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## Leaders in Ophthalmology Reflect on Their HMS Ophthalmology Education

An HMS Ophthalmology education is defined by excellence in three mission areas: clinical care, research, and education. Trainees not only graduate with exceptional clinical and surgical skill sets, but also with research and teaching experience and the professional skills needed to compete in today's global workforce. This world class education enables graduates to excel in their chosen careers – whether in academic medicine, industry, consulting, or private practice. To illustrate the value of an HMS Ophthalmology education, we spoke with four alumni who are leaders in the field to find out how their training shaped their careers.

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*27% percent of current Ophthalmology department chairs in the United States and Canada are HMS Ophthalmology alumni*

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Donald J. D'Amico, MD

Donald J. D'Amico, MD, is an internationally recognized frontrunner in the field of vitreoretinal surgery. As the John Milton McLean Professor and Chairman of Ophthalmology at Weill Cornell Medical College and Ophthalmologist-in-Chief at New York-Presbyterian Hospital, he is one of 35 HMS Ophthalmology alumni who chair an academic Ophthalmology department.

Dr. D'Amico completed his Ophthalmology residency at HMS in 1981, and then completed a fellowship at Bascom Palmer. He then joined the faculty of HMS Ophthalmology as Chief Resident at Mass. Eye and Ear (1982-1983). Notably, the role of Chief Resident has been the initial step for many



Photo credit: John Earle Photography

## NOTES FROM THE CHAIR

### The Gift of Experience: Mentoring at Every Level

Providing a world-class education for the future leaders of Ophthalmology is one of our department's top priorities, and our mentoring program is a critical part of this mission. Many of you may know that we offer an array of clinical, research, and teaching opportunities to nurture and challenge trainees at every level. But our commitment to education extends beyond the formal training years. This is why my colleagues and I implemented a mentoring program that provides our faculty with life-long opportunities for career advancement and professional development.

Mentors help catalyze the intellectual, professional, and interpersonal development of our faculty, which benefits our institution as a whole. By sharing their unique experiences, mentors help guide faculty through many career "firsts" – a new faculty position, a successful grant application, or a difficult clinical case – and also help them achieve work-life balance as their careers grow.

To match faculty members with mentors, **Anne Levy, PhD**, of the Ophthalmic Education Office, schedules meetings for each HMS Ophthalmology faculty member. The goal of these meetings is to explain the promotions process, describe our mentoring initiatives, identify current mentors, and report back to the mentoring oversight board. This board then reviews the list of available mentors and assigns one on a case-by-case basis.

Additionally, **David Hunter, MD, PhD**, HMS Ophthalmology Vice Chair for Promotions and Reappointments, and **Patricia D'Amore, PhD, MBA**, HMS Ophthalmology Vice Chair for Basic and Translational Research are working to create more connections with Massachusetts General Hospital and Boston Children's Hospital to make better use of their extensive mentoring resources. Not only does this shared mentoring program provide more opportunity for individual faculty and trainees, but it also strengthens our entire department.

I greatly appreciate all of you who generously donate your time and energy to guide trainees and junior colleagues. Especially, I want to thank three of my own mentors – my colleague, **Evangelos Gragoudas, MD**; **Ephraim Friedman, MD**, (who passed away in 2011); and the late **Simmons Lessell** (see page 19). They inspired me to always reach higher, and for that, I am forever grateful. Though Dr. Lessell passed away in early May, it brings me comfort to know that by continuing our important work in clinical care, research, and education, we are honoring him and his life's work. ■



Joan W. Miller, MD, FARVO  
Chief and Chair

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The HMS Department of Ophthalmology strives to provide:

- ✓ Premier clinical care and attention to the patient experience
- ✓ Transformational research that eliminates blinding diseases
- ✓ World-class training of future leaders

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## Unique Pediatric Partnership Brings World-Class Care to Patients



Photo credit: Julia Russell Photography

**A**s affiliates of HMS Ophthalmology, Boston Children’s Hospital (BCH) and Massachusetts Eye and Ear have long collaborated on clinical, research, and educational activities to bring the finest care to their young patients. In 2009, the two institutions took their partnership to a new level when they formalized their relationship in pediatric care, and created one of the most comprehensive pediatric ophthalmology networks in the country.

Over the last seven years this unique partnership has flourished under the leadership of **David Hunter, MD, PhD**, Ophthalmologist-in-Chief at BCH and President of the Children’s Hospital Ophthalmology Foundation (CHOF), and **Joan W. Miller, MD**, Chief of Ophthalmology at Mass. Eye and Ear and Massachusetts General Hospital. From an academic perspective, the collaborative pediatric ophthalmology and strabismus service has enriched the training and educational environment across the department with added opportunities for research collaborations. For patients and their families, the collaboration has enhanced access to the best general and subspecialty pediatric eye care in the world, and broadened the depth and breadth of service offerings available at the three institutions.

BCH ophthalmologists provide general pediatric optometry and ophthalmology care at Mass. Eye and Ear under the leadership of **Melanie Kazlas, MD**, who serves as Site Director for the collaborative Pediatric Ophthalmology and Strabismus Service at Mass. Eye and Ear. In turn, Mass. Eye and Ear specialist **Ambika Hoguet, MD**, offers expert subspecialty pediatric glaucoma care at BCH. Service offerings at BCH will expand further in the summer/fall of 2016 with Mass. Eye and Ear subspecialty providers **Yoshihiro Yonekawa, MD**, and **Hajirah Saeed, MD**, who will be providing pediatric retina surgical and cornea services, respectively. Additionally, three double-fellowship-trained pediatric subspecialists –

**Alexandra Elliott, MD; Gena Heidary, MD, PhD; and Anne Fulton, MD** – provide pediatric subspecialty expertise at BCH in oculoplastic surgery, neuro-ophthalmology, and retinal degenerations, respectively.

The collaborative pediatric ophthalmology and strabismus service also supports specialized care for adults with persistent misalignment or double vision caused by childhood strabismus. **Linda Dagi, MD**, leads BCH’s Adult Strabismus Service, and works in collaboration with Mass. Eye and Ear specialists, including **Dean Cestari, MD**, and **Melanie Kazlas, MD**, to treat adult patients who have developed double vision as a result of diseases ranging from Graves’ disease to retinal detachment.



*Ankoor Shah, MD, PhD*

Another key mission of the collaboration – and an integral part of the department’s community outreach mission – is bringing pediatric eye care to underserved populations. Toward this goal, CHOF and Mass. Eye and Ear pediatric optometrists and ophthalmologists work together to provide free community

benefit services, such as annual vision screenings for children at Camp Harbor View, the Year Up Boston Program, and the Neighborhood Charter School in Dorchester. In 2015, nearly 250 children at Camp Harbor View were screened, with many referred to specialists for follow-up. Additionally, through telemedicine programs, clinicians are able to screen low-weight premature infants for retinopathy of prematurity without the need for an in-person exam. This service is currently active at

# Hot Topics at the 2016 Full-time Faculty Retreat: Teamwork, Big Data, and Leadership Practices

Nearly 150 HMS Ophthalmology faculty members representing multiple HMS affiliates attended the 2016 Full-time Faculty Retreat on April 1st and 2nd in New Castle, NH. Organized by **Reza Dana, MD, MSc, MPH**, and the **Retreat Planning Committee**, the two-day intensive meeting was an opportunity to revitalize the department's engagement with its three-fold mission of providing premier clinical care and attention to the patient experience, conducting transformational research that eliminates blinding disease, and offering world-class training of future leaders.

**W**ith more than 260 full- and part-time faculty members, HMS Ophthalmology is the largest Ophthalmology department in the United States. **Joan W. Miller, MD**, Chair of HMS Ophthalmology, kicked off the retreat by reviewing the opportunities and challenges that the department faces as it continues to grow. Clinical growth provides opportunities to broaden network access, increase patient access to care, and provide margins to fund research and academic programs. Growth in research is driven by the department's strategic focus on areas of greatest unmet clinical need, which include retinal degenerations, age-related macular degeneration, optic neuropathy, glaucoma, and diabetic eye disease. In education, department growth means continuing to provide the best training possible. At the same time, growth brings about its own set of challenges, including: maintaining a sense of team; funding research and educational priorities while continuing valued programs; and maintaining the highest quality care, research, and education.

Since becoming Chair of HMS Ophthalmology in 2003, Dr. Miller has focused on creating organizational structures that provide cohesion in the department and strengthen the connections among the department's multiple affiliates. Examples of these structures include the Harvard Ophthalmology Institutes and Centers of Excellence (COEs), shared educational events, training programs that cross disciplines, and shared mentoring programs.



