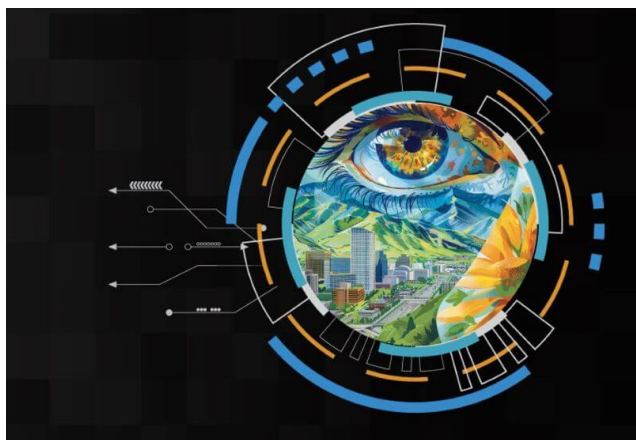




Wills Eye Hospital at ARVO 2025 Annual Meeting

Congratulations to the Wills Eye Attendings/Faculty and Trainees who are delivering **42** presentations (3 papers and **39** posters) at this year's Annual meeting.

SATURDAY, MAY 3RD	
8:00 AM – 5:30 PM	
<u>SPECIAL EDUCATIONAL SESSION:</u> Imaging in the Eye	
<u>Poster Session:</u> Fundamental and Pre-Clinical Research	
Poster # PB00127 Abstract 1	Longitudinal Changes in OCT-Derived Ocular Parameters in Healthy Rhesus Macaques *Jacob Lester, Arturo Barron Arrambide, Armando Burgos-Rodriguez, Gabriela Schwantes, Ezekiel Ede, Prabha Nepal, Sohaib Fasih-Ahmad, Loan Huynh, Ronald Zambrano, Ting Fang Lee, Joel Schuman, Amanda Melin, James Higham, John Danias, Gadi Wollstein.
<u>Poster Session:</u> Retina	
Poster # PB0039 Abstract 2	Deep Learning for Standardized Vessel Segmentation in Vis-OCT Imaging *Christian Raimondo, Alisha Desai, Loan Huynh, Ronald Zambrano, Jacqueline Chen, Batsheva Rubin, Catherine Lalman, Roman Kuranov, Weija Fan, Fengyuanshan Xu, Raymond Atkinson, Fabio Lavinsky, Gadi Wollstein, Hao Zhang, Joel Schuman
<u>Poster Session:</u> Glaucoma	
Poster # PB0048 Abstract 3	The Hypotenuse of the Vertical Optic Nerve Head Cup as an Indicator of Glaucoma Progression *Andrea Bao, Ryan Lamrani, Fabio Lavinsky, Ting Fang Lee, Riya Patel, Jaime Guedes, Ronald Zambrano, Gadi Wollstein, Joel Schuman

