

Emily Y. Chew, MD

Dr. Chew is the Deputy Director of the Division of Epidemiology and Clinical Applications and the Deputy Clinical Director for the National Eye Institute at the National Institutes of Health.



1. What made you choose ophthalmology, and specifically retina, as a specialty in medicine?

I had been interested in internal medicine but I found the rates of patient noncompliance with medical therapies disappointing. I discovered ophthalmol-

ogy when I spent a month during an elective period working with Brenda Gallie, MD, an ophthalmologist conducting research in retinoblastoma at the University of Toronto. She was a terrific role model for a young impressionable medical student and, among other things, taught me the importance of research. I ultimately settled on medical retina as a specialty because retinal diseases seemed most challenging and interesting. Because we deal with chronic conditions in this subspecialty, we develop long-term relationships with our patients and their families, which was appealing to me. The flexibility of the medical retina specialty also allowed me to conduct research. I have the best of all worlds.

2. You attended 2 institutions for your medical retina fellowships: one in the United States (Johns Hopkins University) and one in the Netherlands (University of Nijmegen). What was the biggest difference between the American and the Dutch approaches to medicine?

I was very fortunate to be able to see medicine practiced as a trainee in different countries. On both sides of the ocean I found clinicians with great dedication and compassion for their patients. Technological advances were similar in both countries. The trainees from both countries were enthusiastic and inquisitive while the teachers at the 2 universities were eager to teach. At Johns Hopkins, there is a great emphasis on evidence-based medicine because of the interest in clinical trials. In the Netherlands, there is ongoing interest in genetic diseases that affect numerous patients seen at the University of Nijmegen. In fact, August Deutman, MD, the professor who mentored me, had already written a classic textbook of genetic eye diseases during his own residency training. It was fun to extend some of the genetic studies that he had initiated. Although it was hard to fully appreciate the

"I ultimately settled on medical retina as a specialty because retinal diseases seemed most challenging and interesting."

differences between the medical systems as a member-in-training. I was quite cognizant that the Netherlands, similar to Canada, had socialized medicine, with virtually everyone receiving health care when needed. Nevertheless, my training at both institutions provided encouragement to pursue a career in clinical research.

3. What unexpected challenges have you encountered as study chair for AREDS2?

I was very privileged to chair AREDS2. So many talented clinicians, study coordinators, and statisticians at the coordinating center (the Emmes Corporation) supported our research efforts. Managing 82 clinical sites was different from our usual scale of 20-plus clinics. There was definitely a learning curve associated with that aspect of the study. We had to learn to do things a little differently just from the sheer number of clinics. We learned a great deal from our colleagues who have been highly successful in managing the Diabetic Retinopathy Clinical Research Network, a network of more than 100 clinical sites.

As is often the case with clinical research, the funding to do everything we wanted was simply unavailable. It was a challenge to raise some of the funding. However, we were extraordinarily fortunate to have partnered with a number of pharmaceutical companies and fellow agencies, such as the National Institutes of Health: Office of Dietary Supplements; the National Center for Complementary and Alternative Medicine; the National Institute on Aging; the National Heart, Lung and Blood Institute; and the National Institute of Neurological Disorders and Stroke. Funds were

(Continued on page 81)

(Continued from page 82)

generously provided to conduct a number of ancillary studies, such as studies to find the effects of nutritional supplements on cardiovascular disease and cognitive function testing. We were also able to conduct an ancillary genetic study in which we collected DNA and serum from AREDS2 participants. We hope these and other ancillary studies will broaden our knowledge of the role of nutrition in ocular diseases and other medical diseases. Such genetic studies will help us further evaluate the pathogenesis of and potential treatments for age-related macular degeneration.

4. What advice would you offer young doctors who are considering specializing in ophthalmology?

Ophthalmology is a great specialty with a wide-ranging offering of medical and surgical challenges as well as many research opportunities. One can go in many directions to find a fulfilling career in ophthalmology. It is great to practice ophthalmology because we are fortunate to be able to practice evidence-based medicine in several of the subspecialties within ophthalmology. It is a highly dynamic field. Every young doctor, however, should find what makes his or her heart sing.

“I envy the students of today
because there are so many career
possibilities open to them.”

5. Had you not chosen to practice medicine, which professional field would you have chosen?

If I had not been accepted into medical school, I had hoped to at least continue my undergraduate studies in science with a minor in music. I also have a deep interest in the culinary arts, but that is more of a hobby.

I envy the students of today because there are so many career possibilities open to them. However, I feel truly blessed to work in a job I love. I have the opportunity to interact with patients who provide insight for the relevance of our clinical research. I work on meaningful research projects with some of the brightest people in the field, and I have the opportunity to help nurture the next generation of researchers so that we may further advance the field for our patients. ■