Richard K. Lee, MD, PhD

As a child in elementary school, I wrote an essay on what I wanted to be when I grew up. I cannot point to a particular inspiration—maybe it was the TV show I had watched the night before—but I recall writing that I wanted to be a doctor and to own a zoo with the money I made as a doctor. My parents were first-generation immigrants from China. My father was a cook in a Chinese restaurant, and my mother had her hands full as a homemaker with my three brothers and me. She wanted me to be plumber, because they got paid well, kept their own hours, and were happy in their jobs. In the end, she was not far off: I am an eye plumber, minus the perks of a real plumber.

In high school, I had an opportunity to conduct biomedical research at the Children's Hospital of Los Angeles with the first commercial DNA sequencer combined with the then-new technology of polymerase chain reaction to identify viruses in disease states. This cutting-edge research cemented my desire to become a doctor. When I was a student at Pomona College, I chose to major in chemistry and biology and loved being in the laboratory. I then decided to apply to MD-PhD programs, because I wanted to be a doctor but also to continue doing research.

As a graduate student, I focused on molecular immunology, because I found it conceptually challenging. I later chose to specialize in glaucoma because of the faculty at the Bascom Palmer Eye Institute and my interest in researching the apoptosis of retinal ganglion cells. Douglas Anderson, MD, was my initial inspiration as a graduate student, and my mentors (now colleagues) in the glaucoma division of the Bascom Palmer Eye Institute are among those I wanted to emulate as an ophthalmologist and clinician-scientist.

My clinical interest in imaging technologies for diagnosing human glaucoma led me to help develop a powerful platform for in vivo glaucoma animal experiments on neuronal and axonal regeneration. My laboratory studies glaucoma with experiments using optical coherence tomography, confocal scanning laser ophthalmoscopy, pattern electroretinography, fluorescein angiography, and other structural and functional testing technologies available for the study of human eyes. We can now conduct experiments in animal models with much better results and perform studies not possible with human eyes to address fundamental questions regarding the pathophysiology of glaucoma. I also collaborate with basic science colleagues such as Sanjoy Bhattacharya, PhD, at Bascom Palmer, who has developed new technologies for discovering glaucoma biomarkers to tie together the epidemiology and biological pathways of glaucoma relative to the varied clinical cases I see.

> "Contrasts between the care I provide at the Bascom Palmer Eye Institute versus in the community and around the world always remind me to be grateful for ... my great fortune to be a doctor."

One of my passions is international and community ophthalmology. As the faculty advisor for the Ophthalmology Interest Club, I have the privilege of working with wonderful medical students who conduct vision screenings at churches, community centers, schools, flea markets, and other areas in our South Florida community with diverse, grateful, economically and socially challenged people. I also escorted the Bascom Palmer Vision Van to the tsunami-devastated region of Tohoku, Japan, and serve as the volunteer medical director of an eye clinic in Haiti. The contrasts between the care I provide at the Bascom Palmer Eye Institute versus in the community and around the world always remind me to be grateful for my life and my great fortune to be a doctor to whom people freely entrust something dear, their sight. ■

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