

ARVO 2017

GLOBAL CONNECTIONS IN VISION RESEARCH | MAY 7 – 11 | BALTIMORE

Continuing Medical Education Program Information and Sessions List

Statement of need

Ophthalmic researchers and physicians are many times unaware of and/or have limited exposure to the most recent research advances in vision and ophthalmology. This research continuously evolves toward enhancing the general understanding of the eye and visual systems, which gives rise to new pre-clinical treatment options, and revised standards of practice. Exposure to this new information is a critical first step in enhancing the understanding of basic eye functions and vision disease processes.

Target audience

The educational design of this activity addresses the needs of basic researchers, clinician-scientists, ophthalmologists, ophthalmology residents, optometrists, post-doctoral fellows, graduate students, PhD candidates, medical students and research assistants/associates involved in the treatment of patients with eye and vision diseases and disorders.

Educational objectives

After participating in this CME activity, participants should be able to:

- Discuss the results of basic and clinical ophthalmology investigations and vision research underway, relevant to my area of interest or practice.
- Describe new models and methods being used by researchers and practitioners in eye and vision science.
- Cite ways in which new research data and methods may influence my research and/or practice.
- Discuss prospective advancements in eye and vision research and/or practice.

Physician Accreditation Statement

The Association for Research in Vision and Ophthalmology (ARVO) is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Physician Credit Designation

ARVO designates this live activity for a maximum of 29.75 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

International Attendees: The American Medical Association (AMA) has determined that physicians not licensed in the U.S. who participate in CME activities are eligible for *AMA PRA Category 1 Credit™*.

CME credits and certificate fee

	Advance	Onsite
MIT, Student Non-Member	\$29	\$29
Member, Non-Member, Exhibitor (paid full-meeting access badge)	\$49	\$69
Exhibitor (complimentary full-meeting access badge only)	\$89	\$89

Instructions to receive credit and/or certificates

Attendees interested in claiming *AMA PRA Category 1 Credits™* for attendance at the ARVO Annual Meeting must pay the CME credits and certificates fee. Payment is collected during the registration process. Upon payment of this amount, an account will be created in our CME credit system allowing you to submit session evaluations and indicate the extent of your participation in each session. You will receive an email from “ARVO 2017 CME” with login information after the start of the Annual Meeting or within two business days of your purchase (whichever is later). Only attendees with a paid account will be able to claim credit for the 2017 Annual Meeting.

All requests for credit must be submitted no later than 11:59pm U.S. Eastern Time on Thursday, Aug. 31, 2017. Certificates are official. You will not receive additional documentation.

Certificate of Participation*

ARVO is accredited to offer *AMA PRA Category 1 Credits™* to physicians. All other participants may receive a Certificate of Participation that documents the number of CME hours attended* by following the same instructions listed above and paying the CME credits and certificates fee.

*Some accrediting agencies may award equivalent Continuing Education (CE) credit when presented with a Certificate of Participation from an activity that offered *AMA PRA Category 1 Credit™*. Check with your accrediting agency for information. Questions? Email: education@arvo.org

Certificate of Attendance

Certificates of attendance are available free to all attendees. These certificates state that one has attended the Annual Meeting; but does not offer credit tracking. They will be available for pick-up onsite at the meeting registration desk and ARVO Central in the exhibit hall.

Disclaimer

The Annual Meeting provides a forum for the open exchange and discussion of research results and scientific advancements in the field of ophthalmology; however, ARVO makes no representation or warranty as to the truth, originality, or accuracy of the information presented at the meeting or in materials distributed in connection with them. Nor are the views expressed by the individual speakers necessarily the views of ARVO. ARVO supports the ACCME’s policy on evidence-based content and encourages faculty to adhere to these standards when planning a presentation.

Participants have an implied responsibility to use the newly acquired information to enhance patient outcomes and their own professional development. The information presented in this meeting is not meant to serve as a guideline for patient management. Any procedures, medications, or other courses of diagnosis or treatment discussed in this activity should not be used by clinicians without evaluation of patient conditions and possible contraindications on dangers in use, review of any applicable manufacturer’s product information, and comparison with recommendations of other authorities.

