News from the Department of Ophthalmology & Visual Sciences



Fall 2024



INSIGHT FROM THE INTERIM CHAIR

It is an honor to continue to serve as Interim Chair of Ophthalmology and Visual Sciences, a role I began in April 2023. It is also a distinct pleasure to direct the Residency Program and to help train, educate and develop our bright and enthusiastic residents and ophthalmologists of the future. Of course, none of this would be possible without the support and expertise of our dedicated faculty and staff at UMass Chan Medical School and UMass Memorial Eye Center at the Hahnemann and Northborough campuses. In the past year we have made great progress in enhancing

resident education by providing protected didactic time and educational courses, starting a resident clinic and inpatient consult service, hiring three new faculty members to provide specialty care in glaucoma, cornea and oculoplastic surgery, and purchasing new ocular imaging equipment. We will also hire new retina faculty in 2025. I look forward to continuing this progress with your help and team effort and to supporting the permanent chair in the future.

Johanna M. Seddon, MD, ScM, FARVO, FASRS

Professor and Interim Chair of Ophthalmology & Visual Sciences Director, Residency Program

HAPPY RETIREMENT SHARON FURBISH

With a mix of sweet wishes and some salty tears, the ophthalmology department celebrated the retirement of Sharon Furbish, Senior Executive Assistant to the Chair, after spending an impressive 34 years within the UMass Memorial Health system.

Sharon started her career at UMass Memorial in 1991 as a medical administrative secretary in a primary care practice and later became a familiar face in a variety of departments, including medical management and surgery, before joining the ophthalmology team.

We wish her a wonderful retirement doing all the things her heart desires.



INSIGHTS IN THIS ISSUE

RESIDENTS

Congratulations Ophthalmology Graduating Residents and Welcome PGY-1 Residents

SEMINAR SERIES CALENDAR YEAR 2024-2025

ARVO MEETING

Researchers Present Findings Related to Disease Progression and Possible New Treatments

WELCOME NEW OPHTHALMOLOGISTS TO UMASS MEMORIAL EYE CENTER Jad Ayash, MD Isha Ingle, MD Oded Ohana, MD

JUNE 15, 2024 OPHTHALMOLOGY RESIDENTS GRADUATION

NORTHBOROUGH CROSSING EYE CENTER CLINIC EXTENDS SERVICES

Find us online for the latest, research, publications, faculty updates & more at **www.umassmed.edu/ophthalmology**





News from the Department of Ophthalmology & Visual Sciences

CONGRATULATIONS GRADUATES



LAUREN COLWELL, MD ADMINISTRATIVE CHIEF PREVIOUS PGY-4 RESIDENT Dr. Colwell graduated from Brown University in 2015 with a degree in public health. She completed medical school at UMass Chan Medical School in 2020. After medical school, she completed an internal medicine internship at

Newton Wellesley Hospital. She joined the UMass Chan Ophthalmology Residency in 2021 and was the administrative chief from 2023-2024. Current Position: Oculoplastics Fellow at Wills Eye Hospital, Philadelphia, Pennsylvania.



LUKE NAMAN, MD PREVIOUS PGY-4 RESIDENT

Dr. Naman graduated from Dartmouth College in 2015 with a degree in philosophy. He then completed medical school at University of Southern California Keck School of Medicine in 2020. After graduating, he completed an internal medicine

internship at UMass Chan Medical School. Dr. Naman joined the UMass Chan Ophthalmology Residency in 2021 and graduated in June, 2024. Current Position: Comprehensive Ophthalmologist in Private Practice, Columbus, Georgia.

WELCOME OPHTHALMOLOGY PGY-1 RESIDENTS



ANTONIO YAGHY, MD PGY-1 RESIDENT

Dr. Yaghy graduated from the University of Balamand in Lebanon in 2013, where he completed medical school in 2017. After graduation, Dr. Yaghy spent one year conducting research while working as an ocular oncology research fellow at Wills Eye Hospital in Philadelphia, PA. He

then spent another year conducting research with the OCT Research Fellowship at the New England Eye Center and MIT. He started an integrated internship at UMass Chan as part of his PGY-1 year. He will join our Ophthalmology Department in April 2025 (three months before starting his PGY-2 year.)



