

Departmental Activities

Association for Research in Vision and Ophthalmology

2023 Annual Meeting



Department of Ophthalmology
and Visual Sciences

UNIVERSITY OF WISCONSIN
SCHOOL OF MEDICINE AND PUBLIC HEALTH

Saturday, April 22, 2023 **as part of the Imaging in the Eye Conference*

12:00–12:30 PM Session 2 Poster #PB0046	Comparison of 7M, Clarus, and Optos Ultrawide Field Imaging Systems for Diabetic Retinopathy Assessment	Nancy Barrett Abstract Author Block: *Nancy Barrett, Nicole Duncan, Christian Kim, Rick Volland, Amitha Domalpally, Barbara Blodi, Sheila Watson, Andrew Ewen, Lauren Krouth
12:00–12:30 PM Session 2 Poster #PB0047	Assessing Disorganization of Retinal Inner Layers in Long Term Follow Up of SCORE2 Trial	Rachel Linderman Abstract Author Block: *Rachel Linderman, Jonathon Le, Barbara Blodi, Amitha Domalpally, Rick Volland, Paul VanVeldhuisen, Neal Oden, Michael Ip, Ingrid Scott

Sunday, April 23, 2023

8:00–9:45 AM Session 17 Poster #B0207	In Vivo Depletion of the Herpes Simplex Virus 1 Latency Associated Transcript Intron Using AAV-Ribozymes Inhibits the Establishment of	Mason Shipley Abstract Author Block: *Mason Shipley, Pankaj Singh, David Bloom, Donna Neumann
8:00–9:45 AM Session 17 Poster #B0213	HSV-1 Neuron-to-Eye Transport is Controlled by an Interaction Between an Enhancer and Anterograde Transport Genes	Ziyun Ye Abstract Author Block: *Ziyun Ye, Mason Shipley, Donna Neumann
8:00–9:45 AM Session 111 Poster #C0061	Data Labeling for Artificial Intelligence (AI) Algorithms for Measurement of Geographic Atrophy	Rohit Balaji Abstract Author Block: *Rohit Balaji, Robert Slater, Jacob Bogost, Geliqye Ayala, Jeong Pak, Rick Volland, Roomasa Channa, Barbara Blodi, Donald Fong, Amitha Domalpally
8:00–9:45 AM Session 111 Poster #C0102	Prediction of Geographic Atrophy Enlargement Using Various Deep Learning Approaches	Amitha Domalpally Abstract Author Block: *Amitha Domalpally, Robert Slater, Mark Banghart, Roomasa Channa, Donald Fong, Barbara Blodi
8:00–9:45 AM Session 111 Poster #C0063	Training Size Effect on Deep Learning Models for Geographic Atrophy	Robert Slater Abstract Author Block: *Robert Slater, Mark Banghart, Roomasa Channa, Barbara Blodi, Donald Fong, Amitha Domalpally

Departmental Activities

Association for Research in Vision and Ophthalmology

2023 Annual Meeting



Department of Ophthalmology
and Visual Sciences

UNIVERSITY OF WISCONSIN
SCHOOL OF MEDICINE AND PUBLIC HEALTH

Sunday, April 23, 2023 (cont.)