Poster # PB0049 Abstract 4	OCT Cluster Analysis of the Peripapillary Nerve Fiber Layer: A Novel Strategy for Deviation Map Quantification *Fabio Lavinsky, Fernanda Fujihara, Pedro Luz, Diego Rajchenberg, Jaco Lavinsky, Monica Oliveira, Augusto Paranhos Jr, Rodrigo Lindenmeyer, Helena Pakter, Gadi Wollstein, Joel Schuman, Daniel Lavinsky
Poster # PB0050 Abstract 5	Repeatability of OCT-Based Measurements of Lamina Cribrosa Microstructures Under Different IOP Settings. *Ezekiel Ede, Gabriela Schwantes, Ting Fang Lee, Ronald Zambrano, Prabha Nepal, Jacob Lester, Sohaib Fasih-Ahmad, Joel Schuman, John Danias, Gadi Wollstein
Poster # PB0053 Abstract 6	Structural and Functional Progression Before and After Trabeculectomy Stratified by Postoperative IOP Level *Jacqueline Chen, Fabio Lavinsky, Ting Fang Lee, Loan Huynh, Ronald Zambrano, Gadi Wollstein, Joel Schuman.
Poster # PB0060 Abstract 7	A machine learning approach to detect RNFL progression from electroretinograms (ERG) in an experimental glaucoma model. *Ronald Zambrano, Loan Huynh, Gabriela Schwantes, Prabha Nepal, Sohaib Fasih-Ahmad, Ezekiel Ede, Jacob Lester, Arturo Barron Arrambide, Leon Kamen, Arthur G. Fernandes, Ting Fang Lee, Fabio Lavinsky, John Danias, Joel Schuman, Gadi Wollstein
Poster # PB0062 Abstract 8	Comparison of Novel Deep Learning and Existing Automated Techniques for Lamina Cribrosa Pore Segmentation *Allison Toyos, Wei-Chun Lin, Gabriela Schwantes, Jin Ming Lin, Palaiologos Alexopoulos, Anse Vellappally, Leon Kamen, Arturo Barron Arrambide, Arthur G. Fernandes, Armando Burgos-Rodriguez, Ronald Zambrano, Fabio Lavinsky, Hiroshi Ishikawa, Joel Schuman, John Danias, Gadi Wollstein
<u>Paper Session:</u> Glaucoma and Anterior Eye	
Presentation 11:00 – 11:15 AM Abstract 9	In Vivo 3D Mapping of Lamina Cribrosa Stretch Distribution Gabriela Cavagnoli Schwantes, Loan Huynh, Ronald Zambrano, Tim K. Chung, Jonathan P. Vande Geest, Arthur G. Fernandes, Amanda Melin, James Higham, Armando Burgos-Rodriguez, Joel S. Schuman, John Danias, Gadi Wollstein

SUNDAY, MAY 4TH

8:00 – 9:45 AM

Poster Session: Corneal Surgery I

Poster # A0265 Abstract 10	Risk factors for corneal graft rejection or failure after penetrating keratoplasty in eyes with previous incisional glaucoma surgery *Eric Boya Lee, Eric Shiuey, Wesam Shalaby, Aakriti Shukla, Zeba Syed
<u>Poster Session:</u> Vitreoretinal surgery and retinal detachment I	