SEAN TEEBAGY, MD PGY-1 RESIDENT

Dr. Teebagy graduated cum laude from the College of the Holy Cross in 2017 with a degree in Psychology. He completed medical school at UMass Chan Medical School in 2024 where he was appointed by his peers as national representative to the AAMC Organization of

Student Representatives. In this role he represented us in national dialogues regarding medical school education and policies. Since graduating, Dr. Teebagy started an integrated internship at UMass Chan as part of his PGY-1 year. He will join our Ophthalmology Department in April 2025 (three months before starting his PGY-2 year).



THE EYE CENTER OFFERS NEW SERVICES

Lauren Branchini, MD will lead new services

Resident Clinic

This clinic is resident lead. It aims to care for patients who present with urgent conditions in a high-quality way, with a focus on resident education and autonomy with oversight.

Inpatient Consults

The inpatient consult service strives to provide a structured way to diagnose, treat and follow the complex ophthalmic conditions of patients admitted to UMass Memorial Health.



News from the Department of Ophthalmology & Visual Sciences

WELCOME NEW OPHTHALMOLOGISTS TO UMASS MEMORIAL EYE CENTER



JAD AYASH, MD ASSISTANT PROFESSOR

Dr. Avash received a Bachelor of Science in Biology at the American University of Beirut, Lebanon. He has a doctor of medicine degree from the University of Balamand School of Medicine. He completed his surgical internship and ophthalmology residency at Saint George Hospital University Medical Center. In the United States he completed an ophthalmic genetics fellowship at Harvard Medical School and two cornea, external diseases, and refractive surgery fellowships at Park Avenue Laser Vision and Callahan Eve Hospital at University of Alabama, Birmingham Heersink School of Medicine. Dr. Ayash specializes in cornea, cataract, and refractive surgeries. research in glaucoma.



ISHA INGLE, MD ASSISTANT PROFESSOR

Dr. Ingle completed her ophthalmology residency and a glaucoma fellowship at Aravind Eye Hospital in India. She then worked as an assistant professor and glaucoma consultant at National Institute of Medical Sciences, Jaipur India. She completed a fellowship at Park Avenue LASEK in Manhattan and then a neuro-ophthalmology fellowship from University of Pittsburgh Medical Center. To further enhance her skills, she had another glaucoma fellowship at Henry Ford Health in Detroit, Michigan. Dr. Ingle's areas of interest are medical and surgical management of glaucoma, quality of life studies and clinical



ODED OHANA, MD ASSISTANT PROFESSOR

Dr. Ohana earned his doctor of medicine degree in Israel, and graduated with honors from the ophthalmology program at the Tel Aviv Medical Center, Israel. He then completed a fellowship to focus on oculoplastics in England. Subsequently, he completed a twoyear full-time fellowship program in **Ophthalmic Plastic and Reconstructive** Surgery (International ASOPRS) at the Bascom Palmer Eye Institute -University of Miami Health System. He then led the oculoplastics service at Meir Medical Center in Israel. At UMass Memorial Eye Center, Dr. Ohana will build an oculoplastics service, treating orbital, lacrimal, and eyelid conditions.



NORTHBOROUGH CROSSING EYE CENTER UPDATE

The UMass Memorial Eye Center at Northborough continues to offer appointments for both routine and specialty care. We are excited to offer new specialty care in cornea, glaucoma and oculoplastic surgery this fall, both at our Northborough location and in Worcester at the Hahnemann clinic. Two of these new providers also perform cataract surgery so we will be able to expand that service and provide more timely appointments. The Northborough clinic is very popular with our patients.

Thank you to the entire Northborough team!

