

## **FIVE QUESTIONS WITH...** THEODORE LENG, MD, MS

Theodore Leng, MD, MS, is a Clinical Assistant Professor of Ophthalmology at the Byers Eye Institute, Stanford School of Medicine, in Palo Alto, Calif. He is Director of Clinical and Translational Research and the Director of Ophthalmic Diagnostics at Stanford.



You have an MS in biological sciences and spent time at the **Hopkins Marine Station in** Pacific Grove, Calif.—the marine laboratory of Stanford University. How has your scientific training affected your understanding of retina?

Before medical school, I spent time work-

ing with William Gilly, PhD, in his neuroelectrophysiology laboratory, and it was an eye-opening experience. We worked with squid, snails, and frogs. At the time, I learned cutting-edge molecular biology techniques including cloning, modification, and transfection. I also became proficient at the difficult electrophysiology tasks of voltage and patch clamping, as well as single cell and single channel recording. Ultimately, I was able to study the electrophysiology properties of squid membrane potassium channels. In learning how nerve cells work at the molecular level, I developed a strong foundation for the cellular function of retinal cells and how they are affected in retinal disease.



Tell us about your stay in Santiago, Chile, on the Paul Kayser International Travel Scholarship.

I met Ricardo Agurto, MD, my Chilean host, many years ago when I was working with Hugo Quiroz-Mercado, MD, in Mexico City. Dr. Agurto was also working with Dr. Quiroz-Mercado, and, after he returned to his home country of Chile, I spent a few weeks there learning from Dr. Agurto. Going to a different country and continent and observing vitreoretinal surgical approaches and techniques there gave me a whole new perspective on surgery. I brought home new ideas and techniques that have changed the way I perform vitreoretinal surgery to this day.



What, in your estimation, is the most reliable way to gather information about the myriad data in the literature?

There are so many journals and articles published on a monthly basis, it is difficult to keep abreast of everything. I have found that the best thing to do is to be methodical. **11** Patient safety and outcomes always come first in my OR." —Theodore Leng, MD, MS

I make sure to read the main ophthalmology and retina journals cover to cover each month. Being involved in a training program also helps, as we have frequent journal clubs to discuss landmark papers.



When you teach fellows in the OR, how do you balance patient safety with the need to teach them the surgical ropes?

Patient safety and outcomes always come first in my OR. That being said, I let the fellows do a majority of the surgeries under close supervision. I also have a methodical way of teaching and some hard and fast rules that systemically reduce the risk of surgery by fellows. Once I know that they have the skills to do the surgery safely, I let them go until they cannot go any further. By the end of their fellowships, they are doing cases skin-to-skin, peeling membranes, and making all the intraoperative decisions without much input from me. That is the most satisfying part of being an educator— taking someone straight out of residency and making him or her into a top-notch vitreoretinal surgeon.

## Which annual retina meeting is your favorite to attend?

We have so many conferences that we can attend. I tend to favor the smaller meetings, and I think that the Retina Society meetings are the most exciting. They are small enough so that you can have interesting conversations, but big enough so that you don't feel like you're the only one in the room. Moreover, the organizers always put on first-class social events and tours of the host city.