

HARVARD MEDICAL SCHOOL DEPARTMENT OF Ophthalmology



HARVARD DEPARTMENT OF OPHTHALMOLOGY 2017 Annual Meeting and Alumni Reunion

June 23-24, 2017

HARVARD DEPARTMENT OF OPHTHALMOLOGY

AFFILIATES: Massachusetts Eye and Ear | Massachusetts General Hospital | Boston Children's Hospital Joslin Diabetes Center/Beetham Eye Institute | Beth Israel Deaconess Medical Center | Brigham and Women's Hospital VA Boston Healthcare System | VA Maine Healthcare System | Cambridge Health Alliance

PARTNERS: Aravind Eye Hospital (India) | LV Prasad Eye Institute (India) | Shanghai Eye and ENT Hospital, an affiliate of Fudan University (China)

HARVARD MEDICAL SCHOOL DEPARTMENT OF OPHTHALMOLOGY 2017 Annual Meeting and Alumni Reunion

Welcome

Dear Friends,

Welcome to the 2017 Harvard Medical School Department of Ophthalmology Annual Meeting and Alumni Reunion—one of our most exciting and important events of the year. This two-day event features clinical and scientific lectures led by faculty, alumni presentations, a trainee poster contest, and much more.

Special guests this year include Robert D'Amato, MD, PhD, who will present the Mariana D. Mead Lecture, and our Distinguished Achievement awardees—Donald J. D'Amico, MD, and Anthony P. Adamis, MD. Their keynote talks share a central theme of angiogenesis and will highlight advances in retinal medicine and ophthalmic drug development.

We encourage you to sign up for a tour of our state-of-the-art Altschuler Ophthalmology Surgical Training Laboratory and visit the Rare Book Library at Mass. Eye and Ear.

Thank you to our academic and industry sponsors, and a special thank you to all of you for being a part of this proud tradition.

Sincerely,

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Joan W. Miller, MD Henry Willard Williams Professor of Ophthalmology and Chair, Harvard Department of Ophthalmology Chief of Ophthalmology, Mass. Eye and Ear and Massachusetts General Hospital

Joseph F. Rizzo III, MD Chair, Alumni Reunion David G. Cogan Professor of Ophthalmology in the field of Neuro-Ophthalmology and Director of Alumni, Harvard Department of Ophthalmology Director, Neuro-Ophthalmology Service, Mass. Eye and Ear

Water

Ula V! Jurkunas, MD Co-chair, Annual Meeting Associate Professor of Ophthalmology and Co-director, Cornea Center of Excellence, Harvard Department of Ophthalmology

Gena Heidary, MD, PhD Co-chair, Annual Meeting Assistant Professor of Ophthalmology, Harvard Department of Ophthalmology Director, Neuro-Ophthalmology Service, Boston Children's Hospital

Chair, Harvard Department of Ophthalmology



Joan W. Miller, MD, FARVO

Henry Willard Williams Professor of Ophthalmology and Chair, Harvard Department of Ophthalmology Chief of Ophthalmology, Mass. Eye and Ear and Mass General Hospital

Dr. Joan W. Miller earned her MD and completed her ophthalmology residency at Harvard Medical School, and then completed a research fellowship and a clinical fellowship in vitreoretinal surgery at Massachusetts Eye and Ear. Dr. Miller is the first female physician promoted to the rank of Professor of Ophthalmology at Harvard Medical School and the first woman to serve as chair of the Department of Ophthalmology. Additionally, she is the first woman appointed as Chief of Ophthalmology at both Mass. Eye and Ear and Massachusetts General Hospital. Dr. Miller is also the Co-director of Mass. Eye and Ear's Angiogenesis Laboratory and a vitreoretinal surgeon in the Retina Service.

Dr. Miller's clinical and research interests focus on retinal disorders, including age-related macular degeneration (AMD), retinal degenerations, and diabetic retinopathy. She and her colleagues at Mass. Eye and Ear pioneered the development of photodynamic therapy (PDT) using verteporfin (Visudyne), the first pharmacologic therapy for AMD able to reduce and slow vision loss. The group also identified the importance of vascular endothelial growth factor (VEGF) in neovascular eye diseases, which formed the scientific basis of current anti-angiogenic therapies for neovascular AMD, diabetic macular edema, and macular edema following retinal vein occlusion. While these approaches have improved the outlook for patients with vascular retinal diseases, Dr. Miller and her colleagues continue investigations to elucidate the pathophysiology of vision loss and improve therapies. Current investigations include genetics of AMD, strategies for early intervention in AMD, and neuroprotective therapies.

