinical approach she gave a clear classification of a thousand cases and laid down the appropriate line of treatment to be followed, together with indications for surgery as she saw them. The results of treatment in each group were discussed and set out statistically. The book cleared the ground for a new systematic approach, laid down sound guidelines, and introduced much new material. Up to 1948 Mary Pugh's work had been essentially individual and pioneering. The Squint Departments of the post-war Moorfields were envisaged in terms of a different approach and organization and she moved to the Institute of Ophthalmology where she worked on a part-time research basis until she retired. She investigated the nature of visual distortion in amblyopia associated with heterotropia and evolved a theory as to the retinal changes that might account for her findings. The theory has not been confirmed, but the clinical evidence upon which it is based is of importance to our understanding of amblyopia. BJO 1972,56:382

Puliafito, Carmen A. (1951-) American ophthalmologist, born in Buffalo, New York. Puliafito graduated from St. Joseph's Collegiate Institute in 1969 and received an A.B. cum laude from Harvard College in 1973 and the M.D. magna cum laude from Harvard Medical School in 1978. He completed a residency in ophthalmology at the Massachusetts Eye and Ear Infirmary and Harvard Medical School, and there completed fellowships in both ophthalmic pathology and vitreoretinal diseases and surgery. Dr. Puliafito completed his M.B.A. studies at the Wharton Schoolof the University of Pennsylvania in 1997. He was founding director of the Morse Laser Center at the Massachusetts Eye and Ear Infirmary, Associate Professor of Ophthalmology at Harvard Medical School and Associate Professor in the Health Sciences Technology Division, Massachusetts Institute of Technology. In September, 1991, Dr. Puliafito was appointed Professor and Chair of the Department of Ophthalmology at Tufts University School of Medicine, founding Director of the New England Eye Center, Ophthalmologist-in-Chief at New England Medical Center, and Adjunct Professor of Electrical Engineering and Computer Science at Tufts University. Under Dr. Puliafito's leadership, the New England Eye Center has become recognized as an international center for excellence in ophthalmology and eye research. Dr. Puliafito directs a major academic clinical practice with 17 full-time ophthalmologists, and annual revenue of $10 million. The main center, in Boston, has grown into a major tertiary center with 50,000 patient visits per year. The New England Eye Center is a leader in innovative strategies to address the rapidly changing health care environment. A network of 7 regional New England Eye Center locations has been established throughout eastern, central, and western Massachusetts. Dr. Puliafito is President of New England Eye Care, Inc., a physicians' network to deliver medical and surgical ophthalmic services under capitation, with 25,000 covered lives. Research at the New England Eye Center has grown rapidly as well, with new molecular genetics, pharmacology, and cornea research laboratories recently established, with an annual budget of $2 million. Dr. Puliafito is an eye surgeon specializing in diseases and surgery of the retina and vitreous, and he maintains a busy clinical practice. He is also a world renowned authority on ophthalmic lasers. He has been a pioneer in the basic investigation and clinical application of such lasers as Nd:YAG, diode and excimer in the treatment of retinal disorders, post-cataract complications, and glaucoma, as well as for refractive surgery. He co-invented the technique of optical coherence tomography (OCT). He is the author of more than 100 peer-reviewed publications in the scientific literature, and four books. He holds two United States patents. Dr.Puliafito was editor-in-chief of *Lasers in Surgery and Medicine*, the leading academic journal in the field of biomedical lasers, from 1987 to 1995. In 1995, he was appointed Editor-in-Chief of *Ophthalmic Surgery and Lasers*. He was elected 1994-95 President of the American Society for Laser Medicine and Surgery, and 1993-95 Vice-President of the Massachusetts Society of Eye Physicians and Surgeons. In 1995, he was elected Trustee of the Association for Research in Vision and Ophthalmology (ARVO). Dr. Puliafito was the recipient of the 1994 Rosenthal Foundation Award in the Visual Sciences. He has been elected to membership of the Retina Society, Macula Society, and Club Jules Gonin. He edited: Albert, D.M., Puliafito, C.A., *Foundations of Ophthalmic Pathology*, New York: Appleton-Century-Crofts, 1979; Puliafito, C.A., *Lasers in Surgery and Medicine: Principles and Practice*, New York: Wiley-Liss, 1996. Puliafito coauthored: Steinert, R.F., Puliafito, C.A., *The Nd-YAG Laser in Ophthalmology: Principles and Clinical Applications of Photodisruption*, Philadelphia, PA: W.B. Saunders