*When I think about the department's success during my appointment as Chair, teamwork emerges as a common theme. We are better when we work together. We achieve more because we share common goals. Teamwork will be very important as our department continues to grow.*

– **Joan W. Miller, MD**

Chief of Ophthalmology, Mass. Eye and Ear and Mass General Hospital  
Chair, HMS Ophthalmology  
(pictured above with *Patricia A. D'Amore, PhD, MBA*)



*David Hunter, MD, PhD*

During the retreat, HMS Ophthalmology Vice Chairs updated the faculty about their areas of focus: promotions and reappointments, industry and international development, basic/translational/clinical research, medical education, and the Institutes and COEs. Co-directors representing each of the three Institutes and six COEs also discussed their groups' progress and achievements since the 2014 Faculty Retreat, and clinical and scientific presentations followed. In addition, faculty from Boston Children's Hospital,

Joslin Diabetes Center, and Veterans Affairs Boston Healthcare System presented overviews of their current efforts. The retreat also included a faculty development workshop on leadership, as well as presentations on development and fundraising efforts, research funds available for specific translational research projects, and using "big data" to complement traditional research (see next page for highlights).



*Left to right: Sheila Borboli-Gerogjannis, MD, FACS, Anna M. Baglieri, OD, Ula V. Jurkunas, MD, and Anne B. Fulton, MD*

## PRESENTATION HIGHLIGHTS

### Managing Big Data to Supplement Traditional Medical Research



**Peggy Chang, MD**, discussed the opportunities and challenges of mining “big data” for research. One source of “big data” can be found in patient electronic health records. Data in these files grow at a rapid pace, contain many variables, and may not always be completely reliable. On April 2, 2016, Mass. Eye and Ear and Massachusetts General Hospital embraced a new Partners

eCare electronic health record (eMR) database, referred to as EPIC. This system enables clinicians to record more discrete data than previously possible in clinical encounters, questionnaires, and imaging/testing documentation. In turn, analyses of these large clinical data sets may become more useful in supplementing traditional medical research.

### Faculty Development: Leadership in the 21st Century

**Mary Shapiro, MBA, MS**, of Simmons School of Management, presented the keynote lecture for the 2016 Faculty Development Program at the retreat. She challenged faculty members to redefine leadership as a set of practices rather than as a static role. In this framework, leadership can be practiced by modeling the way, inspiring a shared vision, challenging the process, enabling others to act, or encouraging the heart by recognizing contributions. Faculty members shared personal stories in small groups to identify their own best practices as leaders, and to fully reflect upon their personal power in relation to others.



### Funding Strategies

Philanthropy, corporate investments, and intellectual property are three funding strategies adopted by HMS Ophthalmology/ Mass. Eye and Ear. With a goal of raising \$200 million by the year 2020, Mass. Eye and Ear launched the **Bold Science. Life Changing Cures.** campaign to help support growth in research and education. **Patricia McCabe**, Senior Director of Development announced that nearly \$111 million has been raised to date, with 46 percent of these funds, or \$49 million, designated for Ophthalmology. The Corporate Relations Task Force is also working to expand industry collaborations with corporate partners to identify new investment and funding opportunities. With translational research a hospital priority, President and CEO of Mass. Eye and Ear, **John Fernandez** communicated that those researchers interested in bringing the department’s most translatable ideas to market may be eligible for support through the Mass. Eye and Ear Summit Fund. ■



*Joseph F. Arboleda-Velasquez, MD, PhD, and Michael A. Sandberg, PhD*



*James Chodosh, MD, MPH, and colleagues participating in a leadership development workshop*



*Sherleen H. Chen, MD, Christian E. Song, MD, Daniel R. Lefebvre, MD, and Michael K. Yoon, MD*

## Massachusetts Eye and Ear Endows Lecture to Honor Joan W. Miller

Mass. Eye and Ear endowed a named lecture for **Joan W. Miller, MD**, to be presented every other year at the New England Ophthalmological Society (NEOS) meeting. The inaugural lecture was given on Friday, April 15, 2016 by **David M. Brown, MD**, Clinical Professor of Ophthalmology at Cullen Eye Institute, Baylor College of Medicine, at the Back Bay Event Center in Boston. Dr. Brown's lecture, entitled "Pathophysiology of Retinal Vein Occlusion (RVO) - Revelations of the anti-VEGF Trials," reflects his expertise and experience as a vitreoretinal specialist at the Blanton Eye Institute, Houston Methodist Hospital.

NEOS is a non-profit organization dedicated to the study and advancement of Ophthalmology. Founded in 1884, it counts among its members some of the brightest and most influential leaders in ophthalmology. NEOS is committed to educating its members to ensure high standards of ophthalmic care. They also educate health care providers and the public about diseases and conditions of the eye.

Dr. Miller, an internationally recognized expert on retinal disorders, has been involved with NEOS since 1994, and most recently served as President (2013-2014). According to John Fernandez, Mass. Eye and Ear President and CEO, "This lectureship is especially fitting given the passionate commitment that both organizations have for education and collaboration. It is also testimony to Dr. Miller's dedicated involvement with NEOS and her commitment to educating the next generation of trainees. She has supported, mentored, and inspired hundreds of trainees in their careers, and is an especially worthy candidate for this honor."

## Advocating for Ophthalmology in Medical Students' Education



Ankoor Shah, MD, PhD

**H**arvard Medical School is in the 18 percent of US medical schools that provide a required clinical experience in Ophthalmology. Given the increasing age of the world population, high prevalence of eye injury, and importance of vision in the era of digital information, ophthalmic education during medical school is becoming more critical not less. As Director of Medical Student Education in Ophthalmology, **Ankoor Shah, MD, PhD**, oversees the Ophthalmology curriculum for HMS students. His priority is to ensure that this curriculum is comprehensive, coherent, and accessible.

In August 2015, HMS launched Pathways – a new, dynamic curriculum that exposes students to clinical experiences earlier and provides more opportunities for advanced clinical and research experiences. Medical students begin their ophthalmic education during the physical examination course in year one. In this course, primary care specialists review the basic aspects of the external eye exam, visual acuity, and fundoscopy through didactics, and ophthalmologists refine these skills through small-group practical sessions. In Year Two, students benefit from a refresher course on the eye exam, salient and common cases in ophthalmology, and a required clinical ophthalmology experience with the residents in the Mass. Eye and Ear Emergency Service. **Deborah Jacobs, MD**, Director of the Ophthalmology Component of Core Medicine I at HMS, designed and implemented this Year Two coursework.



Deborah Jacobs, MD

Electives begin in Year Two, when students may opt for a one-week "selective" in Ophthalmology during their General Surgery Clerkship. In Year Four additional clinical electives are offered at Mass. Eye and Ear, Boston Children's Hospital (BCH), and Beth Israel Deaconess Medical Center (BIDMC). Advanced clinical research electives are offered by select faculty from Mass. Eye and Ear, Schepens Eye Research Institute of Mass. Eye and Ear, BCH, and BIDMC.

To round out the medical student curriculum, Dr. Shah serves as a faculty advisor for the Ophthalmology Interest Club, an HMS student organization committed to increasing educational opportunities and clinical exposure

to the field of ophthalmology. In addition, he has proposed adding one-hour of instruction on eye anatomy and vision physiology to the First-year curriculum along with an "Eye Exam Bootcamp" for graduating senior medical students to refresh their skills before heading off to internship.

These proposals are being reviewed by curriculum committee members. The Ophthalmic Education Office, directed by **Charles Ruberto, PhD**, provides critical administrative support for these educational initiatives. ■

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*With all of these activities, interest in Ophthalmology has been strong over the past nine years. An average of six HMS students per year out of 161 match in our field, and the cumulative total over the past eight years is 53 students, which is a strong contribution to the field.*

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– **Ankoor Shah, MD, PhD**  
 Director of Medical Student Education  
 in Ophthalmology  
 Assistant Professor of Ophthalmology,  
 Harvard Medical School

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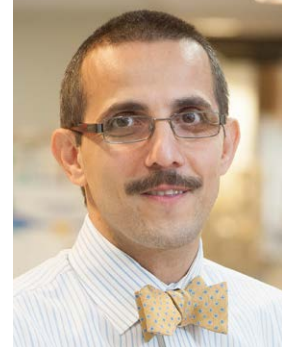
## Charles Schepens' Legacy Inspires Monte J. Wallace Ophthalmology Chair in Retina

Monte J. and Anne H. Wallace have established the Monte J. Wallace Ophthalmology Chair in Retina at Mass. Eye and Ear to honor the memory of Charles L. Schepens, MD, founder of the Schepens Eye Research Institute of Mass. Eye and Ear. As a lawyer, Mr. Wallace worked with Dr. Schepens to draft the legal documents to establish the Institute, and a lasting friendship ensued.