Disclaimer off-label use

The Annual Meeting may contain discussion of published and/or investigational uses of agents that are not indicated by the FDA. ARVO does not recommend the use of any agent outside of the labeled indications.

The opinions expressed in the educational activity are those of the faculty and do not necessarily represent the views of any organization associated with this activity. Please refer to the official prescribing information for each product for discussion of approved indications, contraindications and warnings.

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Disclosure information for faculty will be provided within initial disclosure slides, prior to the start of their respective presentations.

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The following activity managers have reported no financial relationships.

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CONTINUING MEDICAL EDUCATION SESSIONS

All Annual Meeting sessions certified as Continuing Medical Education (CME) and eligible for *AMA PRA Category 1 Credit™* are listed below with their associated faculty presenters. Presenters are listed in alphabetical order. For a complete list of all individuals involved with each research project, refer to the *Program Summary Book*.

The following 2017 Annual Meeting formats are not certified as Continuing Medical Education (CME) and are not eligible for *AMA PRA Category 1 Credit™*: ALCON/Keynote series, Award lectures, Posters, SiGs, Special sessions, Workshops and the Research Grant Administrators Program.

Sunday, May 7, 8:30 – 10:30am

Session #	Session Title	Location
101	Light-based treatment strategies for blinding eye disease <i>Dimitri Azar, Ed Boyden, Randolph Glickman, Tony Realini, Arun Singh, Brian Wilson</i>	Ballroom 3
102	Homologies between the brain and the eye: Can ocular researchers lead the way or are we following our 'brainy' colleagues? <i>Claude Bernard, Catherine Bowes Rickman, Sarah Coupland, Britta Engelhardt, Paul McMenemy, W. Daniel Stamer</i>	Ballroom 4

Sunday, May 7, 1:30 – 3:00pm

Session #	Session Title	Location
117	GEN Group: New tools and methodologies for ocular genetics: Promises and challenges <i>Chiea Chuen Khor, Stuart MacGregor, Eric Pierce, Carlo Rivolta, Anand Swaroop</i>	Ballroom 2

Sunday, May 7, 3:15 – 5:00pm

Session #	Session Title	Location
143	Retinal glia <i>Faizah Bhatti, Qianyi Luo, Nefeli Slavi, Levi Todd, Stefanie Wohl, Ting Zhang, Yikui Zhang</i>	Ballroom 1
144	Biochemistry and Molecular Biology of AMD <i>Barbara Braunger, Arkasubhra Ghosh, Nady Golestaneh, Emilie Heckel, Raffael Liegl, Laura Lorès de Motta, Qian Sun</i>	Ballroom 4
145	OCT Angiography in AMD <i>A. Yasin Alibhai, Steven Bailey, Enrico Borrelli, Nikolaos Giannakopoulos, Jost Laueremann, Carl Rebhun</i>	Hall G
146	Deep learning for image segmentation and classification <i>Forson Chan, Kunal Dansingani, Aaron Lee, Theodore Leng, S. Scott Whitmore, Yalin Zheng</i>	301

Session #	Session Title	Location
147	Genetics and modeling of lens and anterior segment anomalie – Minisymposium <i>John Gottsch, Robyn Jamieson, Salil Lachke, S. Amer Riazuddin, Elena Semina, Alan Shiels</i>	307
148	Frequency of Visual Impairment and Eye Disease and Their Risk Factors <i>Rupert Bourne, Leo Cubillan, Joshua Foreman, Rohit Khanna, Roberta McKean-Cowdin, Benedicte Merle, Meraf Wolle</i>	309
149	Systemic influences on ocular disease <i>Toshiaki Hirakata, Reiko Horai, Hyun Soo Lee, Zhijie Li, Stephanie Llop, H. Nida Sen, Anthony St. Leger</i>	310
150	Pharmacology and Cellular Mechanisms <i>Xiaomin Chen, Prabhavathi Maddineni, Claire Mitchell, Gaurang Patel, Ian Pitha, Valery Shestopalov</i>	316
151	Retinoblastoma: From Genetics and Pathology to Therapy <i>Alec Amram, Laura Asnaghi, Eunoo Bak, Jesse Berry, Anthony Daniels, Govindasamy Kumaramanickavel</i>	321
152	Nystagmus and Gaze Holding <i>Larry Abel, Richard Hertle, John Kelly, Frank Proudlock, Hyongsok Ryu, Mervyn Thomas, Avery Weiss</i>	324

