### Monday, May 2  ■  Posters

#### 8:30–10:15am

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<td>216</td>
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#### 11am–12:45pm

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<td>242</td>
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<td>243</td>
<td>Diabetic macular edema and anti-VEGF [RE ]</td>
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<td>AMD and CNV: Clinical and Translational [RE ]</td>
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<td>273</td>
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<td>274</td>
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<td>275</td>
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<td>Retinal Degeneration: Mechanisms and Therapeutic Strategies [RC]</td>
<td>2730 - 2750</td>
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<td>285</td>
<td>Retinal circuits and Behavior [VN]</td>
<td>2751 - 2769</td>
<td>D0285 - D0303</td>
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**Poster board numbers correspond to poster location in Exhibit Hall**

A = Poster Area A , B = Poster Area B , C = Poster Area C and D = Poster Area D

**2:45–3:45pm: All Posters and Networking — authors will be present at poster boards**
Dendrites are exquisitely specialized processes that critically influence how neurons collect and process information. Retinal ganglion cell (RGC) dendrites receive synaptic inputs from bipolar and amacrine cells, thus allowing cell-to-cell communication and flow of visual information. In glaucoma, damage to RGC axons in the optic nerve head results in progressive neurodegeneration and vision loss. Recent data indicate that axonal injury triggers rapid structural alterations in RGC dendrites, prior to manifest axonal loss, which can lead to synaptic rearrangements and functional deficits. This minisymposium will provide an update on recent work addressing the role of RGC dendrite degeneration in models of acute and chronic optic nerve damage, factors affecting vulnerability, and novel mechanisms that regulate dendrite stability and regeneration. Understanding how alterations in RGC dendrites contribute to neurodegeneration in glaucoma might provide new insights into disease onset and progression while informing the development of new therapies to prevent vision loss.

Moderators: Arthur J. Weber, Keith R. Martin and Adriana Di Polo

1337 — 8:30  Dendrite remodelling and repair in a retinal explant model of retinal ganglion cell degeneration. James E. Morgan. School of Optometry and Vision Sciences, Cardiff University, Cardiff, United Kingdom

1338 — 8:45  Dendritic remodeling in early-stage glaucoma: Evidence from genetically identified retinal ganglion cell types. Andy Huberman. Neurosciences and Ophthalmology, University of California San Diego, La Jolla, CA

1339 — 9:00  Structural and functional alterations of retinal ganglion cell dendrites in a model of glaucoma. Rachel O. Wong. University of Washington, Seattle, WA

1340 — 9:15  Of axons and dendrites: drivers of progression in glaucoma. David J. Calkins. Vanderbilt University Med Ctr, Nashville, TN

1341 — 9:30  Mechanisms of retinal ganglion cell dendrite stability and regeneration. Adriana Di Polo. Neuroscience, University of Montreal, Montreal, QC, Canada

1342 — 9:45  Strategies for protection of retinal ganglion cell dendrites following axonal injury. James D. Lindsey. University of California San Diego, La Jolla, CA

1343 — 10:00  Retinal ganglion cell structure and electrophysiology during injury and recovery. Jonathan G. Crowston. Ctr for Eye Research Australia, East Melbourne, VIC, Australia; Ophthalmology, University of Melbourne, Melbourne, VIC, Australia

1344 — 8:30  Efficacy of ranibizumab therapy in eyes with neovascular AMD and pigment epithelial detachment (PED): a HARBOR subanalysis study. David Sarraf1, 2; L. Hill3, N. Lu3, S. Gune3, L. Tuomi3, 1Department of Ophthalmology, Stein Eye Institute, UCLA, Los Angeles, CA; 2Greater Los Angeles VA Healthcare Center, Los Angeles, CA; 3Genentech, Inc., South San Francisco, CA


1346 — 9:00  Neovascular Morphology by ICG Angiography and Response to Loading-Dose Anti-VEGF Therapy in Patients with Neovascular AMD. Priyatham S. Mettu, M. J. Allingham, P. C. Nicholas, S. W. Cousins. Ophthalmology / Duke Eye Center, Duke University School of Medicine, Durham, NC

1347 — 9:15  Visual outcome over time and tissue responses in patients with early vision loss after combination therapy of anti-PDGF (Fovista® 1.5mg) plus anti-VEGF (ranibizumab 0.5mg) versus monotherapy anti-VEGF (ranibizumab 0.5mg). Kourosh A. Rezaei1, K. Westby1, P. K. Kaiser1, T. Ciulla1, S. Patel1, 1Ophthotech, Princeton, NJ; 2Cole Eye Institute, Cleveland, OH

1348 — 9:30  Baseline characteristics and 1-year outcomes of patients with polypoidal choroidal vasculopathy: an interim analysis from the real-world LUMINOUS™ study. Timothy Y. Lai1, S. Dessert-Brethes2, V. Bezyak2, M. Lieuw2. 1Ophthalmology & Visual Sciences, Chinese University of Hong Kong, Kowloon, Hong Kong; 2Ophthalmology, Novartis Pharma AG, Basel, Switzerland

202a GL Section Business Meeting

1. Trustee’s Report of Status of Association
2. ARVO Strategic Plan
3. Annual Meeting Program Committee Chair’s Report
4. Annual Meeting Program Committee Election Results
5. Other Business

Room 6B

Monday, May 02, 2016 8:30 AM-10:15 AM

203a RE Section Business Meeting

1. Trustees Report of Status of Association
2. ARVO Strategic Plan
3. Annual Meeting Program Committee Chairs Report
4. Annual Meeting Program Committee Election Results
5. Other Business

Room 6C

Monday, May 02, 2016 8:30 AM-10:15 AM

204 Diabetic Retinopathy

Moderators: Jat Chowdry and Lloyd P. Aiello

1350 — 8:30  Ranibizumab induces regression of diabetic retinopathy (DR) in more than three-quarters of patients with high-risk non-proliferative diabetic retinopathy (NPDR) independent of retinal nonperfusion. Charles C. Wykoff1, 2, S. Gune1, L. Hill1, M. Hemphill1, Z. Haskova1. 1Vision Care, Retina Consultants of Houston, Houston, TX; 2Blanton Eye Institute and Houston Methodist Hospital, Houston, TX; 3Genentech, Inc., South San Francisco, CA

Refer to the Program Number in the Clinical Trial (CT) Registration Index. *CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
1351 — 8:45  Intravitreal Bevacizumab for Proliferative Diabetic Retinopathy: Results from the Pan-American Collaborative Retina Study Group (PACORES) at 24 Months of Follow-up. J. Fernando Arevalo, A. Lasave, L. Wei, M. Maia, M. Diaz-Llopis, A. Alezzandrini, M. Brito. 1Retina Division, The Wilmer Eye Institute-Johns Hopkins University, Baltimore, MD; 2Retina and Vitreous Service, Clínica Privada de Ojos, Mar del Plata, Argentina; 3Instituto de Cirugía Ocular, San Jose, Costa Rica; 4Departamento de Oftalmología - Instituto da Visão, Universidade Federal de São Paulo, São Paulo, Brazil; 5Hospital Universitario, Valencia, Spain; 6OFTALMOS, Universidad de Buenos Aires, Buenos Aires, Argentina; 7Instituto Docente de Especialidades Oftalmológicas (IDEO), Maracaibo, Venezuela, Bolivarian Republic of Venezuela.


1354 — 9:30  Title: Complement component 3 (C3) is increased in vitreous in diabetic macular edema and is required for bradykinin (BK)-induced retinal edema. Nivetha Murugesan, A. C. Clermont, T. Kita, E. P. Feener. 1Vascular Cell Biology, Joslin Diabetes Center, Harvard Medical School, Boston, MA; 2Kyushu University, Fukuoka, Japan

1355 — 9:45  Non-targeted plasma metabolomics of diabetic retinopathy demonstrates increased arginine and related metabolites. Milam A. Brantley, D. J. Herren, K. Uppal, E. G. Burgess, I. Chocron, M. W. Calculi, D. C. Samuels, D. P. Jones. 1Vanderbilt Eye Institute, Vanderbilt University Medical Center, Nashville, TN; 2Department of Medicine, Emory University, Atlanta, GA; 3Department of Biochemistry and Mass Spectrometry Research Center, Vanderbilt University, Nashville, TN; 4Vanderbilt Genetics Institute, Vanderbilt University, Nashville, TN

1356 — 10:00  Myeloid-derived VEGF and HIF are dispensable for ocular neovascularisation. Sidath Liyanage, A. Fantin, P. Villacampa, C. Lange, L. Dentii, E. Cristante, A. J. Smith, R. R. Ali, U. F. Luhmann, J. W. Bainbridge, C. Ruhberg. 1Division of Genetics, UCL Institute of Ophthalmology, London, United Kingdom; 2Division of Cell Biology, UCL Institute of Ophthalmology, London, United Kingdom; 3University Eye Hospital Freiburg, Freiburg, Germany; 4Hoffmann-La Roche Ltd, Basel, Switzerland

Moderators: Julie T. Daniels and James D. Zieske

1357 — 8:30  Effect of Tonicity and UV Riboflavin Cross-linking Treatment on Corneal Biomechanical Properties using Optical Coherence Elastography. Srilatha Vantipalli, J. Li, M. Singh, K. Larin, M. D. Twa. 1College of Optometry, University of Houston, Houston, TX; 2Department of Biomedical Engineering, University of Houston, Houston, TX; 3School of Optometry, University of Alabama, Birmingham, AL.

1358 — 8:45  Morphological changes in the rabbit cornea after standard and accelerated cross-linking. Marina Hovakimyan, T. Stahnke, M. D. Friedman, O. Stuchs, R. Guthoff. 1Avedro, Waltham, MA; 2Department of Ophthalmology, University of Rostock, Rostock, Germany; 3Institute for Biomedical Engineering, University of Rostock, Rostock, Germany *CR

1359 — 9:00  The effects of retinoic acid on human keratoconic fibroblast in vitro under serum-free conditions. Fadilah Zainal Abidin, D. Karamichos, F. C. Figueiredo, C. J. Connon. 1Institute of Genetic Medicine, Newcastle University, Newcastle upon Tyne, United Kingdom; 2Department of Ophthalmology/Dean McGee Eye Institute, University of Oklahoma Health Sciences Center, Oklahoma City, OK; 3Department of Cell Biology, University of Oklahoma Health Sciences Center, Oklahoma City, OK; 4Department of Ophthalmology, Royal Infirmary Hospital, Newcastle, United Kingdom

1360 — 9:15  Self-Assembled System Recapitulates Keratoconus Hypoxic Condition In Vitro. Tina B. McKay, S. Priyaradarsini, J. Hjordal, D. Karamichos. 1Cell Biology, OUHSC, Oklahoma City, OK; 2Ophthalmology, Aarhus University Hospital, Aarhus, Denmark; 3Ophthalmology, Dean McGee Eye Institute/OUHSC, Oklahoma City, OK


1362 — 9:45  Potential Approach to Prevent Corneal Fibrosis. Xiaoxiao Q. Guo, S. Sriram, J. A. Tran, A. E. Hutcheon, J. D. Zieske. 1Scheepens Eye Research Institute/MEE, Boston, MA; 2Ophthalmology, Harvard Medical School, Boston, MA *CR

1363 — 10:00  Supra-molecular structure of a Luminac derived peptide amphiphile enhances collagen-stimulating activity in corneal fibroblasts. Che J. Connor, M. Walter, A. Dehoskhi, I. Hamley. 1Faculty of Medicine, Newcastle University, Newcastle upon Tyne, United Kingdom; 2Chemistry, University of Reading, Reading, United Kingdom

The Commercial Relationships (CR) Index for Disclosures and the Clinical Trial (CT) Registration Index are at arvo.org/amindices.
1365 — 8:45 Host Microenvironment Shapes Uveal Melanoma Tumor Properties. Matthew W. McEwen1, Q. Zhang2, B. Gao1, H. Yang1, Z. Goldsmith1, H. E. Grossniklaus2, M. W. Wilson2, V. M. Morales2, 3. Ophthalmology, University of Tennessee Health Science Center, Memphis, TN; 3Ophthalmology, Emory University, Atlanta, GA; 4Surgery, St. Jude Children’s Research Hospital, Memphis, TN; 5Microbiology, Immunology and Biochemistry, University of Tennessee Health Science Center, Memphis, TN

1366 — 9:00 Deciphering the molecular basis of pericellular infiltrative basal cell carcinoma. John Bladen1, M. Beaconsfield1, E. O’Toole1, M. Philpott1. 1Centre for Cell Biology and Cutaneous Research, Blizard Institute, London, United Kingdom; 2Moorfields Eye Hospital, London, United Kingdom

1367 — 9:15 Successful treatment of recurrent ocular surface squamous neoplasia (OSSN) with topical cidofovir. Matthew H. Ip1, R. George1, W. Rawlinson1, 2, M. T. Coroneo1, 2. 1Faculty of Medicine, University of New South Wales, Sydney, NSW, Australia; 2Department of Ophthalmology, Prince of Wales Hospital, Sydney, NSW, Australia; 3South Eastern Area Laboratory Services, Prince of Wales Hospital, Sydney, NSW, Australia

1368 — 9:30 PDGF-PDGFBR Signaling Sustain Angiogenesis in an Autocrine and Paracrine Fashion in Retinoblastoma. Matthew W. Wilson2, Z. Goldsmith1, W. Coppers1, B. Gao1, M. McEwen1, A. Irvine1, R. C. Brennan1, V. M. Morales1, 2. 1Ophthalmology, Univ of Tennessee Health Sci Ctr, Memphis, TN; 2Surgery and Pathology, St Jude Children’s Research Hospital, Memphis, TN; 3Oncology, St Jude Children’s Research Hospital, Memphis, TN

1369 — 9:45 HER2: A novel therapeutic target for retinoblastoma. Gail M. Seigel2, S. Sharma1, A. Hackam1, D. Shah1, 2. 1Ctr for Hearing & Deafness, University at Buffalo, Buffalo, NY; 2SUNY Eye Institute, Buffalo, NY; 3Pharmaceutical Sciences, University at Buffalo, Buffalo, NY; 4Bascom Palmer Eye Institute, University of Miami, Miami, FL

1370 — 8:30 Previous intravitreal therapy is associated with increased risk of posterior capsule rupture during cataract surgery. Alex C. Day1, A. Lee1, C. A. Egans2, C. Bailey1, R. Johnston1, M. Tsaloumas1, A. K. Diamond1, 4, A. Tufail1. 1UCL Institute of Ophthalmology, London, United Kingdom; 2University of Washington, Seattle, WA; 3Bristol Eye Hospital, Bristol, United Kingdom; 4Gloucestershire Hospitals NHS Foundation Trust, Cheltenham, United Kingdom; 5University Hospitals Birmingham NHS Foundation Trust, Birmingham, United Kingdom; 6Moorfields Eye Hospital, London, United Kingdom; 7Birmingham & Midland Eye Centre, Birmingham, United Kingdom

1371 — 8:45 Is the risk of posterior capsular rupture higher in eyes with previous intravitreal injections? Zaid Salachtchi, R. D. Hamilton. Moorfields Eye Hospital, London, United Kingdom

1372 — 9:00 The role of aldose reductase in the development of posterior capsular opacification. Leonid Zukin, M. Pedder, B. Shich, J. M. Petrasch. Ophthalmology, University of Colorado, Greenwood Village, CO

1373 — 9:15 MMP-9 deficiency results in lack of TGFβ-induced fascin and F-actin formation in Lens Epithelial Cells. Aftab Taiyab, A. Korol, P. Deschamps, J. A. West-Mays. McMaster University, Hamilton, ON, Canada

1374 — 9:30 Dual function of TGFβ in lens cell fate: implications for PCO. Linda Masiel. Biochemistry and Molecular Biology, Oregon Health & Science Univ, Portland, OR

1375 — 9:45 Sustained-release genistein from nanostructured lipid carrier surface modified intraocular lens to prevent posterior capsular opacification. Jun Kong1, J. Liu1, X. Li1, W. Zhang1, N. Yang1. Ophthalmology, the 4th Affiliated Hospital of China Medical University, Shenyang, China; 2School of Traditional Chinese Medicine, Shenyang, China

1376 — 10:00 Myofibroblast emergence is induced in a PI3K isoform-specific Akt-independent manner in a mock cataract surgery model of PCO. Janice L. Walker1, L. Zhang1, T. Chan1, A. Menko1. 1Pathology, Anatomy and Cell Biology, Thomas Jefferson University, Philadelphia, PA; 2Department of Medicine, Thomas Jefferson University, Philadelphia, PA

207 PCO and other complications of cataract surgery

Moderators: Frank J. Lovicu and Michael Wormstone

208 Crystalline Lens Dynamics and Accommodation

Moderators: Jean-Marie A. Parel and Norberto Lopez-Gil

207a LE Section Business Meeting

1. Trustees Report of Status of Association
2. ARVO Strategic Plan
3. 2016 Trustee Election Results
4. Annual Meeting Program Committee Chairs Report
5. Presentation of the National Foundation for Eye Research 2016 Cataract Research Award to Steven Bassnett, PhD, Department of Ophthalmology and Visual Sciences, Washington University, St. Louis, MO
6. Annual Meeting Program Committee Election Results
7. Other Business
Monday Papers/Section Business Meetings

8:30 am – 10:55 am

Monday, May 02, 2016 10:15 AM-10:55 AM
Room 611/612

Monday, May 02, 2016 10:15 AM-10:55 AM
Room 618/620

Monday, May 02, 2016 10:15 AM-10:55 AM
Room 615/617

Monday, May 02, 2016 10:15 AM-10:55 AM
Room 615/617

1381 – 9:30  Peripheral depth cues for accommodation stimulation. Carles Otero Molins1, 2, M. Aldaba1, 2, B. Martinez-Navarro1, J. Pujo1, 2. 1Davalor Research Center - Universitat Politècnica de Catalunya, Terrassa, Spain; 2Centre for Sensors, Instruments and Systems Development, Universitat Politècnica de Catalunya, Terrassa, Spain; 3Image and Multimedia Technology Center, Universitat Politècnica de Catalunya, Terrassa, Spain

1382 – 9:45  Is the fovea the apposite location for investigating the effect of accommodation on posterior eye conformation? Parminder K. Randhawa1, M. F. Ribeiro1, A. L. Sheppard2, L. N. Davies1. 1Ophthalmic Research Group, Aston University, Birmingham, United Kingdom; 2Clinical & Experimental Optometry Research Lab (CEORLab), University of Minho, Braga, Portugal

1383 – 10:00  Patterns of accommodation in lens-simulated anisometropia. Apoorna Karsolia, L. R. Stark. Marshall B Ketchum University, Fullerton, CA

1384 – 8:30  Mechanism of action of mineralocorticoid receptor in the retina: evidences from transcriptomic analyses. Francine F. Behar-Cohen1, 2, M. Der Nigoghossian3, 4, R. Levy5, 6, M. Zhao7, 8, C. Andrieu-Soler2, 8, 9. 1Department of Ophthalmology, Jules Gonin Eye Hospital, Lausanne 7, Switzerland; 2UMRS 1138, INSERM, Paris, France; 3Centre de Recherche des Cordeliers, Paris, France

1385 – 8:45  Affiberecept’s intracellular fate in retinal endothelial cells: Evidence for involvement of neonatal Fc receptor. Heidrun L. Deissler, G. K. Lang, G. E. Lang. Department of Ophthalmology, University of Ulm Medical Center, Ulm, Germany *CR

1386 – 9:00  Exploring ligands selectivity toward human P2X7 receptor: application to drug discovery in ophthalmology. Chiara B M Platania, F. Geraci, F. Drago, C. Bucolo. Biomedical and Biotechnological Sciences, University of Catania, Catania, Italy

1387 – 9:15  Ocular Inhibition of Thyroid Hormone Signaling Protects Cone Photoreceptors in Mouse Models of Retinal Degeneration. Hongwei Ma1, F. Yang, J. Belcher2, M. Butler3, T. Redmond3, T. S. Scanlan2, S. L. Boye4, W. W. Hauswirth4, X. Ding1. 1Department of Cell Biology, Oklahoma University Health Sciences Center, Oklahoma City, OK; 2Department of Physiology and Pharmacology, Oregon Health & Science University, Portland, OR; 3Laboratory of Retinal Cell and Molecular Biology, National Eye Institute, Bethesda, MD; 4Departments of Ophthalmology and Molecular Genetics and Microbiology, University of Florida, Gainesville, FL

1388 – 9:30  A novel mechanism for canonical Wnt signaling regulation through ectodomain shedding of very low-density lipoprotein receptor. Qian Chen, 1, Y. Takahashi1, 2, K. Oka3, J. Ma4. 1Physiology, University of Oklahoma Health Sciences Center, Oklahoma City, OK; 2Harold Hamm Oklahoma Diabetes Center, Oklahoma City, OK; 3Medicine, University of Oklahoma Health Sciences Center, Oklahoma City, OK; 4Molecular and Cellular Biology, Baylor College of Medicine, Houston, TX

1389 – 9:45  Amelioration of Amyloid β induced retinal inflammatory responses by a LXR agonist T0901317 is associated with inactivation of the NF-κB signaling and NLRP3 Inflammasome. Bo Leiv1, 2, C. Leiv3, 4. 1Chongqing Key Laboratory of Ophthalmology, Chongqing, China; 2Ophthalmology, First Affiliated Hospital of Chongqing Medical University, Chongqing, China

1390 – 10:00  VEGF induced changes in RPE function are dependent on increased HDAC activity. Zsolt Ablonczy, D. Desjardins, Y. Liu, J. Fan, C. E. Crosson. Ophthalmology, Medical University of South Carolina, Charleston, SC

1391 – 8:30  Nanoskin: use for volume replacement of the anophthalmic socket. Natalia Mussi1, M. Orsolini1, S. A. Schellini1, C. Pelizzoni1, L. K. Veloso1. 1Ophthalmology, University of State of São Paulo, Botucatu, Brazil; 2morphology department, Institute of Biosciences of University of State of São Paulo, Botucatu, Brazil


1393 – 9:00  Lack of Association between Obstructive Sleep Apnea and Floppy Eyelid Syndrome. Jeffrey A. Schwartz1, T. Fox2, A. Chang3, F. Parvin-Nejad1, S. Feinsher1, A. Y. Wu2. 1Medial Education, Icahn School of Medicine at Mount Sinai, New York, NY; 2Ophthalmology, Mount Sinai Hospital, New York, NY; 3Sleep Medicine, Mount Sinai Hospital, New York, NY

1394 – 9:15  A sturdy connective tissue network surrounds all the extraocular muscle fibers. Fatima Pedrosa Domellof1, L. K. McLoon2, M. Lindström3. 1Clinical Sciences, Ophthalmology, UMEA University, Umea, Sweden; 2Dept of Ophthalmology, University of Minnesota, Minneapolis, MN; 3IMB, Anatomy, UMEA University, Umea, Sweden

1395 – 9:30  Controlling Eye Alignment Development with Glial Derived Neurotrophic Factor. Linda K. McLoon1, C. L. Willoughby1, J. Fleuring1, 2, M. M. Walton1, M. J. Mustari1, 2. 1Ophthalmology & Visual Sciences, University of Minnesota, Minneapolis, MN; 2Neurobiology and Clinical Neuroscience, Umea University, Umea, Sweden

1396 – 9:45  Loss of myofibers containing MyHC Slow tonic in extraocular muscles of terminal ALS patients with bulbar onset. Anton E. Tjutj2, 3, A. Danielsson1, P. M. Andersson1, F. Pedrosa Domellof1, 2. 1Department of Integrative Medical Biology, Umea University, Umea, Sweden; 2Department of Clinical Sciences, Ophthalmology, Umea University, Umea, Sweden; 3Pharmacology and Clinical Neuroscience, Umea University, Umea, Sweden

1397 – 10:00  Differential expression analysis for early gene activation patterns in regenerating lateral rectus muscle. Alan Kahana, P. E. Kish, A. Saera-Vila. Ophthalmology and Visual Sciences, Univ of Michigan, Ann Arbor, MI *CR

The Commercial Relationships (CR) Index for Disclosures and the Clinical Trial (CT) Registration Index are at arvo.org/amindices.
**Room 618/620**
Monday, May 02, 2016 10:15 AM-10:55 AM

**210a EY Section Business Meeting**

1. Trustees Report of Status of Association
2. ARVO Strategic Plan
3. 2016 Trustee Election Results
4. Annual Meeting Program Committee Chairs Report
5. Annual Meeting Program Committee Election Results
6. Other Business

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**Room Skagit 4/5, TCC**
Monday, May 02, 2016 10:15 AM-10:55 AM

**211a IM Section Business Meeting**

1. Trustees Report of Status of Association
2. ARVO Strategic Plan
3. Annual Meeting Program Committee Chairs Report
4. Annual Meeting Program Committee Election Results
5. Cora Verhagen Award
6. Dr. Raniyah Ramadan Foundation Award
7. Other Business

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**Room Skagit 4/5, TCC**
Monday, May 02, 2016 8:30 AM-10:15 AM

**Immunology/Microbiology / Retinal Cell Biology / Retina**

### 211 Parainflammation and what it means in the eye - Minisymposium

The concept of par-inflammation is gaining traction amongst general immunologists and is beginning to be used as a framework for understanding conditions which do not have an overt inflammatory basis but which are more chronic in nature.

**Moderators: Paul G. McMenamin, Heping Xu and Wal T. Wong**

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**Monday, May 02, 2016 8:30 AM-10:15 AM**

**Monday Papers/Section Business Meetings: 1398 – 1409**

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**Moderators: Goldis Malek and Philip J. Luthert**

### 1403 — 8:30 Hyperhomocysteinemia Disrupts Retinal Pigment Epithelial Structure and Function with Features of Age-Related Macular Degeneration. Amany M. Tawfik, A. S. Ibrahim, N. Elsherbini, S. B. Smith, M. A. Al-Shabrawey, Georgia Regent Univ (GRU), Augusta, GA

### 1404 — 8:45 Visualizing retinal pigment epithelium (RPE) melanosomes, lipofuscin, melanolipofuscin (M, L, ML) in human eyes of different ages using 3-dimensional serial block face scanning electron microscopy (3D SBFSEM). Andreas Pollevie1, J. D. Messinger2, K. R. Sloan3, E. Benson4, G. J. Kidd4, U. Schmidt-Erfurth5, C. A. Catter1. Ophthalmology, Medical University Vienna, Vienna, Austria; Ophthalmology, University of Alabama at Birmingham, Birmingham, AL; Computer and Information Sciences, University of Alabama at Birmingham, Birmingham, AL; Renovo Neural Inc., Cleveland, OH; Neurosciences, Cleveland Clinic, Lerner Research Institute, Cleveland, OH *CR

### 1405 — 9:00 Retinal pigment epithelium organelle biogenesis and trafficking in models of macular degeneration. Kimberly A. Toops1, L. Tan1, A. Lakkaraju2, Kimberly A. Toops1, L. Tan1, A. Lakkaraju2. Ophthalmology and Visual Sciences, University of Wisconsin - Madison, Madison, WI; McPherson Eye Research Institute, University of Wisconsin - Madison, Madison, WI

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**Monday, May 02, 2016 10:15 AM-10:55 AM**

**Monday Papers/Section Business Meetings: 212a – 212**

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**Monday, May 02, 2016 10:30 AM-10:55 AM**

**212a RC Section Business Meeting**

1. Trustees Report of Status of Association
2. ARVO Strategic Plan
3. Annual Meeting Program Committee Chairs Report
4. Annual Meeting Program Committee Election Results
5. Other Business

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* Refer to the Program Number in the Clinical Trial (CT) Registration Index. *CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
234 Genetic defects of retinopathy

Moderators: Eric A. Pierce, Subhabrata Chakrabarti and Terri L. Young

1417 — 8:30 Retinal Targeted-Capture Next Generation Sequencing and CLIA Confirmation in Patients with a Range of Inherited Retinal Degeneration. Stephen Pa Daiger1, 2, S. J. Bowne3, L. S. Sullivan1, K. D. Webb-Jones1, D. G. Birch2, C. E. Avery1, F. Wang4, R. Chew1, D. K. Wheaton1 1Ophthalmology, Univ Texas Hlth Sci Ctr Houston, Houston, TX; 2Human Genetics Center, Univ. of Texas Hlth Sci Ctr Houston, Houston, TX; 3Retina Foundation of the Southwest, Dallas, TX; 4Department of Molecular and Human Genetics, Baylor College of Medicine, Houston, TX

1418 — 8:45 Target 5000: Next-Generation Sequencing of the Irish Inherited Retinal Degeneration Population. Matthew Carrigan1, E. Duignan1, C. P. Malone2, K. Stephenson3, D. J. Keegan2, P. Humphries4, P. Kenn2, G. Farrar1 1School of Genetics and Microbiology, Trinity College Dublin, Dublin, Ireland; 2Research Foundation, Royal Victoria Eye and Ear Hospital, Dublin, Ireland; 3Mater Misericordiae University Hospital, Dublin, Ireland

1419 — 9:00 Molecular inversion probe based sequence analysis of 108 genes associated with non-syndromic inherited retinal disease in 4,000 probands. M. Imran Khan1, G. Christiann2, A. Carmen3, D. Sharon4, R. K. Koenekoop5, C. Rivolta6, E. De Baere6, C. F. Inglehearn7, A. Hoischen8, F. P. Cremer9 1Department of Human Genetics, Radboud university medical centre, Nijmegen, Netherlands; 2Department of Genetics, University Hospital Fundación Jiménez Díaz, Madrid, Spain; 3Departments of Ophthalmology, Hadassah-Hebrew University Medical Center, Jerusalem, Israel; 4Departments of Paediatric Surgery, Human Genetics and Ophthalmology, McGill University Health Center, Montreal, QC, Canada; 5Department of Medical Genetics, University of Lausanne, Lausanne, Switzerland; 6Center for Medical Genetics, Ghent University Hospital, Ghent, Belgium; 7Department of Ophthalmology and Neuroscience, University of Leeds, Leeds, United Kingdom; 8Radboud Institute for Molecular Life Sciences, Radboud University Medical Center, Nijmegen, Netherlands

213 Myopia: From risk factors to randomized trials

Moderators: Mingguang He and Seang-Mei Saw

1410 — 8:30 Changing prevalence, and incidence and progression of myopia in Singapore teenagers: the SCORM cohort. Seang-Mei Saw1, 2, A. Awodele1, Y. Liu1, C. Cheng3, Y. Cheung3, D. Tan4, T. Y. Wong5 1Singapore Eye Research Institute, Singapore, Singapore; 2Epidemiology, Saw Swee Hock School of Public Health, Singapore, Singapore; 3Duke University, Durham, NC; 4Singapore National Eye Center, Singapore, Singapore; 5Duke-NUS Medical School, Singapore, Singapore

1411 — 8:45 Prediction of axial elongation and early onset myopia. Willem Tideman1, 2, J. Polling1 1Division of Preventive Ophthalmology, Zhongshan Ophthalmic Centre, Guangzhou, China; 2Zhongshan Ophthalmic Centre, Erasmus Medical Centre, Rotterdam, Netherlands

1412 — 9:00 Prediction of Future Spherical Equivalent Refraction in Children using the Longitudinal Data from the Guangzhou Twins Eye. Jing Xie1, Y. Chen2, M. He2 1Ophthalmology and Visual Science, Erasmus Medical Centre, Rotterdam, Netherlands; 2Epidemiology, Erasmus Medical Center, Rotterdam, Netherlands