8:00–9:45 AM Session 21 Poster #C0049	Autonomous Artificial Intelligence Exams are Associated with Higher Adherence to Diabetic Retinopathy Testing in an Integrated Healthcare System	Jane Huang Abstract Author Block: *Jane Huang, Jiangxia Wang, Roomasa Channa, Risa Wolf, Michael Abramoff, T. Y. Alvin Liu
8:00–9:45 AM Session 21 Poster #C0080	Autonomous Artificial Intelligence (AI) Increases Health Equity for Patients Who are More at Risk for Poor Visual Outcomes Due to Diabetic Eye Disease (DED)	Ariel Leong Abstract Author Block: *Ariel Leong, Jiangxia Wang, Risa Wolf, Roomasa Channa, Michael Abramoff, Harold Lehmann, T. Y. Alvin Liu
8:00–9:45 AM Session 22 Poster #C0124	Visual Correlation of OCT-Angiographic Features in Neovascular Age-Related Macular Degeneration	Kevin Elwood Abstract Author Block: *Kevin Elwood, Rachel Linderman, Jeong Pak, Rick Volland, Amitha Domalpally, Barbara Blodi
8:00–9:45 AM Session 25 Poster #C0334	Inherited Retinal Disease Genetic Testing is Dynamic!– Snapshot of 5 years of a Midwest Academic Practice With Dedicated Inherited Retinal Disease Clinics	Kimberly Stepien Abstract Author Block: *Kimberly Stepien, Rachel Sullivan, Elizabeth Kellom, Kyle Peterson, Nickie Stangel
8:00–9:45 AM Session 25 Poster #C0344	A Mouse Model of Human Congenital Stationary Night Blindness (CSNB) for Therapeutic Evaluation	Bikash Pattnaik Abstract Author Block: *Bikash Pattnaik, Pawan Shahi, Meha Kabra
8:00–9:45 AM Session 25 Poster #C0346	Strategies for Readthrough of Premature Termination Codons to Restore Ion Channel Function	Stephen Fulbright Abstract Author Block: *Stephen Fulbright, Meha Kabra, Pawan Shahi, Allison Spillane, Christopher Ahern, Bikash Pattnaik
12:00–1:45 PM Session 49 Poster #C0375	Silica Nanocapsules as a Nonviral Delivery Platform for iPSC-RPE	Divya Sinha Abstract Author Block: *Divya Sinha, Yao Tong, Maria Fernandez Zepeda, Giovanni Hanstad, Emma Nelson, Cole Theisen, Shaoqin Gong, David Gamm
3:45–5:30 PM Moderator Paper Session #57 Room: R04-R05	Animal Models of Ophthalmic Disease	Colleen McDowell

Departmental Activities

Association for Research in Vision and Ophthalmology

2023 Annual Meeting



Department of Ophthalmology
and Visual Sciences

UNIVERSITY OF WISCONSIN
SCHOOL OF MEDICINE AND PUBLIC HEALTH

Sunday, April 23, 2023 (cont.)

3:45-5:30 PM Session 64 Poster #B0065	Toll-Like Receptor 4 Dependent Glaucomatous Retinal and Optic Nerve Head Damage	Emma Geiduschek Abstract Author Block: *Emma Geiduschek, Timur Mavlyutov, Colleen McDowell
3:45-5:30 PM Session 65 Poster #C0014	Assessing Photoreceptor Morphology Over Time to Monitor Retina Pathology	Vasu Rishi Abstract Author Block: *Vasu Rishi, Laura Kopplin, Nickie Stangel, Jeremy Rogers, Kimberly Stepien
3:45-5:30 PM Moderator Posters C0565-C0576	Lens Aging and Cataractogenesis	Mary Ann Croft
3:45-5:30 PM Session 71 Poster #C0586	Regulation of Retinal Endothelial Cells Angiogenic and Inflammatory Properties Through Vitamin D Receptor	Nader Sheibani Abstract Author Block: *Nader Sheibani, Yong- Seok Song, Christine Sorenson
3:45-5:30 PM Session 65 Poster #C0004	Dense Optical Flow Enables Fast Acquisition and Processing of Large Panorama AOSLO Images	Jeremy Rogers Abstract Author Block: *Jeremy Rogers, Samantha Shrum, Nickie Stangel, Vasu Rishi
3:45-5:30 PM Session 71 Poster #C0591	CYP1B1 Regulates Iron Homeostasis in the Retinal Endothelium Through ER α /BMP6/Hepcidin Axis	Yong-Seok Song Abstract Author Block: *Yong-Seok Song, Ismail Zaitoun, Shoujian Wang, Soesiwati Darjatmoko, Christine Sorenson, Nader Sheibani
3:45-5:30 PM Session 72 Poster #C0627	Spontaneous Retinoblastoma-Like Mass in the Retina of a Young Cynomolgus Macaque	Peter Sonnentag Abstract Author Block: *Peter Sonnentag, Paul Miller, T Michael Nork, James Ver Hoeve, Carol Rasmussen, Alex Katz, Hugh Wabers, Christopher Murphy