Sunday, May 7, 5:15 – 7:15pm

Session #	Session Title	Location
164	Basic/Clinical lecture: Improving global eye health: Beating the odds for neglected and emerging diseases around the world <i>Tin Aung, Rubins Belfort, Paul Courtright, Brenda Gallie, Hugh Taylor, Sheila West</i>	Hall G

Monday, May 8, 8:30 – 10:15am

Session #	Session Title	Location
204	Common pathogenic role of inflammation in retinal diseases – Minisymposium <i>Steven Abcouwer, Sarah Doyle, Goldis Malek, Victor Perez, Andrew Taylor, Wai Wong</i>	Ballroom 1
206	Optic nerve regeneration: Barriers past and future – Minisymposium <i>Larry Benowitz, Jeffrey Goldberg, Daniel Goldman, Zhigang He</i>	Ballroom 4
207	AMD and anti-VEGF therapy <i>Paul Baird, Jason Hsu, Peter Kertes, Won Ki Lee, Anat Loewenstein, Daniel Martin, Cynthia Toth</i>	Hall G
209	Lens Development and Cell Biology <i>Lisa Brennan, M. Costello, Soma Dash, Jianguo Fan, Qiuli Fu, Rebecca McGreal, Meysam Yazdankhah</i>	307

Session #	Session Title	Location
210	Diseases and Protection <i>Mirella Barboni, Alun Barnard, Jasmina Cehajic Kapetanovic, Gregory Gauvain, Johnnie Moore-Dotson, Alisa Thavikulwat, Victoria Yang</i>	308
211	Genetic Epidemiology <i>Joan Bailey-Wilson, Stuart MacGregor, Abhishek Nag, Seang-Mei Saw, Milly Tedja, Robert Wojciechowski, Tien Wong</i>	309
213	Genotype-phenotype correlations, prevalence studies and novel gene defects <i>Rando Allikmets, Basamat Almoallem, Isabelle Audo, Frans Cremers, Alessia Fiorentino, Dror Sharon, Qingjiong Zhang</i>	314
215	Novel Imaging and Biomarkers for Ocular Tumors and Disease <i>Melanie Campbell, Chi-Chao Chan, Konstantin Kotliar, Oleg Nadiarnykh, Rajesh Rao, Hua Yang</i>	321

Monday, May 8, 11:00 – 12:45pm

Session #	Session Title	Location
226	Gene therapies <i>M. Dominik Fischer, Neena Haider, Susanne Koch, Thierry Leveillard, Margaret McDougal, Suddhasil Mookherjee, Patrizia Tornabene</i>	Ballroom 1
227	AMD imaging I <i>Magdalena Baratsits, Kate Grieve, Maged Habib, Ryan Larochelle, Carlos Moreira Neto, Andreas Pollreisz</i>	Ballroom 3
228	Imaging Posterior Segment and Progression <i>Tadamichi Akagi, Christopher Bowd, Ramin Daneshvar, Anna Dastiridou, Brad Fortune, Luke Saunders, Jayme Vianna</i>	Ballroom 4
229	Vitreoretinal interface and retinal detachment <i>Gabriel Gordon, Junyeop Lee, Dhruvesh Patel, Emilie Picard, Rodolfo Repetto, Mohammad Sadiq</i>	Hall G
230	IOP Measurement and Characterization I <i>J. Crawford Downs, David Friedman, Alexander Kokini, Xuyang Liu, Sean McCafferty, Brian Samuels, Bianca Nicolela Susanna</i>	301
231	RPE metabolism, autophagy and cell death <i>Dhanesh Amarnani, Sayantan Datta, Wei-Hua Lee, Hongwei Ma, Philip Mzyk, Huan Yang</i>	307
232	Ganglion cells <i>Onkar Dhande, Ryan Maloney, Paul Martin, Scott Nawy, Kaushambi Roy, Wen Yao Wang, Jasmine Yung</i>	308
233	Improving Eye Care Delivery <i>Tina Felfeli, Judith Goldstein, Emily Gower, Michael Huvad, Lisa Keay, Jamie Odden, Laura Pizzi</i>	309