1413 — 9:15 Protective association of ultraviolet B (UVB) exposure on myopia risk, independent of years in education, and interaction with serum vitamin D in an adult European population (EUREYE).Katie Williams1, R. E. Hogg1, C. J. Hammond1, U. Chakravarthy2, M. Rah1, J. Seland3, G. Soubrane4, L. Tomasselli5, F. Topooz6, A. Fletcher1 1Departments of Ophthalmology & Twin Research, King’s College London, London, United Kingdom; 2Centre for Experimental Medicine, Institute of Clinical Science, Queen’s University Belfast, Belfast, United Kingdom; 3Department of Epidemiology and Biostatistics, National Institute for Health Development, Tallinn, Estonia; 4Eye Department, University of Bergen, Bergen, Norway; 5Faculty of Epidemiology & Population Health, London School of Hygiene and Tropical Medicine, London, United Kingdom; 6Department of Ophthalmology, Hotel Dieu de Paris, University Paris Descartes-1, Paris, France; 7Clinica Oculistica, Università degli Studi di Verona, Verona, Italy; 8Department of Ophthalmology, Aristotle University of Thessaloniki School of Medicine, Thessaloniki, Greece

1414 — 9:30 Risk factors for longitudinal biometric and refractive change in Australian schoolchildren. Amanda N. French7, I. G. Morgan2, K. A. Rose1 1Discipline of Orthoptics, University of Technology Sydney, Sydney, NSW, Australia; 2Research School of Biology, Australian National University, Canberra, ACT, Australia

1415 — 9:45 Cluster-randomized controlled trial of the effects of free glasses on glasses purchase in China: the PRICE (Potentiating Rural Investment in Children’s Eyecare) study. Nathan G. Congdon1, 4, X. Wang1, Y. Ma4, W. Liao1, B. Xiao1, M. Ni4, Y. Huang4, H. Yi4, X. Ma4, S. Rozelle1 1Centre for Public Health, Queen’s University Belfast, Belfast, United Kingdom; 2Division of Preventive Ophthalmology, Zhongshan Ophthalmic Center, Guangzhou, China; 3Zhongshan Ophthalmic Centre, Erasmus Medical Centre, Rotterdam, Netherlands; 4The Fred Hollows Foundation China, Kunming, China; 5China Center for Health Development Studies, Peking University, Beijing, China; 6Stanford University, Palo Alto, CA *(CR)*

1416 — 10:00 Teachers’ influence on glasses purchase and wear in China: the PRICE (Potentiating Rural Investment in Children’s Eyecare) study. Xiaqin Wang1, 4, Y. Ma4, Y. Zhou4, L. Jin1, B. Xiao1, M. Ni4, H. Yi4, X. Ma4, S. Rozelle1, N. G. Congdon1, 4, Zhangshen Ophthalmic Center, Sun Yat-sen University, Guangzhou, China; 2The Center for Experimental Economics in Education, Shaanxi Normal University, Xi’an, China; 3Ophthalmic department, Affiliated Hospital of Guangdong Medical College, Zhanjiang, China; 4The Second People’s Hospital of Yunnan Province, Kunming, China; 5The Fred Hollows Foundation China Project, Kunming, China; 6Center for Chinese Agricultural Policy, Institute of Geographical Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing, China; 7China Center for Health Development Studies, Peking University, Beijing, China; 8Freeman Spogli Institute of International Studies, Stanford University, Palo Alto, CA; Orbis International, New York, NY *(CR)*

Room Tahoma 3, TCC

Monday, May 02, 2016 10:15 AM-10:55 AM

213a CL Section Business Meeting

1. Trustee’s Report of Status of Association
2. ARVO Strategic Plan
3. Annual Meeting Program Committee Chair’s Report
4. Annual Meeting Program Committee Election Results
5. CL Section Trustee nomination(s) update
6. Other Business
1420 — 9:15 Coding and non-coding copy number variations explaining unsolved retinal dystrophies: role of genomic architectural features and underlying mechanisms. Kristof Van Schil1, S. Naessens2, S. Van de Sompele3, M. Bauwens1, H. Verdon1, C. Van Cauwenbergh1, A. Mayer1, S. Kohli4, B. P. Leroy3,4, E. De Baere¹. 1Center for Medical Genetics, Ghent University, Ghent, Belgium; 2Division of Ophthalmology, The Children’s Hospital of Philadelphia, Philadelphia, PA

1421 — 9:30 Copy number variation - missing inheritance in retinal disorder. Kinga M. Bujakowska1, R. Fernandez-Godino1, E. Place1, M. Consugur2, D. Navarro-Gomez1, J. White1, H. Xie1, G. X. Gui1, B. P. Leroy3,4, E. A. Pierce1. 1Ophthalmology, Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston, MA; 2Center for Personalized Medicine, Children’s Hospital Los Angeles, Los Angeles, CA; 3Department of Ophthalmology & Center for Medical Genetics, Ghent University, Ghent, Belgium; 4Ophthalmic Genetics & Visual Electrophysiology, Division of Ophthalmology, The Children’s Hospital of Philadelphia, Philadelphia, PA; 5Department of BioMedical Health Informatics, Children’s Hospital of Philadelphia, Philadelphia, PA

1422 — 9:45 Whole Exome Sequencing Identifies Mutations in GNB3 to Cause a Novel Congenital Stationary Night Blindness. Ajoy Vincent1,2, E. Tavares1, I. S. Audo10,11, J. Maynes4,5, S. Li3, C. Michiels6, A. Tumber1, H. Macdonald8,9, C. Roadhouse6, C. Zeitz10, E. Heon1,2, 1Ophthalmology and Visual Sciences, Genetics and genome Biology, Hospital for Sick Children, Toronto, ON, Canada; 2Ophthalmology and Vision Sciences, University of Toronto, Toronto, ON, Canada; 3Children’s Hospital of Philadelphia, Philadelphia, PA; 4Department of Ophthalmology & Visual Sciences, Genetics and genome Biology, Hospital for Sick Children, Toronto, ON, Canada; 5Department of Ophthalmology & Eye Research, University of Toronto, Toronto, ON, Canada; 6Department of Ophthalmology, Casey Eye Institute, Oregon Health & Science University, Portland, OR; 7Baylor College of Medicine, Houston, TX; 8Columbia University, New York, NY; 9University of California, Santa Cruz, Santa Cruz, CA; 10University of Minnesota, Minneapolis, MN

1423 — 10:00 Whole exome sequencing reveals CEP78 as a novel disease gene for cone-rod dystrophy. Konstantinos Nikopoulos1, P. Farinelli1, B. Royer-Bertrand1, N. Bedoni2, U. Kjellstrom1, S. Andreasson1, M. K. Sillibiaris3, C. Tiksa1, S. Blazak1, C. Rivolti1, 1Department of Medical Genetics, University of Lausanne, Lausanne, Switzerland; 2Department of Ophthalmology, Lund University, Lund, Sweden; 3Department of Ophthalmology, Medical School, University of Crete, Heraklion, Greece

Room Tahoma 4, TCC
Monday, May 02, 2016 10:15 AM-10:55 AM

214a BI Section Business Meeting

1. Trustee’s Report of Status of Association
2. ARVO Strategic Plan
3. Annual Meeting Program Committee Chair’s Report
4. Annual Meeting Program Committee Election Results
5. BI Section Trustee nomination(s) update
6. Other Business

Room Tahoma 5, TCC
Monday, May 02, 2016 8:30 AM-10:15 AM

215a VN Section Business Meeting

1. Trustees Report of Status of Association
2. ARVO Strategic Plan
3. Annual Meeting Program Committee Chairs Report
4. Annual Meeting Program Committee Election Results
5. VN Section Trustee nomination(s) update
6. Other Business

* Refer to the Program Number in the Clinical Trial (CT) Registration Index. *CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
Moderators: Ali R. Djalilian and Jun Yamada

1430 — A0064 Plasmacytoid Dendritic Cells Maintain Corneal Heme-Angiogenic Privilege Through Secretion of Anti-Angiogenic Molecules. Arista Jamalli1, 2, M. J. Lopez1, 2, V. Sendra1, 2, D. L. Harris1, 2, P. Hamrah1, 2. 1Ophthalmology, Tufts Medical Center, Tufts University School of Medicine, Boston, MA; 2Ophthalmology, Scheepen Eye Research Institute/Massachusetts Eye and Ear, Harvard Medical School, Boston, MA; Ophthalmology, Cornea Service, New England Eye Center, Tufts Medical Center, Tufts University School of Medicine, Boston, MA. 1431 — A0065 Pathogenesis of meibomian gland dysfunction (MGD) requires the T cell-neutrophil axis, in the allergy setting. Nancy Reyes1, D. R. Sabar1. 1Ophthalmology, Duke University School of Medicine, Durham, NC; Ophthalmology/Immunology, Duke University School of Medicine, Durham, NC. 1432 — A0066 In Vivo Confocal Microscopy Demonstrates Increased Immune Cell Densities in the Endothelial and Subbasal Layers During Corneal Graft Rejection that Correlate with Clinical Signs and Symptoms of Rejection. Alessandro Abouda1, C. Chirapaisan1, A. Jamalli1, R. Muller1, 2, B. Cavalcanti1, C. Colon1, 2, H. Insko1, 2, A. Cruzat1, P. Hamrah1, 2. 1Department of Ophthalmology, Tufts Medical Center, Boston, MA; 2Department of Ophthalmology, Massachusetts Eye and Ear Infirmary, Boston, MA. 1433 — A0067 Gr-1+CD11b+, not Gr1+CD11b+, cells are myeloid-derived suppressor cells (MDSCs) in murine corneal allograft and induced by high dose IFN-γ. Wunguk Choi1, Y. Ji1, E. Choi1, M. In hee1, H. Ham1, A. Yeo1, H. Noh1, J. Song1, H. Kim1, E. Kim1, 2, H. Lee1. 1Preventive Medicine, Yonsei University College of Medicine, Institute of Vision Research, Seoul, Korea (the Republic of); 2Department of Ophthalmology, Yonsei University College of Medicine, Seoul, Korea, (the Republic of); 3Ophthalmology, Yonsei University College of Medicine, Institute of Corneal Dystrophy Research, Seoul, Korea (the Republic of). 1434 — A0068 Mesenchymal stem cells modulate the differentiation of myeloid progenitor cells in corneal inflammation. Afsaneh Amouzegar1, S. Mittal1, S. Chauhan1. Scheepens Eye Research Institute, Harvard Medical School, Boston, MA. 1435 — A0069 Licensing of recipient-derived mesenchymal stem cells enhances their immunosuppressive properties and prolongs corneal allograft survival in rats. Oliver Treacy, N. Murphy, A. E. Ryan, P. Lohan, K. Lynch, M. Marcos, G. Fahy, M. Griffin, T. Ritter. National University of Ireland, Galway, Galway, Ireland. 1436 — A0070 Comparative Effects of Corneal Limbal Versus Bone Marrow Derived Mesenchymal Stem Cell Secretome on Innate Immune Response of Corneal Epithelium. Judy Hamouie1, M. Eslani1, S. Ghassemi1, G. Agnihotri1, A. Tadepalli1, E. Ghahari1, P. Hematti1, A. R. Djalilian1. 1Ophthalmology and Visual Sciences, University of Illinois at Chicago, Chicago, IL; Division of Hematology/Oncology, Department of Medicine, University of Wisconsin School of Medicine and Public Health, Madison, WI. 1437 — A0071 Immunomodulatory Gene Expression Profile of Corneal Limbal Versus Bone Marrow Derived Mesenchymal Stem Cells. Asha Tadepalli1, M. Eslani1, J. Hamouie1, G. Agnihotri1, S. Ghassemi1, J. Putra1, N. Afsharhambesh1, P. Hematti1, A. R. Djalilian1. 1Ophthalmology and Visual Sciences, University of Illinois at Chicago, Chicago, IL; Division of Hematology/Oncology, Department of Medicine, University of Wisconsin School of Medicine and Public Health, Madison, WI. 1438 — A0072 Is Dry Eye Disease in Donors a Risk Factor for Corneal Graft Rejection? Takesoni Inomata1, 2, J. Huar1, T. Shiang1, H. Chiang1, R. Dana1. 1Ophthalmology, Scheepens Eye Research Institute/Massachusetts Eye and Ear Infirmary/ Harvard Medical School, Boston, MA; 2Ophthalmology, Juntendo University School of Medicine, Bunkyo-ku, Japan. 1439 — A0073 Corneal Transplant Survival in Young Mice. Takeshi Naka1, 2, T. Inomata1, 2, M. Tahvildari1, 2, R. Dana1. 1Scheepens Eye Research Institute, Massachusetts Eye and Ear Infirmary, Boston, MA; 2Department of Ophthalmology, Harvard Medical School, Boston, MA. 1440 — A0074 Long term Effect of anti-CD40 antibody treatment on the survival of corneal xenotransplantation. Mee Kun Kim1, 2, J. Kim1, D. Kim1, H. Choi1, H. Lee1, H. Jeong1, K. Kang1, C. Park1, W. Wee1, 2. 1Ophthalmology, Seoul National University College of Medicine, Seoul, Korea (the Republic of); 2Laboratory of Ocular Regenerative Medicine and Immunology, Seoul National University Hospital Biomedical Research Institute, Seoul, Korea (the Republic of); 3Laboratory Medicine, Hallym University College of Medicine, Anyang, Korea (the Republic of); 4Microbiology and Immunology, Seoul National University College of Medicine, Seoul, Korea (the Republic of). 1441 — A0075 The Direct Pathway of T Cell Sensitization Mediates Corneal Graft Rejection in Absence of the Indirect Pathway in Low Risk Marfans Corneal Allograft Transplantation. Maria J. Lopez, V. Sendra, A. Jamali, H. Moein, D. L. Harris, P. Hamrah. Ophthalmology, Tufts Medical Center, Boston, MA. 1442 — A0076 A case control study using data from the Corneal Transplant Follow-up Study II (CTFS II) to determine the influence of HLA class I matching on high-risk penetrating keratoplasty 5-year survival. John Armitage1, 2, M. N. Jones1, H. Winton1, C. Rogers1, D. Tole1, A. D. Dick1. 1Clinical Sciences, University of Bristol, Bristol, United Kingdom; NHS Blood and Transplant, Bristol, United Kingdom; Bristol Eye Hospital, Bristol, United Kingdom. 1443 — A0077 Penetrating Keratoplasty Outcomes in the Setting of Autoimmune Disease. Karan Patel1, W. Shi2, S. Pantanelli1, V. L. Perez1, 2. 1Ophthalmology, Bascom Palmer Eye Institute, Royal Oak, MI; Penn State Hershey Eye Center, Hershey, PA. *CR. 1444 — A0078 Effect of severing corneal nerves on the induction of immune tolerance during corneal transplantation. Juan Ma, J. Mellon, J. Y. Niederkorn. Ophthalmology, UT Southwestern Medical Center, Dallas, TX. 1445 — A0079 Sympathetic Corneal Nerves Mediate Contralateral Immune Responses in Unilateral Inflammation. Predram Hamrahi1, 2, X. Huang1, 2, M. J. Lopez1, 2. 1Ophthalmology, NEEC, Tufts Medical Center, Tufts University, Boston, MA; 2Ophthalmology, SERI/MEEI/Harvard Medical School, Boston, MA. 1446 — A0080 Integrin α9 blockade promotes corneal transplant survival. Gyeong Jin Kang1, T. N. Truong1, E. Huang1, V. Su1, S. Ge1, 2, L. Chen1, 2. Vision Science Graduate Group, University of California, Berkeley, CA; Center for Eye Disease and Development, Program in Vision Science and School of Optometry, University of California, Berkeley, CA. 1447 — A0081 Secreted Ly6/Urokinase-type Plasminogen activator Receptor-Related Protein-1 (SLURP1) Suppresses Angiogenic Inflammation through a Pathway that Involves Src, RhoA and NFκB. Sudha Swamynathan, S. K. Swamynathan. Ophthalmology, University of Pittsburgh School of Medicine, Pittsburgh, PA. *CR. 1448 — A0082 The management and outcomes of Granulomatosis with Polyangiitis associated peripheral ulcerative keratitis: a report of a novel therapy, khawla abusamra1, 2, N. Ebrahimi1, 2, C. Foster1, 2. 1ophthalmology, MERSI, Cambridge, MA; 2Ocular Immunology and Uveitis Foundation, Cambridge, MA.
Monday – Posters – 1449 – 1473


1452 – A0132 Biocompatibility Evaluation of Contact Lens Multipurpose Solutions through Novel Genotoxicity Assays. Ling C. Huang, R. S. Leang. R&D, Abbott Medical Optics, Inc., Santa Ana, CA *CR

1453 – A0133 Performance of cationic peptide Me4 as an antimicrobial agent and contact lens coating. Debarun Dutta, A. Vijay, J. Tong, W. Lui, T. Zhao, K. B. Cheah, M. D. Willeco. Optometry and Vision Science, The University of New South Wales, Sydney, NSW, Australia


1455 – A0135 Microstructured materials for removing Acanthamoeba castellanii from contact lens storage cases. Christine Selhuber-Unkel, S. Gutekunst. Biocompatible Nanomaterials, University of Kiel / Institute for Materials Science, Kiel, Germany *CR


1457 – A0137 Nile Red in different solvents can simulate contact lens wetting performance under different environments. Robert Tucker, N. Samuel, P. Lackey. R&D, Alcon, Johns Creek, GA *CR

1458 – A0138 Contact lens surface modification utilizing fluoruous chemistry. Guoting Qin1, Z. Zhu, S. Li2, C. Cai3, A. M. McDermott4. 1College of Optometry, University of Houston, Houston, TX; 2Chemistry, University of Houston, Houston, TX


1460 – A0140 Effects of MPS on SCL wettability, protein uptake, friction-drag in vitro and on lens-wear comfort and tear film stability in vivo. Tatiana F. Svitova1, M. Sommerschuh2, M. C. Lin3. 1School of Optometry, University of California Berkeley, Berkeley, CA; 2Chemical and Biomolecular Engineering, University of California Berkeley, Berkeley, CA

1461 – A0141 Quantification of contact lens wettability after prolonged visual device use under low humidity conditions. Kathryn Dumbleton1, M. Guillon2, T. Patel3, K. Patel3, C. A. Maissa1. 1Ocular Technology Group - International, London, United Kingdom; 2School of Life and Health Sciences, Aston University, Aston, United Kingdom; 3Alcon Research Ltd., Fort Worth, TX *CR, $CR

1462 – A0142 Evaluation Polyethylene Glycol Surface Coating on Gas Permeable Lenses to Improve Wearability and Wettability. Christine W. Sindr. Ophthalmology, University of Iowa, Iowa City, IA

1463 – A0143 Impact of packaging saline wetting agents on wetting substantivity and lubricity. Leroy Muya1, J. Lempi1, J. R. Kern1, K. B. Cheah1, S. S. Perry2. Vision Care, Alcon, Duluth, GA; 1Materials Science and Engineering, University of Florida, Gainesville, FL *CR

1464 – A0144 Surface friction modification of trifluron B contact lenses by commercial drops. Jamir R. Kern1, S. S. Perry1, J. Rex1, A. Rady1. 1Materials Science & Engineering, University of Florida, Gainesville, FL; 2Global Medical Affairs, Alcon Research, Ltd, Fort Worth, TX *CR

1465 – A0145 Validity of Oxygen Permeability determined with a Coulometric Method. Terin Dupre, W. J. Benjamin. Optometry, UAB, Birmingham, AL *CR

1466 – A0146 A Biological Model of Contact Lens Wear. Alison M. McDermott1, G. Qin1, H. Baidouri2, A. Glasser2, C. Kuehler2, C. A. Morris2, I. Malteva2. 1University of Houston, Houston, TX; 2CooperVision, Pleasanton, CA *CR

1467 – A0147 Complications of Scleral Lens Wear. Muriel Schornack1, J. Harthan2, J. T. Barr3, E. Shorter1, A. Nauf1, C. B. Nau1. 1Ophthalmology, Mayo Clinic, Rochester, MN; 2Illinois College of Optometry, Chicago, IL; 3The Ohio State University, Columbus, OH; 4Korb and Associates, Boston, MA; 5University of Illinois at Chicago, Chicago, IL

1468 – A0148 A fourteen year large scale follow-up study into the distribution of astigmatic axis in Japan. The result of analysis of approximately 550,000 eyes of Japanese patients by spherical surface power. Masao Yoshida1, N. Mizuki2, A. Meguro3, T. Sakono3, E. Okada1. 1Department of Public Health, Kyorin University School of Medecine, Mitaka, Japan; 2Department of Ophthalmology, Yokohama City University School of Medicine, Yokohama, Japan; 3Okada Eye Clinic, Yokohama, Japan

1469 – A0149 A thirteen year, large scale, follow-up study on the number of prescriptions of hard contact lenses in Japan. The result of age group analysis of approximately 178,000 Japanese subjects eyes. Eiichi Okada1, N. Mizuki2, A. Meguro3, T. Sakono3, M. Yoshida1. Okada Eye Clinic, Yokohama, Japan; 1Department of Ophthalmology, Yokohama City University School of Medicine, Yokohama, Japan; 2Department of Public Health, Kyorin University School of Medicine, Mitaka, Japan

1470 – A0150 Effects of the peripheral thickness of soft contact lenses on tears and eye dryness during soft contact lens wear. Norihiko Yokoi1, R. Sakai2, H. Yamaguchi2, S. Kinosita2. 1Ophthalmology, Kyoto Prefectural Univ of Med, Kyoto, Japan; 2Menicon Co., Ltd., Nagoya, Japan; 3Frontier Medical Science and Technology for Ophthalmology, Kyoto Prefectural Univ of Med, Kyoto, Japan

1471 – A0151 Risk Factors for Contact Lens-Related Microbial Keratitis: A Case-Control Multicenter Study. Pierre-Henri Becmeur, T. Bourcier, A. Sauer. NHC Strasbourg, Strasbourg, France

1472 – A0152 Influence of cosmestically tinted contact lenses on contrast sensitivity, light scattering, and higher-order aberrations. Takahiro Hiraoka1, T. Yamamoto2, J. Kotsuka2, F. Okamoto1, T. Oshika1. 1Dept of Ophthalmology, University of Tsukuba, Tsukuba, Japan; 2Department of Ophthalmology, Ushiku Arwa General Hospital, Ushiku, Japan

1473 – A0153 Diquafosol ophthalmic solution increases pre- and post-lens tear film during contact lens wear in rabbit eyes. Shizuka Koh1, Y. Nagaehara1, Y. Oshita2, T. Nagano3, H. Mano3, H. Watanabe1, K. Nishida1. 1Ophthalmology, Osaka University Graduate School of Medicine, Suita, Japan; 2Nara Research & Development center, Santen Pharmaceutical Co., Ikoma, Japan *CR

*CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.

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1474 — A0154 Release of moxifloxacin from daily disposable contact lenses using an in vitro eye model: Impact of artificial tear fluid composition and mechanical rubbing, Chau-Minh Phan1, M. Bajgrowicz1, L. N. Subbaraman1, L. W. Jones1. 1School of Optometry and Vision Science, University of Waterloo, Waterloo, ON, Canada; 2Material Science and Engineering, Wroclaw University of Technology, Wroclaw, Poland

1475 — A0155 The Role of Scleral Lenses in the treatment of Corneal Irregularity and Ocular Surface Disease. Ellen S. Shorter1, J. Hartharan1, C. B. Nau1, A. Nau1, J. T. Barr1, M. Schornack1. 1University of Illinois at Chicago, Chicago, IL; 2Illinois College of Optometry, Chicago, IL; 3Mayo Clinic, Rochester, MN; 4Korb and Associates, Boston, MA; 5Ohio State University, Columbus, OH

1476 — A0156 Cholesterol Penetration into Daily Disposable Contact Lenses Using a Novel In Vitro Eye-Blink Model. Hendrik Walther, C. Phan, L. N. Subbaraman, L. W. Jones. School of Optometry, CCLR, University of Waterloo, Waterloo, ON, Canada

1477 — A0157 In vitro lipid deposition and extraction from two silicone hydrogel contact lenses. Simin Masoudi1, T. Mitchell1, M. D. Wilcox2. 1Optometry and Vision Science, University of New South Wales, Sydney, NSW, Australia; 2Illawarra Health and Medical Research Institute, University of Wollongong, Wollongong, NSW, Australia *CR

1478 — A0158 Decreased Lens Clearance at 20 Minute Intervals Over 2 Hours of 18.2mm-Diameter Lens Wear. Cherie B. Nau, M. Helland, M. Schornack. Department of Ophthalmology, Mayo Clinic, Rochester, MN

1479 — A0159 Mini scleral contact lenses: settling period and its effect on peripheral refraction. Rajini Peguda, Y. Kang, A. Lim, P. Kang, H. A. Swarbrick. School of Optometry and Vision Science, University of New South Wales, Sydney, NSW, Australia; 2Illawarra Health and Medical Research Institute, University of Wollongong, Wollongong, NSW, Australia *CR

1480 — A0160 Accommodative responses in myopic children wearing extended depth of focus contact lenses. Daniel Tilia1,2, J. Sha1, D. Kho1, A. Munro1, S. Delaney1, V. Thomas1, K. Guillon1, K. Moody1, J. Xu1, R. Clark1. 1Ocular Technology Group International, London, United Kingdom; 2School of Life and Health Sciences, Aston University, Aston, United Kingdom; 3Johnson & Johnson Vision Care Inc., Jacksonville, FL *CR

1481 — A0161 Real World Through Focus Curve of a New Multifocal Contact Lens. Michel Guillon1,2, K. Dumbleton1, K. Patel1, T. Patel1, T. K. Karkkainen1, K. Moody1, J. Xu1, R. Clark1. 1Ocular Technology Group International, London, United Kingdom; 2School of Life and Health Sciences, Aston University, Aston, United Kingdom; 3Johnson & Johnson Vision Care Inc., Jacksonville, FL *CR


1483 — A0163 Impact of Electronic Device Use on Contact Lens Wearers. Justin T. Kwan1, J. Hartharan1, L. O’Dell1, S. G. Hauswirth1, M. M. Hom1. 1Marshall B. Ketchum University, Fullerton, CA; 2Private Practice, Azusa, CA; 3Illinois College of Optometry, Chicago, IL; 4Minnesota Eye Consultants, Minneapolis, MN; 5Private Practice, York, PA *CR

1484 — A0164 Determining the Frictional Energy of 1-Day Contact Lens Wear. Olof Sterner1, S. Tosatti1, C. Scales2, R. Aeschlimann1, T. J. Wilson1, K. O. Lorenz1. 1SuSoS AG, Dübendorf, Switzerland; 2Johnson & Johnson Vision Care, Inc., Jacksonville, FL *CR

1485 — A0165 Comparative assessment of visual performance of two daily disposable multifocal soft contact lenses. Cécile A. Maissa1, R. Montès-Micó1, J. Estève-Taboada1, T. Ferrer Blasco2, A. Domínguez-Vicent1. 1Alcon Research Ltd, Fort Worth, TX; 2Dept. Óptica., Facultad de Fisica, Universidad de Valencia, Valencia, Spain *CR

1486 — A0166 Diurnal Blink Tracking of Symptomatic Contact Lens Wearing. Endri Angeli1, J. D. Rodriguez1, K. J. Lane1, G. W. Ousler2, M. Watson2. 1Research and Development, Ora, Inc., Andover, MA; 2Dry Eye, Ora, Inc., Andover, MA *CR

1487 — A0167 Simulation of three-dimensional scenes through multifocal contact lenses. William Duncan, J. Schwiergerling. College of Optical Sciences, University of Arizona, Tucson, AZ *CR


1489 — A0169 Using Corneal elevation specific technology to anti-aberrate a contact lens, David J. Slater1, B. Lay1, C. W. Sindt1. 1EyePrintProsthetics, Lakewood, CO; 2Ophthalmology, University of Iowa, Iowa City, IA; 3ADCS, Saint Contest, France *CR

1490 — A0170 Visual rehabilitation using non-invasive methods in relation to keratoconus stage. Paulina Camacho Choza, O. Fernandez. Cornea, Fundacion Hospital Nuestra Señora de la Luz, Ciudad de Mexico, Mexico

1491 — A0171 Mixed model analysis of corneal deswellling following overnight wear of silicone hydrogel lenses. Amir M. Moezzi1, D. Fonn2, N. Hutchings2, T. L. Simpson2. 1Centre for Contact Lens Research, School of Optometry and Vision Science, University of Waterloo, Waterloo, ON, Canada; 2School of Optometry and Vision Science, University of Waterloo, Waterloo, ON, Canada

1492 — A0172 Digital device user survey of eye fatigue. Peter S. Kolbbaum1, D. Meyer1, S. Huenink1, M. Rickett2, P. Chamberlain1, L. Hall1. 1Optometry, Indiana University, Bloomington, IN; 2R&D, COOPERVISION, Pleasanton, CA *CR

1493 — A0173 Internet Survey on Contact Lens Care. Margarete Wang1, V. Gunasekaran1, S. Naswazish1, D. B. Kim1, V. Pham2, C. Trinh2, G. Wu2. 1Harvard University, Cambridge, MA; 2University of California, Berkeley, Berkeley, CA; 3University of California, San Francisco, San Francisco, CA; 4University of Missouri Kansas City, Kansas City, MO; 5Aravind Eye Hospital, Chennai, India

1494 — A0174 Impact of primary and secondary spherical aberrations of multifocal soft contact lenses on vision. Cathleen Fedke1, K. Ehrmann1,2, V. Thomas1, R. C. Bakaraju1,2. 1Brien Holden Vision Institute, Sydney, NSW, Australia; 2School of Optometry and Vision Science, University of New South Wales, Sydney, NSW, Australia *CR

*CR refraction.
1495 — A0289 Does visual attention training improve balance and mobility in older adults? Mohammed Althomali1, L. Vallis1, S. J. Leat1. 1University of Waterloo, Waterloo, ON, Canada; 2University of Guelph, Guelph, ON, Canada

1496 — A0290 The availability of visual information affects the anticipatory postural control associated to reaching movements. Carlo Bruttini, R. Esposito, F. Bolzoni, P. Cavallari. Human Physiology Section of the DePT, University of Milan, Milan, Italy

1497 — A0291 Visually induced postural response using HMD vs screen projection. Guillaume L. Giraudet1,2, L. Daligaux1, J. Schwiegerling1,2. 1Optometry, Universite de Lyon, France; 2MIL, University of Milan, Milan, Italy

1498 — A0292 Utility of VEP in identifying concussion history in patients with Convergence Insufficiency. paul lederer1, D. Poltarski2. 1Rosenberg School of Optometry, San Antonio, TX; 2Department of Psychology, University of North Dakota, Grand Forks, ND

Exhibit/Poster Hall A0289-A0316
Monday, May 02, 2016 8:30 AM-10:15 AM
Visual Psychophysics/Physiological Optics / Low Vision / Visual Neuroscience

218 Binocular Vision, Stereopsis, Visual-Motor Control and Posture

Moderators: Cynthia Owsley and Juan Tabernerob
1499 — A0293 Astigmatic blur alters the spatial frequency tuning characteristics of visual cells. Kenneth D. Tran, B. Z. Li, M. M. Antonucci, C. V. Ngo, S. Chau, C. Kee, D. M. Levi, R. W. Li. 1School of Optometry, University of California, Berkeley, CA; 2Wills Neuroscience Institute, University of California, Berkeley, CA; 3School of Optometry, The Hong Kong Polytechnic University, Hung Hom, Hong Kong

