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Ophthalmologist

O P H T H A L M I C
F R O N T I E R S :

*T H E A N T E R I O R
S E G M E N T*

PART 2: ASCRS 2022



FEATURE

Up Close and Personal

Impressions from ASCRS congresses of the past
– and April 2022's edition in Washington, DC.

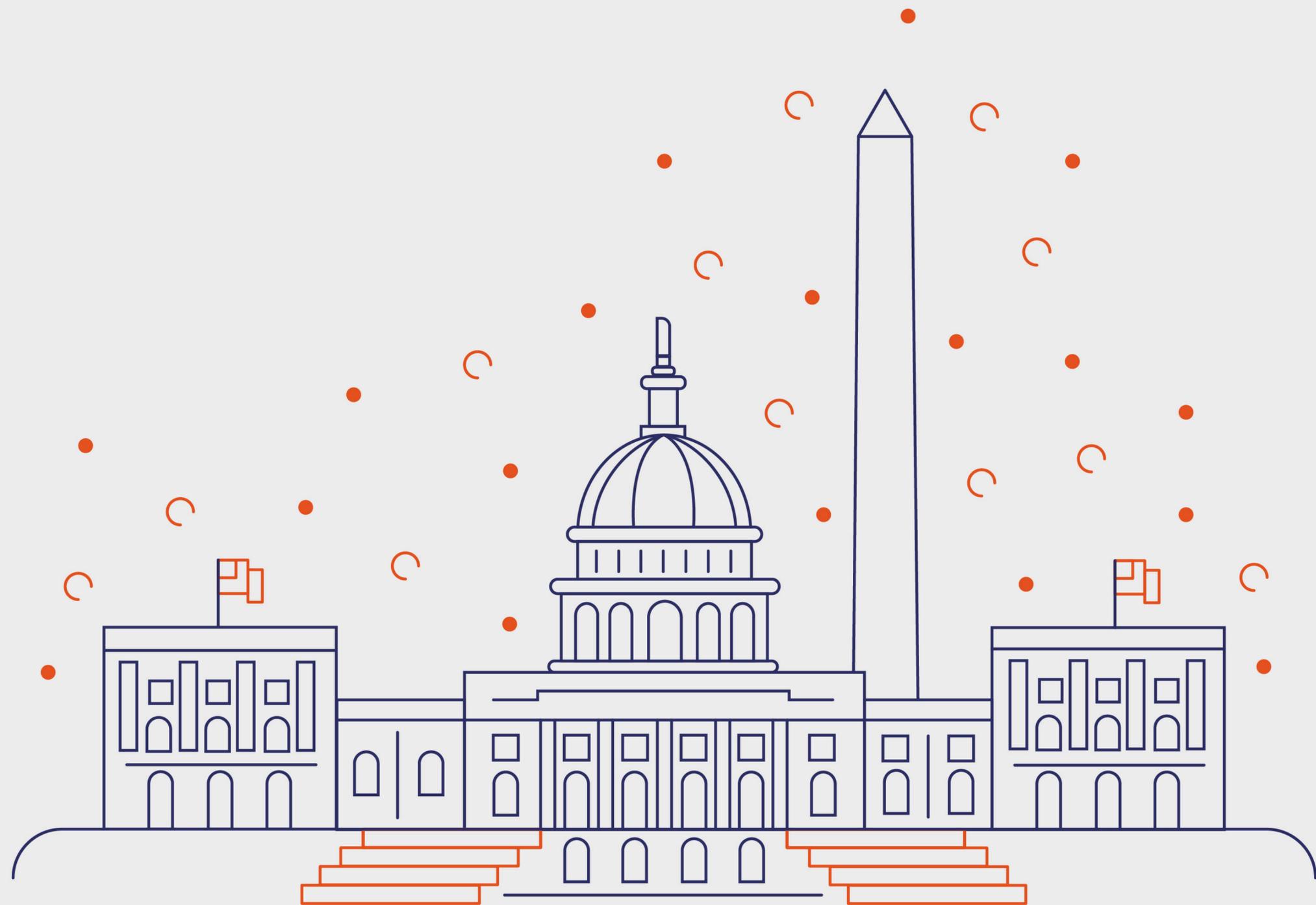
When did you attend your first meeting – and have you missed any since?