Session #	Session Title	Location
235	Applications of adaptive optics for retinal imaging and visual function testing – Minisymposium <i>Stephen Burns, Jacque Duncan, Jennifer Hunter, Donald Miller, Ethan Rossi, William Tuten</i>	316
236	Optical coherence tomography in pediatric neuro-ophthalmology – Minisymposium <i>Robert Avery, Mays El-Dairi, Jack Gormley, Irene Gottlob, Anastasia Pilat, Frank Proudlock</i>	324

Monday, May 8, 1:00 – 2:30pm

Session #	Session Title	Location
251	LV Group: Reading with low vision: What we know and need to know <i>Vijaya Gothwal, Mi Young Kwon, Pradeep Ramulu, Gary Rubin</i>	308

Monday, May 8, 3:45 – 5:30pm

Session #	Session Title	Location
263	Corneal Development and Repair <i>Paola Bargagna-Mohan, Ricardo Gouveia, Carlo Iomini, Elena Koudouna, Li Ma, Mary Ann Stepp, Praveen Joseph Susaimanickam</i>	Ballroom 2
264	Biomarkers based on vasculature Imaging <i>Barbara Cortes, Thomas Hwang, ByungKun Lee, Yang Lu, Qingkai Ma, Matthew Muller, Jie Wang</i>	Ballroom 1
265	Inherited retinal diseases and mactel <i>Robert Koenekoop, Simone Mueller, Eric Pierce, Cecinio Ronquillo, Rupert Strauss, Mays Talib, Sanne Verbakel</i>	Ballroom 3
266	Neurodegeneration <i>Melissa Cooper, Jorge Luis Cueva Vargas, Lauren Davis, Rachel Fischer, Meredith Gregory-Ksander, Delaney Henderson, Yvonne Ou</i>	Ballroom 4
269	Cataractogenesis I <i>Muhammad Ali, Norman Kleiman, Dan Li, Xin Liu, Aditi Swarup, Yichen Wang, Jeremy Whitson</i>	307
270	The Impact of Low Vision on Mobility <i>Regina de Luna, Shirin Hassan, Carrie Huisingh, Robert Massof, Aleksandra Mihailovic, Alex Tam</i>	308
271	Molecular and biochemical mechanisms in retinal disorders <i>Wolfgang Baehr, Katie Bales, Gautami Das, Tanya Dilan, Dyah Karjosukarso, Shanu Markand, Diane Slusarski</i>	314
272	Mechanisms of accommodation <i>Atanu Ghosh, Katherine Knaus, Philip Kruger, Chunming Liu, Consuelo Robles, Marco Ruggeri, Irene Siso-Fuertes</i>	316

Session #	Session Title	Location
273	Corneal immunology and neuropathy <i>Joseph Catapano, Ali Djalilian, William Foulsham, Aubrey Hargrave, George Maiti, Maryam Tahvildari, Mark Yorek</i>	321