1500 — A0294 Noise coherence thresholds for stereopsis. Dania Abuleil, V. Begum, S. Wei. A. Abuleil, B. Thompson, D. L. McCulloch. School of Optometry and Vision Science, University of Waterloo, Waterloo, ON, Canada

1501 — A0295 Research of Stereoeactivity with Integral Feedback in Space and Time. Mecislovas Vrubliauskas1, I. Rabichev1,2 VISUS-4D, VISUS-4D CENTER, Vilnius, Lithuania; 1The department of anatomy and physiology of humans and animals, Moscow State Pedagogical University, Moscow, Russian Federation


1503 — A0297 Objective and Subjective Measurements of Visual Fatigue Induced by Sustained Onscreen Reading. Martin D. Kändig, Y. Tsai, J. R. Hayes, J. E. Sheedy. 1Vision Performance Institute, Pacific University, College of Optometry, Forest Grove, OR; 2Aalen University, Aalen, Germany

1504 — A0298 Comparison of visual skills training and reading skills training for reading improvement in students reading below grade level. Maureen K. Powers, G. L. Miner, K. Sanders. 1Research Institute, Gemstone Foundation, Lake Forest, CA; 2Rodeo Hills Elementary School, Rodeo, CA *CR

1505 — A0299 3D-MOT predicts driving skills in older drivers. Jesse Michaela, D. Watanabe, P. Hirschi, F. Bellavance, J. Faubert. 1Visual Psychophysics and Perception Laboratory, School of Optometry, University of Montreal, Montreal, QC, Canada; 2Virage Simulation, Montreal, QC, Canada; 3Transport Safety Laboratory, HEC Montreal, Montreal, QC, Canada *CR

1506 — A0300 Useful field of vision for peripheral detection of motorcycles at intersections. Lauren P. Sandoval, F. Zahiri, A. R. Bowers. 1Scheepens Eye Research Inst., Mass Eye and Ear, Boston, MA; 2New England College of Optometry, Boston, MA; 3Department of Ophthalmology, Harvard Medical School, Boston, MA

1507 — A0301 Retro-reflective clothing enhances judgment of pedestrian walking direction at night-time. Alex A. Black, V. Bui, E. Henry, K. Ho, D. Pham, T. Tran, J. M. Wood. School of Optometry & Vision Science, Queensland University of Technology, Kelvin Grove, QLD, Australia

1508 — A0302 Object Recognition, Eye-hand Coordination and Wayfinding Performance with Simulated Intracortical Prosthetic Vision. Gayatri Kasakdikar, L. Yang, P. Troyk, G. Dagnelli. 1Biomedical Engineering, Illinois Institute of Technology, Chicago, IL; 2Ophthalmology, Johns Hopkins University, Baltimore, MD

1509 — A0303 Use of a smartphone app for heterophoria measurement. Shrinivas Pandik, M. Tomasi, K. Houston, G. Luo. Scheepens Eye Research Institute, Mass Eye and Ear, Boston, MA *CR

1510 — A0304 Slow-pace videogames are more effective than fast-pace videogames in enhancing visual attention in older adults. Allen M. Cheong, H. Lam1, W. Tsang, S. J. Leat3, R. Li. 1Optometry, Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong; 2Optometry, UC Berkeley, Berkeley, CA; 3Optometry, University of Waterloo, Waterloo, ON, Canada; 4Rehabilitation Sciences, The Hong Kong Polytechnic University, Hung Hom, Hong Kong

1511 — A0305 The effect of vertical yoked prism on horizontal fixation disparity. Lisa Asper, R. Lin, E. Tsai, K. Watt. School of Optometry and Vision Science, University of New South Wales, Sydney, NSW, Australia

1512 — A0306 Binocular Combination: Data and Binocular Perceptual Template Model. Chang-Bing Huang, G. Chen, F. Hou, Z. La. 1Institute of Psychology, CAS, Beijing, China; 2Psychology, The Ohio State University, Columbus, OH

1513 — A0307 Ocular sensory dominance and viewing distance. Ge Wu, H. Bi, C. Yu, Y. Wang, J. Jiang, B. Zhang. 1NOVA Southeastern University, Davie, FL; 2Wenzhou Medical University, Wenzhou, China; 3He University, Shenyang, China

1514 — A0308 Ocular dominance and handedness in Glaucoma Patients. Sharnjit Bains, N. Hua, E. Soghesan. 1McMaster University, Hamilton, ON, Canada; 2St. Joseph’s Healthcare Hamilton, Hamilton, ON, Canada

1515 — A0309 Repeatability of logMAR acuity in subjects with and without Down syndrome. Ayeswarya Ravikumar, J. Benoit, K. B. MORRISON, H. A. Anderson. Department of Optometry, University of Houston, Houston, TX

*CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.

1516 — A0310 Foveal and peripheral crowding and contour interaction are not affected by flanker-target color congruency. Stephanie Marten-Ellis, H. E. Bedell, S. B. Stevenson. College of Optometry, University of Houston, Houston, TX

1517 — A0311 Visuohaptic Integration During the Performance of a Precision Grasping & Placement Task. Naime Tugac, D. A. Gonzalez, E. Niechwiej-Szewo. Kinesiology, University of Waterloo, Waterloo, ON, Canada

1518 — A0312 Eye vergence is limited by adaptation. Elizabeth Fast, L. Holm, L. K. McLoon, S. Engel. 1Psychology, University of Minnesota, Minneapolis, MN; 2Ophthalmology, University of Minnesota, Minneapolis, MN; 3Neuroscience, University of Minnesota, Minneapolis, MN; 4Psychology, Umeå University, Umeå, Sweden

1519 — A0313 Prevalence of Eye-hand Dominance in Pomona Unified School District in California. Kristy Remick-Waltman, P. G. Davey. College of Optometry, Western University of Health Sciences, Pomona, CA


1521 — A0315 Continuous Flash Suppression in Amblyopia is Asymmetric and Non-selective for Stimulus Orientation. Tina Y. Gao, T. Ledgeway, A. Lie, N. Anstice, J. Black, P. McGraw, B. Thompson. 1School of Optometry and Vision Science, University of Auckland, Auckland, New Zealand; 2School of Psychology, Nottingham University, Nottingham, United Kingdom; 3School of Optometry and Vision Science, University of Waterloo, Waterloo, ON, Canada

1522 — A0316 CA/C adaptability to stereoscopic viewing. Pascaline Neveu, C. Roumes, M. Philippe, P. Fuchs, A. Prior. 1Perception, Armed Forces Biomedical Research, Brétigny-sur-Orge, France; 2Robotic Center, Mines ParisTech, Paris, France; 3Lyon Neuroscience Research Center, INSERM U1028, CNRS UMR 5292, Bron, France
219 Pediatric Eye Disease

1523 — A0348 Evaluation of Progressive Addition Lens Wear and Age-Related Changes in Phoria Magnitude in Myopic Children. Heather A. Anderson, J. Benoit, R. E. Mann. Optometry, University of Houston, Houston, TX

1524 — A0349 Does Mandatory Vision Examination Upon School Entry Identify Sufficient Vision Problems? Sandra S. Block1, A. Hempelmann1, M. Nguyen2, N. Phan1, J. Fang1. 1School-Based Vision Clinic, Illinois College of Optometry, Chicago, IL; 2Illinois College of Optometry, Chicago, IL

1525 — A0350 Is early literacy of 4- and 5-year-olds related to percentage of visual on-task time during storybook reading? Tamara S. Oechslin1, N. Fogg1, M. T. Kulp1, T. Candy1, E. B. Ciner1. 1Ohio State Univ Coll of Optometry, Columbus, OH; 2Indiana University, Bloomington, IN; 3Salus University, Philadelphia, PA

1526 — A0351 Association of Anisometropia with Unilateral Amblyopia in School-aged Children: the multi-country Refractive Error Study in Children. Yin Hu, M. He. Sun Yat-Sen University, Guangzhou, China

1527 — A0352 Abusive head trauma: a retrospective chart review of Omaha Children’s Hospital and Medical Center from 2013-2015. Andrew J. Baldwin1, K. Young1, K. Schumacher1, A. Svee1, C. Svee2, J. Fullner1, R. Hig1, S. Allbery1, S. Haney1, D. Suh1. 1Ophthalmology, Truhlsen Eye Institute, University of Nebraska Medical Center, Omaha, NE; 2Omaha Children’s Hospital and Medical Center, Omaha, NE; 3University of Nebraska Medical Center College of Medicine, Omaha, NE; 4Creighton Medical Center, Omaha, NE

1528 — A0353 Comparison of the characteristics of retinal hemorrhages in abusive head trauma versus normal vaginal delivery. So Young Kim1, A. J. Baldwin1, D. Suh1. 1Ophthalmology, Soonchunhyang Univ Cheonan Hospital, Cheonan, Korea (the Republic of); 2Ophthalmology and Visual Science, Truhlsen Eye Institute, University of Nebraska Medical Center, Omaha, NE

1529 — A0354 Binocular vision deficits post-concussion in the adolescent population: a retrospective review. Jameel Kanji1, S. Goswrisankar1, A. Shah1, A. Raghuram1. 1New England College of Optometry, Boston, MA; 2Ophthalmology, Children’s Hospital and Harvard Medical School, Boston, MA

1530 — A0355 Pediatric Ocular Trauma in Southern China. Sarah C. Xu1, J. Chow1, J. Liu1, B. Chen1, J. Maslin1, C. C. Teng1. 1Ophthalmology and Visual Science, Yale School of Medicine, New Haven, CT; 2Ophthalmology, The Second Xiangya Hospital, Changsha, China

1531 — A0356 Paediatric Ocular Trauma in a Tertiary Eye Hospital in Saudi Arabia. Huda Al Ghadeer. Medical Staff, King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia

1532 — A0357 Vision In Preschoolers - Hyperopia In Preschoolers (VIP-HIP) study: Effect of hyperopia and near visual functions on early literacy, visual-motor integration, visual perception and attention. Maxwell Pistilli1, M. G. Maguire1, G. Ying1, M. T. Kulp1, E. B. Ciner1, T. Candy1, J. Pentimonti1, G. E. Quinn1, B. D. Moore1, L. Cyert1. 1University of Pennsylvania, Philadelphia, PA; 2Ohio State University, Columbus, OH; 3Salus University, Philadelphia, PA; 4Indiana University, Bloomington, IN; 5Children’s Hosp of Philadelphia, Philadelphia, PA; 6New England Coll of Optometry, Boston, MA; 7Northeastern State University College of Optometry, Tahlequah, OK; 8American Institute of Research, Washington, DC

1533 — A0358 Vision In Preschoolers - Hyperopia In Preschoolers (VIP-HIP) Study: Associations between visual function and accommodative lag for emmetropic to moderately hyperopic children. T. Rowan Candy1, E. B. Ciner1, M. T. Kulp1, M. Pistilli1, M. G. Maguire1, G. Ying1, G. E. Quinn1, B. D. Moore1, L. Cyert1. 1Indiana University, Bloomington, IN; 2Ohio State University, Columbus, OH; 3Children’s Hospital of Philadelphia, Philadelphia, PA; 4New England College of Optometry, Boston, MA; 5Northeastern State University College of Optometry, Tahlequah, OK

1534 — A0359 Vision In Preschoolers-Hyperopia In Preschoolers (VIP-HIP) Study: The effects of uncorrected, moderate hyperopia on visual attention. Marjean T. Kulip1, E. B. Ciner1, M. Pistilli1, M. G. Maguire1, B. D. Moore1, T. Candy1, G. E. Quinn1, G. Ying1, L. Cyert1. 1Ohio State University, Columbus, OH; 2Salus University, Elkins Park, PA; 3University of Pennsylvania, Philadelphia, PA; 4Children’s Hospital of Philadelphia, Philadelphia, PA; 5New England College of Optometry, Boston, MA; 6Indiana University, Bloomington, IN; 7Children’s Hospital of Pennsylvania, Philadelphia, PA; 8Northeastern State University, Tahlequah, OK

1535 — A0360 Vision In Preschoolers-Hyperopia In Preschoolers (VIP-HIP) Study: Associations between visual function and magnitude of refractive error for emmetropic to moderately hyperopic children. Elise B. Ciner1, M. T. Kulp1, M. G. Maguire1, M. Pistilli1, T. Candy1, G. Ying1, G. E. Quinn1, B. D. Moore1, L. Cyert1. 1Salus University, Elkins Park, PA; 2College of Optometry, Ohio State University, Columbus, OH; 3Ophthalmology, University of Pennsylvania, Philadelphia, PA; 4College of Optometry, Indiana University, Bloomington, IN; 5Ophthalmology, Children’s Hospital of Philadelphia, Philadelphia, PA; 6New England College of Optometry, Boston, MA; 7College of Optometry, Northeastern State University, Tahlequah, OK

1536 — A0361 Prevalence of eye disease and reading difficulty in an inner city elementary school population - Preliminary results from the Baltimore Reading and Eye Disease Study (BREDS). Megan Collins1, L. J. Mudge1, R. Slavin2, R. Corcoran1, J. Owoeye1, D. S. Chang1, M. Repka1, D. S. Friedman1. 1Wilmer Eye Institute, Johns Hopkins University School of Medicine, Baltimore, MD; 2Johns Hopkins School of Education, Baltimore, MD

1537 — A0362 Pediatric Erythema Multiforme, Stevens-Johnson Syndrome, and Toxic Epidermal Necrolysis: epidemiology and risk factors for ocular involvement. Jeanie Ling1, C. Fathy1, S. Kohanim1. 1Vanderbilt Eye Institute, Nashville, TN; 2Vanderbilt University Medical School, Nashville, TN

1538 — A0363 Topographic findings of the optic disc in familial exudative vitreoretinopathy (FEVR). Jonghyun Lee1, C. A. Toth2, S. Mangalesh3, A. Dundridge3, D. Tran-Viet4, M. Veerappan4. 1Department of Ophthalmology, Inje University, Ilsan Paik Hospital, Goyang, Gyunggi-do, Korea (the Republic of); 2Department of Ophthalmology, Duke University Eye Center, Durham, NC; 3CR

1539 — A0364 Pediatric Keratitis at The New York Eye and Ear Infirmary: A Retrospective Review. Xuan Le-Nguyen, D. Trief, D. Ritterband, J. Seedor, E. Waisbren. ophthalmology and visual sciences, New York Eye and Ear Infirmary, New York, NY


1541 — A0366 Paediatric eye clinic at Mulago Hospital, Uganda: An epidemiological review. Harry Posner1, M. Posner2, A. Jones1, H. Ibrahim1. 1University Hospitals Leicester, Leicester, United Kingdom; 2Central middlesex hospital, London, United Kingdom; 3royal free hospital, London, United Kingdom
1563 — B0047 Screening for vestibular impairment in congenital neurosensory hearing loss identifies a population at high risk of ocular anomalies, including Usher syndrome. Vaishnavi Batumanban1, T. Dai1, S. Kleite1, A. Vincent1, B. C. Pagson2, S. L. Cushing3, J. Locke1, E. Hew1. 1Ophthalmology and Vision Sciences, The Hospital for Sick Children, Toronto, ON, Canada; 2University of Toronto, Toronto, ON, Canada; 3Department of Otologyngolgy - Head and Neck Surgery, The Hospital for Sick Children, Toronto, ON, Canada

1564 — B0048 Visual acuity and its related factors of primary school students in Japan. Luoming Huang, M. Shinkai, T. Kobayashi. Department of Health Development, Institute of Biomedical & Health Sciences, Hiroshima University, Hiroshima, Japan

1565 — B0049 Association between Retinal Thickness and Contrast Sensitivity in Older Adults: the Beaver Dam Eye Study (BDES). Kristine E. Lee1, S. M. Meuer1, K. Lee1, D. M. Abramoff1, B. E. Klein1. 1Ophthalmology and Visual Sciences, University of Wisconsin-Madison, Madison, WI; 2Electrical and Computer Engineering, University of Iowa, Iowa City, IA; 3Iowa Institute for Biomedical Imaging, University of Iowa, Iowa City, IA; 4Ophthalmology and Visual Sciences, University of Iowa, Iowa City, IA *CR

1566 — B0050 Assessment of Visual Acuity Changes Across a Dialisys Unit Population. Philip Wright1, H. Mahmoud2, L. Hodierne3, O. Smith4, A. Newsham5, P. Cory1, E. Weisfeld3, M. Amran3, S. de Sousa1, N. M. Selby1, P. Richardson3. 1Department of Renal Medicine, Royal Derby Hospital, Derby, United Kingdom; 2Department of Ophthalmology, Royal Derby Hospital, Derby, United Kingdom

1567 — B0051 Presbyopia and Near Vision Impairment in Older Adults from Parititins: The Brazilian Amazon Region Eye Survey (BARES). Cristina C. Cunha, S. Munoz, J. M. Furtado, N. N. Cavascan, A. Berezovsky, M. Campos, J. M. Cohen, M. J. Cohen, J. M. Furtado2, A. N. Ferraz Jr, A. Berezovsky, N. N. Cavascan, P. Y. Saccal2, M. R. Mitshiro, J. M. Cohen1, R. Belfort1. 1Ophthalmology and Ciencias Visuais, Universidade Federal de São Paulo - UNIFESP, São Paulo, Brazil; 2Departamento de Oftalmologia, Otorrinolaringologica e Cirurgia de Cabeça e Pescoço, Faculdade de Medicina de Ribeirao Preto - USP, Ribeirao Preto, Brazil; 3Departamento de Salud Publica, Universidad de La Frertera, Temuco, Chile; 4Instituto de Olos de Manaus, Manaus, Brazil; 5Departamento de Oftalmologia, Faculdade de Medicina-Univesidade Federal de Minas Gerais, Belo Horizonte, Brazil; 6Divisião de Oftalmologia, Departamento de Ciuriga, Faculdade de Medicina, Universidade Federal do Amazonas, Manaus, Brazil

1570 — B0054 Study Design and Methods for a Population-based Study on the Prevalence and Causes of Distance and Near Vision Impairment and Blindness in Parititins City: The Brazilian Amazon Region Eye Survey (BARES). Solange R. Salomao2, S. Munoz2, J. M. Furtado2, A. N. Ferraz Jr, A. Berezovsky, N. N. Cavascan, P. Y. Saccal2, M. R. Mitshiro1, J. M. Cohen4, R. Belfort1. 1Ophthalmology and Ciencias Visuais, Universidade Federal de São Paulo, Sao Paulo, Brazil; 2Oftalmologia, Otorrinolaringologica e Cirurgia de Cabeça e Pescoço, Faculdade de Medicina de Ribeirao Preto USP, Ribeirao Preto, Brazil; 3Salud Publica, Universidad de La Frertera, Temuco, Chile; 4Divisião de Oftalmologia, Depto. de Ciuriga, Faculdade de Medicina-Universidade Federal do Amazonas, Manaus, Brazil; 5Instituto de Olos de Manaus, Manaus, Brazil

1571 — B0055 Conducting a Rapid Assessment of Avoidable Blindness (RAAB) survey with Diabetic Retinopathy (DR) module in Hungary. Dorottya Szabo, G. Sandor, G. Toth, I. Szalai, R. Lukacs, A. Pek, G. Toth, A. Papp, J. Nemeth. Department of Ophthalmology, Semmelweis University, Budapest, Hungary

1572 — B0056 Six-Year Incidence of Visual Impairment and Blindness in Adult Malays: The Singapore Malay Eye Study (SIMES). Pok Chien Tan1, Y. Tham1, S. Tan1, S. Saw1, T. Aung2, T. Wong1, C. Cheng1, 2Ophthalmology, Singapore Eye Research Institute, Singapore, Singapore; 3Singapore National Eye Centre, Singapore; 4Academic Medicine Research Institute, Duke-NUS Graduate Medical School, Singapore, Singapore

1573 — B0057 Prevalence and Causes of Visual Impairment and Blindness in an Urban Chinese Population: The Singapore Chinese Eye Study, Sing-Hui Lim1, Y. Tham1, Y. Shi1, S. Tan1, Y. Zheng1, S. Saw1, T. Aung1, T. Wong1, C. Cheng1. 1Singapore Eye Research Institute, Singapore National Eye Centre, Singapore, Singapore; 2Department of Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore; 3State Key Laboratory of Ophthalmology, Zhongshan Ophthalmic Center,Sun Yat-sen University, Guangzhou, China; 4Saw Swee Hock School of Public Health, National University of Singapore and National University Health System, Singapore, Singapore; 5Yong Loo Lin School of Medicine, National University of Singapore and National University Health System, Singapore, Singapore

1574 — B0058 The Incidence of Ocular Adverse Bleeding Events in Patients Utilizing Novel Oral Anticoagulant and Antiplatelet Therapy in Routine Clinical Practice. Dattandar M. Sudarshan1, E. Konstantinou1, S. Arepalli1, A. Schachat1, J. P. Ehlers1, R. P. Singh1. Department of Ophthalmology, Cole Eye Institute, Cleveland, OH; 2Massachusetts Eye & Ear Infirmary, Harvard Medical School, Boston, MA

1575 — B0059 The impact of ambylophia, high myopia and genetic eye diseases for the prevalence of low vision and blindness - results from the Gutenberg Health Study (GHS). Christian Wolfani1, R. Hoehn1, D. Laubert- Reh1, P. S. Wild1, N. Pfeiffer1. Ophthalmology, University Medical Center, Mainz, Germany; 2Ophthalmology, Inselspital, Bern, Switzerland; 3Preventive Cardiology and Preventive Medicine / Center for Cardiology, University Medical Center, Mainz, Germany; 4Center for Thrombosis and Hemostasis (CTH), University Medical Center, Mainz, Germany

1576 — B0060 The association between onset of self-reported vision impairment and nursing home residence in an older US population. Vanessa Shih1, J. Campbell1, E. B. Devine1. 1Allergan Inc., Irvine, CA; 2Pharmaceutical Outcomes Research & Policy Program, University of Washington, Seattle, WA *CR

1577 — B0061 Early Findings Of A New Eye Care Model For Individuals In Residential Care: The Residential Ocular Care (ROC) Randomised Controlled Clinical Trial. Marios Constantinou1, M. Coot1, G. Rees1, J. Jackson1, K. Hill1, E. Finkelstein1, J. Xie1, K. Moore1, E. K. Fenwick1, E. L. Lamoureux1, 3. 1Centre for Eye Research Australia, University of Melbourne, The Royal Victorian Eye and Ear Hospital., Melbourne, VIC, Australia; 2Australian College of Optometry, Melbourne, VIC, Australia; 3Curtin University, Perth, WA, Australia; 4Duke, Graduate Medical School, Singapore, Singapore; 5Singapore Eye Research Institute, Singapore National Eye Centre; Duke, Graduate Medical School, Singapore, Singapore; 6Marie Curie Palliative Care Research Department, London, United Kingdom

The Commercial Relationships (CR) Index for Disclosures and the Clinical Trial (CT) Registration Index are at arvo.org/amindices.
221 Diabetic Eye Disease

Moderator: Gemmy Cheung

1579 — B0271 Improving Diabetic Retinopathy Screening for the Indigent Population of Spartanburg, South Carolina. Renee M. Rosati, P. Warren, A. Z. Ables, D. Meisha, Edward Via College of Osteopathic Medicine, Spartanburg, SC


1581 — B0273 Implementing a Telemedicine Screening Program for Ophthalmic Disease at Bugando Medical Center in Mwanza, Tanzania. Peter Coombs1, C. Nicol1, J. Shimba2, S. Rweyemamu2, D. Matuyabalwa2, R. Peck1, L. Smarr1, R. V. Chan1, K. Jonas1, G. Sun1. ‘Weill Cornell Ophthalmology, New York, NY, ‘Weill Bugando Medical Center, Mwanza, United Republic of Tanzania

1582 — B0274 Patient motivators and preferences regarding diabetic retinopathy screening methods at a rural eye clinic. Sapsang Gangapatra1, N. Jacobsson1, S. Georgeason1, B. A. Blodi1, H. Potter1, G. Sterken2, M. Smith1, Y. Liu1. ‘Department of Ophthalmology and Visual Sciences, University of Wisconsin-Madison, Madison, WI; ‘Institute for Clinical and Translational Research, University of Wisconsin-Madison, Madison, WI; ‘Dept of Population Health Sciences and Family Medicine, University of Wisconsin-Madison, Madison, WI

1583 — B0275 Teleretinal Screening in Mexico: Automating Diabetic Retinopathy Screening at a Comprehensive Diabetes Care Clinic in Monterrey, Mexico. Gilberto Zamora1, C. Agurto2, C. Hernandez3, J. Quesada4, L. Olmedo5, E. Quintero1, J. Kueppers1, J. Kueppers1, J. Kueppers1. ‘Emory University School of Medicine, Atlanta, GA; ‘University of California - San Francisco, San Francisco, CA

1584 — B0276 Prevalence, screening rate, visual impairment and treatment patterns of diabetic retinopathy among type 2 diabetes: Results from national insurance service survey 2006-2013. Su Jeong Song, ophthalmology, Kangbuk Samsung Hospital, Seoul, Korea (the Republic of Korea)

1585 — B0277 Automated Teleretinal Screening for Diabetic Retinopathy in the Harris Health System: Cost Analysis & Economic Impact. Robert B. Garon1, Y. Chu2, S. gapar3, C. Y. Weng3. ‘Ophthalmology, Baylor College of Medicine, Houston, TX; ‘Retina Specialty Group, Pensacola, FL; ‘Harris Health System, Houston, TX

1586 — B0278 Validity and usefulness of ‘RETeval’, a hand-held electro-physiological tool, in diabetic retinopathy screening compared to conventional digital fundus photography. Humoud Alothabi1, M. Alothabi1, C. Sourn2, R. Khandkar1, D. Stone1, I. Kozak1. ‘College of Medicine, King Saud bin Abdulaziz University for Health Sci, Riyadh, Saudi Arabia, ‘King Khalid Eye Specialist Hospital, Riyadh, Saudi Arabia, ‘Wilmer Eye Institute, Baltimore, MD


1588 — B0280 Predictors for Appointment Follow-up in Patients with Diabetic Retinopathy at a County Hospital. Ficky Hwang, P. Law, J. K. Yue, J. Stewart, D. Chao. Ophthalmology, University of California, San Francisco, San Francisco, CA


1590 — B0282 The Relationship of Retinal Vessel Diameters to Cognitive Function in Persons with Long Duration Type 1 Diabetics: the Wisconsin Epidemiologic Study of Diabetic Retinopathy (WESDR), Ronald Klein1, C. Ryan1, K. E. Lee1, B. E. Klein1. ‘Ophthalmology & Visual Sciences, Univ of Wisconsin Sch of Med & Public Hlth, Madison, WI; ‘Department of Psychiatry, University of California - San Francisco, San Francisco, CA


1592 — B0284 Proliferative Diabetic Retinopathy and Diabetic Macular Edema: are these two different disease processes? A Retrospective Cross-sectional Study. Samuel Hobbs1, A. Mehta2, A. Patel3, A. Das4. ‘Ophthalmology, University of New Mexico School of Medicine, Albuquerque, NM; ‘Ophthalmology, New Mexico VA Healthcare System, Albuquerque, NM


1594 — B0286 Skin Intrinsic Fluorescence and Complications of Type 1 Diabetes: the Wisconsin Epidemiologic Study of Diabetic Retinopathy. Barbara E. Klein1, K. Horak2, J. D. Maynard3, K. E. Lee1, R. Klein1. ‘Ophthalmology, Univ of Wisconsin-Madison, Madison, WI; ‘MDDC, Albuquerque, NM

1595 — B0287 Aspirin and Diabetic Retinopathy: the Singapore Epidemiology of Eye Disease (SEED) study. Yuan Shi1, Y. Tham1, R. J. Tapp1, G. Tan1, P. Mitchell1, J. Wang2, Y. Cheung3, C. Cheng3, T. Wong1. ‘Singapore Eye Research Institute, Singapore National Eye Centre, Singapore, Singapore; ‘The University of Sydney, Sydney, NSW, Australia; ‘Duke-NUS Medical School, Singapore, Singapore

1596 — B0288 Prevalence of diabetic retinopathy by the glycemic and blood pressure levels in an adult Japanese population: the Chikusei Eye Study. Mariko Sasaki1, 2, K. Motomura1, Y. Ozawa1, K. Iki1, R. Kawasaki1, K. Yamagishi1, N. Sawada1, S. Tsugane1, H. Iso1, K. Tsukuba1. ‘Department of Ophthalmology, Keio university, Tokyo, Japan; ‘Department of Ophthalmology, Tokyo Medical Center, Tokyo, Japan; ‘Department of Public Health, Yamagata University Faculty of Medicine, Yamagata, Japan; ‘Department of Public Health Medicine, Faculty of Medicine, University of Tsukuba, Tsukuba, Japan; ‘Research Center for Cancer Prevention and Screening, National Cancer Center, Tokyo, Japan; ‘Department of Public Health, Social and Environmental Health, Osaka University Graduate School of Medicine, Osaka, Japan
1598 – B0290 Risk Factors for Diabetic Retinopathy in Type 1 Diabetes Mellitus
Patients with Poor Glycemic Control. Vivian Schreuer1, F. Van Asten1, H. Ng2, J. Weeda3, C. Tack1, C. C. Hooy4, B. Klevering5, E. de Jong6, 1Ophthalmology, Radboudumc, Nijmegen, Netherlands; 2Internal Medicine, Radboudumc, Nijmegen, Netherlands

1599 – B0291 Impact of Axial Length on Diabetic Retinopathy. Stephen Holland, W. S. Gange, A. Stoddard1, J. sandhu, F. De Alba1, 1Ophthalmology, Loyola University Medical Center, Chicago, IL; 2Loyola University, Maywood, IL

1599 – B0291 Impact of Axial Length on Diabetic Retinopathy. Stephen Holland1, W. S. Gange1, A. Stoddard1, J. sandhu1, F. De Alba1, 1Ophthalmology, Loyola University Medical Center, Chicago, IL; 2Loyola University, Maywood, IL

1600 – B0292 Prevalence and severity of diabetic retinopathy of predominantly African American population in urban environment. Vincent LaBarbera, J. Tran, P. Thulasi, A. Hendrick, Ophthalmology, Emory University School of Medicine, Atlanta, GA

1601 – B0293 Glucose metabolism status is associated with changes in macular thickness: The Maasstricht Study. Eline E. De Clerck1, J. Schouten1, T. Berendschot2, F. Goezinne2, M. Schram2, C. Stehouwer2, C. Webers2, 1Ophthalmology, Maastricht University Medical Center +, Maastricht, Netherlands; 2Internal Medicine and Cardiovascular Research Institute, Maastricht University Medical Center +, Maastricht, Netherlands *CR

1602 — B0294 Description of ocular comorbidities associated to a surgical cohort of proliferative diabetic retinopathy patients in Mexico. Paulina Tolosa Tori1, R. Gonzalez-Salinas1, C. Garcia-Guiterrez2, V. Soberon3, G. Garcia-Aguirre4, V. Morales-Canton5, R. Velez-Montoya6, J. Solis-Salazar7, P. Garcia-Solis8, M. Sainz-de-Viteri9, V. Garcia-Solis4, Retina, Asociacion Para Evitar la Cequera en Mexico I.A.P., Mexico city, Mexico; 1Department of Biomedical Research, Autonomous University of Queretaro, Queretaro, Mexico; 2University La Salle, Mexico city, Mexico; 3Retina, ISSSTE Queretaro, Queretaro, Mexico *CR