Poster # A0516 <i>Abstract 11</i>	Long-Term Outcomes of Pars Plana Vitrectomy and Scleral-Fixated Intraocular Lens Using Gore-Tex Sutures *Luis Acaba-Berrocal, Jake Mathew, Omesh Gupta
<u>Poster Session:</u> AMD: Epidemiology, Treatment and service delivery	
Poster # B0160 <i>Abstract 12</i>	Disparities in presentation and initiation of anti-VEGF therapy for neovascular age-related macular degeneration: An analysis of the Academy IRISÂ® Registry *Binod Acharya, Bita Momenaei, Qiang (Ed) Zhang, Leslie Hyman, Julia A. Haller
<u>Poster Session:</u> Glaucoma: Posterior segment and optic nerve imaging	
<u>Moderators:</u> Wendy Lie, Gadi Wollstein	
Poster # B0286 <i>Abstract 13</i>	Association between Structural Changes in the Optic Nerve Head and Lamina Cribrosa Microstructure in an Experimental Glaucoma Animal Model *Sohaib Fasih-Ahmad, Loan Huynh, Gabriela Schwantes, Ronald Zambrano, Leon Kamen, Ezekiel Ede, Prabha Nepal, Jacob Lester, Palaiologos Alexopoulos, TingFang Lee, Joel S. Schuman, John Danias, Gadi Wollstein
Poster # B0291 <i>Abstract 14</i>	Minimum IOP Change Required to Induce Ocular Structural Changes Beyond OCT Measurement Variability *Ezekiel Ede, Gabriela Schwantes, TingFang Lee, Ronald Zambrano, Prabha Nepal, Leon Kamen, Jacob Lester, Sohaib Fasih-Ahmad, Joel S. Schuman, John Danias, Gadi Wollstein
<u>Poster Session:</u> Glaucoma: Applications of AI, machine learning, large language models and computational science	
Poster # B0358 <i>Abstract 15</i>	Predicting change in visual field mean deviation (MD) using Normalized Compression Distances between 3D OCT images and Machine Learning *Loan Huynh, Ronald Zambrano, Jacqueline L. Chen, Joel S. Schuman, Gadi Wollstein, Andrew R. Cohen
1:00 - 2:45 PM	
<u>Poster Session:</u> Machine Learning for Segmentation and Other Applications	
Poster # A0205 <i>Abstract 16</i>	An automated deep learning approach for 3D segmentation of Schlemm's Canal in healthy and glaucomatous eyes *Ronald Zambrano, Loan Huynh, Gabriela Schwantes, Ryan Lamrani, Taylor Harwood, Ezekiel Ede, Fabio Lavinsky, Lawrence Kagemann, TingFang Lee, Kevin Choy, Sina Farsiu, Andrew R. Cohen, Bhavna Antony, Gadi Wollstein, Joel S. Schuman
Poster # A0238 <i>Abstract 17</i>	A Novel Deep Learning Model for Automated Lamina Cribrosa Pore Segmentation *Allison Toyos, Wei-Chun Lin, Gabriela Schwantes, Jin Ming Lin, Palaiologos Alexopoulos, Anse Vellappally, Leon Kamen, Arturo Osvaldo Barron Arrambide, Arthur Fernandes, Armando Burgos-Rodriguez, Hiroshi Ishikawa, Joel S. Schuman, John Danias, Gadi Wollstein
<u>MINISYMPOSIUM:</u> The translational scientist: Building programs for a brighter future	
<u>Moderators:</u> Martina C Herwig-Carl, Tatyana Milman	

3:15 – 5:00 PM

Poster Session: Patient reported outcome measures, quality of life and implementation

Poster # B0245
Abstract 18

Chloroprocaine hydrochloride ophthalmic gel anesthesia for intravitreal injection
***Kate Spirn, Sarah Fineman, Richard Kaiser**

MONDAY, MAY 5TH

8:30 – 10:15 AM

Poster Session: Glaucoma Epidemiology, Risk Factors, and Social Determinants

Poster # B0415
Abstract 19

The Association between Neighborhood Area Deprivation Index (ADI) and Functional or Structural Parameters at Presentation for Patients who underwent Minimally Invasive Glaucoma Surgery (MIGS)

***Sefy A. Paulose, Jacqueline L. Chen, TingFang Lee, Fabio Lavinsky, Ronald Zambrano, Joel S. Schuman**

Poster Session: Advances in Glaucoma Diagnostics, Comorbidities, and Clinical Outcomes

Poster # B0427
Abstract 20

Socioeconomic Status and Functional Parameters at Presentation and at the Visit Before Surgery for Patients who underwent Tube Shunt Surgery

***Kevin Zhang, Jacqueline Chen, Ting-Fang Lee, Fabio Lavinsky, Ronald Zambrano, Joel S. Schuman**

Poster Session: AI in Retina I

Poster # B0462
Abstract 21

Readability of retina patient education materials generated with a large language model

***Turner David Wibbelsman, Randy Calotti, Martin Calotti, Mak B. Djulbegovic, Nikhil Bommakanti, Theodore Bowe, David T. Gonzalez, Yoshihiro Yonekawa, Allen Ho**

3:00 – 4:45 PM

Poster Session: Adaptive optics, microscopy, MRI, ultrasound, and other imaging technologies

Poster # A0046
Abstract 22

Normative OCT-Derived Ocular Parameters and Their Relationship to Image Quality and Demographic Features in Healthy Rhesus Macaques

***Jacob Lester, Arturo Osvaldo Barron Arrambid, Armando Burgos-Rodriguez, Gabriela Schwantes, Ezekiel Ede, Prabha Nepal, Sohaib Fasih-Ahmad, Ronald Zambrano, Amanda Dawn Melin, James Higham, TingFang Lee, Joel S. Schuman, John Danias, Gadi Wollstein**

Poster # A0047
Abstract 23

Do Cynomolgus and Rhesus Macaques Have Similar Retinal and Optic Nerve Head Structure and Biomechanics?