Tuesday, May 9, 8:30 – 10:15am

Session #	Session Title	Location
301	Corneal Imaging and Biomechanics <i>Kirill Larin, Kaleena Michael, Michael Pircher, Rushad Shroff, Brittany Simmons, Rene Werkmeister, Hongmin Zhang</i>	Ballroom 2
302	Angiogenesis <i>Saptarshi Biswas, Azza El-Remessy, Jean-Sebastien Joyal, Sergio Li Calzi, Ye Sun, Yanhong Wei, Jennifer Wilkinson-Berka</i>	Ballroom 1
303	Biomechanics I <i>Joseph Demer, Massimo Fazio, Rafael Grytz, Kapil Krishnan, Vijaykrishna Raghunathan, Cynthia Roberts, Joseph Sherwood</i>	Ballroom 3
304	Clinical Trials and Drug Studies II <i>Panayiota Founti, Albert Khouri, James Peace, Tony Realini, Janet Serle, Kavitha Srinivasan, Zhichao Wu</i>	Ballroom 4
305	Novel therapies and imaging techniques for retinal disorders – Minisymposium <i>Justis Ehlers, Elliott Sohn, Tim Stout, Masayo Takahashi, Budd Tucker, Nadia Waheed</i>	Hall G
306	Lens Physiology and Biomechanics I <i>Eric Beyer, Catherine Cheng, Mary Ann Croft, Lisa Ebihara, Xiaohua Gong, Jean Jiang, Kulandaiappan Varadaraj</i>	307
308	Photoreceptors: Cell Biology, Disease and Rescue <i>Michael Butler, Erik de Vrieze, Rachayata Dharmat, Steven Fliesler, Erwin van Wijk, Jingyu Yao, Lina Zelinger</i>	314
309	Surprising human visual processes revealed with advanced techniques <i>Pablo Artal, Antoine Barbot, Shrikant Bharadwaj, Silvestre Manzanera, John Pirog, William Tuten, Elaine Wells-Gray</i>	316
310	Uveal melanoma: From Clinical Trials to Molecular Mechanisms <i>James Augsburger, Chandrani Chattopadhyay, Sarah Coupland, Amy Scheffler, Eszter Szalai, Serdar Yavuziyigitoglu</i>	321

Tuesday, May 9, 11:00 – 12:45pm

Session #	Session Title	Location
325	ER stress and the unfolded protein response in ocular health and disease – Minisymposium <i>Marina Gorbatyuk, Stephanie Hagstrom, Jonathan Lin, Przemyslaw Mike Sapieha, Sarah Zhang, Gulab Zode</i>	Ballroom 1
327	Neuroprotection <i>Jessica Agostinone, Nicolas Belforte, Alejandra Bosco, Keith Martin, William McLaughlin, Ben Mead, Derek Welsbie</i>	Ballroom 4
328	Retinal Vascular Diseases and CSCR <i>Manuel Casselholm de Salles, Jennifer Lim, Ian MacCormick, Alexandre Matet, Michael Singer, Delu Song</i>	Hall G
330	Bipolar, Horizontal and Amacrine cells <i>Ivan Anastassov, Billie Beckwith-Cohen, Bart Borghuis, Lei-Lei Liu, Gregory Perrin, Teresa Puthussery, Shai Sabbah</i>	308
331	Understanding the Course and Risk Factors for Age-Related Macular Degeneration <i>Usha Chakravarthy, Emily Chew, Johanna Maria Colijn, Felix Grassmann, Julie Mares, Rachel Silver, Freekje Van Asten</i>	309
332	Going viral! <i>Daniel Carr, Homayon Ghiasi, Paul Kinchington, Dai Miyazaki, Pawan Kumar Singh, Paul Steptoe, Hongmin Yun</i>	310
333	Age-related changes in optics of the eye and vision – Minisymposium <i>Aki Kawasaki, Fabrice Manns, Allison McKendrick, Jos Rozema, Thomas Van Den Berg, James Wolffsohn</i>	316
334	Factors affecting ocular development <i>Jessica Eason, Jakub Famulski, Suzanne Michalak, Amrita Pathak, Fatemeh Rajaii, Nguyen Tram, Eric Weh</i>	321

Tuesday, May 9, 3:45 – 5:30pm

Session #	Session Title	Location
362	Corneal Tissue Engineering and Molecular Biology <i>Sayan Basu, Margarita Calonge, Heather Chandler, Gina Griffith, Winston Kao, Shoumyo Majumdar, Golnar Shojaati</i>	Ballroom 2
363	Macular degeneration-cell biology <i>Thomas Ach, Paul Bishop, So Goto, Elisabeth Obert, Magali Saint-Geniez, Peng Shang, Alison Szabo</i>	Ballroom 1

