Foundations of ophthalmology : great insights that established the discipline /

Marmor, Michael F. (1941-),
editor
Albert, Daniel M.,
editor

Springer,
2017

Electronic book | Electronic books | Biographical Information | Fulltext | Historical Works | Internet Resources | Portraits

Monografía

There have been books over the years discussing the history of ophthalmology, but none that focus directly on just the most critical thinkers whose insights provided the foundation for the discipline. These men and women advanced knowledge about vision, diagnosis, disease mechanisms, and therapy through innovative thinking and perseverance against old ideas. Their stories are intriguing at a personal level and for showing the complexity of advancing medical science and, therefore, should be required reading for anyone practicing ophthalmology. Foundations of Ophthalmology includes giants such as Young (the nature of color and light), Braille (a practical reading system for the blind), Helmholtz (development of the ophthalmoscope), von Graefe (defining glaucoma), Curie (discovery of radiation and the basis of radiation therapy), Gonin (demonstration how to cure retinal detachment), Ridley (serendipity that led to intraocular lenses), and Kelman (development of phacoemulsification that revolutionized cataract surgery)

Título: Foundations of ophthalmology great insights that established the discipline Michael F. Marmor, Daniel M. Albert, editors

Editorial: Cham Springer 2017

Descripción física: 1 online resource

Bibliografía: Includes bibliographical references and index

Contenido: 1. Johannes Kepler and René Descartes: A retinal image is transmitted to the brain -- 2. Jacques Daviel: The invention of modern cataract surgery -- 3. John Dalton: The recognition of color deficiency -- 4. Thomas Young: The foundations of light, color, and optics -- 5. Valentin Haüy and Louis Braille: Enabling education for the blind -- 6. Jan Evangelista Purkinje: Visual physiologist -- 7. Franciscus Donders: The

management of anomalies of refraction -- 8. Hermann von Helmholtz: The power of ophthalmoscopy -- 9. Albrecht von Graefe: The beginnings of scientific ophthalmology and education -- 10. Karl Koller: The introduction of local anesthesia -- 11. Allvar Gullstrand: Dioptrics of the eye and the slit lamp -- 12. Maria Curie: radiation as a medium that can cure -- 14. Harold Ridley: The development of a plastic implantable lens -- 15. Amall Patz and Norman Alston: Oxygen and retinopathy of prematurity -- 16. Charles Kelman: Phacoemulsification and small incision cataract surgery Preface; Contents; Contributors; 1: Johannes Kepler and René Descartes: A Retinal Image is Transmitted to the Brain; Introduction; The Elegant Construction of a Retinal Image; Descartes Extended Kepler's Retinal Image to the Brain; The Crucial Points about Descartes' Brain; The Kepler-Descartes Linkage is One of the Best Examples of Synergism in the History of Science; References Daviel's Life as a Cataract Surgeon Daviel Describes and Promotes Extraction of Cataracts; Conclusion; References; 3: John Dalton: The Recognition of Color Deficiency; Dalton, the man; Dalton's Observations; Legacy and Denouement; References; 4: Thomas Young: The Foundations of Light, Color, and Optics; Introduction; Child Prodigy; Accommodation; Medical Student at Edinburgh, Göttingen, and Cambridge; London and Optics; Light as a Wave; Color Vision; Professor at the Royal Institution; Physician in London; Young's Legacy; References 5: Valentin Haüy and Louis Braille: Enabling Education for the BlindReferences Prior Observations Popularization of the Instrument; Helmholtz's Other Scientific Achievements; Honors to the Innovator; References; 9: Albrecht von Graefe: The Beginnings of Scientific Ophthalmology and Education; Introduction; Von Graefe: The Beginnings; Advent of new Technology (the Beginnings of Modern Ophthalmology); Early Practice; Von Graefe's Observations; The Beginnings of the 'Cataract Wars' and the Introduction of the Graefe Knife; Analysis of Graefe's Surgical Procedures; Clinical Observations; Albrecht von Graefe the Educator; References 10: Karl Koller: The Introduction of Local Anesthesia The Allgemeines Krankenhaus; Coca; The "Discovery"; The Acceptance of Local Anesthesia; The Cocaine Epidemic; The Immediate Aftermath; Koller in America; References; 11: Allvar Gullstrand: Dioptrics of the Eye and the Slit Lamp; Introduction; Early Years to Lecturer in Ophthalmology 1891; The new Professor, His Research and His Inventions; The Slit Lamp; Reflex-Free Fundus Examination and Photography; Annus Mirabilis 1911; Professor of Physical and Physiological Optics and Retirement; Character and the Nobel Prize

Copyright/Depósito Legal: 1002418512 1002830475 1005006886 1005115875 1011998819 1048172564 1058318187 1066475144 1066597501 1086516132 1111285180

ISBN: 9783319596419 electronic bk.) 3319596411 electronic bk.) 9783319596402 3319596403 9783319866703 print) 3319866702 9783319596426 print) 331959642X

Materia: Ophthalmology Ophthalmology MEDICAL- Surgery- General Ophthalmology Augenheilkunde

Autores: Marmor, Michael F. (1941-), editor Albert, Daniel M., editor

Enlace a formato físico adicional: Print version Foundations of ophthalmology. Cham : Springer, 2017 9783319596402 3319596403 (OCoLC)985081028
