

NETAN CHOUDHRY, MD, FRCSC

Can you tell us about the first time you realized you wanted to become an ophthalmologist?

As a medical student at Georgetown University, I had the opportunity to rotate through the ophthalmology department. This was one of my first exposures to the field, and I was taken by the integration of technology and surgery as well as the diversity of patient types. This definitely supercharged my interest in a career in ophthalmology. I subsequently had the privilege of spending a month rotating with Larry Singerman, MD, FACS, in Cleveland where I was exposed to a dynamic retina practice. The rest, as they say, is history.

What led you to specialize in retinal imaging and rare disorders of the retina and vitreous?

As a resident at the University of Pennsylvania Scheie Eye Institute, I was fortunate to learn under many brilliant minds, most notably, Alexander J. Brucker, MD. He and I embarked on a project together looking at the discrepancy between leakage on fluorescein angiography and OCT. Through this exercise, I had a chance to really dive into the complex arena of retinal imaging, to work closely with the photographers, and to appreciate the technical aspects of image capture and evaluation. I completed my fellowship in vitreoretinal surgery at the Massachusetts Eye and Ear of Harvard Medical School, where my enthusiasm expanded. Working alongside international fellows and faculty, I explored the strengths and limitations of various devices and realized how subtle aspects of retinal images could provide valuable insights into disease and patient prognosis. To me, looking at these retinal images was like looking into space and seeing the cosmos.

You pioneered OCT imaging of the peripheral retina, and you have developed novel noninvasive devices for imaging the retina and vitreous. What have you learned from these experiences?

The journey of research and innovation is a team effort, and I have worked alongside several bright individuals who helped steer the ship. Exploring the peripheral retina, the examination of which for many is not only difficult but intimidating, has been an enjoyable challenge. I am fortunate to have connected my enthusiasm for imaging the peripheral retina with innovation, and I have worked alongside device companies to create novel equipment. The arduous journey of taking an idea to completion has shown me the value of patience, flexibility, and, most important, perseverance.

Where do you see new developments in ocular imaging technology occurring in the coming years?

Ocular imaging has come a long way since the



Figure. Dr. Choudhry and his family enjoying a day in the park.

introduction of the traditional fundus camera and OCT imaging, from ultrawide-field imaging and autofluorescence to OCT angiography. The future of imaging is bright! We are beginning to see improvement in adaptive optics technology to enable us to visualize individual cells in the retina and, of course, the integration of machine learning or AI into our commonly used devices. The goal of our field has always been to advance the frontier of medicine by working alongside our technology to eradicate blindness, and I see the possibility of this in the near future.

What has been the most memorable experience of your career so far?

In all honesty, there is no single most memorable experience. I have had great mentors and colleagues, each of whom has shaped my professional career. Each patient in whom I am able to help restore sight is the most memorable experience of that day. The tapestry of intertwining patient stories motivates me to carry forward with my peers and strive to give sight to the blind. I find that these patient encounters are the most lasting memories. ■

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