1603 — B0295 Risk factors and the incidence of patients with proliferative diabetic retinopathy in patients of Eyes Institute of Goiania; Goiania - Go. DENISE Borges de Andrade Mendanha, M. martins cortez vitar1, J. J. Nasseralla, L. M. CAMPOS, M. Martins Abrahao, L. Pinheiro Teixeira, E. Dalia. Instituto de Olhos de Goiania, Goiania, Brazil

1604 — B0296 The Effects of Anti-VGEF preoperatively and perioperatively in preventing recurrent vitreous hemorrhage in the patients with Proliferative Diabetic Retinopathy who are status post vitrectomy. Francinia S. McCartney, W. Li. Ophthalmology, Drexel University/Hahnemann University Hospital, Philadelphia, PA

1605 — B0297 Prevalence of retinopathy and macular edema and evaluation of associated risk factors in patients with type 2 diabetes of short duration. Aida Jimenez-Corona1, D. Riveral-del-Parral1, S. C. Hernandez-Jimenez2, C. A. Aguilar-Salinas3, E. O. Graue-Hernandez2, 1Institute of Ophthalmology Conde de Valenciana, Mexico, City, Mexico; 2General Directorate of Epidemiology, Ministry of Health, Mexico, City, Mexico; 3Department of Cornea and Refractive Surgery, Institute of Ophthalmology Conde de Valenciana, Mexico, City, Mexico; 4Department of Ocular Epidemiology and Visual Health, Institute of Ophthalmology Conde de Valenciana, Mexico, City, Mexico; 5National Institute of Medical Sciences and Nutrition Salvador Zubiran, Mexico, City, Mexico

Exhibit/Poster Hall C0062-C0092
Monday, May 02, 2016 8:30 AM-10:15 AM

222 AMD Imaging 2

Moderators: Stela Vujosevic and Shizuo Mukai

1606 — C0062 Prevalence and natural course of refractive drusen in eyes with intermediate age-related macular degeneration. Akio Oishi1, M. Oishi1, S. Thiele1, J. Nadal1, M. Fleckenstein1, F. G. Holz2, S. Schmitz-Valckenberg1, 1Department of Ophthalmology, University of Bonn, Bonn, Germany; 2Institute for Medical Biometry, Informatics and Epidemiology, University of Bonn, Bonn, Germany *CR

1607 — C0063 Qualitative and Quantitative Assessment of Type 1 Neovascularization in OCT-Angiography. Alexandra Miere1, E. Costanzo1, G. Querques3, V. Capuano1, E. H. Souied1, 1Retina, Centre Hospitalier Intercommunal de Creteil, Creteil, France; 2Ophthalmology, Second University of Naples, Naples, Italy; 3Ophthalmology, University Scientific Institute San Raffaele, Milan, Italy

1608 — C0064 OCT-Angiography Assessment of CNV Evolution In Treated Exudative AMD: An Analysis Based On Activity Criteria. Marco Lupidi1, 2, F. Coscas1, 2, F. Tito1, C. Cagnini1, G. J. Coscas1, 2, 1Department of Biomedical and Surgical Sciences, Section of Ophthalmology, University of Perugia, Perugia, Italy; 2Centre Ophthalmologique De L’Odeon, Paris, France; 3Centre Hospitalier Intercommunal de Créteil, Créteil, France

1609 — C0065 Masked Assessment of Widfield En Face Swept Source OCT Imaging Versus Color, Autofluorescence, and Infrared Fundus Imaging for the Diagnosis of Reticular Pseudodrusen. Karen B. Schaaf1, A. D. Legarreta1, W. J. Feuer1, G. Gregory1, Q. Cheng1, J. E. Legarreta1, P. F. Stetson1, S. Kubach1, P. J. Rosenfeld1, 1Ophthalmic Research, Basom Palmer Eye Institute, Key Biscayne, FL; 2Biostatistics, University of Miami, Miami, FL; 3Carl Zeiss Meditec, Dublin, CA *CR

1610 — C0066 Choroidal and Outer Retinal OCT Features Preceding Development of Geographic Atrophy. Eduardo A. Novais1, 2, R. N. Loszada1, 2, R. E. Silver3, E. Cole2, G. K. Collins3, E. M. Moult3, E. Wagner3, J. S. Duke1, D. Ferrara1, J. M. Seddon1, 2, 1Ophthalmology, Federal University of Sao Paulo (UNIFESP), Sao Paulo, Brazil; 2Ophthalmology, New England Eye Center - Tufts University School of Medicine, Boston, MA; 3Ophthalmology, Federal University of Goias, Goiania, Brazil; 4MIT, Cambridge, MA; 5Ophthalmic Epidemiology and Genetics Service, New England Eye Center - Tufts Medical Center, Boston, MA *CR

1611 — C0067 Evaluation of automated drusen detection system for fundus photographs of patients with age-related macular degeneration. Katia Delalibera Pacheco1, 2, Y. Wolfson1, P. Burlina1, 2, D. Freund1, A. Feeny1, N. Joshi1, 2, M. Bressler1, 2Retina Division, Wilmer Eye Institute, Johns Hopkins University School of Medicine, Baltimore, MD; 2Retina Division, Brazilian Center of Vision, Brasilia, Brazil; 3Applied Physics Laboratory, The Johns Hopkins University, Laurel, MD *CR


1613 — C0069 The perimeter as predictor for the progression of geographic atrophy (GA) secondary to age-related macular degeneration (AMD). Maximilian Pfitz1, L. Lindner2, L. Goerdt1, S. Schmitz-Valckenberg1, S. R. Sadder1, 2, F. G. Holz2, M. Fleckenstein1, 1Ophthalmology, University of Bonn, Bonn, Germany; 2Doheny Eye Institute, UCLA, Los Angeles, CA; 3Jules Stein Eye Institute, UCLA, Los Angeles, CA *CR, ©
1614 — C0070 OCTA detects flow alterations in the choriocapillaris underlying drusen in non-exudative age-related macular degeneration without geographic atrophy. Eric M. Mouth1, 2, N. K. Waheed3, E. A. Novais4, 5, W. Choi6, B. Lee6, E. Colé7, C. D. Lu7, P. J. Rosenfeld7, J. S. Duke8, J. G. Fujimoto9, 10. Electrical Engineering and Computer Science, MIT, Cambridge, MA; 1 Health Sciences and Technology, Harvard-MIT, Cambridge, MA; 2 Ophthalmology, New England Eye Center - Tufts University School of Medicine, Boston, MA; 3 Ophthalmology, Federal University of Sao Paulo / UNIFESP, Rio de Janeiro, Brazil; 4 Ophthalmology, Bascom Palmer Eye Institute - University of Miami Miller School of Medicine, Miami, FL *CR

1615 — C0071 Monitoring treatment of retinal angiomatous proliferation by phase resolved Doppler OCT. Mirjam E. Van Velthoven1, J. H. de Jong1, B. Braaf2, M. Gräfe3, S. Amarakoon4, K. A. Vermeer4, S. yzer5, T. Missotten5, J. F. De Boer6. 1Ophthalmology, Rotterdam Eye Hospital, Rotterdam, Netherlands; 2VU University, Amsterdam, Netherlands *CR


1617 — C0073 Influence of disease duration on choroidal neovascularization (CNV) microstructures in eyes with age-related macular degeneration (AMD) as assessed by optical coherence tomography angiography (OCTA). Reinhard Told, A. Pollreisz1, F. Sulzbacher, S. Sacu, U. Schmidt-Erfurth1. Department of Ophthalmology, Medical University of Vienna, Vienna, Austria *CR, 2

1618 — C0074 Histologically guided metrics for semi-automated analysis of fundus autofluorescence (FAF) in aging and age-related macular degeneration (AMD). Kenneth R. Sloan1, 2, A. V. Zarubina3, C. E. Huisinig1, F. Aseemi2, 3, G. McGwin4, 5, Y. Zhang1, 6, C. Owlsley7, C. A. Curcio1. 1Department of Computer and Information Sciences, University of Alabama at Birmingham, Birmingham, AL; 2Department of Ophthalmology, University of Alabama at Birmingham, Birmingham, AL; 3School of Medicine, Wake Forest University, Winston-Salem, NC; 4Department of Epidemiology, University of Alabama at Birmingham, Birmingham, AL; 5Department of Biomedical Engineering, University of Alabama at Birmingham, Birmingham, AL *CR

1619 — C0075 Accuracy, repeatability and reproducibility of a novel approach to quantify individual drusen in spectral-domain optical coherence tomography images. Luis De Sisternes1, G. Jonna2, M. Greven3, T. Leng4, D. Rubin5, 1Radiology, Stanford University, Stanford, CA; 2Ophthalmology, Albert Einstein College of Medicine, Bronx, NY; 3Medicine (Biomedical Informatics Research), Stanford University, Stanford, CA; 4Ophthalmology, Stanford University School of Medicine, Palo Alto, CA

1620 — C0076 Variability in fundus autofluorescence (FAF) intensity is locally and globally associated with rod-mediated dark adaptation (RMDA) delay in early age-related macular degeneration (AMD). Anna V. Zarubina1, C. E. Huisinig2, F. Aseemi3, 4, G. McGwin4, 5, M. Clark6, C. A. Curcio1, K. R. Sloan7, 8, C. Owlsley7, 8. 1Department of Ophthalmology, University of Alabama at Birmingham, Birmingham, AL; 2School of Medicine, Wake Forest University, Winston-Salem, NC; 3Department of Epidemiology, University of Alabama at Birmingham, Birmingham, AL; 4Department of Computer and Information Sciences, University of Alabama at Birmingham, Birmingham, AL *CR

1621 — C0077 Choroidal Volume is Affected During Treatment for Neovascular AMD. Alan J. Franklin1. Retina Specialty Institute, Mobile, AL

1622 — C0078 En-face versus 12-line radial spectral domain optical coherence tomography scan patterns for detection of neovascular age-related macular degeneration pathology. Murtaza K. Adam, A. Shaikh, J. Hsu1, Wills Eye Hospital, Philadelphia, PA


1624 — C0080 Photoreceptor visibility surrounding different types of subretinal drusenoid deposits (SDD) revealed by adaptive optics scanning laser ophthalmoscopy (AOSLO). XIAOYU XU1, 2, X. Liu3, X. Wang3, Y. Zhang1. 1State Key Laboratory of Ophthalmology, Zhongshan Ophthalmic Center, Sun Yat-sen University, Guangzhou, China; 2Department of Ophthalmology, University of Alabama at Birmingham, Birmingham, AL

1625 — C0081 Evaluating the Response of Type 1 Choroidal Neovascular Membrane in Neovascular Age-Related Macular Degeneration to Anti-VEGF Treatment by Optical Coherence Tomography-Angiography. Ching J. Chen1, M. Olsen, B. Tieu, J. Burnham1. Ophthalm & Visual Science, Univ of Mississippi Med Center, Jackson, MS

1626 — C0082 Automated Detection of the Optic Disc in Fundus Autofluorescence Images of Age-Related Macular Degeneration. Daniel Alburque1, 2, K. T. Jayasundera3, C. Ranella3, M. Johnson-Roberson1. Kellogg Eye Center, University of Michigan, Ann Arbor, MI; 2Department of Naval Architecture & Marine Engineering and the Department of Electrical Engineering and Computer Science, University of Michigan, Ann Arbor, MI

1627 — C0083 VCAM-1 targeted in vivo imaging of neovascular disease in preclinical model. Md Imam Uddin, S. Evans1, A. Wong2, D. Wright3, A. Jayagopalan, J. S. Penne4. 1Ophthalmology, Vanderbilt University School of Medicine, Nashville, TN; 2Chemistry, Vanderbilt University, Nashville, TN; 3Hoffmann-La Roche Ltd, Basel, Switzerland; 4Department of Cell and Developmental Biology, Vanderbilt University, Nashville, TN


1630 — C0086 RPE imaging with polarization-sensitive optical coherence tomography in healthy subjects and AMD patients. Barry Cense1, D. T. Miller2, A. E. Elser1. 1Center for Optical Research and Education, Utsunomiya University, Utsunomiya, Japan; 2School of Optometry, Indiana University, Bloomington, IN *CR

1631 — C0087 Morphologic characteristics of the retina during drusen development in early and intermediate age-related macular degeneration. Ferdinand G. Schlanitz, M. Baratis, H. Bogunovic, A. Montuoro, S. Sacu, U. Schmidt-Erfurth1. Medical University of Vienna, Vienna, Austria *CR


*a Refer to the Program Number in the Clinical Trial (CT) Registration Index. *CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
Monday Posters
8:30 am – 10:15 am

1633 — C0089 Computational analysis of spatial correspondence between intraretinal, subretinal and sub-RPE fluid in neovascular AMD. Sophie Klimscha1, H. Bogunovic2, T. Schlegl1, A. Philip1, L. Zhang2, M. D. Abramoff2, M. Sonka2, B. Gerenday1, S. M. Waldstein1, U. Schmidt-Erfurth3. 1Christian Doppler Laboratory for Ophthalmic Image Analysis, Vienna Reading Center, Department of Ophthalmology, Medical University Vienna, Vienna, Austria; 2Department of Electrical and Computer Engineering, The University of Iowa, Iowa City, IA *CR

1634 — C0090 Prevalent and incident geographic atrophy (GA) in fellow-eyes of patients with unilateral neovascular age-related macular degeneration (AMD). Ruth E. Hogg1, R. M. Silva2, G. Staurenghi3, C. Rosina1, A. Santos2, M. Silva2, G. Staurenghi3, C. Rosina3, A. Santos2, M. Sonka2, M. D. Abramoff2, Ipek Oguz, L. Zhang2, M. D. Abramoff2, Christina D. Poulsen1, 2, A. Green3, T. Pet61, J. Grauslund1, 3. 1Department of Ophthalmology, Odense University Hospital, Denmark, Odense C, Denmark; 2OPEN Odense Patient data Explorative Network, Odense University Hospital, Denmark, Odense C, Denmark; 3The Clinical Research Institute, University of Southern Denmark, Odense C, Denmark; 4The NIHR Biomedical Research Centre, Moorfields Eye Hospital NHS Foundation Trust and UCL institute of Ophthalmology, London, United Kingdom *CR, ▲

1635 — C0091 Comparison between Multimodal Imaging and OCT Angiography in the diagnosis of Age Related Choroidal Neovascularization. Maurizio Mote1, A. Peroglio Deiro1, M. Guerrero2, G. Pertile3. 1Ophthalmology, Ospedale Sacro Cuore Don Calabria, Negrar (VR), Verona, Italy; 2Department of Ophthalmology and Visual Science, Nagoya City University Graduate School of Medicine, Nagoya, Japan; 3Ophthalmology departement, Policlinico Universitario G. Martino, Messina, Italy; ▲*CR

1636 — C0092 Graph-based fluid segmentation from OCT images. Ipek Oguz, L. Zhang, A. Wahle, M. Sonka, M. D. Abramoff. Ophthalmology, University of Iowa, Iowa City, IA *CR

Exhibit/Poster Hall C0093-C0127
Monday, May 02, 2016 8:30 AM-10:15 AM

Retina / Low Vision / Multidisciplinary Ophthalmic Imaging
223 Imaging posterior segment

Moderators: Yasuo Yanagi and Makoto Inoue


1638 — C0094 Multimodal Imaging of Large Microaneurysms in Macular Telangiectasia Type 1 With Correlation to OCT-Angiography. Meredith R. Kliffo1, J. T. McCann2, L. Yannuzzi3. 1Ophthalmology, NYU Langone Medical Center, New York, NY; 2Vitreous-Retina-Macula Consultants of New York, New York, NY

1639 — C0095 Diagnosis of choroidal neovascularization in uveitis by optical coherence tomography angiography. Alexandra Pierré1, M. Errera2, J. Girmens2, J. Benesty1, C. Baudouin2. 1Ophthalmology 3 Pr BAUDOUIN, Quinze-Vingts Hospital, Paris, France; 2Ophthalmology 4 Pr SAHEL, Quinze-Vingts Hospital, Paris, France

1640 — C0096 Oct-Angiography Of Angiod streaks. Eleonora Corbelli1, M. Cicinelli2, A. Carnevali3, A. Mazzaferrro2, M. Battaglia Parodi4, L. Querques5, I. Zucchiatti6, L. Benatti6, F. Bandello7, G. Querques8. 1Università degli studi di Messina, Messina, Italy; ▲*CR

1641 — C0097 Optical Coherence Tomography Angiographic Evaluation of Patients with Acute Multifocal Placoid Pigment Epitheliopathy. Jordan Burnham1, B. Tieu1, M. Olsen1, J. StJohn2, C. J. Chen1. 1Ophthalmology, University of Mississippi Medical Center, Jackson, MS; ▲2University of South Alabama, Mobile, AL


1643 — C0099 Peripheral fundus in normal eyes by ultra-widefield fluorescein angiography. Lu Lin, J. Lu, G. Mai, M. Li, D. Cao, X. Wang, Y. Luo. Zhongshan Ophthalmic Center of Sun Yat-Sen University, Guangzhou, China


1645 — C0101 Comparison of Retinal Image Sharpness and Visible Retinal Area Between Two Ultrawide Field (UWF) Cameras. Aditi Gupta1, H. El-Rami1, R. Barham1, A. Fleming1, J. Van Hemert1, J. K. Sun2, P. S. Silva1, L. P. Aiello1, 2. 1OPTOS PLC, Dunfermline, United Kingdom; 2Ophthalmology, Harvard Medical School, Boston, MA; ▲Beetham Eye Institute, Joslin Diabetes Center, Boston, MA *CR

1646 — C0102 Retinal changes detected by Ultra-Widefield imaging and indirect ophthalmoscopy of “fellow-eye” in patients with primary rhegmatogenous retinal detachment. Christina D. Poulsen1, A. Green2, T. Pet61, J. Grauslund1, 3. 1Department of Ophthalmology, Odense University Hospital, Denmark, Odense C, Denmark; 2OPEN Odense Patient data Explorative Network, Odense University Hospital, Denmark, Odense C, Denmark; 3The Clinical Research Institute, University of Southern Denmark, Odense C, Denmark; ▲*CR


1648 — C0104 The Impact and Implication of Peripheral Vascular Leakage on Ultra Widefield Fluorescein Angiography in Uveitis. Akshay S. Thomas1, T. Reid1, J. Campbell1, E. B. Suher2, J. T. Rosenbaum3, P. Lin1. 1Casey Eye Institute, Oregon Health and Science University, Wilsonville, OR; 2Portland VA Medical Center, Portland, OR; ▲Devers Eye Institute, Portland, OR

1649 — C0105 Evaluation of choroidal circulatory disturbance with Ultra-wide field Indocyanine Green Angiography. Aoi Kominami, S. Hirahara, M. Nozaki, T. Tasukawa, Y. Ogura. Department of Ophthalmology and Visual Science, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan

1650 — C0106 Qualitative and quantitative assessment of retinal vascular impairment due to Epiretinal membrane: an OCT-Angiography analysis. Fiore Tito1, M. Lupidii2, F. Coscas2, 3, C. Cagnini2, G. J. Coscas2, 3. 1Department of Biochemical and Surgical Sciences, Section of Ophthalmology, University of Perugia, Perugia, Italy; ▲2Ospedale Oculistico De L’Odeon, Paris, France; ▲3Centre Hospitalier Intercommunal de Créteil, Créteil, France

1651 — C0107 Diabetic Retinopathy (DR) Severity and Prevalence of Predominantly Perivascular Lesions (PPL) Identified using Nonmydriatic Ultrawide Field (UWF) Retinal Imaging in the National Indian Health Service Teleophthalmology Program. Paolo S. Silva1, 2, M. B. Horton1, D. Clay2, J. K. Sun2, J. D. Cavallerano1, 2, L. Aiello1, 2. Beetham Eye Institute, Joslin Diabetes Center, Boston, MA; ▲Ophthalmology, Harvard Medical School, Boston, MA; ▲National Teleophthalmology Reading Center, Indian Health Service, Phoenix, AZ *CR

The Commercial Relationships (CR) Index for Disclosures and the Clinical Trial (CT) Registration Index are at arvo.org/amindices.
1652 — C0108 Effects Of Hypertension On Retinal Vessel Diameter In A Minnesota Population. Dara D. Koozekanani1, R. J. White2, A. Divani3, J. Kohler1. 1Department of Ophthalmology and Visual Neurosciences, University of Minnesota, Minneapolis, MN; 2University of Minnesota Medical School, Minneapolis, MN; 3Department of Neurology, University of Minnesota, Minneapolis, MN

1653 — C0109 Dynamic Functionality And Static Changes Of Retinal Vessels In Eyes With Diabetic Macular Edema. Lucia Benatti1, L. Tomasso1, F. Corvi1, F. Darvizeh2, C. Spina1, A. Carnevali1, L. Querques1, I. Zucchiatti1, F. Bandello1, G. Querques1. IRCCS Ospedale San Raffaele, Milan, Italy; 2University of Rome ‘La Sapienza’, Rome, Italy

1654 — C0110 Inter-Session Repeatability of Retinal Layer Thickness Measurements in Optical Coherence Tomography. Jing Tran1, N. Bates1, G. M. Somfai1, D. DeBuc1. 1Bascom Palmer Eye Institute, University of miami, Miami, FL; 2Retina Unit, Pallas Klinikken, Olten, Switzerland; 3Ophthalmology, Semmelweis University, Budapest, Hungary

1655 — C0111 Development and evaluation of the novel fundus oximetry. Shinichiro Ishikawa1, Y. Yoshinaga2, D. Nakamura2, T. Okada2, T. Minamimoto3, T. Milanov, MN; 2and Visual Neurosciences, University of Minnesota, Minneapolis, MN; 3Department of Neurology, University of Minnesota, Minneapolis, MN

1656 — C0112 Structural changes by spectral domain optical coherence tomography in patients with Coats disease. Cui Rui1, Q. Zhao2, W. Yang1, Y. Zhang1, B. Mo3, W. Wei3. Beijing Tongren Medical School, Beijing, China

1657 — C0113 A Portable, Inexpensive, Non-Mydriatic Fundus Camera Based on the Raspberry Pi® Camera. Bailey Shen1, S. Mukai1. 1Department of Ophthalmology, University of Illinois at Chicago, Chicago, IL; 2Retina Service, Massachusetts Eye and Ear Infirmary, Boston, IL

1658 — C0114 Fundus autofluorescence in diabetic macular edema as a tool for establishing diagnosis, prognosis and treatment. Ruben D. Medellin-Balsarela1, D. Magana1, J. Ceja Aguilar1, C. G. Arias Rodriguez1, C. Haro Zuno1, D. Del Rio Moro1, E. Romo-Garcia1. 1Ophthalmology, CIDOCS - UAS, Culaicacan, Mexico; 2Buena Vista Sinaloa I.A.P., Culaicacan, Mexico

1659 — C0115 Correlation of parameters of laser speckle flowgraphy and retinal oximetry in healthy subjects. Atsushi Hayashi1, S. Abe2, M. Miyakoshi1, T. Nakagawa. University of Toyama, Toyama, Japan

1660 — C0116 Correlation of Hemorrhages and/or Microaneurysms (H/Ma) Severity and Counts Between Ultrawide Field (UWF) Retinal Imaging and Standard ETDRS Color Stereoscopic Retinal Photography (ETDRS Photos). Hala El Rami1, R. Barham1, A. Gupta1, A. Fleming1, J. Van Hemert1, J. K. Sun2, P. S. Silva1, L. Aiello1,2,3. 1Ophthalmology, Beetham Eye Institute, Joslin Diabetes Center, Boston, MA; 2Optos plc, Dunfermline Scotland, United Kingdom; 3Ophthalmology, Harvard Medical School, Boston, MA

1661 — C0117 Feasibility and acceptance of retinal imaging in a medical clinic by non-expert imagers. Peter C. Nicholas1, P. S. Mett1, S. W. Cousins. Ophthalmology, Duke University Eye Center, Durham, NC

1662 — C0118 AO-SLO imaging of diseased retina using offset and confocal apertures. Tara L. Favazza1, A. E. Swanson1, L. Ambrosio1, G. Soni1, R. M. Hansen1, J. D. Akula1,2, A. B. Fulton1,2. 1Ophthalmology, Boston Children’s Hospital, Boston, MA; 2Ophthalmology, Harvard Medical School, Boston, MA

1663 — C0119 Correlations between retinal vessel calibers and neurodegeneration in patients with no or mild diabetic retinopathy in the European Consortium for the Early Treatment of Diabetic Retinopathy (EUROCONDOR). Jakob Grauslund1, U. Frydkjaer-Olsen1, R. S. Hansen1, R. Simo1, J. G. Cunha-Vaz1, T. Peto1. 1Ophthalmology, Odense University Hospital, Odense, Denmark; 2Vall d’Hebron, Barcelona, Spain; 3Association for Innovation and Biomedical Research on Light and Image, Coimbra, Portugal

1664 — C0120 Retinal Oximetry in a Healthy Japanese Population. Yuki Nakano1, T. Shimuzaki1, N. Kobayashi1, Y. Miyoshi1, A. Ono1, M. Kobayashi1, C. Shiragami1, K. Hirooka1, A. Tsujikawa1. Department of Ophthalmology, Kagawa University Faculty of Medicine, Kida-gun, Japan

1665 — C0121 Alterations of Choroidal Thickness and Circulation in Patients with Hypertensive Choroidopathy. Michiyuki Saito1, K. Noda1,2, Y. Hashimoto1, K. Hirooka1, Z. Dong1, R. Ando1, S. Mori1, S. Kase1, W. Saito1,2. 1Department of Ophthalmology, Hokkaido University Graduate School of Medicine, Sapporo, Japan; 2Department of Ocular Circulation and Metabolism, Hokkaido University Graduate School of Medicine, Sapporo, Japan

1666 — C0122 Comparison Of Vitreous Humor Characteristics Of Children And Adults With Enhanced Vitreous Imaging SD-OCT. Víctor López-Vílchez1, A. Magno-Aguirre1, L. wheelock1,3, F. Morales-Canton1, H. Quiroz-Mercado1, G. Salcedo1. 1Asociacion para Evitar la Ceguera en Mexico, mexico. D.F., Mexico; 2ITESM, Monterrey, Mexico

1667 — C0123 Optical coherence tomography using visible light on human subjects. Hao F. Zhang1, J. Y. Chien1, X. Shiu1, A. A. Fawzi1. 1Eye Research Institute, Northwestern University, Evanston, IL; 2Biomedical Engineering, Northwestern University, Evanston, IL

1668 — C0124 Clinical characterization of Ebola-associated eye disease with spectral domain optical coherence tomography. Allen O. Eghirer1, R. J. Bishop2, C. J. Brady3, V. Ray4, M. Fallah1, D. Cunningham2, S. S. Reilly5, E. F. Ferris2, J. Larbee3. 1Ophthalmology, Johns Hopkins University School of Medicine, Baltimore, MD; 2Ophthalmology, National Eye Institute, Bethesda, MD; 3Ophthalmology, Redemption Hospital, Monrovia, Liberia; 4PREVAIL III, Monrovia, Liberia; 5Ophthalmology, California Pacific Medical Center, San Francisco, CA; 6Biostatistics, University of Minnesota, Minneapolis, MN

1669 — C0125 Effects of Age and Vitreous Structure on Contrast Sensitivity. Giancarlo A. Garcia1,2, K. M. Yeel1, J. Nguyen1, J. Nguyen1, J. Mamou1, J. A. Ketterling1, R. H. Silverman1, A. A. Sadun1, J. Sebag1, YMIR Institute for Vitreous Macula Retina, Huntington Beach, CA; 2Ophthalmology, Doheny Eye Institute/UCLA, Los Angeles, CA; 3E. L. Lizzie Center for Biomedical Engineering, Riverside Research, New York, NY; 4Ophthalmology, Columbia University Medical Center, New York, NY; 5School of Medicine, University of California, Irvine, Irvine, CA

1670 — C0126 Sensitivity of macular optical coherence tomography versus clinical examination alone in the preoperative assessment of patients with cataract. Jonathan D. Fay1, M. T. Fay1, J. K. Lee1, S. Anderson1. 1Ophthalmology, Montefiore/Albert Einstein College of Medicine, New York, NY; 2Klamath Eye Center, Klamath Falls, OR

1671 — C0127 Analysis by NASA’s VESGEN Software of Vascular Branching in the Human Retina with a Ground-Based Microgravity Analog. Patricia A. Parsons-Wingerter1, R. J. Vaas1, S. Raghunandan1, A. Vet1, S. Zanello2, R. Ploutz-Snyder2, G. Taibbi3, G. Vizzetti4. 1Space Life Sciences Research Branch, NASA Ames Research Center, Moffett Field, CA; 2Universities Space Research Association, NASA Johnson Space Center, Houston, TX; 3Department of Ophthalmology and Visual Sciences, University of Texas Medical Branch at Galveston, Galveston, TX; 4NASA SLSTP Summer Internship Program/ University of California Berkeley, Berkeley, CA

* Refer to the Program Number in the Clinical Trial (CT) Registration Index. *CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
Monday, May 02, 2016 8:30 AM-10:15 AM
Multidisciplinary Ophthalmic Imaging Group
224 MOI Poster 8 - Imaging Technology - Miscellaneous

Moderators: Hao F. Zhang and Tomasz Tłačzyk

1672 — D0033 In vivo Mapping and Comparative Analysis of Human Saccadic Eye Movement Pathways by Diffusion Tensor MRI-based Tractography. Hachemi Nezzea, J. N. MBEKEANI, A. Tardif, A. Sontheimer, J. Coste, F. Chiambaretta, J. Lemaitre. 2 Ophthalmology, Auvergne University, Chu Clermont Ferrand, Clermont Ferrand, France; 1Igcn, Auvergne University, Clermont Ferrand, France; 3Ophthalmology & Visual Sciences, Albert Einstein College Of Medicine Of Yeshiva University, New York, NY; 4Surgery, North Bronx Health Network, New York, NY; 5Neurosurgery, Auvergne University, Chu Clermont Ferrand, Clermont Ferrand, France

1673 — D0034 Magnetic Resonance Angiography of the Choroid in Patients with Age-Related Macular Degeneration. Gina Yu, W. Dai, L. O’Loughlin, L. Zhao, E. Levitt, A. Bassiri, S. Wagley, K. V. Marra, D. Alsop, J. G. Arroyo. 1Dept of Ophthalmology, Beth Israel Deaconess Medical Center, Boston, MA; 2Dept of Radiology, Beth Israel Deaconess Medical Center, Boston, MA; 3Michigan State University, Lansing, MI; 4University of California, San Diego, San Diego, CA *CR

1674 — D0035 Dose and Time Response of Mn²⁺-enhanced Magnetic Resonance Imaging for Tracing Visual Pathway in vivo. Yuntao Hu, W. Wang, H. Xu, Z. Ma. 1Dept. of Ophthalmology, Beijing Tsinghua Changgung Hospital, Beijing, China; 2Dept. of Ophthalmology, General Hospital of Ningxia Medical University, Yinchuan, China; 3Dept. of Ophthalmology, Peking University Third Hospital, Beijing, China; 4Department of Radiology, Peking University Third Hospital, Beijing, China