Esen Akpek: My first meeting was in Boston, Massachusetts, in 1997, while I was a fellow at Mass Eye and Ear Infirmary. I was so excited to attend the meeting – and it was free! I admit I've missed a few meetings since then...

John Berdahl: The first ASCRS Congress I went to was in the first year of my residency; I presented research with Terry Kim. I have attended every year since then, which – I think – makes it 16 years in a row.

Eric Donnenfeld: I attended my first ASCRS in the first year of my clinical practice. I had completed my residency and cornea fellowship, but I felt I needed more expertise in cataract and refractive surgery. ASCRS provided that experience, which set the tone for my clinical practice. I have attended every ASCRS annual meeting since 1986 – 37 consecutive meetings so far!

John Hovanesian: My first meeting was San Diego, California, in 1995, and I haven't missed any events except for those during the pandemic shutdown. ➔



“I’ve relished the opportunity to listen to and learn from colleagues, present my own research, have it vetted by colleagues, and publish it in the Journal.”

Soosan Jacob: My first congress was in 2006 (San Francisco, California), and I have only missed the pandemic years’ meetings: 2020 and 2021.

Douglas D. Koch: I attended my first meeting in 1982, at Century Plaza Hotel in Los Angeles. It was the era of the amazing pioneers in phaco and IOLs: Kelman, Sinsky, Kraff, Kratz, Emery, among many others. I was overwhelmed with the spirit of innovation and enthusiasm that pervaded the meeting.

Ben LaHood: I attended my first ASCRS meeting in 2017, in Los Angeles, California. At the time, I was completing my fellowship in cataract and laser refractive surgery. It was an amazing opportunity to present my research findings and meet some of the people whose names I recognized from journal articles and formulas.

Samuel Masket: If I remember correctly, I attended my first ASCRS meeting in 1980, in Los Angeles, and have only missed one since, in 1983.

Jeff Pettey: My first ASCRS was in San Francisco in 2009, during my residency, and I haven’t missed any since.

Do you have any particularly fond memories from ASCRS meetings?

Akpek: I especially enjoyed the DJ party and the panel discussions during scientific sessions with Margaret McDonald, Ed Holland, and

David Chang, among others.

Berdahl: Presenting at the Innovators’ Session has been a particular highlight for me, but mostly the best bits are when gathering with friends!

Donnenfeld: I have always enjoyed the unique combination of state-of-the-art education and entertainment that has been a signature of ASCRS meetings. I enjoyed the challenge cup many years ago, with teams competing against each other. And X-Rounds, where individuals present their approach to refractive cataract surgery in rapid fire, was another highlight.

Hovanesian: I live in California, rather than Michigan, because of ASCRS! In May 1995, I was a second-year resident from Michigan, and we had just endured a particularly rough winter. I remember stepping outside the Marriott Marina in San Diego, California, US, walking about 150 feet to the entrance of the convention center, and re-entering the indoors. There was absolutely no change in temperature! It was then I realized I wanted to live in California.

The best part of ASCRS is seeing old friends: people I trained with, people I’ve met from all over the country. We are in different practices, different states, and sometimes different countries, but we all share eye surgery and work through the same challenges in our practice. ➡

Meet the specialists



Esen Akpek, Professor of Ophthalmology and Rheumatology, Director, Ocular Surface Disease Clinic, The Wilmer Eye Institute, Johns Hopkins School of Medicine, Baltimore, Maryland, USA



John Berdahl, Professor, University of South Dakota, Partner at Vance Thompson Vision, Sioux Falls, South Dakota, USA



Eric Donnenfeld, Clinical Professor of Ophthalmology NYU, Founding Partner Ophthalmic Consultants of Long Island, OCLI Vision, Garden City, Ophthalmic Consultants of CT (OCC), Fairfield, Connecticut, USA



John Hovanesian, specialist in cataract, refractive and corneal surgery at Harvard Eye Associates, Laguna Hills California and Clinical Faculty at UCLA Stein Eye Institute, California, USA

And that brings a great bond of friendship. Ophthalmology is such a collegial specialty. Everybody respects and likes each other, from doctors to staff members to industry people. ASCRS was a party with a purpose even before this year's Party with a Purpose.