Departmental Activities

Association for Research in Vision and Ophthalmology

2023 Annual Meeting



Department of Ophthalmology
and Visual Sciences

UNIVERSITY OF WISCONSIN
SCHOOL OF MEDICINE AND PUBLIC HEALTH

Monday, April 24, 2023

11:30 AM-1:15 PM Moderator Paper Session #74 Location: R01	New Drugs, Delivery Systems and Mechanisms of Action 2	Nader Sheibani
11:30 AM-1:15 PM Session 83 Poster #B0027	Accuracy and Precision of Rebound and Applanation Tonometers in Eyes with Focal Corneal Edema	Julie Kiland Abstract Author Block: *Julie Kiland, Hannah Terhaar, Hannah Walleck, Nickolas Chen, Odalys Torne, Kazuya Oikawa, Tina Wahl, Kyle McDaniel, Gillian McLellan
11:30 AM-1:15 PM Session 97 Poster #C0235	Ultra Widefield Fluorescein Angiography (UWF FA) in Retinal Vein Occlusion: 5-Year Data Using the Network Grid from the SCORE2 Trial	Mary Wilda Abstract Author Block: *Mary Wilda, Ellie Corkery, Barbara Blodi, Michael Ip, Ingrid Scott, Paul VanVeldhuisen, Neal Oden
11:30 AM-1:15 PM Session 228 Poster #C0220	Assessing Disorganization of Retinal Inner Layers in Long Term Follow Up of SCORE2 Trial	Jonathan Le Abstract Author Block: *Jonathan Le, Barbara Blodi, Amitha Domalpally, Rick Voland, Paul VanVeldhuisen, Neal Oden, Michael Ip, Ingrid Scott
3:15-5:00 PM Session 117 Poster # B0309	Visual Evoked Potentials Detect Functional Correlates of Axon Loss in Feline Glaucomatous Optic Neuropathy	Gillian McLellan Abstract Author Block: *Gillian McLellan, Kazuya Oikawa, Julie Kiland, Kevin Snyder, Leandro Teixeira, Kore Chan, Jacob Lindemann, Hennes-Beean Elizabeth, James Ver Hoeve
3:15-5:00 PM Session 120 Poster #C0052	Hedgehog-Gli1 Signaling Axis Mediates Choroidal Neovascularization and Fibrosis	Ismail Zaitoun Abstract Author Block: *Ismail Zaitoun, Yong-Seok Song, Soesiwati Darjatmoko, Christine Sorenson, Nader Sheibani
3:15-5:00 PM Session 122 Poster #C0129	Multimodal Assessment of Incomplete Retinal Pigment Epithelial Outer Retinal Atrophy (iRORA) and Nascent Geographic Atrophy (nGA) in Age-Related Macular Degeneration	Gelique Ayala Abstract Author Block: *Gelique Ayala, Jeong Pak, Kenneth Taylor, Cynthia Hurtenbach, Barbara Blodi, Amitha Domalpally
3:15-5:00 PM Session 122 Poster #C0130	Longitudinal Analysis of Age-Related Macular Degeneration (AMD) in the AMD Ryan Initiative Study (ARIS)	Jeong W Pak Abstract Author Block: *Jeong Pak, Gelique Ayala, Cynthia Hurtenbach, Christine Orndahl, Tiarnan Keenan, Frederick Ferris, Traci Clemons, Emily Chew, Amitha Domalpally

Departmental Activities

Association for Research in Vision and Ophthalmology

2023 Annual Meeting



Department of Ophthalmology
and Visual Sciences

UNIVERSITY OF WISCONSIN
SCHOOL OF MEDICINE AND PUBLIC HEALTH

Monday, April 24, 2023 (cont.)