An internationally recognized expert in the field of macular degeneration, Dr. Miller has authored over 200 peer-reviewed papers and nearly 80 book chapters, review articles, or editorials. She is a co-editor of the third edition of Albert and Jakobiec's Principles and Practice of Ophthalmology, and a named inventor on 12 United States patents and nine international patents. Dr. Miller is a member of the National Academy of Medicine and Gold Fellow of the Association for Research in Vision and Ophthalmology (ARVO). She has received numerous awards, including the Rosenthal Award, Donald J. Gass Medal, and Paul Henkind Memorial Award (all from the Macula Society); the Retina Research Award (Club Jules Gonin); the Alcon Research Institute Award; the ARVO/Pfizer Ophthalmic Translational Research Award; the Founder's Award (American Society of Retinal Specialists); the Joseph B. Martin Dean's Leadership Award for the Advancement of Women Faculty (Harvard Medical School); the Suzanne Veronneau-Troutman Award (Women in Ophthalmology); the Senior Achievement Award (American Academy of Ophthalmology); and the Pinnacle Award for Achievement in the Professions (Greater Boston Chamber of Commerce). Dr. Miller delivered the 2012 Edward Jackson Lecture for the American Academy of Ophthalmology. In 2013, she was elected to the Academia Ophthalmologica Internationalis and was an ARVO Foundation Honoree. She was the recipient of the 2015 Mildred Weisenfeld Award for Excellence in Ophthalmology, one of ARVO's highest honors; Dr. Miller is the first woman to receive this honor, which recognizes distinguished scholarly contributions to the clinical practice of ophthalmology. For her contributions to the development of anti-angiogenic retinal therapies, Dr. Miller was a co-recipient of the 2014 António Champalimaud Vision Award, the highest distinction in ophthalmology and visual science.

Co-chairs, Harvard Ophthalmology Annual Meeting



Ula V. Jurkunas, MD

Associate Professor of Ophthalmology and Co-director, Cornea Center of Excellence, Harvard Department of Ophthalmology

Dr. Ula Jurkunas is a clinician scientist and corneal surgeon at Mass. Eye and Ear. At Schepens Eye Research Institute of Mass. Eye and Ear, she conducts basic science research on stem cell transplantation and Fuchs' endothelial corneal dystrophy, a disease that accounts for over 10,000 corneal transplants (roughly one-third of all corneal transplantations) each year in the United States. In addition, she also teaches residents and fellows about ocular surgical procedures as well as the clinical management and diagnosis of corneal and refractive conditions. Dr. Jurkunas is a Co-director of the HMS Ophthalmology Cornea Center of Excellence. After obtaining her medical degree from University of Louisville, Dr. Jurkunas completed her ophthalmology residency at Boston University. She then completed subspecialty training in cornea, external diseases, and refractive surgery at Mass. Eye and Ear, serving as Chief Cornea Fellow for one year.

Dr. Jurkunas was one of the first in our department to benefit from the prestigious K12 Harvard Vision Clinical Scientist Development Program, an award funded by the NIH/ NEI. As a K12 scholar, she conducted award-winning research into the pathophysiology of Fuchs' endothelial corneal dystrophy. Today, she heads a fully-staffed laboratory focused on Fuchs' dystrophy research. Moreover, she has pioneered development of cultivated epithelial (stem) cell transplantation for the treatment of limbal stem cell deficiency. The latter studies have led to the translational development of stem cell therapy in corneal disorders. She has recently received approval for an Investigational New Drug (IND) application to the FDA to perform a Phase I/II study using stem cells to treat corneal blindness. The first-in-human study using Cultivated Autologous Limbal Epithelial Cells (CALEC) transplantation is currently underway at Mass. Eye and Ear. She has received numerous awards, including Research to Prevent Blindness Award, ARVO Alcon Early Clinician-Scientist Research Award, Alcon Research Institute Award, AAO Achievement Award, and ARVO Foundation/Pfizer Ophthalmics Carl Camras Translational Research Award.



Gena Heidary, MD, PhD

Assistant Professor of Ophthalmology, Harvard Department of Ophthalmology Director, Neuro-Ophthalmology Service, Boston Children's Hospital

Dr. Gena Heidary earned her MD and PhD in Neuroscience at University of Pennsylvania and completed her ophthalmology residency at Harvard Medical School. She then completed a neuro-ophthalmology fellowship at Mass. Eye and Ear and a pediatric ophthalmology and strabismus fellowship at Boston Children's Hospital/Mass. Eye and Ear, before joining the Harvard Ophthalmology faculty.

Dr. Heidary conducts translational research to improve the management and treatment of patients with visually threatening, pediatric neuro-ophthalmic diseases and complex strabismus. Specifically, she is working to develop a method to non-invasively assess elevated intracranial pressure using otoacoustic emissions in patients with idiopathic intracranial hypertension or pseudotumor cerebri.

