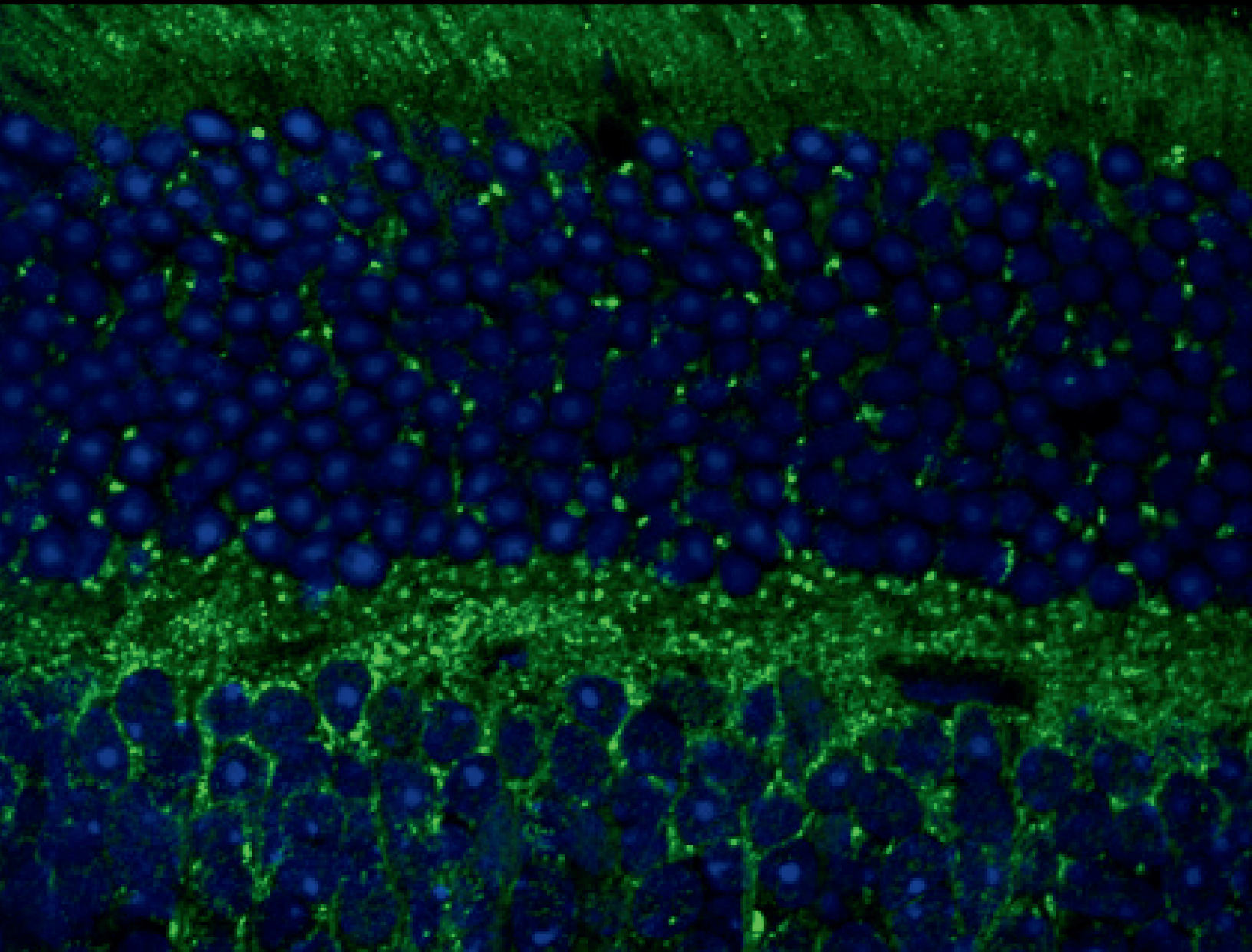


Department of Ophthalmology and Visual Sciences 40th Annual Research Day



THURSDAY, MAY 23, 2024

KELLOGG EYE CENTER

1000 WALL STREET, ANN ARBOR

8:00 am - 4:00 pm



**KELLOGG
EYE CENTER**
MICHIGAN MEDICINE

40th Annual Research Day

May 23, 2024



PROGRAM GOALS

At the 40th Annual Research Day, you will hear about the latest findings from research under way at the University of Michigan Kellogg Eye Center. Kellogg fellows, postdocs, medical students, and residents will present papers based on their most recent clinical and basic science research. A brief question and answer session will follow each presentation. After attending, participants will be able to evaluate, manage, present, and implement new diagnostic and treatment options being developed through research at the Kellogg Eye Center for ocular diseases and conditions.

TARGET AUDIENCE

The program is designed for medical students, physicians, scientists, and allied health professionals in the field of ophthalmology.