1675 — D0036 Quantifying Optic Nerve Inflammation and Axon Loss by Diffusion MRL. Tsen-Hsuan Lin, P. Sun, Y. Wang, S. Song. 1Radiology, Washington University School of Medicine, St. Louis, MO; 2Obstetric and Gynecology/Radiology/The Hope Center for Neurological Disorders, Washington University School of Medicine, St. Louis, MO; 3Radiology/The Hope Center for Neurological Disorders, Washington University School of Medicine, St. Louis, MO; 4Biomedical Engineering, Washington University in St. Louis, St. Louis, MO

1676 — D0037 The use of retinal wide-field imaging system to screen for sickle cell retinopathy (SCR). Wai Ching Lam, T. Alabdashali, C. VandenHoven, L. MacKeen, M. Kirby, C. Cheung, M. J. Wan, P. Kertes. 1Ophthalmology and vision sciences, University of Toronto, Toronto, ON, Canada; 2Ophthalmology and vision sciences, SickKids Hospital, Toronto, ON, Canada; 3Casey Eye Institute, Oregon Health and Sciences University, Portland, OR *CR

1677 — D0038 Wide field imaging of the retina using a new slit scan ophthalmoscope (SSO) imager. Kathleen S. Kunert, T. Taeubig, M. Blum, S. Saur, K. O’Hara, M. K. Durbin, B. Danieli, M. Uwe, S. Virmanni, M. Peter, C. Russmann. 1Department of Ophthalmology, Helios Klinikum Erfurt, Erfurt, Germany; 2Carl Zeiss AG, Oberkochen, Germany; 3Carl Zeiss AG Jena, Jena, Germany; 4Carl-Zeiss-Meditec AG, Jena, Germany; 5Carl Zeiss Meditec Inc., Dublin, CA *CR

1678 — D0039 Comparison of Optos Optomap versus Heidelberg Spectralis ultra-widefield fundus fluorescein angiography in infants. Timothy Fung, C. Patel. Oxford Eye Hospital, Oxford, United Kingdom

1679 — D0040 Developing a Portable, Wide Field, Contact Retinal Imaging System. Felix Y. Chau. Department of Ophthalmology, University of Illinois at Chicago - UIC, Chicago, IL

1680 — D0041 Ultra-Widefield Ophthalmic Imaging for Biomarker Discovery in Hypertension. Gavin Robertson, T. Petö, M. Williams, B. Dhillon, G. Houston, D. Newby, E. J. van Beek, E. Trucco, A. Fleming, J. Van Hemert, T. J. MacGillivray. 1VAMPIRE project, Centre for Clinical Brain Sciences, University of Edinburgh, Edinburgh, United Kingdom; 2NIHRC BMRC, Moorfields Eye Hospital, London, United Kingdom; 3VAMPIRE project, School of Science and Engineering (Computing), University of Dundee, Dundee, United Kingdom; 4Centre for Cardiovascular Science, University of Edinburgh, Edinburgh, United Kingdom; 5Ninewells Hospital and Medical School, University of Dundee, Dundee, United Kingdom; 6Optos PLC, Dunfermline, United Kingdom; 7Clinical Research Imaging Centre, University of Edinburgh, Edinburgh, United Kingdom *CR

1681 — D0042 Automated Quantitative Characterization of Retinal Vascular Features in Ultra-widefield Fluorescein Angiography. Kevin Wang, S. K. Srivastava, J. P. Ethier. 1School of Medicine, Case Western Reserve University, Cleveland Heights, OH; 2Coe Eye Institute, Cleveland Clinic, Cleveland, OH *CR

1682 — D0043 Ultra Wide Field Fundus Autofluorescence (UWF-FAF) for the detection and monitoring of inherited retinal disease in children. Avinash Gurbaxani, D. Khurram. Moorfields Eye Hospital, Dubai, United Arab Emirates


1684 — D0045 Smartphone-based Ophthalmic Imaging with Paxos Scope™ to Expand and Improve Eye Care in Rural Nepal. David Myung, J. Welling, M. Oliva, D. Chang, G. Tabin. 1Ophthalmology, Byers Eye Institute at Stanford, Palo Alto, CA; 2VA Palo Alto Health Care System, Palo Alto, CA; 3Himalayan Cataract Project, Waterbury, VT; 4Los Altos Eye Physicians, Los Altos, CA; 5Ophthalmology, Moran Eye Center, University of Utah, Salt Lake City, UT *CR

1685 — D0046 Open-Source, Ultra-Low-Cost Smartphone Attachment for Non-Mydriatic Fundus Photography - Open Indirect Ophthalmoscope. Devesh Jain, T. Swedish, B. Shen, D. Y. Kim, S. Mukai, R. Raskar. 1Electrical and Electronics Engineering, BITs Pilani Hyderabad Campus, Hyderabad, India; 2Camera Culture, Media Arts and Sciences, Massachusetts Institute of Technology, Cambridge, MA; 3Retina Service, Department of Ophthalmology, Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston, MA; 4Department of Ophthalmology, University of Illinois, Chicago, IL

1686 — D0047 A Smartphone attachment for slit lamp-like imaging of the anterior segment of the eye. Shantanu Sinha, W. S. Lee, R. Raskar. 1MIT Media Lab, Massachusetts Institute of Technology, Cambridge, MA; 2Department of Mechanical Engineering, Massachusetts Institute of Technology, Cambridge, MA

1687 — D0048 Smartphone-Based Tele-Ophthalmology Screening for Diabetic Retinopathy. Brian C. Toy, M. Prabhu, C. Pan, L. Leung, M. Blumenkranz. Byers Eye Institute, Stanford University, Stanford, CA *CR

1688 — D0049 Inexpensive model for learning the technique and principles of wide-angle smartphone ophthalmic photography. R. Joel Welch, J. Crews, Q. Nguyen. Department of Ophthalmology, Stanley M. Truhlsen Eye Institute, Omaha, NE

1689 — D0050 Ultrasound Coherent Compound Plane-Wave Imaging of Ocular Anatomy and Blood Flow. Raksha Urs, J. A. Ketterling, D. Gross, R. H. Silverman. 1Harkness Eye Institute, Columbia University Medical Center, New York, NY; 2Lizzi Center for Biomedical Engineering, Riverside Research, New York, NY

1690 — D0051 Comparative sensitivity of ultrasound probes in detection of vitreous inhomogeneities. Harriet O. Lloyd, K. Smith, J. A. Ketterling, J. Mamou, R. H. Silverman. 1Ophthalmology, Columbia University Medical Center, New York, NY; 2Örebro University School of Medicine, Örebro, Sweden; 3F.L. Lizzi Center for Biomedical Engineering, Riverside Research, New York, NY

*CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.

† Refer to the Program Number in the Clinical Trial (CT) Registration Index.
1713 — D0074  Ophthalmology resident proficiency and confidence in identification of fluorescein angiograms. Russell M. Levine1, L. GODUN2, A. Crossan1, L. Nicolis3, R. Mirza1, V. Rauji1, I. Tsui1, L. Eisen1, J. Rosenberg1. 1Memorial Sloan Kettering Cancer Center, New York, NY; 2Albert Einstein College of Medicine, Bronx, NY; 3Medical College of Wisconsin, Milwaukee, NY; *Northwestern, Chicago, IL; *UCLA Jules Stein Eye Institute, Los Angeles, CA

1714 — D0075  Stiffness of glaucomatous sclera assessed using Optical Coherence Dynamic Elastography: a preliminary ex vivo study. Thu-Mai Nguyen1, K. Grieve1, M. Paques2, C. Boccara3, C. Baudouin2, Z. Stephanie2, 1, 2Institut Langevin Ondes et Images, ESPCI ParisTech, CNRS UMR 7587, Inserm ERL U979, Paris, France; *Centre National d’Ophthalmologie des Quinze-Vingts, Paris, France

1715 — D0076  Label-free two-photon imaging of donor corneal lenticules with cultivated human limbal epithelial stem cells. Marco Lombardo1, V. Barbero2, G. Lombardo4, M. Bertolini1, S. serrao1, E. Di Iorio1. JRCCS Fondazione GB Bietti, Rome, Italy; 1Fondazione Banca degli Occhi del Veneto Onlus, Venezia, Italy; 2Istituto per i Processi Chimico-Fisici, Consiglio Nazionale delle Ricerche, Messina, Italy; 3Vision Engineering Italy srl, Rome, Italy; 4Dipartimento di Medicina Molecolare, Università di Padova, Padova, Italy

1716 — D0077  Can in vivo two-photon retinal imaging be safely applied in humans? Christina Schwarz1, R. Sharma2, W. S. Fischer3, M. M. Chung3, G. Palczewska3, K. Palczewski4, D. R. Williams5, J. J. Hunter1, 1Center for Visual Science, University of Rochester, Rochester, NY; 2Flaun Eye Institute, University of Rochester, Rochester, NY; 3Department of Medical Devices, Polgenix Inc., Cleveland, OH; 4Department of Pharmacology, Cleveland Center for Membrane and Structural Biology, School of Medicine, Case Western Reserve University, Cleveland, OH; 5The Institute of Optics, University of Rochester, Rochester, NY *CR

1717 — D0078  Comparing the performance of three retinal cameras in detecting malarial retinopathy in pediatric cerebral malaria in Malawi. Vinayak S. Joshi1, S. C. Nemeth1, P. Soliz1, T. Taylor2, I. MacCormick1, S. Harding1, M. Burton1, A. Bastawrous1, S. Levellen1. 1VisionQuest Biomedical LLC, Albuquerque, NM; 2Michigan State University, East Lansing, MI; 3University of Liverpool, Liverpool, United Kingdom; 4London School of Hygiene & Tropical Medicine, London, United Kingdom; 5Kilimanjaro center for Community Ophthalmology, Cape Town, South Africa *CR

1718 — D0079  Defining Clinically Significant Vitreous Floaters with Objective Quantitative Measures of Vitreous Structure and Visual Function. Kenneth M. Yee1, J. Mamou2, J. A. Kettinger3, J. Nguyen1, R. H. Silverman1, J. Sebag4. 1VRM Institute for Vitreous Macula Retina, Huntington Beach, CA; 2Doheny Eye Institute/UCLA, Los Angeles, CA; 3Lizzi Center for Biomedical Engineering, Riverside Research, New York, NY; 4Harkness Eye Institute, Columbia University Medical Center, New York, NY *CR

1719 — D0080  Acoustic microscopy: an imaging tool to assess elastic properties of ocular tissues at the micrometer scale. Jonathan Mamou1, D. Rohrbach1, Q. V. Hoang2, H. O. Lloyd2, S. A. McFadden2, R. H. Silverman1. 1F L Lizzi Center for Biomedical Engineering, Riverside Research, New York, NY; 2Ophthalmology, Columbia University Medical Center, New York, NY; 3Vision Sciences Group, Faculty of Science and IT, University of Newcastle, Newcastle, New South Wales, Australia

1720 — D0081  Real world, large-scale Study of Safety and Effectiveness of a Fully-automated Diabetic Retinopathy Screening System. Kaushal Solanki1, C. Ramachandra1, S. Bhat2, M. Bhaskaranand2, M. G. Nittala3, S. R. Sadda3. 1Joyndocs1, 2Eynuck, Inc., Woodland Hills, CA; 3Doheny Eye Institute, Los Angeles, CA; 4EyePACS LLC., San Jose, CA *CR

1721 — D0082  Second Generation Robotic Remote Controlled Stereo Silt-Lamp. Jean-Marie A. Parel1, C. Roovaan1, A. Gonzalez1, J. Silgado2, M. C. Aguilar1, K. A. Alawi1, C. De Freitas1, V. M. Hernandez1, N. Relhan1, S. H. Too1, M. Tanega1. 1Ophthalmic Biophysics Center, Bascom Palmer Eye Institute, University of Miami Miller School of Medicine, Miami, FL; 2Brien Holden Vision Institute, University of New South Wales, Sydney, Australia; 3Cornea and Anterior Segment Services, L V Prasad Eye Institute, Hyderabad, India *CR

1722 — D0083  Expression of an N-terminal GAR1 region truncation of CNG channel β-subunit on a KO background partially rescues structure/function and alters calcium feedback. Steven J. Pittler1, Y. Zhang2, A. S. McKeown1, T. W. Kraft1, B. Reidel1, V. Y. Arshavsky1, M. E. Burns1, M. L. DeRamus1. 1Department of Vision Sciences, Vision Science Research Center, University of Alabama at Birmingham, School of Optometry, Birmingham, AL; 2Department of Ophthalmology, Mayo Clinic, Rochester, MN; 3Albert Eye Research Institute, Duke Eye Center, Duke University, Durham, NC; 4Center for Neuroscience, UC Davis, Davis, CA


1724 — D0120  Mitochondrial Trafficking by Kinesin-Myosin-Cadherin Complex in the RPE. Won Jin Jahng1, T. Dluys1, W. He2, O. Sylvester3, M. Nekus4, J. Um1, S. R. Sripathi4. 1Retina Proteomics Lab, American University of Nigeria, Yola, Nigeria; *Biochemistry, MAUTECH, Yola, Nigeria; 2Biomedical Engineering, Michigan Tech, Houghton, MI; *Chemistry, MAUTECH, Yola, Nigeria; *Optometry, SNUST, Seoul, Korea (the Republic of); *Ophthalmology, The Johns Hopkins University, Baltimore, MD

1725 — D0121  Retinoid x receptor (RXR) expression in the rodent retina and effects of its modulation in neuronal cells. Yogita Dheer1, N. Chitranshi1, R. Vandervall1, S. L. Graham2, V. Gupta3. 1FMHS, Macquarie university, Sydney, NSW, Australia; 2University of Sydney, Save Sight Institute, Sydney, NSW, Australia

1726 — D0122  Modulation of cathepsin L expression and NF-κB signalling pathway effectors by advanced glycation end-products in retinal pigment epithelial cells. Nur Muhsirah Mahmud1, U. Sharif2, P. Kay1, T. Tengku Kamalden3, T. A. V. Yang1, S. P. Harding1, L. Paraoo1. 1Eye and Vision Science, University of Liverpool, Liverpool, United Kingdom; 2University of Malaya, Kuala Lumpur, Malaysia; 3Department of Ophthalmology, Wolverhampton Med Inst-New Cross, Wolverhampton, United Kingdom

1727 — D0123  Robust automated processing and analysis of images of RPE cells. Priyanka Priyadarshani1, S. Guo1, K. Donaldson1, H. Huang2, J. A. Chrenek1, H. E. Grossniklaus2, Y. Jiang2, J. M. Nickerson2. 1Ophthalmology, Emory University, Athens, GA; 2Mathematics and Statistics, Georgia State University, Atlanta, GA

1728 — D0124  Expression of an N-terminal GARP region truncation of CNG channel β-subunit on a KO background partially rescues structure/function and alters calcium feedback. Steven J. Pittler1, Y. Zhang2, A. S. McKeown1, T. W. Kraft1, B. Reidel1, V. Y. Arshavsky1, M. E. Burns1, M. L. DeRamus1. 1Department of Vision Sciences, Vision Science Research Center, University of Alabama at Birmingham, School of Optometry, Birmingham, AL; 2Department of Ophthalmology, Mayo Clinic, Rochester, MN; 3Albert Eye Research Institute, Duke Eye Center, Duke University, Durham, NC; 4Center for Neuroscience, UC Davis, Davis, CA

Exhibit/Poster Hall D0118-D0161
Monday, May 02, 2016 8:30 AM-10:15 AM
Biochemistry/Molecular Biology / Anatomy and Pathology/Oncology

225 Retina/RPE: Biochemistry and molecular biology

Moderators: Matilda F. Chan and Yang Li

1722 — D0118  The Role of Free Radicals in Thermal, Light-driven and Enzyme-catalyzed Isomerization of Retinoids. Tongzhou Xu, Q. Yuan, J. J. Kaylor, A. Tian, G. H. Travis. Stein Eye Institute, University of California, Los Angeles School of Medicine, Los Angeles, CA

The Commercial Relationships (CR) Index for Disclosures and the Clinical Trial (CT) Registration Index are at arvo.org/amindices.
1729 — D0125 An Usher Syndrome Type IIA knockin model leads to hair cell abnormalities, light dependent retinal dysfunction, and late-onset retinitis pigmentosa. Muna I. Naash1, M. A. Gratton1, M. Mwoyosi4, 1. Biomedical Engineering, University of Houston, Houston, TX; 2.Otolaryngology, University of Saint Louis, Saint Louis, MO; 3.Cell Biology, University of Oklahoma Health Sciences Center, Oklahoma City, OK

1730 — D0126 Chicken Embryonic Retina as a Model for Studying the Influence of Diet on VLC-PUFAs During Development. Aruna Goruspudi, B. Li, Y. Subhani, R. Shyam, P. S. Bernstein. Department of Ophthalmology and Visual sciences, Moran Eye Center, Salt Lake City, UT

1731 — D0127 VAMP7 as a regulator of rhodopsin transport carrier fusion in rod photoreceptors. Vasantshara Kandachar1, B. M. Tam2, O. L. Moritz3, D. Deretic4. 1. Department of Surgery/Division of Ophthalmology, University of New Mexico School of Medicine, Albuquerque, NM; 2. Department of Ophthalmology and Visual Sciences, University of British Columbia, Vancouver, BC, Canada

1732 — D0128 Changes in the sarcoglycan complex and effects of (–)-epicatechin in SCGD-null mice as a potential animal model for retinal degeneration. Andric C. Perez-Ortiz1, G. Solano-Garcia1, A. Luna-Angulo2, R. M. Coral-Vazquez3, Y. Garfas4, V. Garcia-Perez5, S. De los Santos-Enriquez6, A. Rendon7, J. Ramirez-Sanchez8, F. J. Estrada-Mena6, 1. Laboratory of Molecular Biology, Universidad Panamericana School of Medicine, Benito Juarez, Mexico; 2. Department of Neuroscience, Instituto Nacional de Rehabilitación, Distrito Federal, Mexico; 3. Escuela Superior de Medicina, Instituto Politécnico Nacional, Distrito Federal, Mexico; 4. Centro médico nacional 20 de noviembre, ISSSTE, Distrito Federal, Mexico; 5. Institut de la Vision, Paris, France; 6. Instituto de Oftalmología F.A.P. Conde de Valenciana, I.A.P., Distrito Federal, Mexico

1733 — D0129 Probing RPE65 palmitoylation by acetyl-exchange labeling. Tingting Liu, E. Poliakov, S. Gentleman, T. Redmond. National Eye Institute, National Institute of Health, Bethesda, MD


1736 — D0132 Peropsin Effects Light-dependent Modulation of Retinyl Esters in the RPE. Jeremy D. Cook, E. Ng, M. Lloyd, S. Eddington, D. Bok, H. Sun, R. A. Rada, G. H. Travis. Stein Eye Institute, UCLA, Los Angeles, CA

1737 — D0133 A2E adducts in the human retinal pigment epithelium. Masahiro Kono1, Z. Ablonczy2, P. W. Goletz3, J. G. Hollyfield4, R. K. Crouch5. 1. Ophthalmology, Medical Univ of South Carolina, Charleston, SC; 2. Cole Eye Institute, Cleveland Clinic Lerner College of Medicine, Cleveland, OH

1738 — D0134 Protease Nixin-1 (PN-1): A Novel Survival Factor for Retina Cells. Preeti Subramanian1, J. Bullock1, 2, P. Winokur1, V. Arcos2, S. Becerra2. 1. National Eye Institute, Bethesda, MD; 2. Biochemistry and Molecular & Cellular Biology, Georgetown University Medical Center, Washington, DC; 3. U1145 Inserm, Batiment Inserm, Hopital Bichat, Secteur Claude Bernard, Paris, France

1739 — D0135 Investigating the Cell Death Mechanisms of ARPE-19 Cells using Modified ARPE-Derived ECM to Model Aging and Disease. Elizabeth R. Gaillard1, J. C. Tournier2. 1. Chemistry and Biochemistry, Northern Illinois University, DeKalb, IL; 2. Biological Sciences, Northern Illinois University, DeKalb, IL

1740 — D0136 Identifying Novel Fluorophores in Human RPE Melanoplosuscin. Michael Vega1, E. R. Gaillard1, 2. 1. Department of Chemistry and Biochemistry, Northern Illinois University, DeKalb, IL; 2. Department of Biological Sciences, Northern Illinois University, DeKalb, IL

1741 — D0137 Evaluating the Influence of Melanin in Cytokine Secretion in Photo-stressed Retinal Pigment Epithelial Cells. Sally Yacout1, E. R. Gaillard1, 2. 1. Chemistry and Biochemistry, Northern Illinois University, DeKalb, IL; 2. Biological Sciences, Northern Illinois University, DeKalb, IL

1742 — D0138 Label-free proteomic analysis of human retinal pigment epithelium (RPE) reveals loss of RPE abilities after RPE depolarization. Yao-Tseng Wen, R. Tsai. 1. Department of Ophthalmology, Medical Univ of South Carolina, Charleston, SC; 2. Cole Eye Institute, Cleveland Clinic Lerner College of Medicine, Cleveland, OH

1743 — D0139 Delineation of the Farnesyl-Binding Site on AIP1 by NMR. Ravi Prakash Yadav1, L. Yu2, N. Artemyev1. 1. Molecular Physiology and Biophysics, University of Iowa, Iowa City, IA; 2. Biochemistry and NMR Core Facility, University of Iowa, Iowa City

1744 — D0140 Ocular parameters changes in the IRBP knockout mouse eye. Shunu Markand1, S. A. Wetzstein1, N. Williams2, R. Chakraborty1, P. priyadarshani1, K. Donaldson1, J. H. Boatright2, M. T. Purdue1, J. M. Nickerson1. 1. Ophthalmology, Emory University, Decatur, GA; 2. University of Excellence, Atlanta VA Medical Center, Atlanta, GA; *BMI Medical Engineering, Georgia Institute of Technology, Atlanta, GA

1745 — D0141 The Effects of Platelet Gel on the Cultured Human Retinal Pigment Epithelial Cells. Mozghan Rezaiekanavi1, S. Balaghoi2, 1. Ocular Tissue Engineering Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran (the Islamic Republic of); 2. Department of Hematology, Faculty of Allied Medicine, Tehran University of Medical Sciences, Tehran, Iran (the Islamic Republic of); *University of Social Welfare and Rehabilitation Sciences, Tehran, Iran (the Islamic Republic of)


1749 — D0145 Fenofibrate is a competitive inhibitor of the RPE65 isomerase, Gennady P. Moiseyev1, Y. Shin1, Y. Takahashi2, J. Mu2. 1. Department of Physiology, Univ of Oklahoma Hlth Sci Ctr, Oklahoma City, OK; 2. Harold Ham Diabetes Center, Oklahoma City, OK; *Department of Medicine, Univ of Oklahoma Hlth Sci Ctr, Oklahoma City, OK

1750 — D0146 Rod bipolar cell degeneration in P3kε3/Vps34 conditional knockout mice. Feng He1, M. A. Agosto1, R. Nichols2, T. G. Wensel2, 1. Biochemistry, Baylor College of Medicine, Houston, TX; 2. Ophthalmology, Baylor College of Medicine, Houston, TX


* Refer to the Program Number in the Clinical Trial (CT) Registration Index. **CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
1752 — D0148  Selective ablation of dehydrodolichyl diphosphate synthase (Dhdbs) expression in RPE alters retinal structural and function. Stephanie J. Davis1, 2, M. L. DeRamus1, B. A. Pfeffer1, S. Ramachandra Rao1, D. A. Davis1, S. J. Flesler1, S. J. Pittler1, 2. Department of Vision Sciences, School of Optometry, University of Alabama at Birmingham, Birmingham, AL; 3Department of Vision Sciences, Post-baccalaureate Research Education Program, Birmingham, AL; 4Department of Ophthalmology, Biochemistry/Research Service, SUNY-Buffalo/VA Med Ctr-Buffalo, Buffalo, NY; 5Department of Vision Sciences, UAB Vision Science Research Center, Birmingham, AL

1753 — D0149 Retinal Proteomics: Protein Changes in Porcine Retinas Following Experimental BRVO and Ranibizumab Intervention. Lasse J. Cehofski1, 2, A. Kruse1, S. Magnusdottir1, A. stenshale1, B. honore2, H. Vorum1, 2. 1Department of Ophthalmology, Aalborg University Hospital, Aalborg, Denmark; 2Department of Clinical Medicine, Aalborg University, Aalborg, Denmark; 3Biomedical Research Laboratory, Aalborg University Hospital, Aalborg, Denmark; 4Department of Health Science and Technology, Aalborg University, Aalborg, Denmark; 5Department of Biomedicine, Aarhus University, Aarhus, Denmark

1754 — D0150 Mapping protein-protein interactions of Bestrophin1 - a potential insight into the development of Bestrophanophiasis. Elena Segal1, 2, R. Heinrich1, S. Safuri1, A. Aronheim1, N. Shehadeh1, I. Perlman1. 1Physiology and neuroscience, The Ruth & Bruce Rappaport Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel; 2Pediatrics, Children’s Hospital, Rambam Health Care Campus, Haifa, Israel; 3Molecular Genetics, The Rappaport Family Institute for Research in the Medical Sciences, Technion - Israel Institute of Technology, Haifa, Israel

1755 — D0151 Retinal pigment epithelial cells oxidize fatty acid from ingested photoreceptor outer segments to produce ketone bodies. Juan Reyes-Reveles1, K. Boesze-Battaglia1, D. Alexander1, A. Dhingra1, A. Bragin1, N. J. Philp2. 1Biochemistry, University of Pennsylvania, Philadelphia, PA; 2Thomas Jefferson University, Philadelphia, PA

1756 — D0152 Differential Activity of Systemic and Retinal 12/15-Lipoxygenases in a Mouse Model of Diabetes. Ahmed S. Ibrahim1, 2, H. M. Saleh1, 3, K. Hussein1, 2, B. Baban1, 2, N. Shehata1, M. A. Al-Shahrawy1, 2. 1Department of Oral Biology, College of Dental Medicine, Augusta University, Augusta, GA; 2Department of Biochemistry, Faculty of Pharmacy, Mansoura University, Mansoura, Egypt; 3Section of Plastic Surgery, Department of Surgery, Augusta University, Augusta, GA; 4Department of Ophthalmology and Visual Sciences, University of Wisconsin School of Medicine and Public Health, Madison, WI; 5Oral and Dental Research Division, Department of Surgery and Medicine, National Research Center, Cairo, Egypt; 6Culver Vision Discovery Institute and Ophthalmology, Medical College of Georgia, Augusta, GA

1757 — D0153 Characterization of Sre-homology phosphotyrosyl phosphatase 2 in the Retina. Raju V. Rajala1, 2, Y. Wang, M. Ranjo-Bishop1, 2, A. Rajala1, 2. 1Ophthalmology, Univ of Oklahoma Hlth Sci Ctr, Oklahoma City, OK; 2Physiology and Cell Biology, University of Oklahoma Health Sciences Center, Oklahoma City, OK

1758 — D0154 Correlation between concentration of vitreous angiogenic cytokines (VEGF-B and PIGF) with central retinal thickness and macular volume in diabetic retinopathy patients. Joanna Mesquita1, J. Castro Sousa1, S. Vaz-Pereira1, 2, A. Neves1, P. Tavares-Ratado1, L. Passarinha1, C. Tomaz1. 1CICS-UBI - Health Sciences Research Centre, University of Beira Interior, Covilhã, Portugal; 2Ophthalmology, Centro Hospitalar de Leiria-Pombal, Leiria, Portugal; 3Ophthalmology, Hospital de Santa Maria, Lisbon, Portugal; 4Faculty of Medicine, University of Lisbon, Lisbon, Portugal *CR

1759 — D0155 The Effect of Electrical Stimulation on Cell viability and Proliferation in 661W cells. Ji Yang, Q. Wang, M. Lin, Z. Jin. Laboratory for Stem Cell & Retinal Regeneration (Jin Lab), The Eye Hospital of Wenzhou Medical University, Wenzhou, China


1761 — D0157 Changes in the Retinal Cholinergic System (RCS) in the Tg-SwDI Alzheimer’s Disease Mouse Model. Fred Oliveira-Souza1, M. Bolding1, M. L. DeRamus1, T. vanGroen3, C. E. Strange1, 2, 3Vision Sciences, University of Alabama at Birmingham, Birmingham, AL; 4Radiology, University of Alabama at Birmingham, Birmingham, AL; 5Dept. Cell, Developmental and Integrative Biology, University of Alabama at Birmingham, Birmingham, AL; 6Psychology, University of Alabama at Birmingham, Birmingham, AL

1762 — D0158 Distinct bipolar cell subtypes carry parallel streams of temporal information under scotopic conditions. Christopher Fortenbach1, 2, M. E. Burns1, 2. 1School of Medicine, University of California, Davis, Davis, CA; 2Ophthalmology & Vision Science and Cell Biology and Human Anatomy, University of California, Davis, Davis, CA; 3Center for Neuroscience, University of California, Davis, Davis, CA

1763 — D0159 Metabolic activity of single isolated mouse rod photoreceptors. Chunhe Chen, L. Adler, Y. Koutalos. Department of Ophthalmology, Medical University of South Carolina, Charleston, SC

1764 — D0160 Evaluation of the membrane affinity of peripheral membrane proteins in live rod photoreceptors. Nycole A. Mazd1, 2, P. D. Culvert1, 3. 1Neuroscience and Ophthalmology, SUNY Upstate Medical University, Syracuse, NY; 2SUNY Eye Institute, Syracuse, NY

1765 — D0161 Extracellular Presence of a Non-Specific Retinal Carrier Prevents the Formation of Lipofuscin Precursors from 11-Cts Retinal in Human Rod Photoreceptor Outer Segments. Leopold Adler1, C. Chen1, F. Gonzalez-Fernandez1, 2, Y. Koutalos1. 1Ophthalmology, Medical University of South Carolina, Charleston, SC; 2Departments of Ophthalmology & Pathology, University of Mississippi School of Medicine, Jackson, MS; 3R&D Division, Veterans Affairs Medical Center, Jackson, MS

Exhibit/Poster Hall D0162-D0186
Monday, May 02, 2016 8:30 AM-10:15 AM
Retinal Cell Biology

226 Retinal Development I: Inner Retina

Moderators: Andrea Nistorica and Peter Shaw

1766 — D0162 Lineage tracing of horizontal and photoreceptor cells in the embryonic chicken retina. Maria Blixt, F. Hallböök. Neuroscience, Uppsala University, Uppsala, Sweden

1767 — D0163 Characterization of the Neurogenic Potential of Human ATOH7 in the Developing Chicken Retina. Xiangmei Zhang, T. Hasimoto, X. Yang. Ophthalmology, Jules Stein Eye Institute, UCLA, Los Angeles, CA

1768 — D0164 Dystroglycan regulates retinal development. Reena Clements, K. M. Wright. Volum Institute, Oregon Health and Science University, Portland, OR
1769 — D0165  Extracellular matrices preferable to neurite outgrowth from retinal organoids differentiated from mouse embryonic stem cells. **Yuki Maekawa**, A. Onishi, K. Koide, K. Suzumura, M. Mandai, T. Kitaoka, M. Takahashi1. 1Department of Ophthalmology and Visual Science, Nagasaki University Graduate School of Biomedical Science, Nagasaki, Japan; 2Laboratory of Retinal Regeneration, RIKEN Center for Developmental Biology, Kobe, Japan; 3Department of Ophthalmology and Visual Sciences, Kyoto University Graduate School of Medicine, Kyoto, Japan