News from the Department of Ophthalmology & Visual Sciences





PHYSICIANS GABRIEL LUNA, MD

As our Physician Leader and Quality MENT ACCESS DIVERSITY Officer, Dr. Gabriel Luna was selected to participate in the 2024-2025 Physician Leadership Program, which was developed by UMass Memorial and WPI to advance the leadership careers of our physicians. Dr. Luna has demonstrated a track record of sustained strong performance over a range of diverse challenges and a commitment to diversity, equity and inclusion.



PRIYA JANARDHANA, MD

Congratulations to Priya Janardhana, MD, Assistant Professor, Ophthalmology & Visual Sciences for successfully completing the 2022-2023, Physicians Leadership Development Program.

2024 NANTUCKET RETINA MEETING - "A Different Type of VPT" Vitreo-Papillary Traction", was presented by Benjamin Botsford, MD, and "The Role of Nutritional Factors in Transitioning Between Early, Mid and Late Stages of Age-related Macular Degeneration: a Prospective Longitudinal Analysis" was presented by Johanna Seddon, MD, ScM at the Nantucket Retina Meeting, July 2024.



WHAT SCIENCE SAYS ABOUT BLUE-LIGHT **BLOCKING GLASSES AND EYE EXERCISES**

Benjamin Botsford, MD, Assistant Professor of Ophthalmology at UMass Chan, says there is no evidence that eye exercises eliminate the need for glasses nor do they offer any significant long-term benefits. Dr. Botsford wrote this piece for CNN "The Conversation".-Read the Online article.





JOHANNA M. SEDDON, MD, SCM

Dr. Seddon was honored to receive the Gold Medal prize from the Spanish Vitreoretinal Society on March 8, 2024, in Madrid, Spain, for her meritorious contributions to the retina and vitreous fields. She gave the keynote lecture "Macular degeneration, nature-nurture, lifestyle factors, genetic risk: clues to therapies - we have come a long way together". Dr. Seddon also received the Scientific Contribution Award from Women in Ophthalmology, presented at the American Academy of Ophthalmology meeting on October 19, 2024, for making outstanding advancements in ophthalmology and the field of macular degeneration.



YANHAN REN, MD, RESIDENT PGY-3 Dr. Ren represented our program at the 2024 American Academy of Ophthalmology (AAO) Mid-Year Forum. As a first-generation immigrant, he respects the focus on health care reform and patient care.



Juan Ding, OD, **PhD**, and her team have started using an artificial intelligence program to increase the screening of diabetic retinopathy (DR)

at one of the UMass Memorial primary care practices. In their proposal, they plan to expand this service to four additional family medicine sites. They hypothesize that DR screening will increase and help patients who are subject to barriers caused by social determinants of health.



News from the Department of Ophthalmology & Visual Sciences

DEPARTMENT OF OPHTHALMOLOGY AND VISUAL SCIENCES - COMMUNITY EVENTS



HEALTH SCREENING CLINIC - APRIL 27, 2024

On Saturday, April 27th, several of our ophthalmology providers volunteered at a health fair in Lowell, MA. It was held by a nonprofit organization called LASA (Love All Serve All). The health fair provided free care to over 200 patients. Patients were examined by providers from many different specialties which also included internal medicine, cardiology, psychiatry, and neurology. We extend our heartfelt gratitude to our eye center caregivers who attended: Luke Naman, MD, Chris Kim, MD, David Santos, MD, Elizabeth Eshun, MD, Priya Janardhana, MD, Toral Patel, OD, and our ophthalmic technician Maria Claudia Da Silva. Everyone enjoyed a wonderful and fulfilling day.

SCREENING CLINIC - MAY 18, 2024

UMass Chan medical students along with ophthalmology residents helped to provide vision screenings in collaboration with the Department of Dermatology who provided screening for skin cancer. Residents, **Delaney Curran, MD, Lauren Colwell, MD, Elizabeth Eshun, MD** and **David Santos, MD** attended this event. The ophthalmology event was supervised by **Benjamin Botsford, MD**. Medical students provided reading glasses and were instrumental for the vision screening clinic and referrals to the event.