Co., 1985. Hee M.R., Puliafito C.A., Schuman J.S., Fujimoto, J.G., *Optical Coherence Tomography of Ocular Diseases*, Thorofare, NJ: Slack, Inc., 1996. Reichel, E., Puliafito, C.A., *Atlas of Indocyanine Green Angiography*, New York: Igaku-Shoin, 1996. Papers: Steinert RF, Puliafito CA, Kittrell C. *Plasma shielding by Q-switched and mode- locked Nd-YAG lasers.* Ophthalmology 1983;90:1003-1006. Puliafito CA, Steinert RF. *Laser surgery of the lens: Experimental studies.* Ophthalmology 1983;90:1007-12. Puliafito CA, Wasson PJ, Steinert RF, Gragoudas ES. *Neodymium-YAG laser surgery on experimental vitreous membranes.* Arch Ophthalmol 1984;102(6):843-847. Latina MA, Puliafito CA, Steinert RF, Epstein DL. *Experimental iridotomy with the Q-switched Neodymium-YAG laser.* Arch Ophthalmol 1984;102(8):1211-13. Puliafito CA, Steinert RF, Deutsch TF, Hillenkamp F, Dehm E, Adler CM. *Excimer laser ablation of the cornea and lens: Experimental studies.* Ophthalmology 1985;92:741-748. Dehm EJ, Puliafito CA, Adler CM, Steinert RF. *Corneal endothelial injury in rabbits following excimer laser ablation at 193 and 248nm.* Arch Ophthalmol 1986;104:1364- 1368. Nanevicz TM, Prince MR, Gawande AA, Puliafito CA. *Excimer laser ablation of the lens.* Arch Ophthalmol 1986;104:1825-29. Nuss RC, Puliafito CA, Dehm EJ. *Unscheduled DNA synthesis following excimer laser ablation of the cornea in vivo.* Invest Ophthalmol Vis Sci 1987;28:287-294. Puliafito CA, Deutsch TF, Boll J, To K. *Semiconductor laser endophotocoagulation of the retina.* Arch Ophthalmol 1987;105:424-427. Puliafito CA, Stern D, Krueger RR, Mandel ER. *High-speed photography of excimer laser ablation of the cornea.* Arch Ophthalmol 1987;105:1255-59. Balles MW, Puliafito CA, D'Amico DJ, Jacobson JJ, Birngruber R. *Semiconductor diode laser photocoagulation in retinal vascular disease.* Ophthalmology 1990; 97:1553-1561. Huang D, Swanson EA, Lin CP, Schuman JS, Stinson WG, Chang W, Hee MR, Flotte T, Gregory K, Puliafito CA, Fujimoto JG. *Optical coherence tomography.* Science 1991;254:1178-1181. Dutt S, Steinert RF, Raizman MB, Puliafito CA. *One-year results of excimer laser photorefractive keratectomy for low to moderate myopia.* Arch Ophthalmol 1994;112:1427-36. Izatt JA, Hee MR, Swanson EA, Lin CP, Huang D, Schuman JS, Puliafito CA, Fujimoto JG. *Micrometer-scale resolution imaging of the anterior eye in vivo with optical coherence tomography.* Arch Ophthalmol 1994;112:1584-1589. Puliafito CA, Hee MR, Lin CP, Reichel E, Schuman JS, Duker JS, Izatt JA, Swanson EA, Fujimoto JG. *Imaging of macular diseases with optical coherence tomography.* Ophthalmology 1995;102:217-229. Hee MR, Izatt JA, Swanson EA, Huang D, Lin CP, Schuman JS, Puliafito CA, Fujimoto JG. *Optical coherence tomography of the human retina.* Arch Ophthalmol 1995;113:325-332. Schuman JS, Pedut-Kloizman T, Hee MR, Wang C, Lin CP, Puliafito CA, Fujimoto JG, Izatt JA, Swanson EA, Huang D. *Quantification of nerve fiber layer thickness in normal and glaucomatous eyes using optical coherence tomography.* Arch Ophthalmol 1995;113;586-596. Hee MR, Puliafito CA, Wong C, Duker JS, Reichel E, Schuman JS, Swanson EA, Fujimoto JG. *Optical coherence tomography of macular holes.* Ophthalmology 1995;102:748-756. Reichel E, Duker JS, Puliafito CA. *Indocyanine green (ICG) angiography for choroidal neovascularization obscured by hemorrhage.* Ophthalmology 1995;102:1871-1976. Rutledge B, Coker JG, Puliafito CA, Hee MR, Duker JS, Reichel ER, Wilkins J, Schuman JS, Swanson EA, Fujimoto JG. *Optical coherence tomography of macular lesions associated with optic nerve pits.* Ophthalmology 1996;103: 1047-1053.(AB)

