Carmen A. Puliafito, MD: Who has had the greatest influence on your career?

Timothy W. Olsen, MD: This is a long answer, yet one of the most important parts of my career. In medical school, then-chairman at the University of Kansas, Theodore Lawwill, gave me my first opportunity to explore the world of vision research. We worked together for nearly 3 years on the pattern appearance-disappearance ERG. Next, I worked in Ed Holland’s lab at the University of Minnesota for 3 and a half years during my residency studying immunosuppression in the rat model of corneal allograft rejection. Ed truly got me excited about a career in academic medicine, even though I was pulled/pushed to the “dark side” (retina). Paul Sternberg and Henry Edelhauser are both lifelong mentors. I studied light damage to the RPE and the very initial stages of transscleral drug delivery, respectively, with them. Tom Aaberg Sr. and Tony Capone were my most influential surgical mentors. At the University of Wisconsin, Matthew (Dinny) Davis, Ingolf Wallow, and Tom Stevens helped ground me as a young faculty member. Jay Krachmer is my rabbi (teacher) and lifelong friend. He has taught me some of the most important life lessons and has been one of the greatest influences on my career. Today, I continue to rely and trust each of these important mentors who have clearly defined themselves in the field of ophthalmology. Furthermore, my own faculty continue to serve as my mentors: Nancy Newman, Baker Hubbard, Allen Beck, Ted Wojno, and Hans Grossniklaus, just to mention a few. I’ve been amazingly fortunate to have the opportunity to be a student of these extraordinary individuals. I will always honor them and try to pass on what they’ve taught me to my students.

Dr. Puliafito: What was the defining moment that led you to your field?

Dr. Olsen: At age 7, I enucleated the eye of a Hereford cow while working on my grandfather’s ranch. The eye had “cancer eye” (ocular squamous cell carcinoma), the most common form of cancer in cattle. This was under the supervision of a kind and supportive veterinarian who knew that I wanted to be an eye
surgeon. Anesthesia was a nose ring, rope, and a strong arm. It took me 30 seconds — the fastest enucleation that I’ve done to date. The estimated blood loss, more than 100 cc, was the most ever in any of my surgeries. However, the cow lived!

Dr. Puliafito: What area of research intervention most interests you right now and why?
Dr. Olsen: Age-related macular degeneration is my primary focus. AMD has not been cured by anti-VEGF treatments, yet this therapy has revolutionized management. I also believe that the third epidemic of ROP should be addressed with effective screening methods and management systems, especially in developing countries. Finally, I’ve always been interested in drug delivery and intraocular pharmacokinetics. There is a world of innovation waiting to enter the clinical arena.

Dr. Puliafito: What advice would you offer a student in medical school today?
Dr. Olsen: Work very hard, see as many patients as you are able to see, and read about every patient that you don’t completely understand the day you see them, even when you’re exhausted. Work as a team, and help to build your team. Take an active role in teaching because it will make you a better doctor.

Dr. Puliafito: Have you ever been fortunate enough to witness or to have been part of medical history in the making? If so, please explain.
Dr. Olsen: Yes, I’ve witnessed many dramatic improvements that result from research and prevent blindness on a large scale. Laser treatment for diabetes remains one of the monumental therapies that have saved the vision for countless diabetics. The anti-VEGF therapies that began with basic studies by Judah Folkman and were brought to fruition by Napoleone Ferrara have revolutionized the management of ocular angiogenesis. Incremental technical improvements in cataract and vitreoretinal surgery continue to improve our ability to improve vision through effective and less-invasive surgery.

Dr. Puliafito: What are your hobbies outside of practicing medicine?
Dr. Olsen: My family. I also enjoy any water sport and playing the five-string banjo.

Dr. Puliafito: What do you enjoy doing to relax?
Dr. Olsen: Having a cup of coffee or a cold beer (depending upon the time of day) with friends or family.

Dr. Puliafito: What’s up next for you?
Dr. Olsen: We are working hard at the Emory Eye Center to grow and expand. Our goal is to become an integrated system — integrated into the institution (research) as well as the community (clinical care).

Timothy W. Olsen, MD, is director of the Emory Eye Center and chairman of the Department of Ophthalmology at Emory University. He can be reached at Emory Eye Center, 1365B Clifton Rd NE, Atlanta, GA 30322; 404-778-5000; email: tolsen@emory.edu.