3:15-5:00 PM Session 126 Poster # C0277	Reported Barriers to Obtaining Eye Exams Among Patients with Diabetes in the All of Us Dataset	Brandon Grover Abstract Author Block: *Brandon Grover, Roomasa Channa, Mozhdeh Bahrainian
3:15-5:00 PM Session 127 Poster # C0351	Bim Expression Modulates Choroidal Endothelial Cell Proangiogenic and Inflammatory Phenotype	Christine Sorenson Abstract Author Block: *Christine Sorenson, Yong-Seok Song, Nader Sheibani

Tuesday, April 25, 2023

8:45-10:30 AM Session 142 Poster #B0101	A Comparison of Neovascular Age-Related Macular Degeneration Features in OCT and Fluorescein Angiography	Jordan Winkler Abstract Author Block: *Jordan Winkler, Rachel Linderman, Jeong Pak, Mary Wilda, Rick Volland, Amitha Domalpally, Barbara Blodi
8:45-10:30 AM Session 145 Poster #B0336	Laboratory-Made Needle for Suprachoroidal Injections in Living Animals and Human Eye Bank Eyes	Alexander Katz Abstract Author Block: *Alexander Katz, Christian Kim, Nicole Duncan, Heather Potter, Charlene Kim, Carol Rasmussen, Christopher Murphy, T Michael Nork
8:45-10:30 AM Session 146 Poster #B0478	Dipeptidyl Peptidase 4 Inhibitors for Type 2 Diabetes and Relationships to Diabetic Macular Edema	Alexander Phu Abstract Author Block: *Alexander Phu, Mark Banghart, Mozhdeh Bahrainian, Risa Wolf, Roomasa Channa
8:45-10:30 AM Session 147 Poster #B0484	Total Retinal Thickness is an Important Factor in Evaluating Diabetic Retinal Neurodegeneration	Noor-Us-Sabah Ahmad Abstract Author Block: *Noor-Us-Sabah Ahmad, Kristen Staggers, Kyungmoo Lee, Amitha Domalpally, Benjamin Frankfort, Roomasa Channa
8:45-10:30 AM Session 147 Poster #B0493	Imaging Features of Intraretinal Microvascular Abnormalities in Diabetic Retinopathy	Christian Kim Abstract Author Block: *Christian Kim, Jeong Pak, Nancy Barrett, Nicole Duncan, Mary Wilda, Kristi Dohm, Jen Heathcote, Barbara Blodi, Rick Volland, Amitha Domalpally
8:45-10:30 AM Session 147 Poster #B0494	Comparison of 7M, Clarus and Optos Ultrawide Field Imaging Systems for Diabetic Retinopathy Assessment	Nicole Duncan Abstract Author Block: *Nicole Duncan, Christian Kim, Nancy Barrett, Sheila Watson, Andy Ewen, Lauren Kroth, Rick Volland, Amitha Domalpally, Barbara Blodi

Departmental Activities

Association for Research in Vision and Ophthalmology

2023 Annual Meeting



Department of Ophthalmology
and Visual Sciences

UNIVERSITY OF WISCONSIN
SCHOOL OF MEDICINE AND PUBLIC HEALTH

Tuesday, April 25, 2023 (cont.)