EDUCATIONAL OBJECTIVES

At the end of this activity, participant should be able to:

1. implement current research findings in their daily practice
2. identify diagnostic and treatment options for ocular diseases and conditions
3. evaluate and manage patients with ocular disease
4. develop research and presentation skills

ACCREDITATION

The University of Michigan Medical School is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. The University of Michigan Medical School designates this live activity for a maximum of _____ AMA PRA Category 1 Credit(s)[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

PLANNING COMMITTEE

Angela Elam, MD, MPH
Conference Co-Director

Tatiana Deveney, MD
Conference Co-Director

Jennifer Burkheiser
CME Program Specialist

[Click here to Register](#)

8:00 AM Registration and Continental Breakfast

8:45 AM Welcome and Announcements

Angela Elam, MD, MPH

PODIUM PRESENTATIONS

9:00 – 10:15 AM

Auditorium

MODERATOR: Mia Woodward, MD, MS

9:00 AM	<p>Derivation and Analysis of Artificial Intelligence-Derived Metrics for the Assessment of Surgical Skill Level from Intraoperative Cataract Surgery Video Recordings</p> <p>Dena Ballouz, MD</p> <p><i>Research Mentor/Nambi Nallasamy, MD</i></p>
9:15 AM	<p>Evaluation of a Novel Machine Learning-Based Algorithm for Refraction Prediction in DMEK Triple Procedures</p> <p>Tania Padilla Conde, MD</p> <p><i>Research Mentor/Nambi Nallasamy, MD</i></p>
9:30 AM	<p>Perceived Discrimination, Loneliness, Stress, Visual Acuity, and Vision Related Quality of Life within the MI-SIGHT Program</p> <p>Mikaelah A. Johnson-Griggs, BS</p> <p><i>Research Mentor/Paula Anne Newman-Casey, MD, MS</i></p>
9:45 AM	<p>Comparing Optical Coherence Tomography Parameters Between Participants in the Topcon Normative Database and a Large, Diverse, Real World Cohort</p> <p>Rithambara Ramachandran, MD</p> <p><i>Research Mentor/Paula Anne Newman-Casey, MD, MS</i></p>
10:00 AM	<p>The Impact of Race on Eye Emergencies Across Ages</p> <p>Mickey Nguyen, BS</p> <p><i>Research Mentor/Yannis Paulus, MD</i></p>

BREAK

40th Research Day Conference Schedule

PODIUM PRESENTATIONS

10:30 – 11:45 AM

Auditorium

MODERATOR: Brittany Simmons, MD

10:30 AM	Determining the Role of Setting On the Costs Associated with Retinal Detachment Repair Surgeries Warren W. Pan, MD, PhD <i>Research Mentor/Rajesh Rao, MD</i>
10:45 AM	Enhanced Photoacoustic and Fluorescence Microscopy in Cell Labeling, Tracking, and Viability Assessment Based on a Novel Contrast Agent Park Sumin, PhD <i>Research Mentor/Yannis Paulus, PhD</i>
11:00 AM	Liquid biopsy for proliferative diabetic retinopathy: Single-cell Transcriptomics (scRNA-seq) of Human Vitreous Reveals Inflammatory T cell signature Rachana Haliyur, MD, PhD <i>Research Mentor/Rajesh Rao, MD</i>
11:15 AM	FOXP4, a Novel Candidate Gene for Angle Closure Glaucoma William Presley, BS <i>Research Mentor/Lev Prasov, MD, PhD</i>
11:30 AM	Ophthalmology Consult Volume at a Tertiary Care Center Emergency Room: An Emerging Trend David S. Portney, MD <i>Research Mentor/Bradford Tannen, MD, JD</i>

LUNCH and POSTER VIEWING

40th Research Day Conference Schedule

POSTER SESSION

Poster Judges: Joshua Ehrlich, MD, PhD, Farida Hakim, MD
Emily Eton, MD, Steve Archer, MD, Nita Valikodath, MD, MS

12:45 – 1:45 PM
Lobby

Management of Melanoma-In-Situ Involving the Eyelid Margin

Rodney Ahdoot, BS

Research Mentor/Christine C. Nelson, MD

Ophthalmology Education in Medical School: An Analysis of Ophthalmology Content in a USMLE Question Bank

Osama M. Ahmed, MD

Research Mentor/Bradford Tannen, MD, JD

Proportion of Time Dedicated to Dispensing Low-Cost Glasses in a Free Eye Disease Screening Program

Kaushik Annam, MD

Research Mentor/Paula Anne Newman-Casey, MD, MS

Treatment of Choroidal Metastasis with Combined PDT and Bevacizumab Leads to Faster Recovery of Visual Acuity and Better Tumor Control than PDT Alone

Aslan Aykut, MD

Research Mentor/Hakan Demirci, MD

Ultrasonographic Assessment of Intrinsic Vascularity in Typical Choroidal Nevus, Suspicious Choroidal Nevus and Choroidal Melanoma