Additionally Dr. Heidary has been working toward the development of a novel system to accurately assess visual field dysfunction in pediatric patients using Saccadic Vector Optokinetic Perimetry (SVOP). With this technique, eye tracking technology is used to evaluate pediatric patients for visual field loss.

Annual Meeting Schedule The Starr Center - 185 Cambridge Street, Boston, MA, 2nd Floor

Friday, June 23, 2017

7:30–8:00 am		Registration & Continental Breakfast - Breakout Space				
8:00– 8:10 am	<mark>Opening</mark> Ula V. Ju Gena He	g Remarks Irkunas, MD - Co-chair, Harvard Ophthalmology Annual Meeting, Mass. Eye and Ear Eidary, MD, PhD - Co-chair, Harvard Ophthalmology Annual Meeting , Boston Children's Hospital				
8:10– 8:30 am		Quality and the Intelligent Research in Sight Registry Peggy Chang, MD Instructor in Ophthalmology, Harvard Medical School Mass. Eye and Ear				
8:30– 8:50 am		Retinal Ganglion Cell Replacement Petr Baranov, MD, PhD Instructor in Ophthalmology, Harvard Medical School Schepens Eye Research Institute of Mass. Eye and Ear				
8:50– 9:10 am		How the Brain Solves Visual Recognition Gabriel Kreiman, PhD Associate Professor of Ophthalmology, Harvard Medical School Boston Children's Hospital				
9:10– 9:30 am		Intraoperative Aberrometry Kathryn M. Hatch, MD Assistant Professor of Ophthalmology, Harvard Medical School Mass. Eye and Ear				
9:30– 9:50 am		Imaging the Choroid with Swept Source OCT and OCT-Angiography John B. Miller, MD Instructor in Ophthalmology, Harvard Medical School Mass. Eye and Ear				
9:50–10:15 am		Break & Visit with Exhibits - Breakout Space				
10:15– 10:35 am		Advancing Diagnosis and Treatment of Autoimmune Retinopathy Lucia Sobrin, MD, MPH Associate Professor of Ophthalmology, Harvard Medical School Mass. Eye and Ear				
10:35– 10:55 am		East Meets West - Primary Angle Closure Glaucoma versus Primary Open Angle Glaucoma Lucy Q. Shen, MD Assistant Professor of Ophthalmology, Harvard Medical School Mass. Eye and Ear				
10:55– 11:15 am		Structure and Function of Glaucomatous Central Vision Loss Tobias Elze, PhD Instructor in Ophthalmology, Harvard Medical School Schepens Eye Research Institute of Mass. Eye and Ear				
11:15– 11:35 am	B	Lessons Learned from the Infant Aphakia Treatment Study Deborah K. VanderVeen, MD Associate Professor of Ophthalmology, Harvard Medical School Boston Children's Hospital				
11:35– 11:55 am		Clinical Value of Measuring Visual Fixation During OCT Robert Mallery, MD Instructor in Neurology, Harvard Medical School Brigham and Women's Hospital				

Friday, June 23, 2017 (Continued)

	2017 Gragoudas Prizes for Best Paper by a Trainee - Presented by Evangelos S. Gragoudas, MD					
11:55am- 12:10 pm	Basic and Translational Prize - Jonathan Lam, MD and Daniel Oh, MD "Identification of RUNX1 as a Mediator of Aberrant Retinal Angiogenesis" Clinical Prize - Inês Laíns, MD "Structural Changes Associated with Delayed Dark Adaptation in Age-Related Macular Degeneration"					
	Cornea Center of Excellence 5th Annual Resident Research Award in Cornea and Refractive Surgery - Presented by Reza Dana, MD, MSc, MPH					
	Zeba A. Syed, MD "Peripheral Endothelial Cell Count is a Predictor of Disease Severity in Advanced Fuchs' Endothelial Corneal Dystrophy."					
	Inaugural Iraty Award for Research in Retinal Diseases - Presented by Joan W. Miller, MD 2017 Iraty Award - David Wu, MD, PhD					
12:15–1:3	0 pm Box	ced Lunch & Visit with Exhibits - Breakout Space				
1:30– 1:50 pm	Enclosed Solution	doscopy in Vitreoretinal Surgery r ge Arroyo, MD rociate Professor of Ophthalmology, Harvard Medical School h Israel Deaconess Medical Center				
1:50– 2:10 pm	Ch Ge Pro Jos	aracterization of Endogenous Protective Factors for Diabetic Retinopathy orge L. King, MD fessor of Medicine, Harvard Medical School lin Diabetes Center				
2:10- 2:20 pm	Perspective on Mariana D. Mead Joan W. Miller, MD - Chair, Harvard Department of Ophthalmology Chief of Ophthalmology, Mass. Eye and Ear and Mass General Hospital					
2:20– 2:25 pm	Introduction Patricia D'An Schepens Eye	1 of 2017 Mariana D. Mead Lecturer more, PhD, MBA - Vice-Chair of Basic Research, Harvard Department of Ophthalmology, Research of Mass. Eye and Ear				
2:25– 3:20 pm	The The Rol Pro Bos	e 2017 Mariana D. Mead Lecture alidomide as a Treatment for Cancer: A 50-year Journey bert D'Amato, MD, PhD fessor of Ophthalmology, Harvard Medical School ston Children's Hospital				
3:20– 3:25 pm	Presentation of Mariana D. Mead Bowl Joan W. Miller, MD - Chair, Harvard Department of Ophthalmology Chief of Ophthalmology, Mass. Eye and Ear and Mass General Hospital					
3:25– 3:35 pm	Closing Remarks Ula V. Jurkunas, MD - Co-chair, Harvard Ophthalmology Annual Meeting, Mass. Eye and Ear Gena Heidary, MD, PhD - Co-chair, Harvard Ophthalmology Annual Meeting, Boston Children's Hospital					
3:35–3:4	0 pm	Group Photographs - Starr Auditorium				
3:40-4:30 pm		Rare Book Room Tour (CME eligible) and the Samuel & Nancy Jo Altschuler Ophthalmology Surgical Training Laboratory Tour (CME eligible) - Start at the Starr Center Breakout Space				