"I respected and admired Dr. Schepens, and I am grateful for our many years of friendship," said Mr. Wallace, who has been a Mass. Eye and Ear trustee for 50 years. "His death was a great loss, but his protégées share a similar passion for helping those with blinding eye diseases. Anne and I created this Chair as a tribute to Dr. Schepens. It will help support scientific innovation, which is what Dr. Schepens would still be doing, I think, if he were still with us." With this generous gift, Mass. Eye and Ear recognizes Monte and Anne Wallace as founding partners of the *Bold Science, Life-Changing Cures* campaign.

In addition to honoring Dr. Schepens in perpetuity, the endowed chair empowers the incumbent to advance his or her academic research and teaching pursuits. Sharing the same deep commitment to retinal research and ophthalmic education that

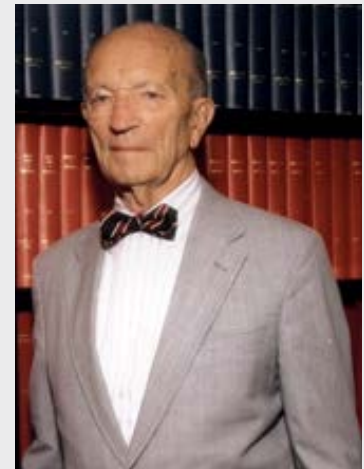
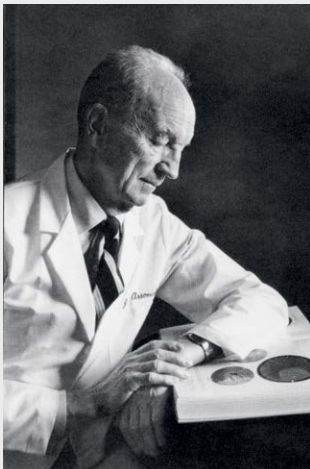
Dr. Schepens did, **Demetrios Vavvas, MD, PhD**, is the first incumbent of the Wallace Chair. Dr. Vavvas' research already has led to a better understanding of blinding retinal diseases and continues to advance the development of sight-saving therapies. Among his important scientific contributions, Dr. Vavvas elucidated multiple mechanisms of photoreceptor and retinal pigment epithelium cell death. With this knowledge, he aims to develop novel neuroprotective therapies, effectively changing the way blinding retinal diseases are prevented and treated.



Demetrios Vavvas, MD,

"Dr. Vavvas' curiosity, drive, and brilliant mind have enabled him to make important breakthroughs in retina," commented Joan W. Miller, MD. "I am so grateful to Anne and Monte for investing in Mass. Eye and Ear. I imagine Dr. Schepens would be pleased with Dr. Vavvas as incumbent, and I expect that Dr. Vavvas' impact will be truly extraordinary in the decades to come." ■

### *The Storied Life and Career of Charles L. Schepens, MD*



A member of the French Resistance during World War II, Dr. Schepens later became a retinal specialist and brilliant inventor of ophthalmic techniques and devices. After earning his medical degree from the State University of Ghent, he was inducted as a Captain in the Medical Corps of the Belgian Air Force. In 1942, he spearheaded a secret information and evacuation pipeline, smuggling documents and people over the Pyrenees to Spain. He escaped to England after the Germans learned of his operation. In London, he began work on retinal surgery techniques and the binocular indirect ophthalmoscope at Moorfields Eye Hospital. In 1947, he immigrated to the United States, and joined the Howe Laboratory of Ophthalmology at Mass. Eye and Ear as a fellow in ophthalmic research. Regarded by many as the Father of Modern Retinal Surgery, Dr. Schepens founded the Retina Foundation in 1950 (later renamed to Schepens Eye Research Institute). Dr. Schepens passed away in 2006, but his legacy continues in the hundreds of trainees he mentored and taught throughout his career. ■



# Alumni Giving Society

OF HARVARD OPHTHALMOLOGY @ MASS. EYE AND EAR

Help us ensure that the future leaders of ophthalmology receive the same world-class education that you did. Your contribution to the Alumni Giving Society of HMS Ophthalmology @ Mass. Eye and Ear allows us to continue our tradition of excellence in our three mission areas of patient care, research, and education.

*Please consider a gift!*

Contact Julie Dutcher in the Mass. Eye and Ear Development Office to explore the possibilities. You may designate your gift in any way you choose or support one of our numerous programs. Gifts are tax-deductible.

*Join your colleagues in the Alumni Giving Society, today!*

Please contact  
Julie Dutcher  
julie\_dutcher@  
meei.harvard.edu  
617-573-3350

## 2015-2016 Alumni Giving Society Members

(As of May 31, 2016)

### CHAMPION Gifts of \$25,000 or more

- Robert J. D'Amato, MD, PhD
- Claes H. Dohlman, MD, PhD
- Joan W. Miller, MD
- Samir C. Patel, MD
- Janey L. Wiggs, MD, PhD

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- Simmons Lessell, MD\*
- Demetrios Vavvas, MD, PhD

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- Shelby R. Wilkes, MD, MBA

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- Felix N. Sabates Sr., MD
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- Bradford J. Shingleton, MD
- Jonathan H. Talamo, MD
- Kazuo Tsubota, MD

\*deceased



## Inaugural Pei-Fei Lee Lecture: Paul Lee on the Importance of Cultivating a Learning Culture

**P**aul P. Lee, MD, JD, the F. Bruce Fralick Professor and Chair of Ophthalmology and Visual Sciences at University of Michigan School of Medicine, presented the inaugural Pei-Fei Lee Lecture at Mass. Eye and Ear on April 13, 2016. Through this named lecture, Dr. Lee commemorated his father, reflected upon the learning culture of Mass. Eye and Ear, and demonstrated how inquiry and open discussion lead to discovery.

*My father treasured Mass. Eye and Ear because of its people, especially his mentors – Paul Chandler, MD, and Morton Grant, MD. He would tell me, ‘At Mass. Eye and Ear, everyone is given an opportunity to contribute regardless of their background.’ I found this to be true as well.*

– **Paul P. Lee, MD, JD**  
Chair of Ophthalmology and Visual Sciences  
University of Michigan School of Medicine

Dr. Lee established the Pei-Fei Lee Lectureship to honor the life and career of his late father, **Pei-Fei Lee, MD**, an internationally known glaucoma and cataract specialist who was also one of the first glaucoma fellows at Mass. Eye and Ear. Like his father, Dr. Lee also completed a glaucoma fellowship at Mass. Eye and Ear.

Dr. Lee’s lecture paid tribute to the learning culture of Mass. Eye and Ear, where individuals, and the organization as a whole, are encouraged to increase knowledge, competence, and performance. He presented an overview of eye care in the United States, which included demographic, socio-economic, cultural, and health industry data to reveal underrepresented minority groups who have unmet eye care needs. To reinforce how open discussion

and teamwork can lead to discovery, he invited the group of 50 trainees, faculty, and trustees who attended the lecture to brainstorm ways to better serve these populations, and improve eye care for all. ■



Paul P. Lee, MD

Establishing a named lectureship is one of the many ways that alumni support HMS Ophthalmology. Not only do lectureships help ensure that today’s residents and fellows – the future leaders of Ophthalmology – receive a world-class education, but they also pay tribute to beloved mentors, colleagues, or family members. Help us continue our important work in clinical care, research, and education by making an annual gift of \$1000 or more to the Alumni Giving Society of HMS Ophthalmology @ Mass. Eye and Ear.