LaHood: I recall presenting at a free paper session moderated by Warren Hill. It was quite a technical topic and, at one point, a presenter whose first language was not English presented her findings; despite doing an excellent job, she struggled with a few technical terms. I remember Hill making a point to praise her efforts and remind the audience just how difficult it is to present something in another language, especially using technical language. This has stuck with me any time I am at a session where a presenter is struggling with a language barrier, I am reminded of his kind words of encouragement. It was a wonderfully inclusive thing to do.

Masket: I have many fond memories. I've relished the opportunity to listen to and learn from colleagues, present my own research, have it vetted by colleagues, and publish it in the Journal. The format and forum were very inviting for those who wished to contribute to the science and participate in its dissemination. I became heavily involved in the organization, presenting the Binkhorst Medal Lecture in 1998 and serving as ASCRS President in 2005–2006. I have been an Editorial Board member for JCRS for more than 30 years and served as Consultation Section Editor over a 25-year period. I remain very enthusiastic about ASCRS.

Petty: Well... at a meeting in San Diego, I went to the ASCRS film festival, where Surendra Basti's name was called as a winner for his video. Unfortunately, he had left early and couldn't accept it so I walked up the aisle to let them know I could send the award to him. Unfortunately, the MC thought I was Surendra and ushered

me on-stage and presented the award to me. To make things worse, they ushered me to the podium where I had to fumble through an explanation that I was just trying to help. I feel my face flushing right now, as I share the story.

Being with Alan Crandall when he received the initial Chang Humanitarian Award is one memory that will stay with me forever. My first job in ophthalmology, during my freshman year of college, was scrubbing for Alan. I was with him at our partner site in Tanzania as the borders were shut down for COVID-19 in March 2020. His legacy is larger than life and personally meaningful.

What are your impressions of this year's event?

Berdahl: The energy was great, it seemed like a soda bottle that had been shaken up was uncorked. The sessions were full and lively.

Donnenfeld: This year's ASCRS was a breath of fresh air. I very much enjoyed seeing old friends, speaking to colleagues, and attending great lectures. I thought the named lectures by Rosa Braga Mele, Frank Price, and Warren Hill were terrific.

Hovanesian: ASCRS was outstanding this year! Everybody felt alive to be meeting mostly without masks. This was the first major meeting where we all felt like "we were back!"

Jacob: I have always been awe-struck by the amount of knowledge shared at ASCRS Congresses. This year was great as it was my first international trip after the pandemic-induced cessation of flights. I loved that it was a predominantly in-person meeting. ➔



Soosan Jacob, Director and Chief, Dr. Agarwal's Refractive and Cornea Foundation, Senior Consultant, Cataract and Glaucoma Services, Chennai, India



Douglas D. Koch, Professor and Allen, Mosbacher, and Law Chair in Ophthalmology, Cullen Eye Institute, Baylor College of Medicine, Houston, Texas, USA



Ben LaHood, refractive, cataract and laser vision correction surgeon at Ashford Advanced Eye Care and The Queen Elizabeth Hospital, Adelaide, Australia



Samuel Masket, Clinical Professor at the Stein Eye Institute, UCLA, Los Angeles, USA and Chair, American Academy of Ophthalmology Senior Ophthalmologists Committee



Jeff Petty, Vice Chair of Education, Associate Professor, Co-Medical Director of John A. Moran Eye Center Global Outreach Division, University of Utah, Salt Lake City, USA

“I really enjoyed meeting up with people I have not seen in years and also colleagues I had only ever met virtually up until now.”

Koch: This year’s meeting felt like a return to the excitement and innovation in our field. I was particularly struck by the contributions of younger physicians. Their energy and creativity were fully evident and bode well for our subspecialty.

LaHood: At this year’s event, it felt so good to be back to a physical meeting. I have to admit I was nervous to travel long haul for the first time since the pandemic began. The travel and worry were all worth it and I now feel more confident traveling to future international events. The meeting definitely felt smaller than previous years. I feel as though people with a major interest in cataract and refractive topics attended, but perhaps those who may have previously attended but mainly work in other areas stayed away.

Masket: It was heart-warming to see many colleagues in the flesh after the height of the pandemic. Though attendance was lower than in previous years, physicians are beginning to feel comfortable meeting live, and that is encouraging.

Petty: I thought the 2022 meeting was fantastic! It was great to be back together in person, see faces, engage, and connect.

Which presentations caught your attention?

Akpek: I was impressed with the scientific research presentations by

younger residents, as well as Cornea Day.