Buse Guneri Beser, MD, FEBO, FICO

Research Mentor/Hakan Demirci, MD

Coats-like exudative vitreoretinopathy in retinitis pigmentosa versus Coats disease: comparing longitudinal outcomes and treatment modalities

Emily D. Cole, MD, MPH

Research Mentor/Emily Eton, MD

40th Research Day Conference Schedule

POSTER SESSION

Poster Judges: Joshua Ehrlich, MD, PhD, Farida Hakim, MD
Emily Eton, MD, Steve Archer, MD, Nita Valikodath, MD, MS

12:45 – 1:45 PM
Lobby

Performing Sentinel Lymph Node Biopsy for Periorbital Malignancies at Standalone Ambulatory Surgical Centers – An Examination of Safety and Feasibility

Alexander A. Dennis, BS

Research Mentor/Christine C. Nelson, MD

Clinical Features and Interocular Symmetry in a Cohort of Choroideremia Carriers

Sarah J. Garnai, MD

Research Mentor/Abigail Fahim, MD, PhD

Age Related Macular Degeneration and Stem Cell-Based Therapies

Joseph C. Giacalone, MD, PhD

Research Mentor/Rajesh Rao, MD

Treatment of Choroidal Metastasis with Combined PDT and Bevacizumab Leads to Faster Recovery of Visual Acuity and Better Tumor Control than PDT Alone

Richard W. Helms, MD, PhD

Research Mentor/Steven Archer, MD

Processed Red Channel Ultrawidefield Scanning Laser Ophthalmoscopy for Choroidal Vessel Visualization

Matt Johnson, MD

Research Mentor/Jason M.L. Miller, MD, PhD and Mark Johnson, MD

Comparison of Different Treatment Modalities for Periocular Cutaneous Squamous Cell Carcinoma with Perineural Spread.

Sarinee Juntipwong, MD

Research Mentor/Hakan Demirci, MD

Kellogg Eye Center Quality and Safety Trends 2010-2023

George T. Lin, MD

Research Mentor/Jennifer Weizer, MD

40th Research Day Conference Schedule

POSTER SESSION

Poster Judges: Joshua Ehrlich, MD, PhD, Farida Hakim, MD
Emily Eton, MD, Steve Archer, MD, Nita Valikodath, MD, MS

12:45 – 1:45 PM
Lobby

Biomechanical Interaction Studies of The Perilimbal Sclera And Aqueous Veins During Intraocular Pressure Regulation

Ni Linyu, PhD

Research Mentor/Guan Xu, PhD

Incorporating Fundoscopy Simulator within the Neurology “Boot Camp” Curriculum

Letitia Pirau, MD

Research Mentor/Lindsey Delott, MD

Fluorescein Angiography in the Assessment of Minor Salivary Gland Transplantation: A Novel Approach

Sina Rezaei, MD

Research Mentor/Nambi Nallasamy, MD

Multimodal Imaging in Bilateral Diffuse Uveal Melanocytic Proliferation

Almila Sarigul Sezenoz, MD

Research Mentor/Hakan Demirci, MD

Myofibromatosis with Orbital Mass Effect: A Case Report

Kirsten L. Simmons, MD, MHSc

Research Mentor/Hakan Demirci, MD

Home Tonometry for Glaucoma: Patient Perspectives on Ease of Use and Proficiency

Pariyamon (Pha), Thaprawat, BS

Research Mentor/Amy Zhang, MD

Establishing Expert Consensus on Distinguishing Factors for Classes of Microbial Keratitis: A Modified Delphi Panel Approach

Emily L. Vogt, BA

Research Mentor/Maria Woodward, MD, MS

40th Research Day Conference Schedule

POSTER SESSION

Poster Judges: Joshua Ehrlich, MD, PhD, Farida Hakim, MD
Emily Eton, MD, Steve Archer, MD, Nita Valikodath, MD, MS

12:45 – 1:45 PM
Lobby

Eye Drop Instillation Success and Hand Function in Adults with Glaucoma

Madeline K. Weber, BS

Research Mentor/Paula Anne Newman-Casey, MD, MS

Complete Spontaneous Resolution of Bilateral Stellate Nonhereditary Idiopathic Foveomacular Retinoschisis

Jeffrey J. Yu, MD

Research Mentor/Mark Johnson, MD

Eyelid Motion Tracking During Blinking Using High-Speed Imaging and Digital Image Correlation

Zhenyang Zhao, MD

Research Mentor/Christine C. Nelson, MD

New Epiretinal Prostheses with Polymer Matrix Nanocomposites as Photoacoustic Transmitter in Rabbit