### The Howe Library: an Essential Resource

**T**he Howe Library at Mass. Eye and Ear is one of the most comprehensive ophthalmology libraries in the world. Directed by **Louise Collins**, the library is an important resource for the department’s medical and scientific community. In addition to a broad range of print and electronic journals, the library includes an outstanding rare book collection and an archive of the hospital’s historic papers, photographs, and medical instruments. Since assuming directorship in 2015, Ms. Collins has been working to improve electronic access to the library’s resources, making them easily available to all the Mass. Eye and Ear staff, including those at satellite locations. Many books and journals are now available electronically, but additional funding will be necessary to keep pace with changing technologies in this digital era. In addition to article retrieval, reference librarian **Stephanie Frirée** is helping to facilitate the community’s research, medical care, and teaching needs. Specifically, she can perform literature searches, assist with systematic reviews (including writing the Methods section), and has training in biomedical informatics. To better serve individuals with low vision in the Mass. Eye and Ear community, the library acquired ZoomText, a magnification and screen-reading software. Installed in 2016 on one of the library’s public access computers, the software can be used by patients, their families, and employees. ■



*Help us ensure that HMS Ophthalmology continues to provide the highest level of service to patients, trainees, faculty. Show your support by designating a gift to the Howe Library Fund, today.*  
[masseyeandear.org/donations](http://masseyeandear.org/donations)

# 4th Biennial International Symposium on AMD

October 20-22, 2016 | Boston, MA

Presented by the Harvard Ophthalmology AMD Center of Excellence, the **4th Biennial International Symposium on AMD** will bring together international AMD experts and leaders from related disciplines outside ophthalmology in an interactive format to discuss current and future topics in AMD research.

## Ephraim Friedman Lecture:

### *Remodeling in Retinal Degenerations*

Robert E. Marc, PhD, Moran Eye Center, University of Utah

## Topics Include:

**RPE biology • Lipids • Aging • Inflammation  
Approaches to Future Treatment • Imaging**

## CLOSING REMARKS:

Robert D'Amato, MD, PhD, Harvard Medical School

## ORGANIZING COMMITTEE:

Co-chair: Patricia A. D'Amore, PhD, MBA, FARVO, Harvard Medical School

Co-chair: Deeba Husain, MD, Harvard Medical School

Co-chair: Ivana K. Kim, MD, Harvard Medical School

Ex-officio: Joan W. Miller, MD, FARVO, Harvard Medical School

**Register Today!**

[eye.hms.harvard.edu/AMD2016](http://eye.hms.harvard.edu/AMD2016)



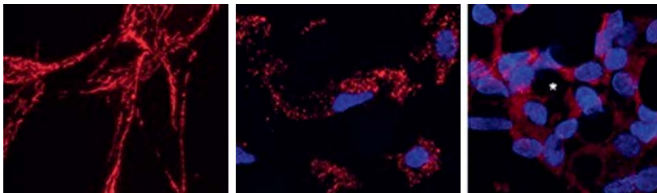
## Quality and Outcomes from Largest Cohort of Resident-performed Cataract Surgeries



**M**ary Daly, MD, of Veterans Affairs Boston Healthcare System; Senior Research Fellow **Abhishek Payal, MBBS, MPH**, of Mass. Eye and Ear; and colleagues published a first-of-its-kind study in the March 2016 issue of *Journal of Cataract & Refractive Surgery*,

exploring quality of life measures in resident-operated cataract surgery. In this retrospective analysis of cataract surgery cases performed by residents, researchers found that visual acuity and vision-related quality of life significantly improved after surgery, although this improvement was less marked in cases with one or more intra- or postoperative event. It included 4,221 cases from five Veterans Affairs Medical Centers, the largest cohort in the US-resident cataract surgery literature to date. ■

## Better Understanding of Fuchs' May Lead to the Development of Non-surgical Therapies



**U**la Jurkunas, MD, and researchers at Schepens Eye Research Institute of Massachusetts Eye and Ear demonstrated a relationship between mitochondrial dysfunction in corneal endothelial cells and the development of Fuchs' endothelial corneal dystrophy – an age-related and genetic eye disease affecting up to 4 percent of the U.S. population over the age of 40. It has long been known that free radicals cause oxidative damage, but researchers showed for the first time that lifelong accumulation of oxidative DNA damage leads to mitochondrial dysfunction and subsequent cell death in the tissue of the corneal endothelium – changes that characterize Fuchs' (*Antioxidants & Redox Signaling*, March 2016). Fuchs' can progress to blindness, at which point corneal transplant procedures remain the only available option to restore vision. However, with this new understanding of the pathogenesis of Fuchs', safer, non-surgical therapies benefiting patients with vision loss may be on the horizon. ■

Image credit: *Antioxidants & Redox Signaling*, March 2016

## Is Stem Cell Therapy Safe and Effective for Retinitis Pigmentosa?



**R**esearchers and clinicians alike hope that stem cells can be provide viable regenerative therapies for patients affected by degenerative retinal diseases. To evaluate the safety and tolerability of stem cell therapy for retinitis pigmentosa, **Eric Pierce, MD, PhD**, Director of the HMS Ophthalmology

Ocular Genomics Institute and Berman-Gund Laboratory at Mass. Eye and Ear, is leading a ReNeuron-sponsored Phase I/II clinical trial. This is a first-in-human, dose escalation study in which up to 15 patients with advanced retinitis pigmentosa will receive a single subretinal injection of human retinal progenitor cells (hRPCs) in one eye. These hRPCs were identified and developed as a potential type of cell to use for transplantation by **Michael Young, PhD**, at the Schepens Eye Research Institute of Mass. Eye and Ear. Participants will be followed for one year.



“We are delighted to be doing this important Phase I/II clinical trial,” commented Dr. Pierce. “The human retinal progenitor cells being tested in the study are promising because they can make photoreceptors. The implanted cells may not only prevent degeneration of patients’ vision but may possibly restore some vision by replacing degenerated photoreceptor cells. We look forward to reporting the results of this study in the months and years ahead.”

While evaluating safety is the primary goal of the study, the investigators also will be evaluating treated subjects for potential effects on vision and retinal structure. **Jason Comander, MD, PhD**, performed the surgery on the first patient, with the assistance of **Dean Elliott, MD**, on March 10, 2016. At the end of April, the Data Safety Monitoring Board gave approval to proceed with treating the two additional subjects in the first dose cohort, and the study is proceeding as planned. ■

CONTINUED FROM PAGE 1, LEADERS IN OPHTHALMOLOGY

HMS Ophthalmology leaders – past and present – including **Nicholas Volpe, MD**, Chair of Ophthalmology at Northwestern University; **Kathryn Colby, MD, PhD**, Chair of Ophthalmology and Visual Science at University of Chicago; **Carolyn Kloek, MD**, Director of the HMS Ophthalmology Residency Training Program; and **Demetrios Vavvas, MD, PhD**, the Monte J. Wallace Associate Professor of Ophthalmology, HMS.



*Dimitri Azar, MD, MBA*

**Dimitri Azar, MD, MBA**, Distinguished Professor of Ophthalmology, Bioengineering, & Pharmacology, Executive Dean of the College of Medicine at the University of Illinois, and B.A. Field Chair of Ophthalmic Research, also served as Chief Resident (1990-1991). Dr. Azar has made significant contributions to the treatment of corneal diseases and to advances in refractive surgery. He attributes

this success, in part, to the “superb” comprehensive training in ocular disease and management he received during his HMS Ophthalmology residency. Dr. Azar also completed research and clinical fellowships in cornea at Mass. Eye and Ear. “Not only did I learn about the most advanced procedures,” he said, “but I also had the honor of working with some of the most distinguished faculty of all time including ‘the father of modern corneal science’ – Dr. Claes Dohlman.”

Later, Dr. Azar joined the HMS Ophthalmology faculty and “re-experienced Harvard’s exceptional commitment to education, training, research, and clinical care – this time from an educator’s perspective.” He rose in rank to become Professor of Ophthalmology at HMS, Director of the Cornea Service at Mass. Eye and Ear, and Senior Scientist at Schepens Eye Research Institute of Mass. Eye and Ear. After 10 years at HMS, he joined University of Illinois, as Professor and Head of Ophthalmology and Visual Sciences in 2006, and was later appointed Dean in 2011.



*Samir Patel, MD*

In industry, **Samir Patel, MD**, leads the development of next-generation therapies for ocular diseases as co-founder of the biopharmaceutical company, Ophthotech Corporation. After completing a vitreoretinal surgery fellowship at Mass. Eye and Ear, Dr. Patel began his career in academic medicine. He served as Director of the Retina Service (1992-2003) at the University of Chicago, and was the first surgeon

to perform a retinal transplant in humans in the United States. During this time, he also was consulting for several ophthalmic biotechnology companies and healthcare venture firms. In the late 1990s, he pursued a high-risk venture as a principal in the biotech start-up, Eyetech Pharmaceuticals. Here, he collaborated with HMS Ophthalmology alumni, **Tony Adamis, MD**, and **David Guyer, MD**, and developed the first anti-VEGF agent for age-related macular degeneration. Today, Dr. Patel continues to collaborate frequently with alumni and faculty at Ophthotech Corporation. “The department played a big role in my entire career in both academia and in industry,” said Dr. Patel.



