

FIVE QUESTIONS WITH...

ANDREW A. MOSHFEGHI, MD, MBA

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What do you enjoy most

about being a retina specialist?

From a surgical perspective, it's being able to visualize the pathology and to see the almost instantaneous effect of my intervention, especially with modern vitrectomy techniques. In the clinic, I enjoy being able

to apply state-of-the-art ocular imaging techniques to assess patients and educate them about their conditions and how they are responding to my treatment regimens. Optical coherence tomography (OCT) is really helpful in this respect—seeing the before-and-after images and demonstrating the trend over time on OCT is quite impactful when explaining the effects of the treatment course so far and the plan for future treatments with patients and their families.

What professional or personal achievement are you most proud of?

When I was still a fellow at the Bascom Palmer Eye Institute in 2004, I had the privilege of working with Philip J. Rosenfeld, MD, PhD, and Carmen A. Puliafito, MD, MBA, on the SANA study, which looked at the use of intravenous bevacizumab (Avastin, Genentech) to treat neovascular age-related macular degeneration (AMD). The surprising results of this study formed part of the basis for the idea to use off-label intravitreal bevacizumab to treat neovascular AMD, which was described in 2005. 1,2 Being a part of that process and watching the story rapidly unfold across the globe that summer was quite a remarkable thing!

What novel therapeutic approaches or surgical techniques do you anticipate will improve the treatment of vitreoretinal diseases over the next few years?

Although intravitreal anti-VEGF therapies have revolutionized the way we manage exudative retinal vascular diseases affecting the macula, they have also created a

tremendous treatment burden in terms of the necessary frequency of injections. We need to be able to have the equivalent level of improved visual acuity outcomes for these diseases with a treatment benefit that has a longer duration of action. I've always felt that a treatment that would last 3 to 4 months would be ideal—and we're almost there.

We all have a small proportion of current patients that can go that long between treatments, but we need this to be the average interval for all of our patients. There are several new drugs in development that may get us close to that number—either alone or potentially in combination with anti-VEGF therapies—for medical retinal diseases.

Additionally, geographic atrophy is a huge unmet need. There are developing pharmacotherapeutic approaches, as well as stem cell-derived therapies and gene therapy approaches combined with innovative surgical techniques, which may help reverse some of the damage from this vexing problem.

Were you and your brother more competitive or supportive while both on the path to becoming retina specialists? Are you each other's go-to second opinion for particular cases?

I've never felt that it was a competitive relationship. Darius has always been a super supportive mentor, not just to me, but also to his trainees and even those at other programs. He's 4 years my senior, so, as the trailblazer, he's been more helpful to me than I have been to him. That said, I do provide him with critical feedback, when needed, which has turned out to be helpful.

We speak daily, often multiple times. We end up discussing challenging and interesting cases all the time. The fact that we are now both in the same time zone, in California, makes this easier today than it was in the past, when a 3-hour time difference made it quite difficult to chat "on demand."

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It should be noted that a large proportion of Darius's practice is devoted to pediatric vitreoretinal surgery, a subsubspecialty area for which I do not offer my services thankfully! But it's not just interesting vitreoretinal cases that we discuss. We also collaborate on research projects and compare notes on clinical and educational efforts. We are both retina fellowship directors—he at Stanford, and I at USC—so having him available as a sounding board and benchmark is tremendously helpful.



Tell us a fun fact about yourself something that might surprise your colleagues.

My college roommate for 2 of my 4 years at the University of Chicago also became an ophthalmologist. Paul S.C. Lee, MD, is now a practicing glaucoma specialist at Mount Sinai School of Medicine in New York City. If you really want to know some surprising and fun facts about me, you'll have to track down Paul and ask him! ... Of course, that's a two-way street, Paul—so be careful!

- 1. Moshfeghi AA, Rosenfeld PJ, Puliafito CA, et al. Systemic bevacizumab (Avastin) therapy for neovascular age-related macular degeneration: twenty-four-week results of an uncontrolled open-label clinical study [published online ahead of print]. Ophthalmology. 2006;113(11)2002.e1-12.
- 2. Rosenfeld PJ, Moshfeghi AA, Puliafito CA. Optical coherence tomography findings after an intravitreal injection of bevacizumab (avastin) for neovascular age-related macular degeneration. Ophthalmic Surg Lasers Imaging. 2005;36(4):331-335.

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