Purkinje, Johannes Evangelista von (1787-1869) German physiologist of the early 19th century, whose name still lives in the term, "Purkinje-Sanson images." Born at Libochowitz, he at first determined to be a priest. At the age of 21, however, he turned his attention to medicine, and, in 1819, at the age of 32, received his medical degree at Prague. His dissertation on this occasion, entitled "*Beiträge zur Kentniss des Sehens in Subjectiver Hinsicht*," attracted the attention of the scientific world, and brought him the friendship of Goethe. In 1823 he received the chair of physiology and pathology at Breslau-a position which he held for 26 years. He then moved back to Prague, in order to accept the chair of physiology in the University at that place. Both at Breslau and at Prague he established a Physiologic Institute. In addition to the graduation dissertation mentioned above, Purkinje wrote, of interest to ophthalmologists: 1. *Commentatio de Examine Physiologico Organi Visus et Systematis Cutanei.* (Breslau, 1823.) 2. *Beobachtungen und Versuche zur Physiologie der Sinnen* (Prague and Berlin, 1823-26, 2 vols.). In the latter work it was that the author announced his great discovery of the three

(correctly speaking, two) Purkinje images: The, first and second, erect, are reflections from the anterior surfaces of the cornea and the lens, the third, however, inverted, from the forwardly-concave posterior lenticular surface. The first of these images was very well known to the ancients, who, however, believed that it had its origin either on or in the lens, instead of on the cornea.→Scheiner was the first to indicate its actual place of origin. Purkinje discovered the other two images, and published his discovery in 1823, together with proper explanations of the origin of these images. For →Sanson, however, remained the honor of pointing out in 1837, the use of all three images for diagnostic purposes.American Encyclopedia of Ophthalmology 14,p.10803-10804

Purnell, Edward W. (1928-1993) American ophthalmologist, one of the founding fathers of the field of ophthalmic ultrasound. He had been the Charles I Thomas Emeritus Professor of Ophthalmology since March of 1993 after having served in the Division of Ophthalmology at Case Western Reserve University for 32 years,of which 20 as chairman. Purnell was born in Youngstown, Ohio. He received the Bachelor of Arts degree cum laude from Princeton University in 1950. A member of the ROTC, he was commissioned at graduation and served as a Navy line officer for three years during the Korean War. After discharge in 1953, he entered medical school at Case Western Reserve University in Cleveland, graduating in 1957. He then completed his internship and residency in ophthalmology at University Hospitals of Cleveland. After completion of his residency in 1961, he joined the faculty as an instructor in the Division of Ophthalmology of Case Western Reserve in 1961 under Charles I→Thomas. After Dr. Thomas's retirement in 1973, Purnell became Director of the Division. In 1977 he became the first individual to hold the Charles I Thomas Professorship. Purnell held membership in numerous local, state, national, and international professional societies. His most important offices included president of the Cleveland Ophthalmological Society (1976), member of the executive board of the Societas Internationalis Pro Diagnostica Ultrasonica in Ophthalmologia (1972-1993), and co-founder of the American Association of Ultrasound in Ophthalmology (1977). He was elected a member of the Retina Society (1974), a fellow in the American Institute of Ultrasound in Medicine (1978), and a member of the American Ophthalmological Society (1980). Purnell received his first grant on the physiology of aqueous humor outflow from the National Eye Institute in 1959 while still a medical student. However, at the suggestion of Dr. Thomas and on the basis of his engineering background and experience in the Navy, Dr. Purnell switched his interest to ultrasonic research. For the next 25 years with National Eye Institute support, Dr. Purnell and his research team, including Dr. Adnan Sokullu, Edward Holasek, Wayne Jennings, Dr. William Cappaert and Dr. K. Ellen Frank played a seminal role in advances in the technology of diagnostic and therapeutic ophthalmic ultrasound. Purnell was one of the pioneers who made ophthalmic ultrasonography what it is today, an essential part of the ophthalmologist's diagnostic armamentarium. Four major technologic advances of his team included the establishment of the *first* clinical immersion ophthalmic B-scanner in 1964, the *first* hand-held contact B-scanner in 1970, the use of color coding spectral information in 1975, and spectral ultrasonic microbiometry in 1981. Besides these technologic advances, Purnell and his team were among the *first* to describe clinically the ultrasonic classification of orbital and intraocular tumors and the toxic effects of high-energy ultrasound on ocular tissues. On the basis of his vast experience, he served as a consultant to the Federal Bureau of Standards (1976-1985) on the safe limits for ultrasound. For all these achievements he received the Pioneer Award from the American Institute of Ultrasound in Medicine in 1988. Along with his accomplishments as a researcher, administrator, and physician, he was most proud of his role as an educator. During his 20-year tenure as chairman, he directed the training of over 90 residents, ten of whom went on to full-time faculty positions. His leadership was always strong, supportive, and unassuming. He preferred to work behind the scenes and let his residents and faculty shine. For this achievement he was the first awardee of the Havener Award of the Ohio Ophthalmological Society in 1991. Similarly, since his own residency he was active in the American Academy of Ophthalmology educational programs and was in the first group of Senior Honor Awardees in 1984. AJO 1994,117:550-551; Arch Ophthalmol 1994,112:316

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

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

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

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

Index

G

K

L

M

N

O

P

Q

R

T

V

W