The Four Seasons - 200 BoyIston Street, Boston, MA (Valet parking, self-pay, \$40)

5:30–9:00 pm Trainee Poster Contest, Reception, and Gala Dinner - Second Floor, Garden Wing



The 2017 Mariana Mead Lecture Thalidomide as a Treatment for Cancer: A 50-year Journey

Robert D'Amato, MD, PhD

Professor of Ophthalmology, Harvard Medical School and Judah Folkman Chair in Surgery Director, Center for Macular Degeneration Research, Boston Children's Hospital

Dr. Robert D'Amato grew up in Lancaster, Pennsylvania. He received his BA, MD, and PhD in Neuroscience from Johns Hopkins University. He completed his Ophthalmology residency at Harvard Ophthalmology in 1992. After this training, Dr. D'Amato undertook a postdoctoral research fellowship in Dr. Judah Folkman's Laboratory in the Vascular Biology Program at Boston Children's Hospital, where he worked to develop antiangiogenic therapies. Dr. D'Amato became a Professor of Ophthalmology at Harvard Medical School in 2010. He currently holds the Judah Folkman Chair in Surgery at Boston Children's Hospital and he leads the Karp Laboratory for Macular Degeneration Research in the Vascular Biology Program.

Dr. D'Amato developed a novel system to screen existing drugs for anti-angiogenic activity. He reasoned that drugs that caused birth defects or amenorrhea could potential have unknown anti-angiogenic activity. By screening drugs with these reported side effects, he discovered the anti-angiogenic activity of thalidomide. Dr. D'Amato was the first to show that thalidomide inhibited angiogenesis and tumor growth in rabbits. Based on this work, Dr. D'Amato helped to initiate the first clinical trials to evaluate the effects of thalidomide on cancer. THALOMID was subsequently approved for the treatment of multiple myeloma Dr. D'Amato went on to synthesize a large number of analogs of thalidomide and discovered that amino-substituted thalidomide analogs have both anti-angiogenic activity and direct anti-tumor cell activity, which results in greater efficacy over thalidomide. The amino-substituted analogs, REVLIMID and POMALYST, were subsequently approved by the FDA in 2005 and 2013, respectively. To date, hundreds of thousands of patients have benefited from his research. Dr. D'Amato is internationally recognized for his work in the field of anti-angiogenic therapies. He has taught at Harvard Medical School for over two decades and received the Massachusetts Eye and Ear Distinguished Service Award in 2009. He has been supported by the NIH for approximately 15 years, has over 100 publications and holds ~40 patents. Dr. D'Amato is a member of the scientific advisory board for the Massachusetts Life Sciences Center.



The Mariana D. Mead Lectureship Fund

The Mariana D. Mead Lectureship Fund was established to commemorate the life and career of Mariana Mead, MD (1955-2002)—a gifted teacher, clinician, researcher, and eye surgeon.

Born in Marshall, Texas, Dr. Mead graduated from University of Texas in 1978 with a Bachelor of Science and Nursing, and began her first career as an emergency room nurse at Ben Taub General Hospital in Houston, Texas. She attended Baylor Medical School, finishing second in her class of 1985. She moved to Boston for her internship at Newton Wellesley Hospital where she was awarded Intern of the Year. She completed her residency in ophthalmology at Harvard Medical School and was the first woman to serve as Chief Resident at Mass. Eye and Ear She later became an attending physician and the Director of the Emergency Department at Mass. Eye and Ear.