1770 — D0166  Dissection of the mechanisms restricting specific retinal progenitor cells to the production of cones and horizontal cells. **Nicolas Lonfat**, C. E. Cepko. Genetics, Harvard Medical School, Boston, MA

1771 — D0167  Postnatal development of the nonhuman primate macula: Thickness of retinal layers measured longitudinally by sdOCT. **Martha Neuringer**, E. Johnson1, K. W. Paul1, T. J. McGil1, L. M. Renner1. 1Neuroscience, ONPRC, Oregon Health & Science University, Beaverton, OR; 2Casey Eye Institute, Oregon Health & Science University, Portland, OR. *CR


1773 — D0169  Genetic ablation of miR-129-3p in zebrafish does not affect cone outer segment development. **Joseph Fogerty**, B. D. Perkins. Department of Ophthalmology, Cleveland Clinic Foundation, Cleveland, OH

1774 — D0170  Cell-intrinsic regulation of the onset of retinal neurogenesis by Vsx2. **Amanda Leung**, E. Levine1, 2. 1Vanderbilt Eye Institute, Vanderbilt University, Nashville, TN; 2Ophthalmology & Visual Sciences, University of Utah, Salt Lake City, UT

1775 — D0171  A novel quantitative tool for the analysis of vascular phenotypes via fluorescein angiograms quantifies reduced arterial-venous vessel patterning. **Alex A. Bigger-Allen**, J. Arboleda-Velasquez1, P. A. D’Amore1, 2. 1Retina, Schepen’s Eye Research Institute/Mass Eye and Ear, Boston, MA; 2Pathology, Massachusetts General Hospital, Harvard Medical School, Boston, MA


1777 — D0173  Ablation of Crb2 Specifically in Mouse Photoreceptors with Crb1 loss in Müller Cells Mimics Leber Congenital Amaurosis. **Thilo M. Buck**, P. M. Quinn, J. Klooster, J. Wijnholds1. 1Ophthalmology, Leiden University Medical Center, Leiden, Netherlands; 2Netherlands Institute for Neuroscience, Amsterdam, Netherlands

1778 — D0174  Maternal zygotic soxla mutant zebrafish exhibit microphthalmia and reduced numbers of rod photoreceptors. **Ann C. Morris**, W. Wen. Biology, University of Kentucky, Lexington, KY

1779 — D0175  Xkr8 Modulates Bipolar Cell Number in the Mouse Retina. **Amanda G. Kautzman**, P. W. Keeley*, C. R. Ackley1, B. E. Reese1, 2. 1Psychological & Brain Sciences, University of California Santa Barbara, Santa Barbara, CA; 2Neuroscience Research Institute, University of California Santa Barbara, Santa Barbara, CA

1780 — D0176  Variation in cellular density is not predictive of the variation in mosaic regularity for the VGluT3+amacrine cell population. **Patrick W. Keeley**, J. J. Kim1, A. J. St. John1, B. E. Reese1, 2. 1Neuroscience Research Institute, University of California Santa Barbara, Santa Barbara, CA; 2Psychological and Brain Sciences, University of California Santa Barbara, Santa Barbara, CA; 3Molecular, Cellular, and Developmental Biology, University of California, Santa Barbara, Santa Barbara, CA

1781 — D0177  Restoration of the dendritic fields and cone synapses of bipolar cells during retinal regeneration in the zebrafish. **Tim McGinn**, D. Leoni, N. Partridge1, D. L. Stenkamp1. 1Biological Sciences, University of Idaho, Moscow, ID; 2Biology, Brigham Young University-Idaho, Rexburg, ID


1783 — D0179  Characterizing delayed retina development in CRISPR/Cas mediated Midkine-a mutant zebrafish. **Travis S. D’Cruz**, P. F. Hitchcock. Ophthalmology & Visual Sciences, University of Michigan, Ann Arbor, MI


1786 — D0182  Temporally-specific requirement for vascular endothelial cells during retinal neurogenesis in zebrafish embryos. **Susov Dhakal**, J. Sejd, M. Batty, D. L. Stenkamp1. 1University of Idaho, Moscow, ID; 2Gonzaga University, Spokane, WA

1787 — D0183  Expression of MANF (mesencephalic astrocyte-derived neurotrophic factor) in the retina. **Yiwen Li**, Z. Wang, R. Wen. University of Miami, Miami, FL

1788 — D0184  Dendrite Plasticity in the Adult Retina is Inhibited by DSCAM and Non-canonical Activity of the Cell Death Pathway Protein BAX. **Peter G. Fuerst**1, 2, A. B. Simmons1, S. Bloomburg1, D. Briggs, E. Pecor2, J. Young1, T. Hernandez1, 2. 1Biological Sciences, University of Idaho, Moscow, ID; 2University of Washington School of Medicine, WWAMI Medical Education Program, Moscow, ID; 3North Idaho College, Cour d’Alene, ID

1789 — D0185  Activity-dependent regulation of the cisternal organelle in the axon initial segment of retinal ganglion cells. **Maren Engelhardt1**, A. Schlueter1, S. Rossberger1, S. Vorwald1, C. Schütz1. 1Institute of Neuroanatomy, Medical Faculty Mannheim, Heidelberg University, Mannheim, Germany; 2Biophysical Chemistry, Heidelberg University, Heidelberg, Germany; 3Max-Planck-Institute for Intelligent Systems, Stuttgart, Germany

1790 — D0186  Presence of transient receptor potential ankyrin1 (TRPA1) into the retinal layer. **Alfonso Savastano1**, C. Adembri1, T. Caporossi1, S. Rizzo1, D. Rossi Degli Innocenti1, F. De Logu1, R. Nassini2, P. Geppetti1. 1Ophthalmic Department, Azienda ospedaliero universitaria Careggi, Cassino, Italy; 2Università degli Studi di Firenze, Florence, Italy

* Refer to the Program Number in the Clinical Trial (CT) Registration Index.  *CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
1791 — 11:00 Restoration of trabecular meshwork cellularity and function following iPSC transplantation in vivo. Markus H. Kuehn1,2, W. Zhu1,2, O. W. Gramlick1,2, L. Lobo1,2, J. Trinchetki1,2, B. A. Tucker1. 1Ophthalmology and Visual Sciences, University of Iowa, Iowa City, IA; 2Center for Prevention and Treatment of Visual Loss, Veterans Affairs, Iowa City, IA; 3Genetics, Development and Cell Biology, Iowa State University, Ames, IA.

1792 — 11:15 Young bone marrow Sca-1+ stem cells home to aged retina and protect retina from acute glaucoma injury. Zhengbo Shao1,2, J. Wu1,2, G. Du1,2, H. Song1, S. Li1, S. He2, J. Li1, J. Wu1,2, R. Weisel1,2, H. Yuan1, R. Li1. 1The Second Affiliated Hospital of Harbin Medical University, Harbin, China; 2Surgery, Toronto General Research Institute, University Health Network, Toronto, ON, Canada; 3Basic Medical Science Institute of Harbin Medical University, Harbin, China.

1793 — 11:30 Optic nerve and retinal ganglion cell degeneration after two weeks of intraocular pressure (ICP) elevation in mice. Giofa Shen, D. Nusbaum, B. J. Frankfort. Ophthalmology, Baylor College of Medicine, Houston, TX.

1794 — 11:45 High-resolution mapping of in-vivo stretch and compression of the lamina cribrosa in response to acute changes in intraocular and/or intraocular pressures. Ian A. Sigal1,2, A. Judisch1, H. Tran1,2, B. Wang1,2, M. A. Smith1,2, L. Kagemann1,2, H. Ishikawa1,2, E. Tyler-Kabara1, J. S. Schuman1,2, G. Wollstein1,2. 1Department of Ophthalmology, University of Pittsburgh, Pittsburgh, PA; 2Department of Bioengineering, University of Pittsburgh, Pittsburgh, PA *CR.

1795 — 12:00 Finite element analysis predicts high optic nerve head strains during horizontal eye movements. Xiaofei Wang1, M. Baskaran2, H. Rumpel1, S. Perera1, W. E. Lim1, M. E. Nongpiur2, T.Aung1, D. Miller1, M. J. Girard1,2. 1Ophthalmic Engineering & Innovation Laboratory, Department of Biomedical Engineering, National University of Singapore, Singapore, Singapore; 2Singapore Eye Research Institute, Singapore National Eye Centre, Singapore, Singapore; 3Department of Diagnostic Radiology, Singapore General Hospital, Singapore, Singapore.


Room 6B

Monday, May 02, 2016 11:00 AM-12:45 PM
Retina

228 Imaging Geographic Atrophy

Moderators: Frank G. Holz; and Srinivas R. Sadda

1798 — 11:00 Fundus Autofluorescence Imaging and Macular Atrophy in Eyes with Neovascular Age Related Macular Degeneration in AREDS2. Amitha Domalpally1, R. P. Danis1, E. Y. Chew2, T. E. Clemons3. 1University of Wisconsin, Fundus Photograph Reading Center, Madison, WI; 2NIH, National Eye Institute, Bethesda, MD; 3EMMES Corporation, Rockville, MD.

1799 — 11:15 Time-lapse imaging of dry age-related macular degeneration using adaptive optics: insights into cell kinetics. Michel Paques1,2, C. J. Li Calzi1, G. Gicco1, C. Chaumette1, M. Benchaaboune1, M. uler1, F. Sennlaub1. 1Clinical Investigation Center 1423, Quinze-Vingts Hospital, Paris, France; 2Ophthalmology, Chiba Hospital, Tokyo, Japan; 3Vision Institute, Paris, France *CR, ▲

1800 — 11:30 Ex vivo spectral domain optical coherence tomography (ex-SDOCT) and high-resolution histology of drusenoid pigment epithelial detachment (D-PED) in age-related macular degeneration (AMD). Jeffrey D. Messinger1, C. Bala2, K. R. Sloan3, K. Freund4,5, C. A. Curcio1. 1Ophthalmology, Univ of Alabama at Birmingham, Birmingham, AL; 2Virginia Retina Macula Consultants of New York, New York, NY; 3LuEsther T. Mertz Retinal Research Center, Manhattan Eye, Ear, and Throat Hospital, New York, New York, NY; 4Department of Computer and Information Sciences, University of Alabama at Birmingham, Birmingham, AL; 5Department of Ophthalmology, New York University School of Medicine, New York, NY *CR.

Room 6C

Monday, May 02, 2016 11:00 AM-12:45 PM
Retina

229 Vitreomacular Interface Disorders

Moderator: J Sebag

1801 — 11:45 Optical Coherence Tomography Predictors of 5-Year Progression to Non-Neovascular Late Age-Related Macular Degeneration. Abdul Karim El Hage Sleiman1, M. Veerappan1, K. Winter2, M. McCall1, S. Farsiu1,2, E. Y. Chew3, T. E. Clemons4, C. A. Toth5. 1Department of Ophthalmology, Duke University Medical Center, Durham, NC; 2Department of Biomedical Engineering, Duke University, Durham, NC; 3National Eye Institute, National Institutes of Health, Bethesda, MD; 4The Emmes Corporation, Rockville, MD *CR, ▲

1802 — 12:00 Fully automated prediction of geographic atrophy growth using quantitative SD-OCT imaging biomarkers. Theodore Leng1, S. Niu2, L. De Sisternes1, D. Rubin1. 1Ophthalmology, Stanford Univ School of Med, Palo Alto, CA; 2School of Computer Science and Engineering, Nanjing University of Science and Technology, Nanjing, China; 3Department of Radiology, Stanford Univ School of Medicine, Stanford, CA.

1803 — 12:15 Directional Progression Analysis of Geographic Atrophy in Fundus Autofluorescence Images. Zhikong Hu1, A. H. Hariri1, R. R. Sadda2,3. 1Doheny Image Analysis Laboratory, Doheny Eye Institute, Los Angeles, CA; 2Ophthalmology, Doheny Eye Institute, Los Angeles, CA; 3Ophthalmology, University of California, Los Angeles, CA *CR.

1804 — 12:30 Foveal Sparing Stability and Geographic Atrophy Progression Measured by SD-OCT in a 18 months Follow-up Study. Ramzi G. Sayegh1, S. Sacu1, M. Kroh1, P. K. Roberts1, A. Montuoro2, M. Ehrenmueller1, U. Schmidt-Erfurth1. 1Department of Ophthalmology, Medical University of Vienna, Vienna, Austria; 2Vienna Reading Center, Department of Ophthalmology, Medical University of Vienna, Vienna, Austria; 3Department for health process management, University of applied Science Upper Austria, Steyr, Austria; 4Vienna Study Center, Department of Ophthalmology, Medical University of Vienna, Vienna, Austria.

1807 — 11:30 The OASIS MP-1 substudy: characterization of the effect of ocriplasmin on microperimetry parameters. Srinivas R. Sadda1, P. Kozma-Wiebe2, E. Meunier3. 1University of California - Los Angeles, Los Angeles, CA; 2Thrombogenics NV, Leuven, Belgium *CR


1809 — 12:00 Topline Results From Prospective, Double-masked, Placebo Controlled Phase 2 Clinical Study Evaluating Luminante® (ALG-1001) in Patients with Symptomatic Focal Vitreomacular Adhesion. Baruch D. Kuppersmann1, D. S. Boyer2, P. K. Kaiser3, J. S. Heier4, P. A. Campochiaro5, H. Quiroz-Mercado6, J. Kornfield7, L. Karageozian8, M. A. Genead9, H. L. Karageozian10, V. H. Karageozian11. 1Ophthalmology, Gavin Herbert Eye Institute, Irvine, CA; 2Allegro Ophthalmics, LLC, San Juan Capistrano, CA; 3Retina Vitreous Associates, Los Angelos, CA; 4Ophthalmology, Cole Eye Institute, Cleveland, OH; 5Ophthalmology, Wilmer Eye Institute, Baltimore, MD; 6Ophthalmic Consultants of Boston, Boston, MA; 7Ophthalmology, University of Colorado, Denver, CO; 8Chemical Engineering, California Institute of Technology, Pasadena, CA *CR, *

1810 — 12:15 Insight into lamellar macular holes: two distinct clinical entities. Andrea Goveatto, H. Hasseini, S. Schwartz, J. Hubschman. Retina,Stein Eye Institute, Los Angeles, CA

1811 — 12:30 Factors Associated with Development of Dissociated Optic Nerve Fiber Layer (DONFL) Appearance in the PIONEER Study. Anne Rankle1, S. K. Srivastava2, P. K. Kaiser3, R. P. Singh4, J. P. Ehlers5. 1Cleveland Clinic Cole Eye Institute, Cleveland, OH; 2Cleveland Clinic Lerner College of Medicine of Case Western Reserve University, Cleveland, OH *CR, *

1812 — 11:00 Abbe numbers and chromatic aberration of a large group of intraocular lens designs. Henk A. Weeber1, D. H. Chang2, M. Van der Mooren3, M. Lowery4, J. Graver5, P. A. Piers6. 1Research, Abbott Medical Optics, Groningen, Netherlands; 2Empire Eye and Laser Center, Bakersfield, CA; 3Research & Development, Abbott Medical Optics, Santa Ana, CA *CR

1813 — 11:15 Straylight from explanted intraocular lenses. Grzegorz Labuz1, E. Papadatos2, T. J. Van Den Berg3, F. Vargas-Martín4, N. Lopez-Gil5, N. J. Reus6. 1Rotterdam Ophthalmic Institute, Rotterdam, Netherlands; 2University of Valencia, Valencia, Spain; 3Royal Netherlands Academy of Arts and Sciences, Amsterdam, Netherlands; 4Facultad de Óptica y Optometria, Universidad de Murcia, Murcia, Spain; 5Department of Ophthalmology, Amphia Hospital, Breda, Netherlands *CR

1814 — 11:30 Optimal orientation for angularly segmented multifocal corrections. Pablo De Gracia1, A. Hartwig2. 1Neuro-Biology, Barrow Neurological Institute, Phoenix, AZ; 2Viam Optical Solutions, Phoenix, AZ; 3Hartwig Research Center, Heidenberg, Germany

1815 — 11:45 Dynamic imaging of accommodating intraocular lens shift using Optical Coherence Tomography during naturally induced accommodation. Florence Cabot1, Y. Chang2, M. Ruggieri3, S. Williams4, C. P. De Freitas5, S. H. Yoo6, J. A. Parel1. 1Optical and Laser Systems Laboratory, Department of Biomedical Engineering, University of Miami Miller School of Medicine, Miami, FL; 2Anne Bates Leach Eye Hospital, Bascom Palmer Eye Institute, University of Miami Miller School of Medicine, Miami, FL; 3Biomedical Optics and Laser Laboratory, University of Miami Miller School of Medicine, Miami, FL; 4Biomedical Optics Center, Brien Holden Eye Institute, Sydney, NSW, Australia

1816 — 12:00 Presbyopia correction with optoelectronic lenses driven by pupil size. Juan Tompeín1, S. Manzanera2, J. Aragó2, P. Artal3. 1Laboratorio de óptica, Universidad de Murcia, Murcia, Spain; 2Fac. Informatica, Universidad de Murcia, Murcia, Spain *CR


Monday, May 02, 2016 11:00 AM-12:45 PM
Room 611/612

1818 — 12:30 Large-Aperture Adaptive Liquid Crystal Lens for Correction of Presbyopia. Guoqiang Li1, J. Xu2. 1Ophthalmology & Visual Science, The Ohio State University, Columbus, OH; 2Electrical & Computer Engineering, The Ohio State University, Columbus, OH

Monday - Papers/Minisymposium – 1806 – 1821

Moderators: Jason D. Marsack and Jens Buehren

1819 — 11:00 Nanoceria protect the function of the RPE and the BRB in ‘ddiz’ mice. Xue Cai1, S. Seal2, J. F. McGinniss3. 1Ophthalmology, Oklahoma University Health Sciences Center, Oklahoma City, OK; 2Advanced Materials Processing Analysis Center, Mechanical Materials Aerospace Eng., Nanosci. and Tech. Ctr., University of Central Florida, Orlando, FL; 3Department of Cell Biology, Oklahoma Center for Neuroscience, Oklahoma University Health Sciences Center, Oklahoma City, OK *CR

1820 — 11:15 Design, Development & Evaluation of Electrospun Nanofibrous Membranes as Scaffolds for Retinal Pigment Epithelium Cells. Denver C. Sarrao1, S. J. Skabo2, Y. Chau3, I. J. Linnios4, K. J. Shelat5, Q. Liu6. 1Clem Jones Research Centre, Faculty of Health Sciences & Medicine, Bond University, Gold Coast, QLD, Australia; 2Australian Institute for Bioengineering and Nanotechnology (AIBN), The University of Queensland, Brisbane, QLD, Australia; 3Australian National Fabrication Facility (AFNN), Queensland Node, The University of Queensland, Brisbane, QLD, Australia

1821 — 11:30 Transition metals and trace elements in the retinal pigment epithelium and neighbouring structures: correlative ultrastructural and chemical analysis by analytical electron microscopy and nanosecondary ion mass spectrometry. Antje K. Biesemeier1, O. Eibf, S. Moorthy1, J. Audinot1, T. Wirtz1, U. Schraermeyer1. 1Center for Ophthalmology, Section for Experimental Vitreoretinal Surgery, Tuebingen, Germany; 2University of Tuebingen, Institute of Applied Physics, Tuebingen, Germany; 3Materials Research and Technology Department, Luxembourg Institute of Science and Technology (LIST), Advanced Instrumentation for Ion Nano-Analytics (AINA), L-4422 Belvaux, Luxembourg
The role of FPR2 signaling in the pathogenesis of bacterial keratitis. Thomas W. Carion1, M. Greenwood2, K. Gronert1, E. A. Berger3, 1Anatomy & Cell Biology, Wayne State University School of Medicine, Detroit, MI; 2School of Optometry, University of California, Berkeley, CA; 3Ophthalmology, Kresge Eye Institute, Detroit, MI

1832 — 11:15 Glycyr Rhizin is protective against keratitis induced by P. aeruginosa and reduces both neutrophil infiltrate and plate count. Sandamali Amarasingha Ekanayaka1, S. A. McClellan1, R. P. Barret1, S. Kharotia1, L. D. Hazlett1, 1Anatomy & Cell Biology, Wayne State University, Detroit, MI; 2School of Medicine, Wayne State University, Detroit, MI

1833 — 11:30 The Ubiquitin-Proteasome Pathway Generates Keratin 6A-Derived Antimicrobial Peptides to Mediate Antimicrobial Activities in Human Corneal Epithelial Cells. Jonathan K. Chan1, P. Too1, K. Tam2, 1Department of Ophthalmic Research, Cleveland Clinic Cole Eye Institute and Lerner Research Institute, Cleveland, OH; 2Department of Ophthalmology, Cleveland Clinic Lerner College of Medicine of Case Western Reserve University, Cleveland, OH

1834 — 11:45 Thymic stromal lymphopoietin secreted by Aspergillus fumigatus-infected human corneal epithelial cells promotes a type 2 adaptive immune response. Xinyi Wu. Ophthalmology, Shandong University, Jinan, China

1835 — 12:00 Conjunctival goblet cell produced secretory leukocyte peptidase inhibitor (SLPI) controls growth of Aspergillus fumigatus. Terry G. Coursey1, D. B. Corry1, S. C. Pflugfelder2, 1Ocular Surface Center, Ophthalmology, Baylor College of Medicine, Houston, TX; 2Department of Pathology & Immunology; The Biology of Inflammation Center, Baylor College of Medicine, Houston, TX

1836 — 12:15 Differential Alterations in Dendritic Cell Density and Morphology in Patients with Central and Peripheral Scars from Herpes Simplex Keratitis: A Longitudinal In Vivo Confocal Microscopy Study. Hamid-Reza Moein1, R. Müller1, 1Department of Ophthalmology, Tufts Medical Center, Tufts University School of Medicine, Boston, MA; 2Boston Image Reading Center, New England Eye Center, Boston, MA; 3Ocular Surface Imaging Center, Massachusetts Eye and Ear Infirmary, Department of Ophthalmology, Harvard Medical School, Boston, MA; 4Cornea Service, Massachusetts Eye and Ear Infirmary, Department of Ophthalmology, Harvard Medical School, Boston, MA; 5Ocular Surface Imaging Center & Cornea Service, Massachusetts Eye and Ear Infirmary, Department of Ophthalmology, Harvard Medical School, Boston, MA; 6Boston Image Reading Center & Cornea Service, New England Eye Center, Tufts Medical Center, Tufts University School of Medicine, Boston, MA

1837 — 12:30 Lack of neurokinin-1 receptor alters the homeostasis of ocular surface and causes an early development of herpes stromal keratitis. Subhash Gaddipati1, 1, P. Rao1, A. Jerome1, B. Burredula2, 1, S. Sivas1, 1Anatomy & Cell Biology, Wayne State University School of Medicine, Detroit, MI; 2Ophthalmology, Wayne State University School of Medicine, Detroit, MI

The Commercial Relationships (CR) Index for Disclosures and the Clinical Trial (CT) Registration Index are at arvo.org/amindices.
Room Tahoma 1/2, TCC
Monday, May 02, 2016 11:00 AM-12:45 PM

Biochemistry/Molecular Biology

234 Gene editing and gene therapy

Moderators: Luk H. Vandenberghe, Zhijian Wu and Uwe Wolfrum


1839 — 11:15 Antisense oligonucleotide delivery is an effective therapeutic approach for CEP290-associated LCA. Alejandro Garanto1, D. C. Chung2, L. Duikers3, J. Corval Serrano4, M. Messchaert1, R. Xiao5, 3, J. Bennett4, L. H. Vandenberghe1, 3, R. Collin5. 1Human Genetics, Radboudumc, Nijmegen, Netherlands; 2Genetics, Radboudumc, Nijmegen, Netherlands; 3Laboratoire de Génétique Moléculaire, CHU Montpellier, Montpellier, France; 4Univ, Montpellier I, Montpellier, France; 5Insenm, U827, Montpellier, France

1840 — 11:30 Towards a clinical trial to treat GUCY2D Leber congenital amaurosis (LCA1). Shannon E. Boye1, S. L. Boye1, W. Hauswirth1, J. Peterson1, S. Min1, Q. Ruan1, C. O’Riordan1, M. Lukason1, R. Baek1, A. Searia1. 1Department of Ophthalmology, University of Florida, Gainesville, FL; 2Genzyme, Framingham, MA *CR


1842 — 12:00 Gene augmentation therapy in a large animal model of CNGB1 retinitis pigmentosa. Simon M. Petersen-Jones1, L. M. Occelli1, P. Winkler2, V. C. Chioldo2, S. L. Boye2, W. W. Hauswirth4. 1Department of Small Animal Clinical Sciences, Michigan State University, East Lansing, MI; 2Department of Ophthalmology, University of Florida, Gainesville, FL *CR

1843 — 12:15 Exon-skipping as a therapeutic approach for treatment of retinal degeneration in patients carrying the intronic USH2A c.7595-2144A>G mutation. Ralph Slijkerman1, 2, C. Vaché1, M. Donad1, 2, G. Garcia-Garcia1, M. Claustres2, 4, L. Hetterschijf1, 2, T. Peters3, 2, R. Collin5, H. Kremen1, 3, A. Roux5, 3, E. van Wyk1, 2. 1Orthoniaryngology, Radboudumc, Nijmegen, Netherlands; 2Genetics, Radboudumc, Nijmegen, Netherlands; 3Laboratoire de Génétique Moléculaire, CHU Montpellier, Montpellier, France; 4Univ, Montpellier I, Montpellier, France; 5Inserm, U827, Montpellier, France

1844 — 12:30 In vivo reprogramming of rods to cone-like cells by Nr1-knockdown using AAV-delivered CRISPR-Cas9 rescues retinal degeneration. Wenhan Yu1, S. Mookherjee1, J. Kim2, S. Hiriyanna1, Y. Aitciemam1, X. Sun2, L. Dong1, T. Li1, A. Swaroop1, Z. Wu1. 1Ocular Gene Therapy Core, National Eye Institute/NIH, Bethesda, MD; 2Neurobiology Neurodegeneration & Repair Laboratory, National Eye Institute, NIH, Bethesda, MD; 3Genetic Engineering Core, National Eye Institute, NIH, Bethesda, MD

Room Tahoma 3, TCC
Monday, May 02, 2016 11:00 AM-12:45 PM

Clinical/Epidemiologic Research

235 Genetic Epidemiology

Moderators: Ching-Yu Cheng and Alex W. Hewitt

1845 — 11:00 Genome-wide association study identifies new loci associated with corneal biomechanical properties. Anthony P. Khawaja1, P. G. Hysi2, D. C. Broadway1, D. F. Garway-Heath3, S. Hay4, R. Luben5, S. J. Tuf1, N. Wareham1, K. Khaw1, C. J. Hammond3, P. J. Foster4. 1 Moorfields Eye Hospital NHS Foundation Trust, London, United Kingdom; 2King’s College London, London, United Kingdom; 3Nuffield Eye Hospital, Norwich University Hospital, Norwich, United Kingdom; 4University of Cambridge, Cambridge, United Kingdom

1846 — 11:15 Genome-Wide Association Study Identifies Novel Genes Associated with High Myopia in the General Population. Pirro G. Hysi1, V. J. Verhoeven1, R. Wojciechowski1, M. S. Tedja1, R. Hoehn1, C. C. Klaver1, C. J. Hammond3. 1Twin Research and Genetic Epidemiology, King’s College London, London, United Kingdom; 2Erasmus University Medical Center, Rotterdam, Netherlands; 3Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD; 4Universitätsmedizin Mainz, Mainz, Germany

1847 — 11:30 Genome-wide multi-ethnic meta-analyses identify new loci associated with age-related nuclear cataract. Ekaterina H. Iono1, W. Zhao1, R. Igo1, A. Fletcher4, C. C. Klaver1, B. E. Klein1, J. Wang2, S. K. Iyengar2, C. J. Hammond3, C. Cheng1. 1Twin Research and Genetic Epidemiology, King’s College London, London, United Kingdom; 2Department of Ophthalmology and Biostatistics, Case Western Reserve University, Cleveland, OH; 3Department of Epidemiology, Erasmus Medical Centre, Rotterdam, Netherlands; 4Centre for Vision Research, Westmead Institute of Medical Research, University of Sydney, Sydney, NSW, Australia; 5Singapore Eye Research Institute, Singapore National Eye Center, Singapore, Singapore; 6Department of Ophthalmology and Visual Sciences, University of Wisconsin School of Medicine and Public Health, Madison, Madison, WI; 7Department of Ophthalmology, King’s College London, London, United Kingdom; 8Department of Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore; 9Department of Epidemiology & Population Health, London School of Hygiene & Tropical Medicine, London, United Kingdom

1848 — 11:45 Age-related macular degeneration displays shortened telomere length indicating differential biological aging. Robert P. Finger2, 4, B. Stavert2, S. Booth2, A. Richardson3, M. McGuinness2, S. Sahebjudae1, F. Charchar1, R. H. Gaymer1, P. N. Baird1. 1Ophthalmology, Department of Ophthalmology, University of Bonn, Bonn, Germany; 2Royal Victorian Eye and Ear Hospital, Centre for Eye Research Australia, Melbourne, VIC, Australia; 3Faculty of Science and Technology, Federation University, Ballarat, VIC, Australia

1849 — 12:00 Shared and distinct genetic variation contributes to risk of polypoidal choroidal vasculopathy and neovascular age-related macular degeneration in East Asians: The GAMA consortium. Tien Y. Wong1, 2, Q. Fan1, G. Cheung1, C. Khor3, K. Park4, L. Chen5, N. Yoshimura1, C. Cheng1. 1Singapore Eye Research Institute, Singapore National Eye Centre, Singapore, Singapore; 2Office of Clinical Sciences, Duke-NUS Graduate Medical School, Singapore, Singapore; 3Genome Institute of Singapore, Agency for Science, Technology and Research, Singapore, Singapore; 4Department of Ophthalmology, Seoul National University Bundang Hospital, Gyeonggi, Korea, Seoul, Korea (the Republic of); 5Department of Ophthalmology and Visual Sciences, The Chinese University of Hong Kong, Hong Kong, China, Hong Kong, Hong Kong; 6Department of Ophthalmology and Visual Sciences, Kyoto University Graduate School of Medicine, Kyoto, Japan, Kyoto, Japan

† Refer to the Program Number in the Clinical Trial (CT) Registration Index. *CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
The Commercial Relationships (CR) Index for Disclosures and the Clinical Trial (CT) Registration Index are at arvo.org/amindices.

**236 Corneal regeneration - Minisymposium**

Recent scientific discoveries on the identification and characterization of cells that maintain corneal health and clarity have led researchers on an exciting path toward engineering scaffolds with or without specialized cells for corneal reconstruction. This mini-symposium will showcase several new approaches being developed for the posterior, intermediate, and anterior layers of the cornea.

**Moderators:** Nick Di Girolamo, Sophie X. Deng and Che J. Connan

**1850 – 1851 – Monday – Papers/Minisymposium**

**1850 – 12:15** Genetic and environmental factors influencing the ganglion cell complex in a healthy aging British cohort. Edward Bloch	extsuperscript{1}, E. H. Yonova	extsuperscript{2}, E. Jones-Odeh	extsuperscript{2}, K. Williams	extsuperscript{2}, D. Kozareva	extsuperscript{2}, C. J. Hammond	extsuperscript{2}. 1Ophthalmology, King’s College London, London, United Kingdom; 2The Department of Twin Research and Genetic Epidemiology, King’s College London, London, United Kingdom

Room Tahoma 4, TCC
Monday, May 02, 2016 11:00 AM-12:45 PM
Cornea

**236 Corneal regeneration - Minisymposium**

Recent scientific discoveries on the identification and characterization of cells that maintain corneal health and clarity have led researchers on an exciting path toward engineering scaffolds with or without specialized cells for corneal reconstruction. This mini-symposium will showcase several new approaches being developed for the posterior, intermediate, and anterior layers of the cornea.