9:00-9:15 AM Paper Presentation Session #133 Room: R04-R05	The Role of Endocytosis in DAMP-Activated TLR4 Signaling in the Trabecular Meshwork	Colleen McDowell Abstract Author Block: *Colleen McDowell, Philip Mzyk
9:45-10:05 AM Mini-symposium Presentation #2462 Room 244	Establishing Input-Output Connections of Mammalian Retinal Bipolar Cells	Mrinalini Hoon
11:45 AM-1:30 PM Session 178 Poster #C0360	In-Depth Molecular Characterization of Retinal Organoids From Pig Pluripotent Stem Cells	Kimberly Lauren Edwards Abstract Author Block: *Kimberly Edwards, Praveen Susai Manickam, Tyler-Serie Ganser, Michael Philipps, Li-Fang Chu, David Gamm
11:45 AM-1:30 PM Session 178 Poster #C0366	Incorporation of hPSC-Derived Photoreceptors and RPE Cells Into Microfabricated, Honeycomb -Patterned Microscaffolds for Outer Retinal Reconstruction	Agustin Luz Madrigal Abstract Author Block: *Agustin Luz Madrigal, In-Kyu Lee, Ruosen Xie, Seunghwan Min, Jingcheng Zhu, Jiahe Jin, Allison L. Ludwig, M. Joseph Phillips, Shaoqin Gong, Zhenqiang Ma, David Gamm
11:45 AM-1:30 PM Session 355 Poster #C0415	Defining the Molecular Signature of Red/Green Cone Photoreceptor Precursors Using a Novel Human Pluripotent Stem Cell (hPSC) Cone-Rod Reporter Line	Praveen Joseph Susai Manickam Abstract Author Block: *Praveen Joseph Susai Manickam, Elizabeth Capowski, Michael Philipps, Steven Mayerl, Kimberly Edwards, Mai Xiong, Maria Fernandez Zepeda, Emma Nelson, David Gamm
3:30-5:15 PM Moderator Poster Session Posters B0231-B0280	Aqueous Humor Dynamics, Trabecular Meshwork and Ciliary Body 2	Gillian J McLellan
3:30-5:15 PM Session 195 Poster #B0247	Early Life Trabecular Meshwork Pathology Associated with LTBP2 Mutation in a Feline Model of Primary Congenital Glaucoma (PCG)	Odalys Torne Abstract Author Block: *Odalys Torne, Kazuya Oikawa, Leandro Teixeira, Julie Kiland, Gillian McLellan
3:30-5:15 PM Session 195 Poster #B0248	Isolation and Culture of Normal and Glaucomatous Feline Trabecular Meshwork Cells (TMCs)	Virginia Mathu Abstract Author Block: *Virginia Mathu, Kara Vogel, Kazuya Oikawa, Odalys Torne, Julie Kiland, Andy Smith, Colleen McDowell, Gillian

Departmental Activities

Association for Research in Vision and Ophthalmology

2023 Annual Meeting



Department of Ophthalmology
and Visual Sciences

UNIVERSITY OF WISCONSIN
SCHOOL OF MEDICINE AND PUBLIC HEALTH

Tuesday, April 25, 2023 (cont.)

3:30-5:15 PM Session 196 Poster #B0294	Presynaptic Inhibition Regulates Light Responses Across Retinal Circuits	Jenna Nagy Abstract Author Block: *Jenna Nagy, Mrinalini Hoon, Raunak Sinha
3:30-5:15 PM Session 204 Poster #C0475	Multimodal Evaluation of Subfoveal Location of Geographic Atrophy (GA)	Jesse Ward Abstract Author Block: *Jesse Ward, Jeong Pak, Rick Voland, Barbara Blodi, Amitha Domalpally