In 1992, she joined Ophthalmic Consultants of Boston, where she specialized in cornea and external diseases. Dr. Mead was a gifted teacher, clinician, and researcher. She was passionate about resident education; believed in treating the patient as a whole, not just the condition; contributed to many papers and books; and spoke at conferences internationally. Dr. Mead passed away in 2002 at the age of 47 after a fouryear battle with pancreatic cancer. She is remembered for her grace, her generosity, and her commitment to leaving the world a better place. The Mariana D. Mead Lectureship Fund supports the named lecture that is presented at the Harvard Department of Ophthalmology Annual Meeting and Alumni Reunion.

Director of Alumni, Harvard Department of Ophthalmology



Joseph F. Rizzo III, MD

David Glendenning Cogan Professor of Ophthalmology in the Field of Neuro-Ophthalmology and Director of Alumni, Harvard, Department of Ophthalmology Director, Neuro-Ophthalmology Service, Mass. Eye and Ear

Dr. Joseph Rizzo is a graduate of Louisiana State University and Louisiana State University Medical School, where he received the "Dean's Award" in recognition of outstanding leadership and performance. He completed an internship in adult medicine at the University of California at Los Angeles Medical Center, followed by a neurology residency at Tufts University - New England Medical Center, and an ophthalmology residency at Boston University. He then performed a clinical fellowship in neuro-ophthalmology under Dr. Simmons Lessell at Mass. Eye and Ear. He is board certified in both ophthalmology and neurology.

Dr. Rizzo joined Mass. Eye and Ear in 1986 and received a five-year Physician Training Award from the National Institutes of Health. The laboratory training was under the supervision of Dr. Richard Masland. In 1988, Dr. Rizzo initiated, and has since served as Co-director, to the Retinal Implant Project, a joint effort of MIT, Mass. Eye and Ear, Boston VA, and Cornell University to develop a retinal prosthesis to restore some vision to the blind. In addition to an active clinical practice, Dr. Rizzo has served as Director of the Neuro-Ophthalmology Service at Mass. Eye and Ear and Director of Alumni, Harvard Department of Ophthalmology. He also founded two companies, Bionic Eye Technologies and Visus Technology, which are developing devices to assist the visually-impaired.

Alumni Reunion Schedule

Saturday, June 24, 2017

Mass. Eye and Ear - 243 Charles Street, Boston, MA, 3rd Floor Registration & Continental Breakfast - Meltzer Hallway, 3rd Floor 7:30-8:00 am Opening Remarks, Introduction of the Resident Class of 2017, and Graduating Clinical Fellows 8:00-Joan W. Miller, MD (1989, 1991) - Chair, Harvard Department of Ophthalmology 8:20 am Chief of Ophthalmology, Mass. Eye and Ear and Mass General Hospital **Fifty Years of Change and Memories** 8:20-David S. Walton, MD (1967) 8:45 am Professor of Ophthalmology, Part-time, Harvard Medical School Some Memories of the Residency 8:45-Don C. Bienfang, MD (1972) 9:10 am Associate Professor of Neurology, Harvard Medical School Brigham and Women's Hospital My Journey with Ocular Cicatricial Pemphigoid 9:10-C. Stephen Foster, MD, FACS (1977) 9:35 am Professor of Ophthalmology, Part-time, Harvard Medical School, Founder and President, Massachusetts Eye Research and Surgery Institution Ocular Immunology & Uveitis **Optic Nerve Structure, Function and Dysfunction: Lessons from LHON** 9:35--Alfredo A. Sadun, MD, PhD (1982) 10:00 am Professor and Thornton Chair, Doheny Eye Institute, UCLA 10:00-10:20 am Break - Meltzer Hallway, 3rd Floor

