

JASON HSU, MD

YOU GRADUATED WITH A BACHELOR'S DEGREE IN ELECTRICAL ENGINEERING. HOW DID YOU FIND YOUR WAY TO OPHTHALMOLOGY AND, SPECIFICALLY, RETINA? WAS THIS ALWAYS THE PLAN?

I had little exposure to medicine growing up, but I knew I wanted to help others and make a positive impact on the world. Originally, I planned to be a biomedical engineer, developing diagnostic devices. Because there was no biomedical engineering major at Princeton, I completed an engineering biology program. However, I found myself spending too much time behind a computer, and I missed social interactions, which led me to medicine. It wasn't until an introductory rotation in medical school that I even considered ophthalmology or pursuing retina. After seeing the posterior pole for the first time with a direct ophthalmoscope, I knew that was the path for me.

WHY HAVE YOU CHOSEN TO BE A PART OF A HYBRID PRIVATE-ACADEMIC RETINA PRACTICE?

Early in my training, I became interested not only in caring for patients but also in trying to advance the field. My interest is in clinical research, and I realized that I needed to be in a busy environment to best accomplish my goals. As a large group, Mid Atlantic Retina has a substantial clinical volume that provides the impetus and data for many of our studies. Through our affiliation with Wills Eye Hospital, we train medical students, residents, and fellows. These trainees get involved in many of my projects and truly inspire me to do more.

TELL US ABOUT THE WORK YOU DID WITH DREXEL UNIVERSITY'S COLLEGE OF ENGINEERING ON NOVEL OPHTHALMIC DEVICES. WHAT MOST EXCITES YOU ABOUT THIS AREA OF RESEARCH?

Through a joint Wills Eye–Drexel collaboration, I had the opportunity to work with Timothy P. Kurzweg, PhD, who is now a professor of electrical and computer engineering at Penn State. At the time, at Drexel, he had a fantastic graduate student, Weston Aenchbacher, who was interested in plenoptic imaging. The basic idea is that a photo taken with this special camera can later be refocused. One of our superb fellows at the time, Murtaza Adam, MD, worked with me to adapt this technology for taking fundus photos. The promise of plenoptic imaging may be in telemedicine, where an untrained photographer can snap a fundus photo that can then be refocused by whoever is reading the images.

WHAT OTHER AREAS OF RESEARCH ARE YOU INVOLVED IN?

I've been looking at a common glaucoma drop, dorzolamide-timolol maleate (Cosopt, Merck), as an adjunct in



My favorite pastime—getting some fresh air, hiking the Narrows at Zion National Park with my wife (and fellow ophthalmologist), Vatinnee Bunya, MD.

patients receiving anti-VEGF injections, to see if it helps improve outcomes. My group, in collaboration with colleagues across the country, just completed a randomized study in patients with wet age-related macular degeneration, and we should have results soon. I'm also exploring loss to follow-up in patients receiving anti-VEGF injections. I have realized that this is a major issue, as we are finding that nearly one in four patients who receive an injection don't come back. We have been examining risk factors for this as well as outcomes of those patients who eventually return.

WHAT IS A TYPICAL DAY LIKE FOR YOU?

Busy. Play tennis, see a few patients, hit the slopes to ski, work on research, all before dinner ... in my dreams. In reality, I typically have a full day of patients but usually get home by dinner to spend some quality time with my family. After my kids go to bed, I exercise and then work on my research projects. One of the difficulties with a private practice is that there is no protected academic time, so research essentially becomes a hobby to do in my free time. ■

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