WORCESTER MULTICULTURAL COMMUNITY HEALTH FAIR SEPT 9, 2023

The UMass Memorial ophthalmology team provided vision screenings at the Worcester Multicultural Community Health Fair at the Fuller Family Park on Saturday, September 9, 2023. Special thanks to ophthalmic technicians **Sherri Granger**, **Kara Donnelly**,

Optometrist **Firas Kassira, OD**, Ophthalmology resident PGY-2 **Elizabeth Eshun, MD**, and Ophthalmologist **Gabriel Luna, MD**. Our CEO, **Eric Dickson, MD, MHCM, FACEP**, stopped by to congratulate the eye team for joining this event.

News from the Department of Ophthalmology & Visual Sciences

2024-2025 Academic Calendar In-person Vision Seminar Series

Seminar Series – 6:00 pm to 7:00 pm Hiatt Auditorium, S1-608

Medical School Building, University of Massachusetts Chan Medical School, Worcester, MA

September 19 2024	Wei Hau ("Danny") Lew, PhD Postdoctoral Research Fellow, Schepens Eye Research Institute/Massachusetts Eye and Ear, Department of Ophthalmology, Harvard Medical School, Boston, MA	Specialty: Binocular Vision
October 17 2024	Sheldon Rowan, PhD Scientist II and Assistant Professor JM-USDA Human Nutrition Research Center on Aging at Tufts University	Specialty: Nutrition and Age-related Eye Diseases
November 21 2024	Brian Hafler, MD, PhD Assistant Professor, Ophthalmology and Visual Sciences, Department of Ophthalmology, Yale school of Medicine, New Haven, CT	Specialty: Age-related Macular Degeneration & Glaucoma
December 19 2024	Johanna Seddon, MD, ScM, FARVO, FASRS Professor and Interim Chair, Director of Retina & Macular Degeneration Center of Excellence, UMass Chan Medical School, Worcester MA	Specialty: Age-related Macular Degeneration
January 16 2025	Claudio Punzo, PhD Associate Professor, Departments of Neurobiology and Ophthalmology, UMass Chan Medical School, Worcester, MA	Specialty: Age-related Macular Degeneration
February 20 2025	Isha Ingle, MD Assistant Professor, Department of Ophthalmology and Visual Sciences, UMass Chan Medical School, Worcester, MA	Specialty: Glaucoma
March 20 2025	Sunil Chauhan, DVM, PhD Massachusetts Eye and Ear, Associate Scientist, Director, Flow Cytometry Core, Harvard Medical School, Associate Professor of Ophthalmology, Boston, MA	Specialty: Ocular Immunity
April 17 2025	Terri L. Young, MD, MBA, FARVO, FAOS Chair, University of Wisconsin Department of Ophthalmology and Visual Sciences, Peter A. Duehr Distinguished Professor of Ophthalmology, Professor of Pediatrics, Professor of Medical Genetics Member, McPherson Eye Research Institute, Madison, Wisconsin	Specialty: Pediatric Ophthalmology
May 15 2025	UMass at ARVO Participants of ARVO meetings and residents of UMass Chan Medical School, Ophthalmology, present their study findings, ARVO Meeting, Worcester, MA	
June 19 2025	Phoebe Lin, MD, PhD Department of Ophthalmology, Cleveland Clinic Main Campus, Mail Code i32, Cleveland, OH	Specialty: Uveitis

Hosted by: Department of Ophthalmology & Visual Sciences

Also Streamed on Zoom at <u>https://umassmed.zoom.us/j/94485461741</u> Password: 190953

News from the Department of Ophthalmology & Visual Sciences

ARVO MEETING 2024

Students, postdoctoral fellows and faculty from the ophthalmology department shined a light on their novel research studies at the 2024 Association for Research in Vision and Ophthalmology (ARVO) meeting in Seattle. The research topics covered diseases such as age-related macular degeneration, diabetic retinopathy, endophthalmitis and uveitis. Posters as well as talks were presented to disseminate the ophthalmology research conducted at UMass Chan Medical School. The research included new insights into disease progression as well as the development of new tools and therapeutics to treat all these various diseases.