*Jeffrey Lamkin, MD*

While industry leaders play an important role in developing therapies that help patients with unmet needs, equally important are the physicians who dedicate their lives to providing the best eye care possible for patients, and educators who teach and mentor the next generation of ophthalmologists. As a leading vitreoretinal specialist and educator, **Jeffrey Lamkin, MD**,

has a private practice in Hudson, OH, as well as significant teaching responsibilities at Northeast Ohio Medical University.

*If you have spent any time at Mass. Eye and Ear, then you will understand how the experience changes you... the people and training programs set you up for success and encourage you to be the best at what you're doing. It's great to be able to pay it forward so someone else can enjoy the same advantages that I did.*

– **Jeffrey Lamkin, MD**

Vitreoretinal Specialist, Retina Group of Northeast Ohio  
Assistant Professor of Ophthalmology, Northeast Ohio Medical University

An HMS Ophthalmology/Mass. Eye and Ear alumnus and former Chief Resident (1991-1992), Dr. Lamkin chose HMS Ophthalmology for his residency out of more than a dozen programs because “the atmosphere at Mass. Eye and Ear was extremely welcoming,” and “all they wanted were talented and hard-working residents to train well and send out into the world to pursue their passion.... I remember saying, ‘I just want to take care of patients, and I’m looking for the very best training I can get.’” When Dr. Lamkin learned that the department had “a long tradition of training primary care clinicians and that it wasn’t a requirement to want to win a Nobel Prize or become world famous,” he knew the program was for him.

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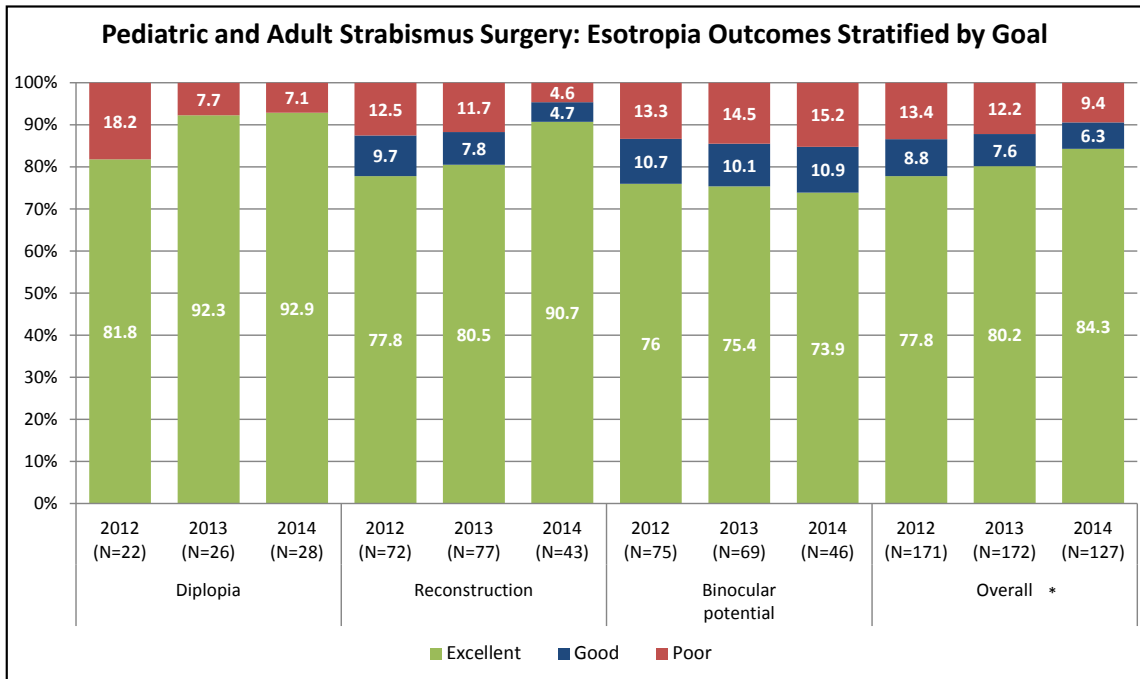
## CONTINUED FROM PAGE 12, LEADERS IN OPHTHALMOLOGY

This educational philosophy continues today. According to Joan W. Miller, MD, Chair of HMS Ophthalmology, “In our department, a world-class education is one that encourages individuals to pursue their passion and cultivate the necessary leadership practices to be the best in their chosen career. By learning to leverage their personal power as a positive force, and to work collectively and in relation to one another, they become leaders of our field.”

In appreciation of his formative training years, Dr. Lamkin named Mass. Eye and Ear in his estate. In particular, he was

grateful to Mariana D. Mead, MD, who was Chief Resident during Dr. Lamkin’s residency. “Dr. Mead was my number one role model and hero,” he said. Dr. Mead passed away from pancreatic cancer in 2002, but her legacy remains. “If you have spent any time at Mass. Eye and Ear, then you will understand how the experience changes you... the people and training programs set you up for success and encourage you to be the best at what you’re doing,” said Dr. Lamkin. “It’s great to be able to pay it forward so someone else can enjoy the same advantages that I did.” ■

## CONTINUED FROM PAGE 3, PEDIATRIC OPHTHALMOLOGY AND STRABISMUS SERVICE



Dedicated to improving clinical and surgical care for patients, the collaborative pediatric ophthalmology and strabismus service participates in annual quality and outcomes reporting. Excerpted from the 2015 Mass. Eye and Ear Outcomes and Quality Report (in review), this chart shows continuous improvement in surgical outcomes in children and adults with esotropia since 2012.

South Shore Hospital’s Neonatal Intensive Care Unit, with plans to expand to other sites in the coming months.

The collaborative pediatric ophthalmology and strabismus service further distinguishes itself by using state-of-the-art diagnostic technologies, such as adaptive optics. Notably, physicians in the CHOF network were the first in the United States to use a saccadic vector optokinetic perimeter device – a special device that evaluates visual field changes in young patients. Furthermore, clinicians at BCH are innovating

surgical techniques and tools to improve diagnoses and treatment outcomes. For example, Dr. Hunter and his colleagues developed a noninvasive laser technology known as the Pediatric Vision Scanner, which detects amblyopia and strabismus with unprecedented accuracy in children.

Committed to advancing diagnostic, surgical, and therapeutic approaches for pediatric visual disorders, researchers continue to investigate the underlying mechanisms of these disorders. At BCH, clinician scientist **Lois Smith, MD, PhD**, studies retinal vascular biology; computational neurobiologist **Gabriel Kreiman, PhD**, studies visual attention; and joint-appointee (with BCH Neurosurgery), **Larry Benowitz, PhD**, studies optic nerve regeneration. Additionally, clinician scientists **Mary Whitman, MD, PhD**, and **Elizabeth Engle, MD**, study congenital cranial dysinnervation disorders and disorders of axon guidance. ■

## Envisioning a World Without Blindness: Highlights from ARVO 2016 Annual Meeting



From May 1st to May 5th, more than 11,000 people attended the Association for Research in Vision and Ophthalmology (ARVO) 2016 Annual Meeting in the Emerald City of Seattle, WA. Eye and vision researchers from more than 75 countries presented their current research, discussed emerging technologies, and strategized ways to overcome the current challenges facing ophthalmology and vision science. HMS Ophthalmology was well-represented at the meeting, with faculty and trainees contributing 247 posters and presentations this year.



Photo courtesy of the National Eye Institute, part of NIH.

### May 1 National Eye Institute Audacious Goals Initiative: Town Hall Meeting

The town hall meeting focused on ocular diseases and disease states affecting photoreceptor cells and/or retinal ganglion cells that could be potential targets for regenerative medicine. Following two introductory talks, attendees and four expert panelists engaged in an open discussion. Panelists included: **Lois E. Smith, MD, PhD**, of Boston Children's Hospital; HMS Ophthalmology alumnus **Don Zack, MD, PhD**, of Johns Hopkins University; and **Joan W. Miller, MD**, of Mass. Eye and Ear/HMS Ophthalmology. According to Dr. Miller, "These forums are important because they encourage dialogue among researchers and clinicians with various backgrounds. Through collaboration, we build upon each other's ideas, and can hopefully develop sight-saving therapies more quickly."