***Prabha Nepal, Gabriela Schwantes, TingFang Lee, Ronald Zambrano, Ezekiel Ede, Leon Kamen, Jacob Lester, Sohaib Fasih-Ahmad, Joel S. Schuman, Jonathan Pieter Vande Geest, John Danias, Gadi Wollstein**

Poster Session: Diabetic Macular Edema: Anti-VEGF

Poster # B0081
Abstract 24

Proportion of Eyes Achieving Absence of Diabetic Macular Edema and Very Good Vision: A Post Hoc Analysis of the Diabetic Retinopathy Clinical Research Network Protocol AC

***Bita Momenaei, Raziye Mahmoudzadeh, Mirataollah Salabati, Hannah J. Lee, Jason Hsu**

TUESDAY, MAY 6TH

1:15 – 3:00 PM

Paper Session: Glaucoma: Ocular blood flow and vascular pathophysiology

Presentation
2:30-2:45 PM
Abstract 25

Using OCT Angiography to Predict Visual Field Changes in Glaucoma

***Andrea Bao, Fabio Lavinsky, Qiang (Ed) Zhang, Jacqueline L. Chen, Denisse Mora, Loan Huynh, Ronald Zambrano, Gadi Wollstein, Joel S. Schuman**

3:30 – 5:15 PM

Poster Session: Diabetic Macular Edema. Clinical research

Poster # B0020
Abstract 26

Ultra-responders to faricimab: ≥ 4 -step improvement in diabetic retinopathy severity in YOSEMITE/RHINE

***Samir Narendra Patel, Michael Klufas, Jason Hsu, Alexandra Warter, Nicholas Dagincourt, Kara Gibson**

WEDNESDAY, MAY 7TH

10:15 AM – 12:00 PM

Poster Session: AMD 4 (clinical research)

Poster # A0103
Abstract 27

Microglia-induced neuronal injury attenuation with C1q Inhibition: Outcomes in Geographic Atrophy (GA) and Huntington's Disease (HD)

***Ajay Kuriyan, Scott Borland, Kim Reed**

Poster Session: Thyroid and Neuro Ophthalmology

Poster # A0407
Abstract 28

Retrospective Clinical Analysis of Non-Arteritic Anterior Ischemic Optic Neuropathy (NAION) in Patients Using Semaglutide

***Danijel Josip Pericic, Ari Hayden August**

Poster Session: Expanding disease genotype and phenotype

Poster # B0009
Abstract 29

Genetic Susceptibility to Ocular Sarcoidosis: A Comparative Analysis of Genome-Wide Association Studies

***Ari Hayden August, Jose S. Pulido**

2:00 – 3:45 PM

<u>Poster Session:</u> Retinal Vascular Diseases (excluding diabetic retinopathy) and Retinopathy of Prematurity II	
Poster # A0027 Abstract 30	Faricimab for Coats Disease *Flavius Beca, Emmanuel Chang, Luis Acaba-Berrocal, Sami H. Uwaydat, Yoshihiro Yonekawa
<u>Poster Session:</u> Glaucoma: Lasers and surgery	
Poster # B0264 Abstract 31	The Impact of Prior Selective Laser Trabeculoplasty on Goniotomy Outcomes in Glaucoma Patients *Steven Chang, Rohit Reddy, Ishan Kasat, Annie Zhang, Joel S. Schuman, Jonathan S. Myers, Ping Huang

