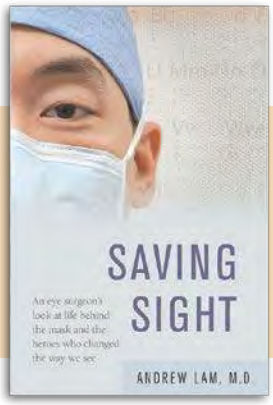

Saving Sight

Andrew Lam, MD

Bokeelia, Florida, Irie Books, 2013; Paperback, 232 pages, $13.95

This book recounts the stories of 6 of the most important visionaries and innovators in ophthalmology, whose lifetime work revolutionized the medical practice in their field and is saving the eyesight of millions of people today. This book is a testimony to their personal and professional lives and their perseverance and endurance in the face of criticism and ridicule as they sought to prove their ideas to the world.

Saving Sight is not only a great reference for ophthalmologists, ophthalmic surgeons, academics in the medical field, clinical researchers, public health advocates, and health care professionals, but is also an engrossing read for the general lay audience, particularly for patients with eye diseases.

Every chapter opens with a recent patient case encountered at Dr Lam's office, then delves into the history of the brilliant ophthalmologist who invented the specific techniques or tools that Dr Lam is using today.

The first hero is Dr Harold Ridley, to whom we owe the intraocular lens. "It is a pity, doctor, that you cannot replace the cataract with a clear lens," Dr Ridley tells one of his students, a memory that later triggers his major discovery. Charles Kelman's phacoemulsification technique revolutionized cataract surgery and inspired major innovations in other fields of medicine. (This technique involves ultrasonic emulsification and suction removal of the cataract lens, providing a clear field for replacement lens implantation.[1]) As Lam notes, "Because he was the first in medicine to remove tissue through a small incision, some have credited [Kelman] with inspiring the revolution in small incision laparoscopic surgery."

The binocular indirect microscope, indispensable today in the correct diagnosis and treatment of eye diseases, is credited to Charles Schepens, the "father of modern retinal surgery": "To a retinal surgeon like me, Charles Schepens is the Thomas Edison, Charles Lindburgh, and Henry Ford of our field."

Before Arnall Patz, MD, premature babies affected with retinopathy of prematurity were condemned to a life of blindness; now there is a treatment option.

Avastin and Lucentis, breakthrough medicines currently used in treating wet macular degeneration and numerous cancers, are the result of research by ophthalmologist Judah Folkman.

It was in Colombia that Spanish ophthalmologist Jose Barraquer developed a new technique for refractive surgery; 50 years later, Barraquer's work became the inspiration for LASIK surgery, a simple procedure that now cures myopia with laser-like precision.

The book ends with the heartwarming story of Louis Braille and his alphabet, which "opened the eyes" of millions. This volume is rich in statistics and clinical journal references. Complicated surgery techniques are simplified for the lay reader with powerful analogies and clear illustrations. Perhaps the most interesting aspect of the book is how it explores the sociopolitical and historical contexts that shaped these individuals' lives and affected the course of their discoveries.

Dr Andrew Lam connects with the reader with a touching humility: "The first time I saw the retina through the indirect ophthalmoscope, I gasped. It was incredibly beautiful. There had only been a few similar awe-inspiring moments . . . the first time I saw a beating heart and held it in my hands during cardiac surgery."

With its realistic portrait of the medical profession and clinical research, its human approach to patient treatment, its criticism of today's US medicolegal system, and its in-depth analysis of healthcare economics, "Saving Sight" is strikingly relevant and is a highly educational book for physicians and patients alike.

Reviewer: *Marielle Fares, PharmD, MBA, CCGP*

Marielle is a scientific editor and medical writer in the health care, pharmaceuticals, and clinical research sectors in Washington, DC.

Reference

1. US NLM, PubMed Health. Phacoemulsification. https://www.ncbi.nlm.nih.gov/pubmedhealth/PMHT0024951/. Accessed April 22, 2017.