Berdahl: I particularly valued sessions on endothelial cell therapy, on the work RxSight is doing, and on presbyopia drops.

Donnenfeld: X-Rounds were great, as usual. I thought the presentation on social media by Will Flanary – aka Dr Glaucomflecken – was a highlight.

Hovanesian: This year, I had a profound sense of pride to see my dear friend and the founder of my practice, Roger Ohanesian, honored with the Chang-Crandall Humanitarian Award. Roger has an Armenian last name that’s similar to mine, but we’re not related. He is a living angel. His work for 30 years in the former Soviet Union has changed hundreds of thousands of lives. It was such a fitting honor.

Petty: The symposium on Equity, Diversity and Inclusion was a massive step forward and one I can’t celebrate enough. EDI is not necessarily in the ASCRS wheelhouse, and it meant a lot to have it as a prominent part of the meeting.

What did you present on?

Akpek: My presentation was on keratoprosthesis versus repeat corneal transplantation, and my team is currently working on a novel prototype keratoprosthesis.

Berdahl: I presented data from an important prospective trial of Equinox Ophthalmic that my team has been working on.

Donnenfeld: Eyecelerator is a full day meeting on the Thursday prior to ASCRS that concentrates on the intersection of business and ophthalmology. This year, we had 600 people in attendance and the presentations were outstanding.

Jacob: Of all my presentations, the ones on CAIRS and PDEK were two that I was very happy to be talking about.

LaHood: I presented two new research projects I have been working on over the past two years. Firstly, an OCT-based grading system of cataract surgery incisions. Scans were taken at one day, one week, and one month after surgery and correlated with surgically induced astigmatism from a variety of injectors and IOL types. Secondly, I presented a study looking at whether we can use the ratio of posterior to anterior corneal curvature to decide how best to calculate IOLs in eyes post laser vision correction. I am thrilled that both ideas won “best paper of the session.”

Masket: I presented on central nervous system manifestations of negative dysphotopsia, use of femtosecond lasers for HumanOptics artificial iris surgery, and I was a co-author of a winning film entry, “The Dead Bag Syndrome.” ➔

Petty: SICS is still booming with more and more phaco surgeons wanting to adopt the technique, either for their own difficult cases or for global work.

I also presented on the Global Ophthalmology Summit. In short, the GOS is a broad collaboration between the academic ophthalmology community, Aravind, AAO, with participation from ASCRS, AGS, Cornea Society, AAOPOS, NANOS, AUS (uveitis), ISOO (ocular oncology), Ophthalmology Foundation, IAPB... and I'm sure I'm forgetting some participating entities! The two-day summit brings together physicians, leaders, NGOs, and industry leaders engaging in global eye health with the express goal of increasing collaboration, promoting proper global engagement, and consolidating the academic global ophthalmology community. It is the most significant step forward in global eye health advancement I've seen in my career – but I may, of course, be biased.

What did you particularly enjoy about this year's meeting?

Akpek: The fact that it was so close to where I'm based!

Donnenfeld: Having dinner with old and new friends, while discussing the day's events.

LaHood: I really enjoyed meeting up with people I have not seen in years and also colleagues I had only ever met virtually up until now. Back in 2017, I visited the team at Vance Thompson Vision in Sioux Falls, South Dakota, US. I had not seen the friends I had made there until this year's meeting. It was so wonderful to see them thriving. Having hosted the podcast "The Second Look" over the past two years

where I interview the most interesting people in the eye world, it was also great to meet some of my guests in person for the first time.

Masket: I was very pleased by the early session of Refractive Day, as it touched on patient responses to refractive cataract surgery. We are all coming to learn how important patient perceptions are with regard to the outcomes of surgery. I also found X-Rounds to be very informative and educational, and the Film Festival is wonderfully accessible and welcoming. CNN's Chris Wallace's address was also most entertaining.

Out of all the people you met at ASCRS, who do you feel particularly deserves recognition?

Berdahl: Tanner Ferguson has probably presented more research at ASCRS than any other resident in history. He will be our fellow next year and a future star, for sure!

Donnenfeld: I think Nicole Fram did an outstanding job and made several remarkable presentations at this year's ASCRS.

Hovanesian: Eric Donnenfeld, Ed Holland, Steve Speares, and the ASCRS staff work extremely hard to make the meeting worthwhile and fun for everyone. They deserve tremendous credit.