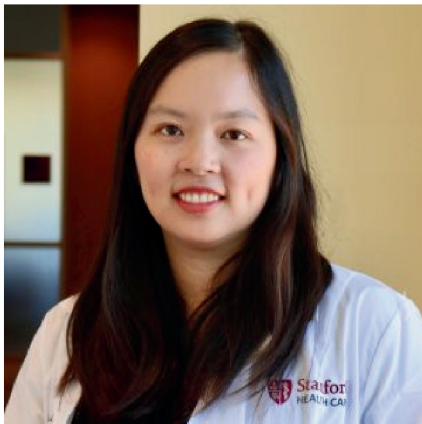
Mi Zheng, MD

Research Mentor/Yannis Paulus, MD

40th Research Day Conference Schedule

**KEYNOTE
SPEAKER**

2:00 - 2:45 PM
Auditorium



Sophia Y. Wang, MD, MS

Assistant Professor of Ophthalmology - Glaucoma
Stanford Medicine and Stanford Byers Eye Institute

Dr. Wang graduated magna cum laude from Harvard University with a degree in Biochemical Sciences. She went on to spend a year in Japan on a Fulbright Scholarship. She then attended medical school at the University of California, San Francisco, during which she also completed a research year in ophthalmology and a yearlong Advanced Training in Clinical Research Certificate Program offered by the UCSF Department of Epidemiology and Biostatistics. After a PGY-1 intern year at Kaiser Permanente Northern California Oakland, she went on to complete ophthalmology residency training at the University of Michigan Kellogg Eye Center. She pursued additional training in glaucoma through a fellowship at the Stanford Byers Eye Institute, after which she continued on as faculty in the Department of Ophthalmology.

Dr. Wang specializes in the medical and surgical treatment of all different forms of glaucoma, as well as cataract surgery. Her research interests lie in "big data" for ophthalmology. Her research to develop artificial intelligence algorithms to predict glaucoma patients' outcomes using natural language processing for electronic health records data is supported by a Research to Prevent Blindness Career Development Award and a K23 Career Development Award from the National Eye Institute.

2:45 - 3:00 PM BREAK Lobby

40th Research Day Conference Schedule

**LIGHTNING
ROUND**

3:00 – 4:15 PM
Auditorium

MODERATOR: Yannis Paulus, MD

3:00 PM	Cost-Drivers of Strabismus Surgery: A Time-Driven Activity-Based Costing Analysis Alexander D. Valentine, MD <i>Research Mentor/Pamela Williams, MD</i>
3:05 PM	Characteristics Associated with Loss to Follow-up After Pediatric Emergency Department Encounters for Ocular Complaints Otana A. Jakpor, MD, MSc <i>Research Mentor/Adam Jacobson, MD</i>
3:10 PM	Recruiting the Next Generation of Pediatric Ophthalmologists: A Success Story David F. Skanchy, MD <i>Research Mentor/Pamela Williams, MD</i>
3:15 PM	Disability-Adjusted Life Years Resulting from Ocular Injury among US Service Members, 2001-2020 Boonkit Purt, MD <i>Research Mentor/Yannis Paulus, MD</i>
3:20 PM	Patient Satisfaction and Perioperative Efficiency of Oral Sedation vs. IV Sedation for Cataract Surgery Jeremy N. Shapiro, BA <i>Research Mentor/Shahzad Mian, MD</i>

40th Research Day Conference Schedule

LIGHTNING ROUND

3:00 – 4:15 PM

Auditorium

3:25 PM	<p>Longitudinal Analysis of Safety Outcomes Following Implementation of a Cataract Surgery Protocol</p> <p>Joshua Ong, MD</p> <p><i>Research Mentor/Jennifer Weizer, MD</i></p>
3:30 PM	<p>Secondary Intraocular Lens Implantation: Trends, Refractive Outcomes and Complications Across Subspecialties at a Tertiary Care Center</p> <p>Alejandra M. Maiz, MD</p> <p><i>Research Mentor/Thomas Wubben, MD, PhD</i></p>
3:35 PM	<p>Ethical Considerations in Gene Therapy Trials for Inherited Retinal Diseases</p> <p>Breanna M. Tracey, MD</p> <p><i>Research Mentor/Julie Rosenthal, MD, MS</i></p>
3:40 PM	<p>Trends of Vitreoretinal Surgical Referrals for Retinal Detachments at a Tertiary Institution</p> <p>Jonah E. Yousif, MD, MBA</p> <p><i>Research Mentor/Rajesh Rao, MD</i></p>
3:45 PM	<p>Staged Excision Technique for Periocular Cutaneous Melanoma: Long-term outcomes of the Square Procedure</p> <p>Delaram Mirzania, MD</p> <p><i>Research Mentor/Christine C. Nelson, MD</i></p>

Audience Voting for Best Lightning Round

Tatiana Deveney, MD

Closing Remarks



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The Office of Continuing Medical Education and Lifelong Learning

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