Session #	Session Title	Location
365	Capillaries, Blood Flow, OCT Angiography <i>Luis Alarcon-Martinez, Tailoi Chan-Ling, Luciano Custo Greig, Masoud Fard, Liang Liu, Takuhei Shoji, Kelvin Wan</i>	Ballroom 4
366	AMD imaging II and visual function <i>Saghar Bagheri, Deebea Husain, Marlene Sassmannshausen, Lydia Sauer, Ursula Schmidt-Erfurth, Wenlan Zhang</i>	Hall G
368	Beyond the retina: Central visual circuits – Minisymposium <i>Peter Campbell, Jess Cardin, Sandra Kuhlman, Aaron Mcgee, Tania Seabrook</i>	308
369	Refractive Error: Risk Factors to Intervention Studies <i>Catherine Jan, Xuejuan Jiang, Himal Kandel, Kristine Lee, Lucy Mudie, Adriana Roth, Katie Williams</i>	309
370	New Insights and Animal models <i>Fei Dong, Ana Fakin, Angela Gauthier, Ala Moshiri, Vincent Raymond, William Scott, Jesse Sundar</i>	314
371	Improving Retinal Imaging and Image Understanding- AO <i>Robert Cooper, Ann Elsner, James Feeks, Charles Granger, Andres Guevara-Torres, Zhuolin Liu, Kaitlyn Sapoznik</i>	316
372	Strabismus: Basic and Clinical <i>Zia Chaudhuri, Luisa Hopker, David Leske, Linda McLoon, Fatima Pedrosa Domellof, Suraj Upadhyaya, Janice Wensveen</i>	324

Wednesday, May 10, 8:30 – 10:15am

Session #	Session Title	Location
402	Dry Eye II <i>Maya Bitar, Ahmad Kheirkhah, Charity Lee, Stephen Pflugfelder, Tannin Schmidt, Adam Tanaka, Yuichi Uchino</i>	Ballroom 2
403	Stem Cells: new approaches and disease modeling <i>Lin Cheng, Aman George, Olivier Goureau, Maria Laggner, Peter Quinn, Ruchira Singh, Min Jae Song</i>	Ballroom 1
404	AMD clinical research <i>Kimberly Cocce, Christine Gonzales, Tim Krohne, Ines Lains, Wenqiang Liu, Marion Munk</i>	Ballroom 3
407	Inflammaging and eye – Minisymposium <i>Reza Dana, Stefano Gandolfi, Hani Levkovitch-Verbin, Wai Wong, Heping Xu</i>	301
408	Lens Epithelial Cells and PCO <i>Shannon Das, Linda Musil, Rooban Nahomi, Rasiyah Pratheepa Kumara, Mahbubul Shihan, Janice Walker, Michael Wormstone</i>	307

Session #	Session Title	Location
409	Corneal Endothelium and Fuchs Corneal Dystrophy <i>Ricardo Frausto, Thibaud Garcin, Viridiana Kocaba, Takako Onishi, Shivakumar Vasanth, Nelson Winkler, Takefumi Yamaguchi</i>	308
410	Vision and driving: Lessons learned and future directions – Minisymposium <i>Felipe Medeiros, Cynthia Owsley, Sheila West, Joanne Wood</i>	309
411	All of the eye is a stage and immune cells are merely players – Minisymposium <i>Florent Ginhoux, Gerard Lutty, Paul McMenamin, Daniel Saban, Florian Sennlaub</i>	310
413	New Genes and Loci <i>Pooja Biswas, Rui Chen, Jessica Cooke Bailey, Meha Kabra, Lin Li, Lev Prasov, Shi Song Rong</i>	321
414	Ambyopia II <i>Eileen Birch, Krista Kelly, Vivian Manh, Mayu Nishimura, Jaime Tejedor, Wen Wen, Bin Zhang</i>	324