Jacob: I see Michael Mimouni from Israel as a terrific researcher and a rising star in ophthalmology.

Masket: Nicole Fram is receiving the attention she deserves for her work. ➔



ASCRS President, Richard Hoffman and Edward Holland present the Incoming ASCRS President, Douglas Rhee.

Petty: I met a couple of ophthalmologists from Ukraine, one of whom presented in a free paper session. It was a meaningful moment and their journey to the meeting was a powerful statement.

How important are in-person events?

Akpek: They are vitally important! I hope figures will not be declining, but I do think that there are too many meetings throughout the year, which dilutes attendance numbers. I don't think this year's ASCRS meeting was well attended, and I found that a bit sad.

Berdahl: We crave human interaction with our colleagues, but meetings need to facilitate an engaged role so everyone both contributes and gains value. I think declining attendance will stabilize.

Donnenfeld: I believe in-person events are extraordinarily important in ophthalmology. There is something special and unique about attending a lecture in person rather than virtually. I find myself more committed to information I learn in person and especially the conversation that takes place with the speakers and in the audience with those attending the meeting.

Hovanesian: Anyone who attended this year's ASCRS event felt the benefit of in-person meetings. We all need human interaction.

Jacob: Very important! And I don't think a declining trend will continue now that the pandemic situation is more under control. Meeting people directly – up close and personal – is so much better than on a screen!

Koch: In-person meetings offer so much more than webinars. We have become so accustomed to online learning that I think we forget how important in-person meetings are. The personal contact and the opportunity to explore various lectures, courses, and exhibits are all invaluable. Being there is an immersive experience that cannot be matched when you are not there physically.

LaHood: In person events are vital. We are humans and need real interactions. At the end of the sessions I presented, I loved it when colleagues came to ask questions, and I did the same for others. We just don't get the same opportunities for discussion on virtual platforms. Catching up over food and drink is so nice, and when you have time to talk with colleagues, so many new ideas and collaboration possibilities come up that simply wouldn't happen during a virtual timeslot. I do not think attendance figures will continue to decline, but they may take some time to grow again. I would like to see meetings like ASCRS not give in to any pressure to provide a virtual or hybrid option, but instead continue to encourage in person attendance.

Masket: Given all of the imaging devices available for eye surgery, much learning can be obtained on-line, challenging the need for in person congresses. That said, the social aspect of live meetings cannot be substituted and I sense that, in a truly post-pandemic world, attendance will increase. On that note, however, many meetings are now duplicative and I sense that there will be understandable attrition.

Petty: I believe value will be created through in-person networking and engagement more so than information sharing, and event numbers will stabilize. The societies that do the best job engaging a

broad swath of their membership will be more successful long-term.

What has been the biggest breakthrough in the field during your career?

Akpek: In my opinion, this title belongs to dry eye treatment modalities – particularly in-office procedures.

Berdahl: I see MIGS, DMEK, trifocal and light adjustable IOLs as the greatest developments.

Donnenfeld: There have been so many amazing breakthroughs in cataract and refractive surgery during my career. The most memorable have been the excimer laser for refractive cornea surgery, MIGS for glaucoma, and the invention of optical biometry that ushered in the field of refractive cataract surgery.

Hovanesian: In my view, presbyopia-correcting lenses have been the biggest breakthrough.

Jacob: At the risk of sounding biased, I think the biggest breakthroughs have been CAIRS and CACXL: two of my own techniques that have helped change treatment of keratoconus – and they are now becoming immensely popular worldwide.

LaHood: As someone who treats presbyopia regularly, the biggest change to my practice has come from the development of the Vivity IOL from Alcon. Previously, my options to help patients see at distance, intermediate, and near had quite major side effects of night time halos or lack of depth perception with monovision. Vivity has allowed me to offer a good range of vision without negative visual side effects. ➔

Masket: Obviously, I have had a long career in anterior segment surgery. Regarding cataract, nothing is more significant than phacoemulsification, developed by Charles Kelman in 1967. Though that method was published before I trained in ophthalmology, it has withstood the test of time. It is remarkable that no technology has replaced it over a 55-year span. But, perhaps as significant was the development of ocular viscosurgical devices (OVDs). As they cushion and protect anterior segment structures and expand space and time during surgery, they have allowed surgeons of all skill levels to achieve excellent outcomes. When I first began to implant IOLs and perform phaco, OVDs were not available – and only very gifted surgeons could safely complete the procedures. IOLs of all types are a major contribution, but their use would be very limited, absent OVDs. Having observed first-hand the contributions of the manufacturing sector over my career, I hope that my younger colleagues appreciate the technology available to them and to their patients.