### May 1 Outbreaks: The Global Ophthalmic Threat of Ebola, Zika and Other Viruses

The late-breaking special session organized by **James Chodosh, MD, MPH**, attracted more than 800 attendees, and emphasized the urgent need for improved ophthalmic screening and care

as well as for a better understanding of infectious disease mechanisms. Panelists provided clinical, scientific, and humanitarian perspectives related to the threat of emerging infectious diseases. In particular, **Paul Farmer, MD, PhD**, (HMS and Partners in Health) described how "staff, stuff, space, and systems" affect diseases. He stated that disease occurs because of a public health desert, but disease kills because of a clinical desert. In addition, **Ian Crozier, MD**, (World Health Organization) shared his perspective as an Ebola survivor; **Todd Margolis MD, PhD**, (Washington University) discussed the interface of ecology and infectious diseases; **Lee Jampol, MD**, (Northwestern University) described the retinal manifestations of Zika, Ebola, and chikungunya viruses; and **Steven Yeh, MD**, (Emory University) remarked on the incidence of post-Ebola uveitis.



Photo credit: John Earle Photography

### May 1 HMS Ophthalmology Reception at the Arctic Club

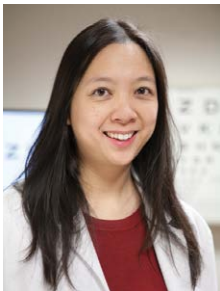


More than 300 faculty, trainees, and alumni from across the United States, as well as Japan and Brazil, attended the HMS Ophthalmology Reception at the Arctic Club. **Joan W. Miller, MD**, and **Patricia A. D'Amore, PhD, MBA**, kicked off this social networking event with a brief department update and highlights of the numerous awards bestowed on HMS Ophthalmology physicians and researchers. According to one attendee, the cocktail reception was a "warm and wonderful event" that "facilitated spirited conversation amongst friends."

## May 2 BrightFocus Foundation Supports Four Vision Researchers

Meredith Gregory-Ksander, PhD, of Schepens Eye Research Institute of Mass. Eye and Ear, received the Thomas R. Lee Award for Glaucoma Research during a breakfast award ceremony at the 2016 ARVO Annual Meeting. She was one of five women scientists receiving awards named in honor of leaders in vision research and advocacy. With this award, Dr. Gregory-Ksander will investigate whether inhibiting an important new regulator of inflammation in the eye's optic nerve head will stop the development of glaucoma and vision loss. Other HMS Ophthalmology-affiliated scientists who received vision research grants from BrightFocus include Petr Baranov, MD, PhD; Kip Connor, PhD; and Daniel Sun, PhD.

## May 3 In the News: DME Therapy with Plasma Kallikrein Inhibitor Showing Promise



*Ophthalmology Times* – Jennifer K. Sun, MD, MPH, of the Beetham Eye Institute at Joslin Diabetes Center, presented data from a Phase I, open-label ascending dose study of a novel, intravenous plasma kallikrein inhibitor (KVD001). Based on early findings, KVD001 shows promise for treating diabetic macular edema, potentially by preventing blood vessel leakage and thickening of the retina. This study was developed out of work by Edward Feener, PhD, and Lloyd Paul Aiello, MD, PhD, who characterized the effects of plasma kallikrein on the pathogenesis of diabetic retinopathy using animal and cell culture models. In particular, they demonstrated that VEGF increases extravasation of plasma kallikrein into the retina, and plasma kallikrein is required for the full effects of VEGF on retinal vascular permeability and retinal thickening in rodents (*Invest Ophthalmol Vis Sci*, 2016). Based on this finding, systemic plasma kallikrein inhibition may be a therapeutic opportunity to treat VEGF-induced retina edema.

## May 5 Genetics of Vision: Problems and Solutions



During this ARVO/Alcon Keynote Series, an expert panel provided critical insight into genetic technologies, monogenic eye diseases, complex eye diseases, and future challenges of vision genetics. Janey Wiggs, MD, PhD, served as one of the panel members. ■

## Honors & Awards

*Congratulations to the following HMS Ophthalmology faculty:*

**Alcon Research Institute Award**  
Eric Pierce, MD, PhD

**Pfizer Ophthalmics Carl Camras Translational Research Award**  
Demetrios G. Vavvas, MD, PhD

**ARVO Gold Fellow, Class of 2016**  
David A. Sullivan, PhD

**New Dowling Society Member**  
Patricia A. D'Amore, MBA, PhD

*Congratulations to the following HMS Ophthalmology trainees:*

**Travel Grant Recipients**  
Daniel Diaz-Aguilar, MD (c)  
Neda Baniasadi, MD  
Charles Cai, BS  
Sophie Cai, MD  
Lindsay Grotting, MD  
Jing Hua, MD  
Arsia Jamali, MD  
Yang Liu, MD  
Hajirah Saeed, MD  
Pavlina Tsoka, PhD (c)

*Congratulations to the following HMS Ophthalmology alumni and former faculty:*

**Friedenwald Award**  
Shigeru Kinoshita, MD, PhD

**Alcon Research Institute Young Investigator Awards**  
Rajesh Rao, MD  
Glenn Yiu, MD, PhD

**ARVO Gold Fellows, Class of 2016**  
Natalie Afshari, MD  
Paul Bernstein, MD  
Paul Lee, MD, JD

**ARVO Silver Fellows, Class of 2016**  
Ron Adelman, MD, MPH, MBA  
Junko Hori, MD, PhD  
Philip Rosenfeld, MD, PhD

**New Dowling Society Member**  
David L. Epstein, MD (deceased)

## Upcoming Events

To see a full list of events, visit  
HMS Ophthalmology online at  
[eye.hms.harvard.edu/calendar](http://eye.hms.harvard.edu/calendar)

### 41st Annual Kevin Hill Seminar in Ophthalmology

July 17-21

Selected topics in the areas of Cornea and External Disease with an additional session on the management of Ocular Trauma Colby College Campus, Waterville, ME  
Course Director: Peter Veldman, MD

### Soft Tissue Suture Course

July 21

Mass. Eye and Ear, Sloane Teaching Room  
Course Directors: Michael K. Yoon, MD, and Suzanne Freitag, MD

### Special Grand Rounds: Quality, Humanism & Professionalism/Schwartz Center

July 28, 7:00 am – 8:00 am

*Pulse 360 – From the Physician's Perspective*  
Meltzer Auditorium, Mass. Eye and Ear, simulcast to Karp 11 Conference Room at Boston Children's Hospital; Joslin Diabetes Center; and Mass. Eye and Ear, Longwood

SEND US YOUR NEWS!  
[eyenews@meei.harvard.edu](mailto:eyenews@meei.harvard.edu)

### Glaucoma Fall Festival

September 23, 2016

Starr Center  
185 Cambridge Street, Boston

Program highlights include imaging discussion, surgical and clinical case presentations, videos of surgical complications, and glaucoma management presentations.

Course Directors: Louis R. Pasquale, MD; Joseph F. Rizzo III, MD; Angela Turalba, MD



#### Guest Speaker:

Helen Danesh-Meyer, MBChB, MD  
University of Auckland

Registration is required for one or both events: [eye.hms.harvard.edu/festivals](http://eye.hms.harvard.edu/festivals)

### 7th Annual Vitrectomy Course for First-year Vitreoretinal Fellows

July 29-30

Mass. Eye and Ear  
Registration required:  
[eye.hms.harvard.edu/vrcourse](http://eye.hms.harvard.edu/vrcourse)

### 8th International Conference on the Tear Film & Ocular Surface: Basic Science and Clinical Relevance

September 7-10

Corum, Montpellier, France  
Registration required: [tfos2016.org](http://tfos2016.org)

### Special Grand Rounds: New England Journal of Medicine Clinicopathologic Conference

September 22, 8:00 am – 9:00 am

Meltzer Auditorium, Mass. Eye and Ear, simulcast to Karp 11 Conference Room at Boston Children's Hospital; Joslin Diabetes Center; and Mass. Eye and Ear, Longwood

### American Academy of Ophthalmology (AAO) Annual Meeting

October 15-18

McCormick Place, Chicago, IL

### Cornea Center of Excellence Visiting Professor

November 17

Meltzer Auditorium, Mass. Eye and Ear  
Martine J. Jager, MD, PhD, Leiden University Medical Center

### Neuro-ophthalmology Fall Festival

September 24-25

Meltzer Auditorium, Mass. Eye and Ear

Program highlights include presentations of unknown cases, and lectures spanning topics such as optic neuritis, neuro-ophthalmic emergencies, anisocoria, idiopathic intracranial hypertension, strabismus, and more.