Wednesday, May 10, 11:00 – 12:45pm

Session #	Session Title	Location
429	Corneal Epithelium in Health and Disease <i>Ying-Ting Chen, Che Connon, Christopher Hood, Mangesh Kulkarni, Rei Murakami, Jong Kook Park, Alexander Richardson</i>	Ballroom 2
432	Structure-Function Relationships I <i>Muhammed Alluwimi, Qian Cheng, C Gustavo De Moraes, Ingy Madi, Allison McKendrick, Kouros Nouri-Mahdavi, Rafaella Penteadó</i>	Ballroom 4
434	Membrane domains: Polarity, trafficking and assembly in the eye – Minisymposium <i>Vann Bennett, Silvia Finemann, Velia Fowler, Kate Keller, Jaya Rajaiya</i>	307
435	ERG:Advances, Disease and Injury <i>James Akula, Roa Al-Abdalla, Kirsten Anderson, Jan Kremers, J. Jason McAnany, Carla Osigian, Wadiah Zein</i>	308
436	Improving Care for Diabetic Retinopathy <i>Christopher Brady, Jacqueline Chua, Rishabh Date, Marta Garcia-Finana, Aditi Gupta, Anne Langguth, Cecilia Lee</i>	309
437	Basic investigations in the treatment of ocular infections <i>Sandamali Amarasingha Ekanayaka, Thomas Carion, Jonathan Chan, Natalya Doroshenko, Dinesh Jaishankar, Robert Shanks, Ting Wan</i>	310
438	Color vision, low vision <i>Susana Chung, Cord Huchzermeyer, Neruban Kumaran, Jay Neitz, Christina Schwarz, Caroline Seto, Merve Tuccar-Burak</i>	316

Session #	Session Title	Location
439	Intracranial Hypertension and Optic Nerve Changes <i>Isabelle Dortonne, Deepta Ghate, Sachin Kedar, Monica Okon, Virender Sachdeva, Patrick Sibony, Jui-Kai Wang</i>	324

Wednesday, May 10, 1:00 – 2:30pm

Session #	Session Title	Location
454	MOI Group: Advanced interpretation of structural retinal optical coherence tomography <i>Delia Cabrera DeBuc, Christine Curcio, David Garway-Heath, Donald Hood, Donald Miller</i>	Ballroom 2

Wednesday, May 10, 3:45 – 5:30pm

Session #	Session Title	Location
468	Conjunctiva, Lacrimal and Meibomian glands and contact lenses <i>Yosuke Asada, Jing Hua Bu, Darlene Dartt, Debarun Dutta, Maud Gorbet, Helen Makarenkova, Eisuke Shimizu</i>	Ballroom 2
469	An eye on the eye microvasculature – Minisymposium <i>Patricia D'Amore, Kaustabh Ghosh, Gerard Luttj, Enrique Rodriguez-Boulan, Nadia Waheed</i>	Ballroom 1
470	Retinopathy of Prematurity <i>J. Peter Campbell, Seema Emami, Chatarina Lofqvist, Graham Quinn, Travis Redd, Shivani Sinha, Brittany Wong</i>	Ballroom 3
471	Visual Fields, Vision Function, Psychophysics II <i>Andrew Tatham, Christopher Leung, Fabio Daga, Jared Sokol, Lilian Mohamed, Masaki Nakanishi, Moon Jeong Lee</i>	Ballroom 4
472	Clinical posterior segment imaging <i>Ross Chod, Ahmed Hagag, Amir Hariri, Shwetha Mangalesh, Dov Sebrov, Andrew Sill, Ruikang Wang</i>	Hall G
473	Drug delivery II <i>Brittany Coats, Morgan Fedorchak, Ding Lin, Ygal Rotenstreich, Sara Smith, Shigeo Tamiya</i>	301
475	The bench and the bedside: Who is the instructor? – Minisymposium <i>Peter Coffey, Dan Kastner, Kohji Nishida, Paul Sieving, Thomas Waldmann</i>	310
476	Ocular Transcriptomics and proteomics <i>Igor Butovich, Alecia Gross, Melissa Liu, Rinki Ratnapriya, Philip Ruzycki, Zeljka Smit-McBride, Christopher Starr</i>	314