**Moderators:** Nick Di Girolamo, Sophie X. Deng and Che J. Connan

**1851 – 11:00** Divergence between Medical Breakthroughs in Corneal Endothelial Treatment and Applied Clinical Practice. Shigeru Kinoshita. Frontier Medical Science and Technology for Ophthalmology, Kyoto Prefectural Univ of Med, Kyoto, Japan *CR

**1852 – 11:15** Regeneration of the corneal endothelium from iPSC. Shigeto Shimmura. Keio Univ School of Medicine, Tokyo, Japan

**1853 – 11:30** Corneal stromal tissue regeneration by stromal-derived stem cells. James L. Funderburgh. Univ of Pittsburgh School of Medicine, Pittsburgh, PA

**1854 – 11:45** Implanting collagen scaffolds into the cornea. May Griffith. Linkoping University, Linkoping, Sweden

**1855 – 12:00** Optimizing RAFTs for treating of limbal stem cell deficiency. Julie T. Daniels. UCL Institute of Ophthalmology, London, United Kingdom

**1856 – 12:15** The importance of cell therapy controls for a safe, EU-approved Advanced Therapy Medicinal Product application to limbal stem cell deficiency. Graziella Pellegrini. University of Modena and Reggio Emilia, Modena, Italy

**1857 – 12:30** Limbal Stem Cell Transplantation: Myth or Science. Sophie X. Deng. Stein Eye Institute, Los Angeles, CA

The Commercial Relationships (CR) Index for Disclosures and the Clinical Trial (CT) Registration Index are at arvo.org/amindices.
237 Uveitis Therapeutics

Moderator: Lynn K. Gordon


1859 — A0023 Induction of endotoxin tolerance in lipopoly saccharide-induced uveitis in rats increases negative regulators IRAK-M, TRAF6 and TRIF during endotoxin-induced uveitis. Hong Lu, Department of Ophthalmology, Charité, Berlin, Germany; Institute of Ophthalmology at St. Franziskus Hospital, Muenster, Germany.

1860 — A0024 Specialized pro-resolving mediators (SPMs) promote resolution of inflammation in human retinal pigment epithelial cells. Lynn Hassman, S. Pollock, R. P. Khipps. Ophthalmology, Flame Eye Institute, University of Rochester, Rochester, NY.


1862 — A0026 Long-term Outcomes of Rituximab therapy in patients with non-infectious posterior uveitis refractory to conventional immunosuppressive therapy. Lin Ma1,2, A. Lasave1,2, C. You1, K. Abu samara1,2, C. Foster1,2, N. Lamba3, M. Navarro1,2. Massachusetts Eye Research and Surgery Institute, Waltham, MA; Ocular Immunology and Uveitis Fundation, Waltham, MA.

1863 — A0027 The effect of Radix Hedyas ri Poly saccharide(HPS) on the expression of TRAF6 and TRIF during endotoxin-induced uveitis. Hong Lu. Department of Ophthalmology, Beijing Chaoyang Hospital, Capital Medical University, Beijing, China.

1864 — A0028 Biologicals inducing or reactivating uveitis. Manfred Zierhut1, A. O. Edwards2, M. Kramer1, A. G. Palestine1, I. R. Schwaib3, E. Zamir2, D. Doycheva1, B. Sobolew ska1. Center of Ophthalmology, University of Tuebingen, Tuebingen, Germany; Department of Ophthalmology & Visual Science, Sacramento, CA; University of Melbourne, Melbourne, SA, Australia.

1865 — A0029 Comparison of Two Treatments in Active Ocular Toxoplasmosis. Mariana L. Urdapilleta, M. Pedroza-Seres, E. B. Guinto Arcos, R. Bobadilla. Ophthalmology, Instituto de Oftalmología Conde de Valenciana, Mexico City, Mexico.

1866 — A0030 Effect of Topical Non-Steroidal Anti-Inflammatory Drugs on HLA-B27 Associated Uveitis. Tai Kyong Kim1, Y. Park2. 1Department of Ophthalmology, College of Medicine, Uijeongbu St. Mary’s Hospital, Uijeongbu-si, Gyeonggi-do, Korea (the Republic of); College of Medicine, The Catholic University of Korea, Seoul, Korea (the Republic of)

1867 — A0031 Therapeutic effect of topical treatment with everolimus-loaded nanocarriers in murine experimental autoimmune uveoretinitis (EAU). Karen R. Armbrust1, J. T. Rosenbaum1, 2, E. B. Suhler1, 3, P. Lin1. Casey Eye Institute, Portland, OR.


1871 — A0035 Efficacy of topical difluprednate in the treatment of uveitic macular edema. Fran Wu1, L. J. Kopplin1, G. Mount1, S. Read-Brown2, J. T. Rosenbaum1, E. B. Suhler1, P. Lin1. Casey Eye Institute, Oregon Health & Science University, Portland, OR; Devers Eye Institute, Portland, OR; Veterans Affairs Medical Center, Portland, OR.


1873 — A0037 Effect of intravitreal injection of microRNA-146a on ocular inflammation in Lewis rats with experimental autoimmune anterior uveitis. Chang-Hao Yang. Ophthalmology, National Taiwan University Hospital, Taipei, Taiwan.


1875 — A0039 Tocilizumab in the treatment of refractory uveitis associated with juvenile idiopathic arthritis. Christoph Tappeiner1, M. Mesquida1, A. Adun Civera2, J. Lopez, A. Ramanan1, E. Carreno1, K. Kotaniemi1, J. de Boer2, A. Heiligenhaus1. Department of Ophthalmology, Inselspital, Bern University Hospital, University of Bern, Bern, Switzerland; Institut Clinique d’Ophthalmologie, Hospital Clinica de Barcelona, University of Barcelona, Barcelona, Spain; Pediatric Rheumatology Unit, Hospital Sant Joan de Déu, University of Barcelona, Barcelona, Spain; Department of Paediatic Rheumatology, Bristol Royal Hospital for Children, Bristol, United Kingdom; Department of Ophthalmology, Helsinki University Hospital, Helsinki, Finland; Department of Ophthalmology, Umeå University Hospital, Umeå, Sweden; Department of Ophthalmology, University Medical Center Utrecht, Utrecht, Netherlands; Department of Ophthalmology at St. Franziskus Hospital, Muenster, Germany.

1876 — A0040 Cataract surgery outcomes in patients with chronic or recurrent uveitis. Faruk Ozturk1, P. Nalcacioglu2, P. Ozdil1, M. Turkyilmaz1. Hacettepe University, Ankara, Turkey; Yildirim Beyazit University, Ankara, Turkey; Ulucanlar Eye Institute, Ankara, Turkey; Ataturk Hospital, Ankara, Turkey.


1878 — A0042 Effectiveness and potential complications of difluprednate use for HLA-B27 associated acute anterior uveitis. George R. Mount, L. J. Kopplin, F. Wu, S. Read-Brown, P. Lin, E. B. Suhler, J. T. Rosenbaum. Casey Eye Institute, Oregon Health & Science University, Lakewood, WA.

Caveolin modulators suppress inflammation in the B10.RII mouse model of uveitis. David Eveleth1,4, W. Sessa3, R. Bradshaw1, A. Subramanian1, J. T. Rosenbaum3, P. Lin1. E&B Technologies, San Diego, CA; 3Vascular Pharmacology, Yale University, New Haven, CT; 4Devers Casey Eye Institute, Portland, OR; CathetheRx Inc., Hamden, CT *CR

Efficacy of anti-tumor necrosis factor (anti-TNF) treatment in a tertiary uveitis service in the United Kingdom. Paul J. Steptoe1, D. Broadbent1, A. Stylianides1, N. Beare1, D. Mewar2, J. Pearse1. St. Paul’s Eye Unit, Royal Liverpool Hospital, Liverpool, United Kingdom; 2Rheumatology, Royal Liverpool Hospital, Liverpool, United Kingdom; *CR

PD Ligand Blockade Decreases IRBP-induced uveitis in Mice. Negin Ashki1, A. M. Chan1, Y. Qin1, R. D. Levinson2, L. K. Gordon2. Ophthalmology, University of California Los Angeles, Los Angeles, CA

24-Month Safety Outcomes in SAKURA Study 1: Treatment of Non-infectious Uveitis (NIU) of the Posterior Segment With Intravitreal Sirolimus. Stephen R. Thurai. Ludwig-Maximilians-University, Munich, Germany *CR


Ocular Tuberculosis at AUBMC, a Tertiary Care Center in Lebanon. Rola N. Hamam, H. Sheheitli, W. Jurdí Kheir, M. Abdul Fattah. Ophthalmology, American University of Beirut, Beirut, Lebanon

Acute Posterior Multifocal Pigment Epitheliopathy: visual outcome in untreated patients. Olivia Xerri, S. Salah, D. Monnet, A. P. Brezin. Ophthalmology, Cochin University Hospital, Paris, France

Preoperative use of a dexamethasone intravitreal implant as a perioperative anti-inflammatory strategy in uveitic cataract surgery. Hoang Mai LE, N. Butel, P. LeHoang, B. Bodaghi. Department of Ophthalmology, Pitié Salpêtrière Hospital, Paris, France

Impact of antitubercular therapy in patients with presumed intraocular tuberculosis at a tertiary referral eye care centre in Singapore. Leslie J. Ang3, A. Kee1, T. H. Yeo1, D. Gunasekaran1, S. Ho1, S. Teoh1, R. V. Agrawal2. National Healthcare Group Eye Institute, Singapore, Singapore; 3National University of Singapore, Singapore, Singapore; 4Tan Tock Seng Hospital, Singapore, Singapore; 5Eagle Eye Centre, Singapore, Singapore

Trends in patterns of scleritis in a tertiary institution in Singapore. MD Amir Ismail1, H. Mi Fang1, R. Lim1, E. Wong1, S. Ho1, S. Teoh1, R. V. Agrawal2. Ophthalmology, National Healthcare Group, Singapore, Singapore; *CR

Immune responses of Bechč’s disease patients with or without recurrent uveitis after infliximab treatment. Masaru Takeuchi1, Y. Karasawa1, K. Harimoto1, Y. Sakurai1, T. Sato1, R. R. Caspi2, M. Ito2. Ophthalmology, National Defense Medical College, Tokorozawa, Japan; 2Immunology, National Eye Institute, Bethesda, MD; 3Developmental Anatomy and Regenerative Biology, National Defense Medical College, Tokorozawa, Japan

Efficacy and Clinical outcomes of intravenous immunoglobulin therapy in refractory uveitis. Haitham F. Sahawneh1,2, C. Foster1,2. Ophthalmology, Massachusetts Eye Research and Surgery Institute, Waltham, MA; 2Ocular Immunology and Uveitis Foundation, Boston, MA

Infliximab Treatment of Chronic Anterior Uveitis in Children: Longitudinal Assessment of Cells and Flare. Meghan Berkenstock1,2, F. Yu3,2, D. McCurdy4, G. N. Holland1. Ophthalmology, Doheny Eye Institute, Los Angeles, CA; 2Department of Biostatistics, Jonathan and Karin Fielding School of Public Health, UCLA, Los Angeles, CA; 3Ophthalmology, Stein Eye Institute, UCLA, Los Angeles, CA; 4Pediatrics – Rheumatology, UCLA, Los Angeles, CA *CR

Interim results from the SATURN Study: Sarilumab in Non-infectious Uveitis (SARIL-NU). Quan Dong Nguyen1, P. A. Sundaram2, K. Erickson3, R. Varona1, L. Viner4, V. Corp-di-Genti5, R. Titi1, M. D. de Smet5. Ophthalmology, National Defence Medical College, Tokorozawa, Japan; 2Department of Biostatistics, University of California, San Francisco, San Francisco, CA; 3Department of Ophthalmology, University of California, San Francisco, San Francisco, CA; 4Ophthalmology, National Defence Medical College, Tokorozawa, Japan; 5Pediatrics – Rheumatology, UCLA, Los Angeles, CA *CR

Interferon alpha2a and systemic corticosteroids in monotherapy in chronic bilateral autoimmune posterior uveitis associated with macular edema: results of the randomised controlled BIRDFERON study. Christine Fardeau1, A. Simon1, B. Rodde3, F. Viscogliosi3, P. Labalette1, V. Looten1, S. Tézenas du Montcel1, P. LeHoang2. Ophthalmology department, Reference Centre for Rare Diseases, Pitié-Salpêtrière Hospital, University Paris VI, DHU Sight Restore, Paris, France; 1Department of Biostatistics Public Health and Medical Informatics, Pitié-Salpêtrière Hospital, University Paris VI, Paris, France; 2Department of Ophthalmology, University Hospital, Lille, Lille, France; 3Department of Psychiatry, Pitié-Salpêtrière Hospital, Paris, France; 4Department of Internal Medicine, Pr S. Herson, Pitié-Salpêtrière Hospital, Paris, France *CR


Müller cell activation in retinal damage caused by endotoxin-induced uveitis. Ruiping Gu. eye, EENT hospital, Shang Hai, China

CD4+ and CD8+ T Lymphocyte Levels in Uveitis Patients Treated with Ciclosporin. David Valenti1, R. B. Nussenblatt2, H. Sen1. 1Retina/Uveitis, National Institutes of Health, Portland, OR; 2Retina Care Center, Medford, OR

Outcomes of Vogt-Koyanagi-Harada disease from a randomized clinical trial of antimetabolite therapies. Elizabeth Shen1, S. R. Rathnani1, M. Babu1, A. Kanakath2, R. Thundikandy3, S. Lee1, E. Browne1, T. Porco1, N. Acharya4, M. Babu5, A. Kanakath3. 1F.I. Proctor Foundation, University of California, San Francisco, San Francisco, CA; 2Aravind Eye Care System, Madurai, India; 3Aravind Eye Care System, Madurai, India; 4Department of Epidemiology & Biostatistics, University of California, San Francisco, San Francisco, CA; 5Department of Ophthalmology, University of California, San Francisco, San Francisco, CA *CR
Monday Posters
11:00 am – 12:45 pm

238 Cornea Imaging

Moderators: Sanjay V. Patel and James V. Jester

1900 — A0175 Quantitative Analysis of Depth, Distribution and Density of Cysts in Acanthamoeba Keratitis using Confocal Microscopy, Ping Huang1, T. Tepelus1, E. Baghdassaryan2, L. Vickers1, J. Huang1, J. A. Irvine2, H. Y. Hsu3, S. R. Sadda1, O. L. Lee1.

1901 — A0176 Corneal Endothelium and Iridocorneal Angle Biometrics in Pediatric Glaucomatous Eyes, Grace Shihi1, D. Contractor2, B. J. Reiser3.

1902 — A0177 Anterior Segment Spectral Domain Optical Coherence Tomography and Histopathological Study of Patients Anomaly, Mohamed S. Sayed1, G. Kontakaki1, M. Fernandez, T. C. Chang1, K. M. Cavuoto1, S. R. Dubovy1, M. Abou Shousha1.

1903 — A0178 Asian Diabetic Corneas: A Study in Astigmatism, Yadiya Gunasekaran1, J. Nguyen2, V. Chen1, B. B. Kim1, P. Phan1, S. Muchamuel1, S. Kim1, G. Wu1.

1904 — A0179 Measurements of corneal astigmatism axis with anterior segment swept source optical coherent tomography versus auto refraactometer, Shinichiro Nakano1, M. Iida1, T. Hiroaka1, T. Oshika1.


1907 — A0182 Higher-order aberrations after DSEAK, “thin” DSEAK and DMEK: comparative study about 60 cases, Naiya Houmad1, O. Guechi1, P. krawczyk1, M. Zaidi1, N. OUAMARA2, A. EHRHARDT2, M. SOT1, L. Lhuillier1, A. agapie1, J. Perone1, H. Duong Nguyen2.

1908 — A0183 A purely solid-state device for rapid reconstruction of 3D models of the anterior segment of the eye with no moving parts, Pushyami Rachapudi1, S. Sinha1, W. S. Lee2, A. Redo-Sanchez1, R. Ruskar3.

1909 — A0184 Studies of collagen organisation and early stages of cell infiltration in the primary stroma of developing chick cornea, Robert D. Young1, C. Knupp1, E. Koudouna1, P. N. Lewis1, K. M. Meek1, A. J. Quantock1.


1911 — A0186 Sampling density and configuration of stimulus points in determination of astigmatism, coma and higher order aberrations of the posterior surface of the cornea using Purkinje image reflection technology, Roland Piper1, E. Gamba1, V. Sicam1.


1913 — A0188 Evaluation of corneal irregularity due to progress of primary pterygium using Fourier harmonic analysis for multiple area diameters, Keitchiro Minami1, T. Ono1, T. Tokunaga1, S. Tokuda1, A. Otani1, K. Miyata1, S. Amano1.

1914 — A0189 High-resolution imaging of limbal structural properties using Brillouin spectro-microscopy, Guillaume Leper1, R. M. Gouveia1, C. J. Connor1, C. Paterson1.

1915 — A0190 Measurement of Corneal and Limbal Epithelial Thickness by In Vivo Confocal Microscopy and Anterior Segment Optical Coherence Tomography, Qihua Le1, Y. Chen1, Y. Yang1, J. Xu1.

1916 — A0191 Corneal epithelial thickness mapping in the diagnosis of ocular surface pathologies involving the corneal epithelium, Sara Touhami1, C. Georgeon1, N. Bouharaoua1, L. Laroche1, V. Borderie1.

1917 — A0192 Multimodal Assessment of Corneal Thinning Using Anterior Segment Optical Coherence Tomography, Scheimpflug Imaging, and Ultrasound Pachymetry Compared to Clinical Measurement, Julius Otatts1, T. Mannis1, J. D. Keenan1, J. Rose-Nussbaumer1.

1918 — A0193 Can we determine the true central corneal thickness? The significance of the discrepancy between the ultrasound and optical coherence tomography pachymetry, Magdalena Niestratu-Ortiz1, O. Li1, M. Haywood2, N. Davies2.

1919 — A0194 Confocal microscopy for the analysis of the sub-basal corneal nerve plexus alternations in elderly and diabetic patients using a new software technology, Hatim I. Batavi1, N. Shahab1, M. Joag1, T. Korus-Sengul1, J. Rodriguez1, P. Green1, M. Campigotto1, C. Karp1, A. Galor2.

1920 — A0195 Validation and quantification of neurotaxis effect in a chick dorsal root ganglion/ corneal stromal cell model, Geraint P. Williams1, G. H. Yum1, L. X. Lee1, L. S. Mehta1.

Refer to the Program Number in the Clinical Trial (CT) Registration Index. * CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
1921 — A0196 Good inter-center reproducibility of quantification of the corneal subbasal nerve plexus using in vivo corneal confocal microscopy, Hoang-Ton Nguyen1, M. Nieuwenhoff2, J. N. Dorrestijn3, F. Huygen4, S. Niehoff5, J. Hay6, A. Moller7, G. Groeneveld8. 8Ophthalmology, VU University Medical Center, Amsterdam, Netherlands; 9Centre for Human Drug Research, Leiden, Netherlands; 10Rotterdam Ophthalmic Institute, Rotterdam, Netherlands; 11Anesthesiology and Pain Medicine, Erasmus MC University Medical Center, Rotterdam, Netherlands; 12Neurology, VU University Medical Center, Amsterdam, Netherlands

1922 — A0197 Repeatability and clinical utility of a novel method to measure in-vivo corneal nerve migration in diabetic neuropathy. Katie Edwards1, K. Al Rashed2, N. Pritchard3, C. Poole4, C. Dehghani5, A. Russell6,7, R. A. Malik2,3, N. Gove, QLD, Australia; Queensland University of Technology, Kelvin Grove, QLD, Australia; 10Centre for Endocrinology and Diabetes and Institute of Human Development, University of Manchester, Manchester, United Kingdom; 11Weil Cornell Medical College in Qatar, Doha, Qatar; 12School of Medicine, University of Queensland, Brisbane, QLD, Australia; 13Department of Diabetes and Endocrinology, Princess Alexandra Hospital, Woolloongabba, QLD, Australia


1924 — A0199 Quantitative alterations in nerve morphology differentiate affected and unaffected eyes in Unilateral Keratoconus. RUSHAD Shroff1, R. Shetty2, A. Ghosh3, N. Pahuja4, C. Dehghani5, A. Russell6,7, N. Ejron1. 1School of Optometry and Vision Science, and Institute of Health and Biomedical Innovation, Queensland University of Technology, Kelvin Gove, QLD, Australia; 9Centre for Endocrinology and Diabetes and Institute of Human Development, University of Manchester, Manchester, United Kingdom; 10Weil Cornell Medical College in Qatar, Doha, Qatar; 11School of Medicine, University of Queensland, Brisbane, QLD, Australia; 13Department of Diabetes and Endocrinology, Princess Alexandra Hospital, Woolloongabba, QLD, Australia

1925 — A0200 Color LED corneal shape analysis of aberrations and irregularity indicators in healthy and keratoconus eyes. Victor Sicam1, S. Klijn2, M. Huijbregtse3, A. J. Geerards4, N. J. Reus5, Rotterdam Ophthalmic Institute, Rotterdam, Netherlands; 6Rotterdam Eye Hospital, Rotterdam, Netherlands; 7Cassini BV, The Hague, Netherlands


1927 — A0202 Quantification of Kaysers- Fleischer ring using Scheimpflug imaging. N. Telinus1, Niklas Telinus2, P. Öhr3, H. Hjortdal4. 1Ophthalmology, Aarhus University Hospital, Aarhus, Denmark; 2Department of Medicine (Hepatology and Gastroenterology), Aarhus University Hospital, Aarhus, Denmark

1928 — A0203 Corneal In Vivo Confocal Microscopy in Ocular Graft versus Host Disease. Kanul Suri1, A. Kheirkhah2, Y. Qazi3, M. A. Arnoldner3, P. Hannah4, R. Dana5. 1Ophthalmology, Massachusetts Eye and Ear Infirmary, Boston, MA; 2Ophthalmology, Tufts Medical Center, Boston, MA

1929 — A0204 Quantitative analysis of Central Corneal Sub-basal Inflammatory cells/Dendritic Cells in Large-area Mosaic images obtained by In Vivo Confocal Microscopy (IVCM). Reza A Badian1,2, T. P. Utheim3,4, S. Allgeier1, B. Koehler5, N. S. Lagali6. 1Faculty of Health Sciences, Biskrud and Vestfold University College, Drammen, Norway; 2The Norwegian Dry Eye Clinic, Oslo, Norway; 3Vestre Viken Hospital Trust, Department of Ophthalmology, Drammen, Norway; 4Karlsruhe Institute of Technology, Institute of Applied Computer Science/Automation, Karlsruhe, Germany; 5Department of Ophthalmology, Faculty of Health Sciences, Linköping University, Linköping, Sweden

1930 — A0205 Techniques to perform Specular Microscopy: Endothelial Cell Counting (ECC) and Endothelial Mosaic Mapping (EMM). Fernando C. Abib. Clinic of Medicine of Federal University of Parana, Curitiba, Brazil; Cornea, Dr. Fernando Abib Eye Clinic, Curitiba, Brazil

1931 — A0206 Automated quantitation of the endothelial alterations in Eye Bank processed corneas. Brian Madow1, N. Sprehe2, S. Lee3, P. Gore4, S. Kaufman5, J. Malling6, V. Grimes7, M. D. McCarthy8. 1Ophthalmology, University of South Florida, Tampa, FL; 2Lions Eye Institute, Tampa, FL; 3Minnesota Lions Eye Bank, St Paul, MN

1932 — A0207 Endothelial cell recognition capability of central and paracentral corneal areas using automatic specular microscopy counting. Richard Y. Hida1, F. U. Carvalho1, R. Holzchuh2, F. C. Abib3. 1Univ de Sao Paulo/Santa Casa de Sao Paulo, Sao Paulo, Brazil; 2Santa Casa de Sao Paulo, Sao Paulo, Brazil; 3Federal University of Parana, Curitiba, Brazil

1933 — A0208 Diagnostic performance of the Endothelial/Descemets’s membrane thickness versus endothelial cell density in the diagnosis of corneal graft rejection. Georgios Kontadakis1,2, C. Smith3, D. Kaitis4, R. Bentivegna5, J. Winegar6, S. H. Yoo7, V. L. Perez8, M. Abou Shousha9. 11st Department of Ophthalmology, Ophthalmiatric Eye Hospital of Athens, ATHENS, Greece; 2Bascom Palmer Eye Institute, University of Miami, Miami, FL; 3Saint Louis University Eye Institute, Saint Louis University, Saint Louis, MO

1934 — A0209 Manual adjustment of specular images: Correcting what the computer can’t see after DMEK. Zachary Mayko1, B. Benzet2,3, C. Stoeper1, H. Menegay1,4, C. Donovan5, M. A. Terry4,5, J. H. Lass6,7. Lions VisionGift, Portland, OR; 8Department of Ophthalmology and Visual Sciences, Case Western Reserve University and UH Eye Institute, Cleveland, OH; 9Cornea, Devers Eye Institute, Portland, OR; 10School of Medicine, Case Western Reserve University, Cleveland, OH

1935 — A0210 Do specular images of endothelial cell density post DMEK preparation tell you anything new? Christopher Stoeper1, B. Benzet2,3, I. Z. Mayko1, H. Menegay1,4, C. Donovan5, M. A. Terry4,5, J. H. Lass6,7. Lions VisionGift, Portland, OR; 8Department of Ophthalmology and Visual Sciences, Case Western Reserve University, Cleveland, OH; 9UH Eye Institute, Cleveland, OH; 9Cornea, Devers Eye Institute, Portland, OR


1938 — A0213 Assessment of a standardized protocol for corneal endothelial cell analysis and interrater reliability across educational levels using the flex-center method. Cindy Cai1, S. Vahedi2, J. Sroth3, G. Dastjerdi4, H. Channa1, M. Malakooti1, A. O. Eghrari5. 1Ophthalmology, Johns Hopkins Hospital, Baltimore, MD; 2University of Maryland, Baltimore County, Baltimore, MD; 3Aga Khan University Medical College, Karachi, Pakistan; 4International American University School of Medicine, Vieux Fort, Saint Lucia

1939 — A0214 Endothelial cell recognition capability of paracentral and midperipheral corneal areas using automatic specular microscopy counting. Fabio U. Carvalho1, R. Y. Hida1, R. Holzchuh2, F. C. Abib3. 1Ophthalmology, Santa Casa de Sao Paulo, Sao Paulo, Brazil; 2Universidade Federal do Parana, Curitiba, Brazil

Monday Posters – 1941 – 1963

1941 — A0247 Test re-test reliability of luminance and color temperature preferences in normally sighted and low vision patients using the LuxIQ. Lorie St-Amour, W. H. Seiple, J. Jarry, W. Wittich. School of Optometry, University of Montreal, Montreal, QC, Canada; Lighthouse Guild, New York, NY; Centre de recherche interdisciplinaire en réadaptation du Montréal métropolitain, Montreal, QC, Canada.

1942 — A0248 Light, What Is It Good For? William H. Seiple, O. Overbury, J. Odom, T. Arango, A. R. Morse. Lighthouse Guild, New York, NY; Ophthalmology, New York University School of Medicine, New York, NY; Ophthalmology, West Virginia University Eye Institute, Morgantown, WV; School of Optometry, University of Montreal, Quebec, QC, Canada.

1943 — A0249 Reading speed on the iPad for individuals with low vision depends on previous experience. Walter Wittich, E. Morrice, A. Johnson. University of Montreal, Montreal, QC, Canada; Centre de recherche interdisciplinaire en réadaptation, Montreal, QC, Canada; Psychology, Concordia University, Montreal, QC, Canada.

1944 — A0250 Validation of Reduced Contrast SRead Test. Jonathan Hernandez-Siman, D. C. Fletcher, L. Walker, M. MacKenzie. Ophthalmology, California Pacific Medical Center, San Francisco, CA; The Smith-Kettlewell Eye Research Institute, San Francisco, CA; Envision Research Institute, Wichita, KS.

1945 — A0251 The shrinking visual span may explain glaucomatous reading deficits. MiYoung Kwon, B. Patel, R. Liu, C. A. Girkin. University of Alabama at Birmingham, Birmingham, AL.


1948 — A0254 Reading speed for Korean text in central and peripheral vision. So R. Baek, Y. He, G. E. Legge. Department of Psychology, University of Minnesota, Minneapolis, MN.

1949 — A0255 Baseline MNREAD measures for normally sighted subjects across age. Aurelie Calabrese, G. E. Legge. Psychology, Univ of Minnesota, Minneapolis, MN.


1953 — A0259 Comparison of contrast sensitivity, visual acuity, and the contrast sensitivity function as predictors of gait in glaucoma. Angelina M. Nguyen, A. Mihailovic, D. S. Friedman, Y. P. Ramulu. Johns Hopkins University/Wilmer Eye Institute, Baltimore, MD; Dana Center for Preventive Ophthalmology, Baltimore, MD.

1954 — A0260 The Effect of Loss of Contrast and Distortion on Vision and Mobility Tasks. Catriona Hamer, G. Shum, L. Bunn, J. Marsden, H. Buckhurst, C. Purslow, N. Habib, P. J. Buckhurst. U1051, Plymouth University, Plymouth, United Kingdom; Sport and Exercise Science, University of St Mark and St Johns, Plymouth, United Kingdom; Ophthalmology, Cardiff University, Cardiff, United Kingdom; Ophthalmology, Royal Eye Infirmary, Plymouth, United Kingdom.


1958 — A0264 Improvement of reaching movement in subjects with retinal implant simulator with gaze feedback system. Kenta Hozumi, T. Endo, M. Hirota, H. Kanda, T. Morimoto, T. Fujikado, K. Nishida. Kansairosai Hospital, Hyogo, Japan; Department of Ophthalmology, Osaka University Graduate School of Medicine, Osaka, Japan; Department of Applied Visual Science, Osaka University Graduate School of Medicine, Osaka, Japan.

1959 — A0265 Improvement of visually-guided reach for retinal prosthesis wearers using scanning-based camera alignment. Michael P. Barry, G. Dagnelie. Biomedical Engineering, Johns Hopkins University, Baltimore, MD; Ophthalm-Lions Vision Ctr, Johns Hopkins University, Baltimore, MD.


1962 — A0268 Does wearing a biopic telecope improve visual recognition while driving? Sharon L. Oberstein, M. Boon, B. Chu, J. M. Wood. School of Optometry and Vision Science, UNSW Australia, Sydney, NSW, Australia; School of Optometry and Vision Science, The Catholic University of Daegu, Daegu, Korea (the Republic of); School of Optometry and Vision Science, Queensland University of Technology, Brisbane, QLD, Australia.

1963 — A0269 Driving Performance in Early and Intermediate Age-related Macular Degeneration. Joanne M. Wood, A. A. Black, K. Mallon, A. Kwai, C. Owsley. Optometry and Vision Science, Queensland University of Technology, Brisbane, QLD, Australia; Faculty of Health Sciences, University of Queensland, Brisbane, QLD, Australia; University of Alabama in Birmingham, Birmingham, AL.