### 2nd Biennial International Symposium on Ocular Regeneration

October 20

Keynote Speaker: John E. Dowling, PhD, of Harvard University will present *Reconstructing the Human Fovea*

Registration required:  
[eye.hms.harvard.edu/ormi2016](http://eye.hms.harvard.edu/ormi2016)

### 4th Biennial International Symposium on AMD

October 20-22

Ephraim Friedman Lecturer: Robert E. Marc, PhD, of University of Utah will present *Remodeling in Retinal Degenerations*

Registration required:  
[eye.hms.harvard.edu/amd2016](http://eye.hms.harvard.edu/amd2016)

Both events will take place at the Starr Center located at 185 Cambridge Street in Boston.

## Awards, Grants, and Honors

### FACULTY FUNDING

#### 2016 Curing Kids Fund

The Mass. Eye and Ear Curing Kids Fund supports research and treatment for children with conditions that affect vision, hearing, and other debilitating disorders of the eyes, ears, nose, throat, head, and neck. Congratulations to the following grant recipients: Kinga Bujakowska, PhD; Luk Vandenberghe, PhD; and David Wu, MD, PhD.



Jason Comander, MD, PhD, of Mass. Eye and Ear received a Foundation Fighting Blindness Enhanced Career Development Award in the amount of \$510,000 over three years.

Darlene Dartt, PhD, received a grant from the National Eye Institute in the amount of \$1,041,079 over five years for her project, "Lacrimal gland repair using progenitor cells." This award will be split



with her co-PI, Helen Makarenkova, PhD, from the Scripps Research Institute in San Diego.



**Deeba Husain, MD**, of Mass. Eye and Ear received a grant from Alcon in the amount of \$345,121 over one year for her project, “A randomized, open-label single ascending dose and double-masked, ranibizumab controlled, safety, tolerability, and efficacy study of intravitreal LMG324 in subjects with neovascular age-related macular degeneration.”

## AWARDS & HONORS

### ARVO Awards

See page 15

### International Society of Eye Research (ISER)

**Lloyd Paul Aiello, MD, PhD**, of Joslin Diabetes Center and **Reza Dana, MD, MSc, MPH**, of Mass. Eye and Ear will receive awards and present Plenary Lectures at the XXII Biennial Meeting of the International Society of Eye Research (ISER) in Tokyo, Japan in September 2016. Dr. Aiello will receive the 2016 Ernst H. Bányai Prize, which is presented to a distinguished scientist who has made outstanding contributions in research that increase our understanding of ocular pharmacology directly related to, or applicable to, glaucoma, diabetic retinopathy, macular degeneration, or related retinal diseases. Dr. Dana will receive the 2016 Endre A. Balazs Prize, which honors a distinguished scientist whose outstanding contributions provide significant progress in the field of experimental eye research.

### The Power List

According to *The Ophthalmologist's* “2016 Power List,” 20 of the top 100 influential people in Ophthalmology in the world are affiliated with HMS Ophthalmology. HMS Ophthalmology current faculty members include **Anthony Adamis, MD**; **Lloyd Paul Aiello, MD, PhD**; **Claes Dohlman,**

**MD, PhD**; **Evangelos Gragoudas, MD**; **Martine Jager, MD, PhD**; and **Joan W. Miller, MD**. Alumni include **Carmen Puliafito, MD, MBA**; **Neil Bressler, MD**; **Eduardo Alfonso, MD**; **Jayakrishna Ambati, MD**; **Stanley Chang, MD**; **Peter Kaiser, MD**; **Henry Klassen, MD, PhD**; **Philip J. Rosenfeld, MD, PhD**; **Joel Schuman, MD**; **Paul Sieving, MD, PhD**; **Giovanni Staurenghi, MD**; and **A. John Kanellopoulos, MD**. Finally, **Shigeru Kinoshita, MD, PhD**, and **Douglas Rhee, MD**, are both former faculty of HMS Ophthalmology. With a readership of 18,000, *The Ophthalmologist* polls its readers to create this list.

### Premier Surgeon 300



**Kathryn Hatch, MD**, was included in the 2016 “Premier Surgeon 300”—a list of innovators in the field of refractive cataract surgery that is developed by the editors and publisher of *Ocular Surgery News*.

**Joan W. Miller, MD**, and **Claes Dohlman, MD, PhD**, were recognized in 2016 as honorary Heed Fellows.

**Nurhan Torun, MD**, of Beth Israel Deaconess Medical Center (BIDMC) was accepted into the BIDMC Academy of Medical Educators as an Academy member in 2015-2016.

**Janey Wiggs, MD, PhD**, of Mass. Eye and Ear, will present the W. Morton Grant, MD, Visiting Professor Lecture, “Genetics in the Glaucoma Clinic,” at the Resident and Fellow Graduation Ceremonies of the New England Eye Center, Tufts Medical Center, Tufts University School of Medicine, on June 24, 2016.

## Personnel Updates

### LEADERSHIP APPOINTMENTS



**Matthew Gardiner, MD**, Director of the Ophthalmic Emergency Service and Associate Chief for Clinical Operations at Mass. Eye and Ear, was appointed to the MGH Surgical Coordinating Committee.

## TRAINEE RECOGNITION

### Society of Heed Fellows / Heed Ophthalmic Foundation

The Society of Heed Fellows is a public charitable and educational foundation that provides funding for post graduate studies in ophthalmology and the ophthalmic sciences. In the last four years, the Heed Ophthalmic Foundation has awarded 28 percent of its Heed Fellowships to HMS Ophthalmology-affiliated trainees. Congratulations to **Catherine Choi, MD**; **Avni Patel, MD**; and **Katherine Talcott, MD**, who will receive 2016-2017 Heed Fellowships.

### American Society of Cataract and Refractive Surgery (ASCRS)

Second-year resident **Durga Borkar, MD**, received \$5,000 as one of ten 2016 ASCRS Foundation Research Grant awardees. This award supports researchers exploring new approaches to challenging issues in Ophthalmology. Two other residents, **Seanna Grob, MD**, and **Zeba Syed, MD**, received 2016 ASCRS Foundation Resident Excellence Awards, which are given annually to only ten residents. Excellence Awards provide \$1,000 for travel, and free registration to the ASCRS Annual Symposium.

### Harvard University

As the runner up for the 2016 Harvard University Deans' Health and Life Sciences Challenge, **Pykus Therapeutics** (a start-up company co-founded by second-year ophthalmology residents, **Tomasz Stryjowski, MD**, and **Tony Stefater, MD, PhD**) received \$25,000 and work-space and mentoring at the Harvard Innovation Laboratory. **Pykus Therapeutics** is currently developing an intraocular technology to improve retinal tamponade after vitrectomy.



Beginning in July 2016, **Seanna Grob, MD, MAS**, will serve as Chief Resident and Director of the Mass. Eye and Ear Trauma Service. In this junior faculty position, she joins the leadership of one of the busiest ocular trauma centers in the country and serves as teacher and mentor to 24 HMS Ophthalmology residents. In addition to her clinical responsibilities, Dr. Grob will serve as a key member of the Ophthalmology Residency Training Program leadership team and teaching faculty. Dr. Grob earned her MSc and MD from University of California, San Diego School of Medicine, and completed her Ophthalmology residency at HMS.

**Ambika Hoguet, MD**, was appointed Associate Director of the Mass. Eye and Ear Glaucoma Fellowship in September 2015. In this role, she works with **Louis Pasquale, MD**, who has directed the Glaucoma Fellowship program since 1998. Dr. Hoguet has clinical expertise in pediatric and adult glaucoma, complicated cases of glaucoma, minimally invasive glaucoma surgery, and cataract surgery in patients with glaucoma. She also conducts research on surgical innovations and techniques of glaucoma surgery, especially tube shunt surgery.

**Jonathan Talamo, MD**, has been appointed Chief Medical Officer for Ocular Therapeutix, a biopharmaceutical company focused on the development and commercialization of innovative therapies for diseases and conditions of the eye. Dr. Talamo is a member of the Mass. Eye and Ear Cornea and Refractive Surgery Service, and was the previous site director of the Mass. Eye and Ear, Waltham office. He will remain a part-time member of the faculty, active in patient care and teaching.