Wednesday, April 26, 2023

10:30AM-12:15 PM Moderator Paper Session #206 Room: R01	Physiology/Pharmacology: Trabecular Meshwork and Retina/RPE	Colleen M McDowell
10:30AM-12:15 PM Session 217 Poster #B0128	Intravitreal AAV2 Gene Delivery to Feline Retinal Ganglion Cells (RGCs)	Kazuya Oikawa Abstract Author Block: *Kazuya Oikawa, Julie Kiland, Seth Eaton, Odalys Torne, Virginia Mathu, Robert Nickells, Gillian McLellan
10:30AM-12:15 PM Session 229 Poster #C0137	Factors Influencing Teleophthalmology Use for Diabetic Eye Screening in Urban Latinx Communities	Christian Pelayo Abstract Author Block: *Christian Pelayo, Maria Mora Pinzon, Loren Lock, Juan Garcia, Christina Fowlkes, Chloe Stevens, Nora Jacobson, Yao Liu
10:30AM-12:15 PM Session 229 Poster #C0146	Evaluating Return on Investment: Downstream Revenue in a Teleophthalmology Program for Diabetic Eye Screening	Tammy Zhong Abstract Author Block: *Tammy Zhong, Loren Lock, Christina Fowlkes, Christian Pelayo, Chloe Stevens, Yao Liu
11:45 AM-12:00 PM Paper Presentation Session #213 Room: 255-257	Accommodative Movements of the Lens, Cistern and Vitreous Fluid	Mary Ann Croft Abstract Author Block: *Mary Ann Croft, Gregg Heatley, T Michael Nork, Jared McDonald, Alexander Katz, Paul Kaufman
12:00-12:15 PM Paper Presentation Session #210 Room: 243	Corneal Application of rAAV-Delivered Ribozymes that Target the LAT of HSV-1 Significantly Reduce Viral Reactivation in the Eye	Donna Neumann Abstract Author Block: *Donna Neumann, David Bloom, Pankaj Singh, Mason Shipley

Departmental Activities

Association for Research in Vision and Ophthalmology
2023 Annual Meeting



Department of Ophthalmology and Visual Sciences

UNIVERSITY OF WISCONSIN
SCHOOL OF MEDICINE AND PUBLIC HEALTH

Wednesday, April 26, 2023 (cont.)

2:15-2:30 PM Paper Presentation Session #237	TIE1 Gene Variants Identified in Patients with Childhood Glaucoma	Terri Young Abstract Author Block: *Terri Young, Kristina Whisenhunt, Sean Martin, Yasmin Bradfield, Simone Finzi, Stuart Tompson
2:15-4:00 PM Moderator Posters C0225-C0246	Animal Models	Kazuya Oikawa
2:15-4:00 PM Session 254 Poster #C0222	Characterization of Unique Bilateral Optic Atrophy in a Cynomolgus Macaque	Aileen Rowland Abstract Author Block: *Aileen Rowland, Paul Miller, Alex Katz, Hugh Wabers, Charlene Kim, Carol Rasmussen, Ken Waller, Peter Sonnentag, James Ver Hoeve, T. Michael Nork
2:15-4:00 PM Session 257 Poster #C0349	Characterization of KCNQ Sub-Types in the Mouse Retinal Neurons	Sehrish Afsheen Abstract Author Block: *Sehrish Afsheen, Pawan Shahi, Bikash Pattnaik

Thursday, April 27, 2023

8:00 AM–9:45 AM Session 261 Poster #B0148	Risk Factors and Outcomes of Surgical Interventions in Scleritis Patients	Laura Kopplin Abstract Author Block: *Laura Kopplin, Karen Armbrust
8:28-8:42 AM Symposium Session #307 Room: Great Hall	Presbyopia: Understanding the Biological Contributions of Aging and Sex	Paul Kaufman
10:30 AM-12:15 PM Moderator- Paper Session #273 Room: R02-R03	Modeling Inherited Retinal Disease	Divya Sinha
10:30 AM–12:15 PM Session 286 Poster #B0222	Visual Electrophysiologic Correlates of Intra-uterine Exposure to ZIKA Virus in a Non-Human Primate Model	James Ver Hoeve Abstract Author Block: *James Ver Hoeve, Charlene Kim, Nick Krabbe, Elaina Razo, T Michael Nork, Carol Rasmussen, Alexander Katz, Karla Ausdernau, Emma Mohr