Saturday, June 24, 2017 (Continued) Keratoconus: A Therapeutic Revolution 10:20-Michael B. Raizman, MD (1987) 10:45 am Ophthalmic Consultants of Boston Director, Cornea and Cataract Service New England Eye Center An Update on the Primary Open-Angle African American Glaucoma Genetics (POAAGG) Study 10:45-Joan M. O'Brien, MD (1992) 11:10 am William F. Norris and George E. de Schweinitz Professor of Ophthalmology Chairman and Director, Scheie Eye Institute, Department of Ophthalmology, University of Pennsylvania Federal-Academic Medical Partnerships: Then and Now 11:10-Glenn Cockerham. MD (1997) 11:35 am Veterans Affairs Palo Alto Health Care System, Chief of Ophthalmology, Veterans Health Administration, U.S. Department of Veterans Affairs **Department Overview & Alumni Giving Society Presentation** 11:35-Joan W. Miller, MD (1989, 1991) - Chair, Harvard Department of Ophthalmology 12:00 pm Chief of Ophthalmology, Mass. Eye and Ear and Mass General Hospital Lunch & Class Photos - Lank Family Dining Room, 7th Floor 12:00-1:15 pm Introduction of Distinguished Clinical Achievement Awardee 1:20-Evangelos S. Gragoudas, MD (1975) - Charles Edward Whitten Professor of Ophthalmology, Harvard 1:25 pm Department of Ophthalmology, Mass. Eye and Ear **Distinguished Clinical Achievement Lecture** Vitreoretinal Diseases: Observations from 36 Years of Treating and Teaching 1:25 -Donald J. D'Amico, MD (1981) 1:55 pm Professor and Chairman of Ophthalmology, Weill Cornell Medical College Ophthalmologist-in-Chief, New York Presbyterian Hospital Introduction of Distinguished Research Achievement Awardee 1.55 -Joan W. Miller, MD (1989, 1991) - Chair, Harvard Department of Ophthalmology 2:00 pm Chief of Ophthalmology, Mass. Eye and Ear and Mass General Hospital **Distinguished Research Achievement Award Lecture** The Future of Ophthalmic Drug Development 2:00-Anthony P. Adamis, MD (1991) 2:30 pm Lecturer in Ophthalmology, Harvard Medical School Global Head of Ophthalmology, Immunology and Infectious Diseases, Genentech/Roche 2:30-2:45 pm Break - Meltzer Hallway, 3rd Floor Advances in the Treatment of Severe Ocular Surface Disorders; Perspectives Gained By Standing on the Shoulders of Giants 2:45-3:10 pm Kimberly C. Sippel, MD (2002) Assistant Professor of Ophthalmology, Weill Cornell Medicine, New York Presbyterian Hospital Towards a New Classification of AMD Demetrios Vavvas, MD, PhD (2007) 3:10-3:35 pm Associate Professor of Ophthalmology, Harvard Department of Ophthalmology Mass. Eye and Ear The Essential Eye Banks 3:35-Peter B. Veldman, MD (2012) 4:00 pm Assistant Professor of Ophthalmology, Harvard Department of Ophthalmology Mass. Eye and Ear **Closing Remarks** 4:00-Joseph F. Rizzo III, MD (1986) - Chair, Alumni Reunion and Director of Alumni, Harvard Department of 4:05 pm Ophthalmology, Mass. Eye and Ear

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2017 Distinguished Clinical Achievement Award Lecture Vitreoretinal Diseases: Observations from 36 Years of Treating and Teaching

Donald J. D'Amico, MD

John Milton McLean Professor and Chairman, Weill Cornell Medicine Ophthalmology Ophthalmologist-in-Chief, New York-Presbyterian Hospital

Professor and Chairman of Ophthalmology at Weill Cornell Medical College and Ophthalmologist-in-Chief at the New York Presbyterian Hospital, Dr. D'Amico is an internationally recognized leader in the field of vitreoretinal surgery. He assumed the Chair at Weill Cornell in 2006 after his longstanding positions at Harvard Medical School as Professor of Ophthalmology and at the Massachusetts Eye and Ear as Associate Chief of Ophthalmology and Director of the Diabetic Retinopathy Unit. A graduate of the Massachusetts Institute of Technology and the University of Illinois College of Medicine, he completed his residency at Harvard Ophthalmlogy. He completed his fellowship in vitreoretinal diseases at the University of Miami, Bascom Palmer Eve Institute, followed by selection as Chief Resident in Ophthalmology at the Massachusetts Eye and Ear prior to joining the Harvard faculty. Dr. D'Amico has published over 200 articles on vitreoretinal diseases and has co-edited two books covering comprehensive retinal themes. He has participated as a principal investigator or co-investigator in many clinical trials and laboratory investigations. His major interests include: vitreoretinal surgery; diabetic retinopathy; experimental lasers and other technologies for the surgical treatment of vitreoretinal disorders such as retinal detachment; macular degeneration; and endophthalmitis and intravitreal drug therapy. As attending physician specializing in the care of patients with vitreoretinal disorders at the Weill Cornell Department of Ophthalmology, Dr. D'Amico also provides direct instruction of medical students, ophthalmology residents, and retina fellows. In his role as a teacher, he twice received the Teacher of the Year Award given by the Harvard Ophthalmology residents. Dr. D'Amico is a distinguished national and international lecturer and is the recipient of many honors, including the Life Achievement Honor Award from the American Academy of Ophthalmology. He is highly active in professional societies and has recently been named the inaugural Editor-in-Chief of the Journal of VitreoRetinal Diseases. He is a Past President of both the Retina Society and of the prestigious international retinal society Club Jules Gonin.