THURSDAY, MAY 8TH

8:00 – 9:45 AM

<u>Poster Session:</u> Glaucoma: Ocular blood flow and vascular pathophysiology	
Poster # B0238 Abstract 32	The Association Between Vasculature and Oxygenation Measured by OCT-Angiography and Visible Light OCT *Riya Patel, Fabio Lavinsky, Ronald Zambrano, TingFang Lee, Andrea Bao, Alisha Desai, Raymond Fang, Weijia Fan, Gadi Wollstein, Hao Zhang, Joel S. Schuman
<u>Poster Session:</u> Glaucoma: Visual Fields and other functional testing	
Poster # B0268 Abstract 33	Precision, Accuracy, and Adherence for At-Home Clustered Visual Field Testing Using a New Psychophysical Procedure *Batsheva Rubin, Taylor Harwood, Ronald Zambrano, Fabio Lavinsky, Gadi Wollstein, Benjamin T. Backus, James Blaha, Manish Gupta, Thaddeus Czuba, Corinne Shiu, Michael Deiner, Yvonne Ou, Joel S. Schuman
<u>Poster Session:</u> Image Processing and Machine Learning for Classification	
Poster # A0279 Abstract 34	Analysis of the Lamina Cribrosa: A Comparison of OCT Image Processing Methods *Gabriela Cavagnoli Schwantes, Ronald Zambrano, Ezekiel Ede, Sohaib Fasih-Ahmad, Jacob Lester, Prabha Nepal, TingFang Lee, Joel S. Schuman, John Danias, Gadi Wollstein
<u>Poster Session:</u> Telemedicine, health service delivery and health economic studies	
Poster # B0360 Abstract 35	Characteristics of Patients Who Were Dismissed from A Retina Practice *Roselind Ni, Bitu Momenaei, Olufemi Adams, Michael K. Nguyen, Jose S. Pulido, Jason Hsu
11:45 AM – 1:30 PM	
<u>Poster Session:</u> Ocular Trauma	
Poster # B0223 Abstract 36	Intraocular foreign body presentation, management and clinical outcomes: a seven-year experience *Randy Calotti, Turner David Wibbelsman, Martin Calotti, Theodore Bowe, Collin Richards, Jordan Deaner, Allen Ho, Samir Narendra Patel

Poster Session: Glaucoma: Tools & advancements in diagnosis, monitoring, telemedicine, and clinical decision making

Poster # B0324
Abstract 37

Myopia and Glaucoma: Accounting for OCT Assessed Retinal Thickness

***Ryan Lamrani, Qiang (Ed) Zhang, Fabio Lavinsky, Ronald Zambrano, Gadi Wollstein, Joel S. Schuman**

11:45 AM – 12:30 pm

Paper Session: Retina Miscellaneous Clinical

**Presentation
12:15 – 12:30 PM
Abstract 38**

Endophthalmitis Rates among Medicare Beneficiaries undergoing Retina Surgery between 2016-2022

***Sidra Zafar, Chen Dun, Cindy Xinji Cai, Oliver Schein, Fasika Woreta**

ON DEMAND

Presentation # OD104

Efficacy of prophylactic laser treatment of lattice degeneration in the fellow eyes of patients with retinal break(s) in the first eye

***Julia Wu, Roselind Ni, Bitu Momenaei, Jason Hsu**

Presentation # OD91

Adverse Events Associated with Injection of Suprachoroidal Triamcinolone Acetonide in the Real-World Setting

***Jamie Nassur, Saif Hamdan, Sidra Zafar, Martin Calotti, Jordan Deaner**

Presentation # OD106

Appropriateness and Readability of ChatGPT-4-Generated Responses for Retinopathy of Prematurity

***Kristine Y. Wang, Bitu Momenaei, Taku Wakabayashi, Emmanuel Chang, Eric Nudleman, Yoshihiro Yonekawa**

Presentation # OD26

Epidemiology of Consumer Product-Related Eye Injury in the United States Incarcerated Population

***Aneesh Poli Reddy, David Mothy, Hassaam S. Choudhry, Mohammad Hossein Dastjerdi**