Session #	Session Title	Location
477	Corneal Surgery: Techniques and outcomes <i>Lamis Baydoun, Claus Cursiefen, Silke Oellerich, Paulo Schor, Jun Shimazaki, David Tabibian</i>	316
478	Visual functions and processes conserved across species – Minisymposium <i>Belinda Chang, James Jester, Jon Kaas, Kristen Koenig, Jacob Sivak</i>	321

Thursday, May 11, 8:30 – 10:30am

Session #	Session Title	Location
501	Genes and disease: How knowledge of genetics can guide treatment, now and in the future <i>John Fingert, John Flannery, John Guy, Emine Kilic, Caroline Klaver, Tara Moore, David Valle</i>	Ballroom 3
502	The global problem of antibiotic resistance: Impact on ocular health worldwide and researching alternatives <i>Penny Asbell, Gautam Dantas, Prashant Garg, Mike Gilmore, Linda Hazlett</i>	Ballroom 4

Thursday, May 11, 11:30 – 1:15pm

Session #	Session Title	Location
524	Keratoconus: Basic Science and Clinical Applications <i>Jorge Alio del Barrio, Samantha Bradford, Vishal Jhanji, Sabine Kling, Yutao Liu, Rabab Sharif, Yumeng Wang</i>	Ballroom 2
525	Cellular and molecular bases of retinal development <i>Jeroen Bastiaans, Helena Lee, Jiamin Ouyang, Lauren Renner, Pawat Seritrakul, Nicholas Silva</i>	Ballroom 1
526	Surgery, Laser Therapy, Wound Healing <i>Yann Bouremel, Dolly Chang, Zhaoxing Dai, Gus Gazzard, Yuta Ueno, Bogomil Voykov, Tian Xia</i>	Ballroom 3
527	Novel methods and Mechanisms of Disease <i>Silvia Albert, Justin Branch, Walter Lukiw, Magda Meester, Riccardo Sangermano, Dana Schlegel, Tasneem Sharma</i>	Ballroom 4
528	Molecular pharmacology and ocular toxicology <i>Ivan Fernandez-Bueno, Caterina Gagliano, Nadine Gerber-Hollbach, William Johnson, Andrew Melchioris, Teemu Turunen</i>	301
529	Lens Biochemistry <i>Larry David, Xingjun Fan, Kirsten Lampi, Sanjay Mishra, Vatsala Sagar, Kevin Schey, K. Krishna Sharma</i>	307
530	Photoreceptors <i>Gordon Fain, Justin Grassmeyer, Shinya Sato, Onkar Sawant, Ulrich Schraermeyer, Xiangyi Wen, Xianshi Zhang</i>	308

Session #	Session Title	Location
531	Glaucoma: Frequency, Risk Factors, and Care <i>Pieter Bonnemaier, Stephanie Chen, Nikhil Choudhari, Paul Healey, Rene Hoehn, Pirro Hysi, Tzokit Zehavi-Dorin</i>	309
532	Genomics and proteomics to dissect normal and diseased ocular sites: an immunology and microbiology perspective <i>James Chodosh, Charles Eberhart, Jerome Ozkan, James Rosenbaum, Olof Sundin, Jonathon Young</i>	310
533	Biochemistry and Molecular Biology implicated in diabetic retinopathy and glaucoma <i>Inas Aboobakar, Maulasri Bhatta, Monika Deshpande, Leona Ho, Mao Nakayama, Johannes Schouten, David Stark</i>	314
534	Visual perception with defocus, distortions, and training <i>Maciej Bartuzel, Kevin Chan, Muhammad Hassan, Arun Krishnan, Aiswaryah Radhakrishnan, Lucie Sawides, Yukai Zhao</i>	316
535	Novel findings and approaches in myopia research <i>Regan Ashby, Christopher Clark, Quan Hoang, Yu Huang, Erica Landis, Seyyedhassan Paylakhi, Christopher Taylor</i>	321
536	Retinal Abnormalities and Neuropathology <i>John Chen, Jurre den Haan, Thiago Filgueiras, Mark Kupersmith, Jakaria Mostafa, Sohaib Rufai, Yi Shao</i>	324