2017 Distinguished Research Achievement Award Lecture The Future of Ophthalmic Drug Development

Anthony P. Adamis, MD

Lecturer on Ophthalmology, Harvard Medical School Global Head of Ophthalmology, Immunology and Infectious Diseases, Genentech/Roche Adjunct Professor of Ophthalmology and Visual Sciences, University of Illinois College of Medicine

Dr. Adamis is the Senior Vice President and Global Head of Ophthalmology, Immunology, Infectious Disease & Metabolism Clinical Science at Genentech, a member of the Roche Group. Dr. Adamis is best known for his co-discovery of the role of VEGF in ocular disease, for which he shared the 2014 Champalimaud Vision Award, considered to be the "Nobel Prize" in ophthalmology. Previously, he co-founded Eyetech (2000) and Jerini Ophthalmic (2007). At Eyetech, Dr. Adamis led the team that obtained FDA approval for the first anti-VEGF drug to treat neovascular AMD (2004). At Genentech, his team obtained FDA approval for the first anti-VEGF drug to treat retinal vein occlusion (2010), diabetic macular edema (2012), diabetic retinopathy (2015), and myopic choroidal neovascularization (2017). From 1991 to 2002, Dr. Adamis was a Harvard Ophthalmology faculty member. His research focused on the mechanisms of AMD, diabetic retinopathy, and ocular drug delivery. Dr. Adamis received his MD with Honors from the University of Chicago, his ophthalmology residency at the University of Michigan, and cornea fellowship at the Massachusetts Eye and Ear. His research training was in vascular biology with Dr. Judah Folkman at the Boston Children's Hospital.





Alumni Giving Society

OF HARVARD OPHTHALMOLOGY @ MASS. EYE AND EAR

Help us continue our important work in clinical care, research, and education by making an annual gift of \$1,000 or more to the Alumni Giving Society of Harvard Ophthalmology @ Mass. Eye and Ear. Society members provide vital support to the department and help ensure that today's residents and fellows—the future leaders of Ophthalmology—continue to receive a world-class education, second to none.

You may designate your gift any way that you choose, such as contributing to one of our established funds or creating a named gift that pays tribute to a beloved mentor, colleague, or family member. The choice is yours. Alumni giving is recognized at the following levels in Harvard Ophthalmology newsletters and publications:

Champion:	\$25,000 and above			
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2016-2017 MEMBERS Alumni Giving Society OF HARVARD OPHTHALMOLOGY @ MASS. EYE AND EAR

We extend our grateful thanks to the current Society members $_{\scriptscriptstyle (as\,of\,5/31/2017)}$

CHAMPION Gifts of \$25,000 or more

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Annual Trainee Poster Contest BASIC & TRANSLATIONAL RESEARCH

B1	Characterize growth factor expression in the developing and aging mouse retina in vivo and in vitro - Maryam Alavi
B2	Ocular Drug Delivery by Contact Lens containing a Drug-Polymer Film - Lokendra Bengani
B3	Does estrogen deficiency promote the development of glaucoma? - Xiaomin Chen
B4	Interleukin-7 and -15 Maintain Memory T Helper 17 Cells in Dry Eye Disease - Yihe Chen
B5	A rod photoreceptor specific Ift172 knockout mouse model exhibits protein trafficking defects as well as rapid retinal degeneration - Priya Gupta
B6	Inhibition of Corneal Neovascularization by Dexamethasone-Eluting Contact Lenses in a Rabbit Model - Hidenaga Kobashi
B7	Corneal endothelial cell and guttae interaction in Fuchs endothelial cornea dystrophy - Viridiana Kocaba
B9	Corneal alkali injury induces inflammatory retinopathy via TNF-alpha cascade - Fengyang Lei
B10	In vivo allele-specific CRISPR/Cas9 gene editing in the rhodopsin P23H knockin mouse model - Pingjuan Li
B11	UVA-induced Mouse Model of Fuchs Endothelial Corneal Dystrophy Is Mediated by DNA Damage and Is Exacerbated in Females - Cailing Liu
B12	Regulation of neurovascular coupling in proliferative retinopathy through a functional interaction between ROR a and semaphorin 3E - Chi-Hsiu Liu
B13	Hepatocyte Growth Factor Exerts Anti-inflammatory Functions and Promotes Corneal Epithelial Regeneration - Sharad Mittal
B14	Interferon gamma-Positive Natural Killer Cells Contribute to Corneal Allograft Rejection in Young Mice - Takeshi Nakao
B15	Retinal Ganglion Cell replacement with mouse iPSC-derived RGCs - Julia Oswald
B16	Motion parallax in prosthetic vision - Cheng Qiu
B17	Evaluation of ATXN2 intermediate polyglutamine expansions and rare variants in primary open-angle glaucoma - Shisong Rong
B18	PGC-1 is required to maintain RPE metabolism, integrity and function - Mariana Rosales
B19	The role of fibrosis and endothelial mesenchymal transition (EndoMT) in choroidal neovascularization (CNV) pathogenesis - Franco Aparecido Rossato
B20	The effects of age and cognitive load on peripheral detection performance at intersections - Steven Savage
B22	Exosome-associated AAV2 vector mediates robust gene delivery into the murine retina upon intravitreal injection - Sarah Wassmer
B21	Novel Phagocytosis-Resistant Extended-Spectrum -Lactamase–Producing Escherichia coli From Keratitis - Daria Van Tyne
B23	The Mechanism of Retinal Damage Following Ocular Surface Burn with Alkali - Chengxin Zhou