(Left to right) Dikha De, MPH, Shun-Yun Cheng, PhD, Ilana Silverstein, MS3, Johanna M. Seddon, MD, ScM, Interim Chair, Su Jeong (Chris) Kim, MD, PGY-4 Resident, Adrienne Conza, MS3, Darren J. Lee, PhD, Claudio Punzo, PhD, Research Vice Chair

Ilana Silverstein:

siRNA-mediated gene silencing of vascular endothelial growth factor (VEGF) for the treatment of neovascular pathologies of the eye.

Ilana, a second-year medical student at UMass Chan presented a new technology that uses siRNA mediated decay to decrease endogenous levels of the vascular endothelial growth factor. This new method requires only two intravitreal injections per year for patients with neovascular pathologies in the eye thereby reducing the treatment burden for patients.

Michelle Cheng, PhD: Genetic and pharmacological reduction of S6K1 alleviates pathologies in the mouse.

The work presented by the postdoctoral fellow Michelle proposes the silencing of S6K1 as a new treatment for age-related macular degeneration (AMD). She showed that loss of s6K1 in an animal model of AMD prevents disease onset and ameliorates the disease progression in animals that have disease.

Adrienne Conza: Role of Alpha-1 antitrypsin in ocular health.

Adrienne is a second-year medical student at UMass who analyzed the effect of alpha-1 antitrypsin loss in the eye. She showed that loss of this antiprotease can lead to pathologies reminiscent of age-related macular degeneration (AMD) helping us understand how risk factors for AMD contribute to disease progression in humans.

Dikha De, MPH:

The role of nutritional factors in transitioning between early, mid and late stages of age-related macular degeneration.

The study examined the impact of nutritional factors on transitions from early and intermediate AMD to higher non-advanced and advanced stages. Results indicate higher dietary intake of green leafy vegetables and fish rich in lutein/zeaxanthin and omega-3 fatty acids during the initial stages of AMD, reduced incidence of disease progression to higher severity.

Darren J Lee, PhD: CCL20 is required for emergence and function of anti-uveitic treg cells.

This study explored the role of CCL20 in the induction and function of Tregs to suppress uveitis and found CCL20 dependent and independent Treg subsets. Therefore, there are multiple ocular requirements for CCL20 to resolve uveitis and maintain remission.

Su Jeoung Kim, MD:

Intravenous drug use associated with endogenous candida endophthalmitis and clinical manifestations.

Candida species are common causes of endogenous endophthalmitis. A retrospective observational study was conducted to compare the clinical progression and outcomes among those with culture positive for C. albicans vs. non-C. albicans group. Overall, 79% of patients had a history of intravenous drug use. Presenting visual acuity was 1.14 logMAR, and greater visual acuity improvement was seen in the non-albicans vs albicans group.

News from the Department of Ophthalmology & Visual Sciences

JUNE 15, 2024 - OPHTHALMOLOGY RESIDENTS GRADUATION





Department of Ophthalmology & Visual Sciences faculty and staff celebrated the accomplishments and promotion of the current residents, and the addition of our new PGY-1 residents to the team. **Johanna M. Seddon, MD, ScM,** was selected by the faculty to give the keynote talk and other faculty speakers included **Gabriel Luna, MD,** and **Benjamin Botsford, MD**. The residents spoke about their projects and presented a short video.

Graduation certificates were awarded to Lauren Colwell, MD, and Luke Naman, MD, the first residents in the match. For the first time, certificates for high achievement on the Ophthalmic Knowledge Assessment Program exam were awarded to Su Jeoung (Chris) Kim, MD, PGY-3 and Delaney Curran, MD, PGY-2. Families of the graduating residents enjoyed the event and the beautiful day.

Johanna M. Seddon, MD, ScM, FARVO, FASRS Professor and Interim Chair of Ophthalmology & Visual Sciences, Residency Program Director



DEPARTMENT OF OPHTHALMOLOGY & VISUAL SCIENCES CONGRATULATES OUR GRADUATES AND WELCOMES OUR NEW PGY-1 RESIDENTS

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