**NEW RECRUITS**



**Hajirah N. Saeed, MD**, will join the faculty as a clinician scientist in July 2016, and begin seeing patients through Mass. Eye and Ear's Cornea Service in September. As the inaugural Gliklich Innovation Scholar

at Mass. Eye and Ear, she will work under the mentorship of **James Chodosh, MD, MPH**, to develop a Stevens-Johnson Syndrome (SJS)/toxic epidermal necrolysis (TEN) registry and biorepository to investigate the immunopathogenesis and genetics of the disease. Dr. Saeed received her MD with honors from Loyola University, Stritch School of Medicine, and completed her Ophthalmology residency at Loyola University Medical Center. Her contributions to patient care and research have been recognized by several awards, including an American Society of Cataract and Refractive Surgery Foundation Resident Excellence Award and two Illinois Society for the Prevention of Blindness Awards.

**DEPARTURES**

**Balaraj Menon, PhD**, of Schepens Eye Research Institute of Mass. Eye and Ear, left the department in April to pursue a position at EBSCO Information Systems in Ipswich, MA. In his new role, he works with a team of physicians and scientists to develop content for *DynaMed Plus* - a clinical reference tool. Until his departure, Dr. Menon was an Instructor in Ophthalmology, and before that was a postdoctoral fellow with **Ilene Gipson, PhD**. He primarily researched mucins and bacterial entry into the cornea.

**Alumni Corner**

**Benjamin D. Freilich, MD, FACS**, has been appointed Senior Medical Affairs Advisor at Intellect Neurosciences, a research-based biotechnology company focused on the discovery, development, and licensing of novel therapeutics for the treatment and prevention of rare neurodegenerative orphan diseases. Dr. Freilich completed a fellowship at Mass. Eye and Ear and Schepens Eye Research Institute of Mass. Eye and Ear.

Former HMS Ophthalmology faculty member and alumnus, **Pedram Hamrah, MD**, has been named Director of the Center for Translational Ocular Immunology at Tufts Medical Center.

Former HMS Ophthalmology resident, **Lynnette M. Watkins, MD**, was appointed Chief Medical Officer and Chief Operating Office of Paris Regional

Medical Center as of May 9, 2016. Bringing nearly 20 years of business leadership and medical experience to this position, Dr. Watkins was previously CMO of Abrazo West and Abrazo Maryvale Campuses in Arizona, CMO at two other hospitals, Vice President for Loyola University Health Systems, and an ophthalmic plastic surgeon.

**Carmen A. Puliafito, MD, MBA**, the former Dean of Keck School of Medicine of the University of Southern California, joined Ophthotech as Chief of Strategic Development in April 2016. A globally recognized innovator and distinguished scholar in the diagnosis and treatment of retinal disorders, Dr. Puliafito completed an Ophthalmology residency at HMS as well as fellowships in Ophthalmic Pathology and Vitreoretinal Diseases and Surgery at Mass. Eye and Ear. He also started his career at Mass. Eye and Ear, where he founded the Laser Research Laboratory.



Photo credit: OS Ophthalmology Innovation Summit

Mass. Eye and Ear alumnus, **Roger Steinert, MD**, received the 2016 Lifetime Innovator Award at the Ophthalmology Innovation Summit on May 5, 2016. An internationally renowned consultant and leader in cataract surgery, refractive surgery and corneal transplants, Dr. Steinert also will receive the 2016 Distinguished Clinical Achievement Award at the HMS Ophthalmology Alumni Reunion on June 11th.

**Nicholas Volpe, MD**, the George and Edwina Tarry Professor of Ophthalmology and Chair of Ophthalmology at Northwestern University Feinberg School of Medicine, has been named an honorary Heed fellow. Dr. Volpe completed his residency at HMS Ophthalmology and his neuro-ophthalmology fellowship at Mass. Eye and Ear.



Photo credit: Liza Green for HMS

## Simmons Lessell – Beloved Mentor, Clinician and Colleague

**S**immons Lessell, MD, the Distinguished Paul A. Chandler Professor of Ophthalmology at HMS, passed away May 9, 2016 after a brief illness, surrounded by his family. A beloved and highly respected member of the department for more than 30 years, Dr. Lessell served as an extraordinary teacher and leader, cared for his patients as one of the most gifted diagnosticians of all time, and exemplified the highest standards of teaching and patient care. He was a revered educator and clinical leader who trained 39 neuro-ophthalmology fellows, and ranked among the top neuro-ophthalmologists in the world. Collegial, brilliantly funny, and generous with his time, Dr. Simmons invested himself – mind, body, and spirit – in ensuring the excellence of his profession.

Dr. Lessell entered the HMS Ophthalmology residency training program in 1963 where he trained under Paul A. Chandler, MD. Following residency, he was recruited as the first neuro-ophthalmologist at Boston University School of Medicine, where he remained for 18 years. In 1984, he was recruited back to Mass. Eye and Ear as director of the neuro-ophthalmology service, where he built an outstanding clinical and teaching service. From 2005 to 2014, he served as director of HMS medical student education, transforming the ophthalmic elective curriculum to emphasize faculty mentorship. More recently, he took on the role of mentoring and advising faculty on their career development plans.

During his prolific career, Dr. Lessell received R01 funding from the National Institutes of Health 13 years straight; authored over 200 publications, chapters, and reviews; and was often sought for consultation in the United States and abroad. He received several prestigious teaching and mentoring awards, among them the HMS William Silen Lifetime Achievement in Mentoring Award (2014). His masterful presentations during the Department's weekly Grand Rounds earned him legendary status department-wide for his quick wit and keen insights. In 2006, he became the first incumbent of the Chandler Professorship, reflecting a lifetime of accomplishment and unparalleled excellence in academic medicine.

On May 25, 2013, the day of his 80th birthday, a Festschrift was held in Dr. Lessell's honor at Mass. Eye and Ear. Organized by his former fellow and first recruit to Mass. Eye and Ear's Neuro-ophthalmology Service, Dr. Joseph Rizzo III, the Festschrift was an opportunity to reflect on the many contributions Dr. Lessell made to the careers and lives of the 39 fellows whom he trained. Dr. Lessell's philosophy of mentoring as a lifelong commitment was evident in the many heartfelt presentations delivered that day by 20 of his former fellows, who came from as far away as Australia to honor their mentor.

Dr. Lessell's humor, collegiality, and love for his work, infused everyone around him, and his legacy will continue in the hearts and minds of his colleagues and trainees. He is survived by his three sons, Miller, Newell, and Ephraim, sister, Florence Jaffe, and grandchildren, Etai and Omer Lavie, and Griffin and Fiona Lessell.

*Like so many of us, I take Simmons with me to every patient experience, hearing his pointed observations (and often his jokes) in my head.*

–Marc Dinkin, MD

*He was huge for me as a medical student and resident at BU. Brilliance with humor. No one could be funnier – and Aristotle at his best.*

–Jonathan Lass, MD

*Simmons, with David Cogan, made it possible for women to be trained at our great institution. He was a great clinician and teacher, and a very warm and welcoming person.*

–Deborah Pavan-Langston, MD, FACS

## John H. TenPas, MD

HMS Ophthalmology alumnus, **John H. TenPas, MD**, passed away at the age of 71 on May 4, 2016. From a very young age, Dr. TenPas was passionate about medicine. He dedicated his life to caring for patients through his private practice and at Lahey Clinic, retiring in 2011. He earned his MD from University of Washington School of Medicine, completed a hematology fellowship at the National Institutes of Health and directed an Emergency Room in a Maryland Hospital before completing his Ophthalmology residency at HMS/Mass. Eye and Ear. Those who knew him best will miss his dedication to the ones he loved, his incredible sense of humor, and quick wit.



*Connect. Collaborate. Discover.*



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October 20-22, 2016 | Boston, MA

Presented by the Harvard Ophthalmology AMD Center of Excellence, the **4<sup>th</sup> Biennial International Symposium on AMD** will bring together international AMD experts and leaders from related disciplines outside ophthalmology in an interactive format to discuss current and future topics in AMD research, including:

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Symposium on  
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Designed to spark dialogue and new collaborations, the **2<sup>nd</sup> Biennial International Symposium on Ocular Regeneration** features scientific presentations on topics related to stem cells and regenerative medicine and their therapeutic potential for treating eye diseases. Attracting a diverse group of eye and vision researchers, this one-day meeting precedes the 2<sup>nd</sup> Biennial International Symposium on AMD, and is presented by the Harvard Ophthalmology Ocular Regenerative Medicine Institute.

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