2017 Annual Meeting and Alumni Reunion

CLINICAL RESEARCH			
C1	Microaneurysm (MA) Wall Characteristics on Adaptive Optics Scanning Laser Ophthalmoscopy (AOSLO) as Related to MA Perfusion Status and Local Neural Retina Changes over Time - Omar Abu-Qamar		
C2	Choroidal Density and Volume in Intermediate Age-related Macular Degeneration & the Influence of Reticular Drusen - Grayson Armstrong		
C3	Foveal vs. Total Geographic Atrophy as a Predictor of Visual Acuity in AMD - Saghar Bagheri		
C4	The Effects of Refractive Error and Related Optic Nerve Head (ONH) Anatomical Parameters on Optical Coherence Tomography (OCT) Retinal Nerve Fiber Layer Thickness (RNFLT) Deviation Map - Neda Baniasadi		
C5	Rapid Detection and Identification of Uveitis Pathogens by Qualitative Multiplex Real Time PCR - Paulo Bispo		
C6	A Novel Quantitative Approach for Analyzing Glaucomatous Disc Hemorrhages: Identifying the Source of the Blood - Jonathan Chou		
C7	Management of orbital fractures: A survey of common practices among oculoplastic surgeons - Liza Cohen		
C8	A novel nonstop MYOC mutation in a Large Filipino Family with Juvenile-Onset Open-Angle Glaucoma - Edward R. Collantes		
C9	Association between IOP and retinal thickness following intravitreal triamcinolone injections in diabetic macular edema - Mohammad Dahrouj		
C10	Neuroretinal Layer Thickness in Patients across 8 Decades of Type 1 Diabetes - Ward Fickweiler		
C11	Utility of optical coherence tomographic angiography in evaluation of afferent neuro-ophthalmic disease - Eric Gaier		
C12	The effect of human growth hormone on corneal wound healing in mice - Xi Han		
C13	Increased Subretinal Fluid after Treatment with Aldosterone Antagonists in Patients with Central Serous Chorioretinopathy - Ismini Koulouri		
C14	Human Plasma Metabolomic Changes Associated with Age-Related Macular Degeneration - Inês Laíns		
C15	Relationship between Minimum-Rim Width at Bruch's Membrane Opening and Paracentral Visual Field Loss in Glaucoma - Dian Li		
C16	Increased hemoglobin A1c is correlated with increased clinically significant macular edema after cataract surgery in veterans - Michael Lin		
C17	Bilateral Open Globe Injuries at a Tertiary Care Center - Huy Nguyen		
C18	Association of Predominantly Peripheral Diabetic Retinopathy Lesions (PPL) with Oximetry-Measured Retinal Ischemia and Nonperfusion on Ultrawide Field Angiography - Konstantina Sampani		
C19	Spectral Domain Optical Coherence Tomography Findings and Visual Outcome after Vitreomacular Traction Treatment - Peng Sun		
C20	Hazard detection with monocular bioptic telescopes in a driving simulator - Xiaolan Tang		
C21	Choroidal vascular density in diabetic retinopathy assessed with swept-source optical coherence tomography - Jay Wang		
C22	Predicting the Occurrence of False Positive Glaucoma Hemifield Test Results from Visual Field Features - Mengyu Wang		
C23	Open globe injury associated with orbital fracture carries a poor prognosis - Natalie Wolkow		

2017 Trainee Poster Contest Floor Plan

Four Seasons Boston - 200 Boylston Street, Boston, MA, Second Floor



^{*}A1 Non-Trainee Poster, Contest Ineligible - Ellipsoid Zone (EZ) Restoration as a Prognostic Factor for Post Operative Visual Outcome in Idiopathic Macular Hole Surgery - Rodrigo Alvarez

**A2 Non-Trainee Poster, Contest Ineligible - Outcomes of Relaxing Retinotomy for Rhegmatogenous Retinal Detachment with Proliferative Vitreoretinopathy - Rachel Tandias

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