It is hard to imagine anything other than LASIK as the chief development on the corneal refractive surgery side!

Petty: It would indeed be hard to beat LASIK for impact although it was a bit before my time. In my view, improvements in IOL technology have had the broadest impact on patients in the past five years. Another important advancement is using MIGS as a primary option for glaucoma.

What predictions do you have for the next five years in this field?

Akpek: I predict even better IOLs entering the market, as well as advancements in artificial cornea/keratoprosthesis.

Donnenfeld: I look forward to the development of accommodating

IOLs and adjustable IOL technology that is not limited to the immediate post-operative period.

Jacob: In my view, corneal surgeries will change in line with the “less is more” perspective.

LaHood: Though biometry will continue to improve accuracy for pre-operative planning, focus will shift to enhancing post-operative outcomes. I see a huge role for laser adjustment of IOLs to provide a precise focal point or to give and take away multifocality.

Masket: For cataract surgery, over the next five years, I foresee further development of automation with implementation of femtosecond lasers and robots, release of truly accommodating IOLs, post-operative adjustment of IOL power, additional deployment of simultaneous bilateral cataract surgery (not necessarily a good idea), and a movement away from traditional analog operating microscopes towards digital remote or headset viewing of surgery. Along with that change, there will be an overall movement towards better ergonomics. I also sense that more attention will be paid to the patient’s subjective evaluation of surgery.

For corneal surgery, further development and release of endothelial cell cultures and artificial endothelium will greatly reduce the need for endothelial keratoplasty.

Petty: The field of Global Ophthalmology will become a significant force throughout ophthalmology. With the struggles of the ICO and the World Ophthalmology Congress, increasing global connectedness and engagement will accelerate to address the growing burden of global blindness. Refractive Index Shaping will be the most impactful innovation in our field.



IN MY VIEW

An Unexpected Match

How did a renowned retina expert end up as a regular visitor – and presenter – at a cataract and refractive meeting?

Christina Y. Weng, Associate Professor of Ophthalmology, Fellowship Program Director of Vitreoretinal Diseases & Surgery, Director, Medical Student Clinical Elective-BTGH, Baylor College of Medicine, Houston, Texas, USA

My relationship with ASCRS is still relatively new, but I'm always grateful to the amazing Steve Charles for bringing me on board in 2019 to be part of the Retina Clinical Committee (RCC) and introducing me to this wonderful community. Some may wonder why there are retina specialists even involved with ASCRS, but we enjoy interacting with our anterior segment colleagues, and the two-way education and dialogue is truly invaluable. The eye functions as a whole, and we appreciate that ASCRS recognizes all the areas of overlap between our subspecialties. It's a great group of people and the degree of passion and dedication amongst the ASCRS leadership is contagious and inspiring.

My ASCRS 2022 highlights

I currently serve as the RCC Chair, and at this year's meeting our group organized a symposium entitled "Retina 2022: Curated for the Anterior Segment Surgeon," where we spoke on a variety of crossover topics, such as anterior vitrectomy settings and treatment options for vitreous floaters. We were thrilled that it was extremely well received, and we continue to strive to make it even more relevant and interesting for the membership next year! I also participated in a fantastic instructional course "Stage It or Combine

It? Approaches to Complex Eyes with Lens, Corneal and/or Retinal Pathology," led by my good friend Kourtney H. Houser, and I gave a talk about pseudophakic cystoid macular edema as part of Refractive Day. It was a busy meeting, but so much fun and very educational!

The future of in-person events

Aside from the obvious impact of the digital era, there's no doubt that the COVID-19 pandemic created a shift in the way we teach, learn, and communicate. Some of those changes will go but others will stay. One of the silver linings of the past few years is realizing that we could still interact in meaningful ways, even without being face-to-face. And, in fact, many organizations were able to engage members of our community who otherwise may not have ever become involved. Having said that, I think all of us also recognized that there is simply no substitute for being together in person. In our ever-changing field, it's paramount to evolve and adapt, and I predict that we will develop a hybrid approach to most of our events. But in-person events have always been – and will continue to be – an integral part of the way we connect.



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