* Refer to the Program Number in the Clinical Trial (CT) Registration Index. *CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
1964 — A0270 The Effect of Biotic Telescopic Spectacle Use on Road Sign Recognition in Drivers with Central Vision Impairment. Bradley E. Dougherty1, A. Mathias2, R. E. Flom3, T. Kerwin3, T. W. Rauch3. 1Optometry, The Ohio State University, Columbus, OH; 2Driving Simulation Laboratory, The Ohio State University, Columbus, OH

1965 — A0271 Predicting Driving Performance under Simulated Fog Conditions in Glaucoma. Tung-Mei Kuang1, E. R. Boer1, A. Diniz-Filho1, A. Elhosseiny1, M. Nakanishi1, F. A. Medeiros1. 1Laboratory of Performance and Visual Function, Department of Ophthalmology, University of California, San Diego, La Jolla, CA; 2Department of Ophthalmology, Taipei Veterans General Hospital, Taipei, Taiwan

1966 — A0272 Objective Assessment of Activity Limitation in Glaucoma by Smart Phone Virtual Reality Goggle. Ya Xiang George Kong1, C. McAlinden1, R. Gol4, J. Liu5, J. G. Crowston1, S. Salikly2, Glaucoma Investigation and Research Unit, Royal Victorian Eye and Ear Hospital, Melbourne, VIC, Australia; 2Alertwave Bro Morganawg University Health Board, Swansea, United Kingdom; 3Monash Medical Center, Melbourne, VIC, Australia; 4Centre for Eye Research Australia, Melbourne, VIC, Australia

1967 — A0273 Measurement of facial perception abilities in low vision. Chris Bradley1, D. Natale1, F. Werblin1, R. W. Massof1. 1Ophthalmology, Johns Hopkins Medicine, Baltimore, MD; 2UC Berkeley, Berkeley, CA

1968 — A0274 Sleep Disturbance in Low Vision Patients. Donald C. Fletcher1, L. Walker1, 2. 1Ophthalmology, California Pacific Medical Center, San Francisco, CA; 2Smith-Kettlewell Eye Research Institute, San Francisco, CA; 3Envision, Wichita, KS

1969 — A0275 Stress, Depression, and Changes in Visual Functioning with Anti-VEGF Treatment in Patients with Age-related Macular Degeneration (AMD). San-San L. Cooley1, B. E. Dougherty1, F. H. Davidson1. 1The Ohio State University College of Optometry, Columbus, OH; 2The Ohio State University Department of Ophthalmology, Columbus, OH

1970 — A0276 Intercocular Acuity Differences Affect Reported Vision-Specific Quality of Life in Diabetic Patients with or without Retinopathy. J Vernon Odom1, M. E. Schneeck1, W. H. Seiple1, M. Smith1, M. J. Leys1. 1Ophthalmology, West Virginia Univ Eye Inst, Morgantown, WV; 2Smith-Kettlewell Eye Research Institute, San Francisco, CA; 3Lighthouse International, New York, NY

1971 — A0277 Performance in alternative tests of vision across the spectrum of glaucoma severity. Stephanie Lin1, A. Mihailovic2, S. K. West3, C. A. Johnson1, D. S. Friedman1, P. Y. Ramuh2. 1Johns Hopkins University School of Medicine, Baltimore, MD; 2Ophthalmology, Johns Hopkins University/Wilmer Eye Institute, Baltimore, MD; 3Ophthalmology, University of Iowa, Iowa City, IA

1972 — A0278 Examining functional ability and vision-specific quality of life in people with glaucoma. Heather Livengood1, E. Skidmore1, R. A. Bilionick1, I. P. Conner2, N. Baker3, J. S. Schuman1. 1Department of Occupational Therapy, University of Pittsburgh School of Health and Rehabilitation Sciences, Pittsburgh, PA; 2UPMC Eye Center, Eye and Ear Institute, Ophthalmology and Visual Science Research Center, Department of Ophthalmology, University of Pittsburgh School of Medicine, Pittsburgh, PA


1974 — A0280 A comparison of self-report and objective assessments of everyday tasks in participants with age-related macular degeneration. Shaina Pardhan1, K. Latham1, T. M. Timms1, 2. 1Vision and Eye Research Unit, Postgraduate Medical Institute, Anglia Ruskin University, Cambridge, United Kingdom; 2Sport and Exercise Sciences, Anglia Ruskin University, Cambridge, United Kingdom; 3Vision and Hearing Sciences, Anglia Ruskin University, Cambridge, United Kingdom

1975 — A0281 The relationship of Goal Attainment Scaling to an interval measure of low vision rehabilitation functional outcomes. Theresa Smith1, L. Forest1, G. Davis2, K. Fujimura2, R. W. Massoff2. 1Occupational Therapy and Rehabilitation Sciences, University of Texas Medical Branch Galveston, Galveston, TX; 2Evangeline Home Health, Lake Charles, LA; 3Johns Hopkins, Baltimore, MD

1976 — A0282 Comparing low vision rehabilitation outcome measures using a clinically meaningful endpoint. Judith E. Goldstein1, T. Smith1, R. W. Massoff1. 1Ophthalmology, Johns Hopkins University, Baltimore, MD; 2University of Texas Medical Branch, Galveston, TX

1977 — A0283 Legal blindness in normal tension glaucoma: a subgroup analysis. Kenji Saito1, A. Sawada2, T. Yamamoto2. Ophthalmology, Gifu University Graduate School of Medicine, Gifu, Japan

1978 — A0284 Glaucoma Patient-Reported Concerns and Associated Factors. Rachel Mogil1, A. Tirsch1, J. Lee1, C. Tello1, S. Park1. 1Department of Ophthalmology, Manhattan Eye, Ear & Throat Hospital, New York, NY; 2Department of Ophthalmology, Hufstra North Shore-LIJ School of Medicine, Hempstead, NY


1980 — A0286 Reliability and Construct Validity of National Eye Institute Visual Function Questionnaire-25 in Geographic Atrophy. Sobha Sivapravad1, R. Varma2, N. M. Bressler3, B. E. Silverman1, M. Kimel2, E. Tschosik3, M. Dolan1. 1Ophthalmology, Moorfields Eye Hospital, London, United Kingdom; 2Keck School of Medicine, University of Southern California Eye Institute, Los Angeles, CA; 3Johns Hopkins University School of Medicine, Baltimore, MD; 4Eidera, Bethesda, MD; 5Roche Products Limited, Welwyn Garden City, United Kingdom; 6Genentech, Inc., South San Francisco, CA; 7CMD Consulting, Inc., Sandy, UT

1981 — A0287 Using Rasch analysis with measures of visual ability of people with ultra-low vision. Rocco Palumbo1, L. N. Ayt1, A. Nau1, R. L. Woods1. 1Scheeps Eye Research Institute, Harvard Medical School, Boston, MA; 2University of Melbourne, Melbourne, VIC, Australia; 3Korb and Associates, Boston, MA


Exhibit/Poster Hall B0063-B0092
Monday, May 02, 2016 11:00 AM-12:45 PM

240 Cataract surgery: epidemiology

Moderator: Eri Kubo


1984 — B0064 Factors Associated with Refractive Surprise after Cataract Surgery. Tara Bryant, N. Farivar1, K. Fan, A. Bausa, S. Rowe. Ophthalmology, Boston University Medical Center, Boston, MA


The Commercial Relationships (CR) Index for Disclosures and the Clinical Trial (CT) Registration Index are at arvo.org/amindices.

1987 — B0067 Aravind Pseudoxefoliation (XFS) Study (APEX): 3 year post operative results. Aravind Haripriya1, C. Shivakumar1, M. Shekkhar2, R. Venkatesh1, K. Narendran1, A. L. Robin1. ‘Cataract, Aravind Eye Hospital, Madurai, India; ‘Glaucoma, John hopkins university, Baltimore, MD’

1988 — B0068 Serum Homocysteine levels in Indian patients with ocular pseudoxefoliation. Ashok Vardhan1, B. R1, H. Aravind2, P. Y. Ramulu3, K. Narendran4, C. Shivakumar5, M. Nath6, R. R.D7, A. L. Robin8. ‘University of Maryland, Baltimore, MD; ‘Wilmer Eye Institute, Baltimore, MD; ‘Aravind Eye Hospital, Tirunelveli, India; ‘Aravind Eye Hospital, Coimbatore, India; ‘Aravind Eye Hospital, Pondicherry, India; ‘Aravind Eye Hospital, Madurai, India

1989 — B0069 Glaucoma is an independent risk factor for the anesthesiologist’s intervention during cataract surgery. Luigi Varano, N. Ungaro, S. A. Gandolfi. University of Parma, Soverato (CZ), Italy

1990 — B0070 Impact and safety of ceferoxime for post-operative endophthalmitis after cataract surgery: a national population study. Vincent Daire1, L. Papinaud2, M. C. Gilles2, C. Dorem3, M. Nagot4, S. Lacombe5, J. Daures6, J. Carriere7, M. Villa8. ‘Ophthalmology, CHU Montpellier, Saint Gely Du Fesc, France; ‘INSERM, Montpellier, France; ‘ERSM, Montpellier, France; ‘Ophthalmology, Save sight Institute, Sydney, ACT, Australia; ‘IURC, Montpellier, France

1991 — B0071 Cystoid macular oedema in paediatric aphakia and pseudophakia: Optical Coherence Tomography (OCT) results. Paola Salvetti, D. Khurram, A. Gurbaxani. Moorfields Eye Hospital Dubai, Dubai Healthcare City, United Arab Emirates

1992 — B0072 Cataract surgery in patients with nanophthalmos: Results in Mexican population at Instituto de Oftalmologia Conde de Valenciana I.A.P. Janet S. Silva, P. J. Guzman-Salas, H. Marz, V. Vineri, M. Olazabal. Ophthalmology, Instituto de Oftalmologia Conde de Valenciana, Mexico, Mexico

1993 — B0073 Cataract Surgical Rate and Socioeconomics: A Global Perspective. William Yan1, W. Wang2, M. He3. ‘Ophthalmic Epidemiology, Centre For Eye Research Australia, Melbourne, VIC, Australia; ‘University of Melbourne, Melbourne, VIC, Australia; ‘Zhongshan Ophthalmic Centre, Guangzhou, China

1994 — B0074 The Establishment and Implement of A Standard Clinical Pathway for Cataract Surgical Management and The Evaluation of Its Health Economics Effect. Yanhong Zhu1, Y. Jiang1, X. Wang2. ‘Department of Science and Education, Shang Hai First People’s Hospital, Shanghai, China; ‘Department of Ophthalmology, Shang Hai First People’s Hospital, Shanghai, China

1995 — B0075 The Relationship between Insurance Coverage, Demographics, and BSCVA at the Time of Cataract Surgery. Jordan Stone, H. Fukoska, R. N. Weinreb, N. A. Afshari. Shiley Eye Institute, University of California San Diego, La Jolla, CA


1997 — B0077 Prevalence and Outcomes of Cataract Surgery: the Brazilian Amazon Region Eye Survey (BARES). Adriana Berezovsky1, S. E. Watanabe1, S. Munoz2, J. M. Furtado3, J. M. Cohen4, P. Morales1, M. Cypel1, J. M. Cohen4, R. Belfort1, S. R. Salomao1. ‘Oftalmologia e Ciencias Visuais, Universidade Federal de Sao Paulo, Sao Paulo, Brazil; ‘Salud Publica, Universidad de La Frontera, Temuco, Chile; ‘Oftalmologia, Otorrinolaringologia e Cirurgia de Cabeca e Pesisco, Faculdade de Medicina de Ribeirao Preto, USP, Ribeirao Preto, Brazil; ‘Divisao de Oftalmologia, Depto. de cirurgia, Universidade Federal do Amazonas, Manaus, Brazil; ‘Instituto de Oftalmologia de Manaus, Manaus, Brazil

1998 — B0078 Post-operative complications following uncomplicated cataract surgery in a community hospital treatment centre. Hedayat Javidi1, S. Mahmood1. ‘Manchester Royal Eye Hospital, Manchester, United Kingdom; ‘Faculty of Medicine, University of Manchester, Manchester, United Kingdom

1999 — B0079 Post-Operative Analysis Following Refractive Cataract Surgery on 53 Eyes of a Group of 200 Operated in a Southern California Clinic. David B. Kneiber1, B. Said2, S. Valtchev3, J. Lee4, L. Park5. ‘Department of Ophthalmology and Visual Sciences, Washington University School of Medicine, St Louis, MO; ‘Vanderbilt Eye Institute, Nashville, TN; ‘Ophthalmology, Veteran Affairs Tennessee Valley Healthcare System Center, Nashville, TN; ‘Ophthalmology, St Louis Veterans Affairs Medical Center, St Louis, MO; ‘Department of Ophthalmology and Visual Sciences, Washington University School of Medicine, St Louis, MO; ‘Ophthalmology, Michael E. DeBakey Veteran Affairs Medical Center, Houston, TX; ‘Ophthalmology, Shiley Eye Institute, Baylor College of Medicine, Houston, TX; ‘Ophthalmology, Department of Defense/Veterans Affairs Vision Center of Excellence, Bethesda, MD; ‘Ophthalmology, Boston University School of Medicine, Boston, MA

2000 — B0080 Association between cataract surgery and cognitive function in Japanese Elderly: Cross Sectional Fujisawa-kyo Cohort Study. Kimie Miyata1, M. Mine2, M. Morkkawa3, T. Nishi4, N. Okamoto5, N. Kurumatan6. ‘Ophthalmology, Nara Medical University School of Medicine, Kashihara City Nara, Japan; ‘Community Health and Epidemiology, Nara Medical University of Medicine, Kashihara City Nara, Japan; ‘Mie Prefectural Mental Care Center, Tsu, Mie, Japan

2002 — B0082 Initial Experience Using A Femtosecond Laser Cataract Surgery System At A UK Cataract Surgery Day Care Unit. Mark R. Wilkins, S. Dhallu, A. C. Day. Cornea, Moorfields Eye Hospital, London, United Kingdom


2004 — B0084 Frequency of retinal detachment as a complication of cataract surgery in a reference center in Mexico city. A two year follow up. Laura Andrea Torrado, P. J. Guzman-Salas, M. Flores, H. Matiz. Eye Clinic, Instituto de oftalmologia. Fundacion Conde de Valenciana, Distrito Federal, Mexico


2006 — B0086 Visual outcomes and vision-related quality of life in veterans with systemic comorbidities: Results from the Veterans Affairs Ophthalmic Surgery Outcomes Data Project. Luis A. Gonzalez1, A. R. Payal2, A. Turalba1, T. Cakiner-Egilmez1, A. Chomsky3, D. Volland4, E. Baze5, M. G. Lawrence6, M. K. Daly7, 8. ‘Ophthalmology, Veterans Affairs Boston Healthcare System, Jamaica Plain, MA; ‘Ophthalmology, Harvard Medical School, Boston, MA; ‘Ophthalmology, Veteran Affairs Tennessee Valley Healthcare System Center, Nashville, TN; ‘Ophthalmology, Vanderbilt Eye Institute, Nashville, TN; ‘Ophthalmology, St Louis Veteran Affairs Medical Center, St Louis, MO; ‘Department of Ophthalmology and Visual Sciences, Washington University School of Medicine, St Louis, MO; ‘Ophthalmology, Michael E. DeBakey Veteran Affairs Medical Center, Houston, TX; ‘Ophthalmology, Cullen Eye Institute, Baylor College of Medicine, Houston, TX; ‘Ophthalmology, Department of Defense/Veterans Affairs Vision Center of Excellence, Bethesda, MD; ‘Ophthalmology, Boston University School of Medicine, Boston, MA

* Refer to the Program Number in the Clinical Trial (CT) Registration Index. *CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
2007 — B0087 Visual outcomes and vision-related quality of life in veterans with dementia or cognitive impairment: Results from the Veterans Affairs Ophthalmic Surgery Outcomes Data Project. Abisheshk R. Payal1, T. Cakiner-Egilmez2, L. A. Gonzalez, A. Chomsky4, D. E. Vollman4, E. Baez4, M. G. Lawrence5, M. K. Daly6, 7. Ophthalmology, Veterans Affairs Boston Healthcare System, Jamaica Plains, MA; 2Ophthalmology, Harvard Medical School, Boston, MA; 3Ophthalmology, Veteran Affairs Tennessee Valley Healthcare System Center, Nashville, TN; 4Vanderbilt Eye Institute, Vanderbilt University Medical, Nashville, TN; 5Ophthalmology, St. Louis Veteran Affairs Medical Center, St. Louis, MO; 6Department of Ophthalmology and Visual Sciences, Washington University School of Medicine, St. Louis, MO; 7Ophthalmology, Michael D. DeBakey Veteran Affairs Medical Center, Houston, TX; Cullen Eye Institute, Baylor College of Medicine, Houston, TX; Department of Defense/Veterans Affairs Vision Center of Excellence, Bethesda, MD; 8Ophthalmology, Boston University School of Medicine, Boston, MA

2008 — B0088 Visual outcomes and vision-related quality of life in veterans with hearing impairment: Results from the Veterans Affairs Ophthalmic Surgery Outcomes Data Project. Tulay Cakiner-Egilmez, A. R. Payal2, L. A. Gonzalez, A. Chomsky4, D. E. Vollman4, E. Baez4, M. G. Lawrence5, M. K. Daly6, 7. Ophthalmology, Veterans Affairs Boston Healthcare System, Jamaica Plains, MA; 2Ophthalmology, Harvard Medical School, Boston, MA; 3Ophthalmology, Veteran Affairs Tennessee Valley Healthcare System Center, Nashville, TN; 4Vanderbilt Eye Institute, Vanderbilt University Medical, Nashville, TN; 5Ophthalmology, St. Louis Veteran Affairs Medical Center, St. Louis, MO; 6Department of Ophthalmology and Visual Sciences, Washington University School of Medicine, St. Louis, MO; 7Ophthalmology, Michael D. DeBakey Veteran Affairs Medical Center, Houston, TX; Cullen Eye Institute, Baylor College of Medicine, Houston, TX; Department of Defense/Veterans Affairs Vision Center of Excellence, Bethesda, MD; 8Ophthalmology, Boston University School of Medicine, Boston, MA

2009 — B0089 Factors Predictive of Improved Sleep Quality after Cataract Surgery. Aya Kokane, K. Negishi, M. Ayaki, K. Tsujioka. Ophthalmology, Keio University School of Medicine, Shinnanomachi, Japan

2010 — B0090 Planning and Performing Cataract Surgery in Poland - Old and New Strategies and Outcomes. Justyna H. Krowicka1, S. I. Sayegh2. 1Ophthalmological Ward, Hospital, Raciborz, Poland; 2The EYE Center, Champaign, IL


Exhibit/Poster Hall B0093-B0112
Monday, May 02, 2016 11:00 AM-12:45 PM

Lens

241 PCO and lens cell response to stress

Moderator: Linda Musil

2013 — B0093 The Role of β5 and β6-Integrin in Lens EMT and Posterior Capsular Opacification. Mahbubul Shihan, Y. Wang, M. K. Duncan. Biological Sciences, University of Delaware, Newark, DE

2014 — B0094 The inhibitory effect of Zebularine on the posterior capsule opacification after phacoemulsification in a rabbit model induced by transforming growth factor-beta 2. Ke-Ke Zhang1, X. Zhu1, P. Zoroquiain1, P. Zhou2, J. Yang1, Y. Lu1. Ophthalmology, Eye and ENT Hospital of Fudan University, Shanghai, China; 2Parkway Health Hongqiao Medical Center, Shanghai, China

2015 — B0095 Evaluation of posterior capsular opacification using new automated detector opacification software(ADOS). Christina Mastromonaco1, M. Balazsi2, P. Zoroquiain1, P. Logans3, S. C. Maloney1, M. N. Burnier1. Ocular Pathology McGill, Henry C. Witelson Ocular Pathology Laboratory, Montreal, QC, Canada; 2Engineering, Medical Parachute, Montreal, QC, Canada

2016 — B0096 Inhibition of MRTF-A/SRF-regulated gene transcription prevents TGFB1-mediated EMT in lens explants. Anna Korol, A. Taiyab, J. A. West-Mays. Pathology and Molecular Medicine, McMaster University, Hamilton, ON, Canada


2018 — B0098 Bone morphogenetic protein (BMP)-7 modulates TGFB1-induced epithelial-mesenchymal transition (EMT) of lens epithelial cells in a dose-dependent manner. Daisy Y. Shu1, F. J. Lopica1. 1Department of Anatomy & Histology, University of Sydney, Bosch Institute, Sydney, NSW, Australia; 2Save Sight Institute, Sydney, NSW, Australia

2019 — B0099 Effect of Proteoglycan 4 treatment on focal adhesions of lens epithelial cells during TGFB1-induced EMT. Scott A. Bowman1, S. Regmi2, T. A. Schmidt2, J. A. West-Mays1. Pathology and Molecular Medicine, McMaster University, Hamilton, ON, Canada; 2University of Calgary, Calgary, AB, Canada


2022 — B0102 Lens GSH deficiency mouse. Promote Alpha-smooth muscle actin expression. Zongbo Wei, Y. M. Monnier, X. Fan. Pathology, Case Western Reserve University, Cleveland Heights, OH


2024 — B0104 MMPs facilitate latent TGFB1 activation in the human lens: implications for PCO. Andrew J. Smith, M. Wormstone. School of Biological Sciences, University of East Anglia, Norwich, United Kingdom

2025 — B0105 DNA repair proteins in the anatomical organisation and protection of the human lens. Simon S. Ball, A. J. Smith, R. P. Bowater, M. Wormstone. School of Biological Sciences, University of East Anglia, Norwich, United Kingdom


2027 — B0107 Sumoylation Motif Disruption Of Prdx6 (K122/142R) Enhances Protection Against Oxidative Stress In Lens Epithelial Cells. By Potentiating GSH Peroxidase And diPLA2. Activities. Dhirendra P. Singhal, B. Chhunchha1, E. Kubo2. Ophthalmology and Visual Sciences, University of Nebraska Medical Center, Omaha, NE; 2Ophthalmology, Kanazawa Medical University, Kanazawa, Japan

2028 — B0108 The immunoproteasome in human lens epithelial cells during oxidative stress. Anne Petersen, J. Adeloej, M. Zetterberg. Institute of Neuroscience and Physiology, University of Gothenburg, Gothenburg, Sweden

### 2030 — B0110 Sumoylation at K16 of Specificity Protein 1 Represses Prdx6 Transcription Leading to Lens Epithelial Cell Death During Oxidative Stress And Aging. Bhavana Chhunchha, E. Kudo, D. P. Singh. 1Ophthalmology and Visual Sciences, University of Nebraska Medical Center, Omaha, NE; 2Ophthalmology, Kanazawa Medical University, Kanazawa, Japan

### 2031 — B0111 MicroRNA-34a promotes apoptosis of human lens epithelial cells through down-regulation of Bcl-2 and SIRT1. Hongyang Zhang, Q. LF, Y. Qin, H. Guo. 1Guangdong General Hospital, San Gabriel, CA; 2Aier Eye Hospital, Zhengzhou, China

### 2032 — B0112 TonEBP modulates Nuclear Factor-KB activity in hyperosmolar stressed human lens epithelial cells. Woong-Sun Yoo, S. Kim, J. Chung, S. Seo, J. Yoo, Y. Hah. 1Ophthalmology, Gyeongsang National University Hospital, Jinju, Korea (the Republic of); 2Biomedical Research Institute, Gyeongsang National University Hospital, Jinju, Korea (the Republic of)

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<th>Exhibit/Poster Hall B0238-B0270</th>
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<td>Monday, May 02, 2016 11:00 AM-12:45 PM</td>
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<td>Clinical/Epidemiologic Research</td>
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### 242 Retinal Diseases

**Moderator: Chandra Bala**

### 2033 — B0238 Sub-inner limiting membrane macular hemorrhages: diagnosis, etiologies, management and outcome. Joël Gambrelle, M. Bressollette-Frappier, A. Robinet. 1Ophthalmology, Clinique Pasteur Lanroze, Brest, France; 2Novartis France, Rueil Malmaison, France

### 2034 — B0239 Spontaneous Intrapallillary Haemorrhage and Adjacent Intrapallillary Subretinal Haemorrhage in Adolescents. Caryssa L. Yan, M. E. Brelen, H. Chen, C. C. Pung, W. Chen. 1Chinese University of Hong Kong, New Territories, Hong Kong; 2Department of Ophthalmology and Visual Sciences, Chinese University of Hong Kong, Kowloon, Hong Kong; 3Joint Shantou International Eye Centre, Shantou, China

### 2035 — B0240 Case Report of Acute Posterior Multifocal Placoid Pigment Epitheliopathy in a 13 Year Old Male. Laura Kueny, D. Spinak. 1Georgetown University, Herndon, VA; 2Retina Center Northwest, Silverdale, WA

### 2036 — B0241 Exogenous Testosterone Use and Central Serous Chorioretinopathy. Yicheng Chen, B. T. Smith. The Retina Institute, St. Louis, MO


### 2038 — B0243 Ciliary Neurotrophic Factor for Macular Telangiectasia Type 2: 48 Month Results from the Phase 1 Safety Trial. Traci E. Clemons, E. Y. Chew, T. Peito, F. B. Salto, I. Leung. 1Ophthalmology, Emmes Corporation, Rockville, MD; 2National Eye Institute/NHI, Bethesda, MD; 3NIH BMRC at Moorfields Eye Hospital and UCL, London, United Kingdom

### 2039 — B0244 Assessment of the implementation of the revised recommendations for screening of hydroxychloroquine retinopathy in the clinical practice of ophthalmologists and rheumatologists. Shiri Shulman, W. Jonathan, D. Parain. 1ophthalmology, tel-aviv medical center, Tel Aviv, Israel; 2Tel-aviv University, Tel Aviv, Israel; 3Rheumatology, tel-aviv medical center, Tel Aviv, Israel

### 2040 — B0245 Association of retinal nerve fiber layer thickness and systemic hypertension. Robert J. White, J. Kohler, D. D. Kooszekanami, A. Divani. 1University of Minnesota Medical School, Minneapolis, MN; 2Department of Ophthalmology, University of Minnesota, Minneapolis, MN; 3Department of Neurology, University of Minnesota, Minneapolis, MN

### 2041 — B0246 The MacTel Project - Enrolling a Phase 2 Clinical Trial. Jennifer K. Trombley. Lowy Medical Research Institute, La Jolla, CA


### 2043 — B0248 Systemic Associations In Central Serous Retinopathy The MultiCenter Controlled Personality Analysis In CSR. Mona Koak, A. M. Mansour, L. H. Lima, M. Shahnin, S. H. Uwaydat. 1Ophthalmology, AUBMC, Beirut, Lebanon; 2Federal University of Sao Paolo, Sao Paolo, Brazil; 3Ophthalmology, Mansoura University, Mansoura, Egypt; 4University of Arkansas, Little Rock, AR

### 2044 — B0249 Ambient air pollution and the risk of central retinal artery occlusion. Hui-Chen Cheng, H. Yeh, A. Wang, R. Faw, M. Yen. 1Taoyuan General Hospital, Taoyuan, Taiwan; 2National Yang-Ming University, Taipei, Taiwan; 3Ophthalmology, Taipei Veterans General Hospital, Taipei, Taiwan; 4Yuan Ze University, Tao-Yuan, Taiwan

### 2045 — B0250 FDA Adverse Event Reports of Retinal Vascular Occlusions Associated with PDE5 Inhibitor Use. Albert Li, H. Pomeranz. North Shore-Long Island Jewish Health System, Huntington Station, NY

### 2046 — B0251 The characteristics of arteriovenous crossing with branch retinal vein occlusion outside the temporal vascular arcades. Qingyuan Liang, H. Liang, D. T. Wong. 1Ophthalmology, St. Michael’s Hospital, Toronto, ON, Canada; 2Laboratory Medicine and Pathology, University of Toronto, Toronto, ON, Canada; 3Keenan Research Centre for Biomedical Science, St. Michael’s Hospital, Toronto, ON, Canada; 4Ophthalmology and Vision Science, University of Toronto, Toronto, ON, Canada

### 2047 — B0252 The Role of Aspirin and Statins in Retinal Vein Occlusions. Vlad Matei, J. Xia, C. Nguyen. Ophthalmology, UT Southwestern Medical Center, Dallas, TX


### 2049 — B0254 Associations with Retinal Vein Occlusion (RVO) in an Urban Population. Eric J. Schwaber, N. Fogelman, D. Mekrotra, J. Powell, D. C. Gritz. 1Ophthalmology, Montefiore Medical Center, Bronx, NY; 2Stony Brook University, Stony Brook, NY

### 2050 — B0255 Atrial fibrillation and carotid artery disease in patients with retinal artery occlusion, retinal vein occlusion and anterior ischemic optic neuropathy. Josep Callizo, N. Feltgen, R. Wachtler. Ophthalmology, Universitätsmedizin Goettingen, Goettingen, Germany; 2Cardiology and Pneumology, Universitaetsmedizin Goettingen, Goettingen, Germany

### 2051 — B0256 Hyperbaric Oxygen Therapy for Central Retinal Artery Occlusion. Sruti S. Akella, R. C. Gentile, J. Yaseni, S. Cherian, S. Gorenstein, N. Barzideh. 1Stony Brook University, Fishkill, NY; 2Winthrop-University Hospital, Mineola, NY; 3The New York Eye and Ear Infirmary at Mount Sinai, New York, NY

* Refer to the Program Number in the Clinical Trial (CT) Registration Index. *CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
2052 – B0257 The relationship of fluctuation of blood pressure and retinal vessel diameters in China: the APAC study. Qi Zhao1, Y. Li1, J. Xu2, Y. Zhou2, A. Wang1, C. Jin1, S. Wu1, X. Zhao3, J. B. Jonas4, W. Wei1. 1Department of Ophthalmology, Beijing Tongren Hospital, Beijing, China; 2Beijing Institute of Ophthalmology, Beijing Tongren Hospital, Beijing, China; 3Department of Cardiology, Kaiping General Hospital, Tangshan, China; 4Department of Neurology, Beijing Tiantan Hospital, Beijing, China; 5Department of Ophthalmology, Medical Faculty Mannheim of the Ruprecht-Karls-University, Heidelberg, Germany

2053 – B0258 Anatomical and functional outcomes one year after macular hole surgery. Louis Arnauld1, Y. Kauffmann1, A. Bourrejdem2, C. Binquet1, A. M. Bron1, C. P. Garcher1, 4. 1Ophthalmology, Chu Dijon, Dijon, France; 2CIC-EC, Dijon, France; 3CSGA, Eye and Nutrition Research Group, Dijon, France

2054 – B0259 Use of Hormone Replacement Therapy and the Risk of Incident Macular Holes. Ferhana Ali1, J. D. Stein2, T. Blachley2, S. Ackley1, J. Therapy and the Risk of Incident Macular Holes. 1Department of Ophthalmology, University School of Medicine, New Haven, CT; 2Ophthalmology, Providence VA Medical Center, Providence, RI

2055 – B0260 Ocular Manifestations of HIV at Boston Medical Center: A 15 Year Retrospective Study. Erol E. Verter1, L. Rice, N. Siegel. Ophthalmology, Boston University School of Medicine, Boston, MA

2056 – B0261 Analysis of Human Donor Retinas Suggests a Greater Prevalence of Retinal Disease Than Previously Reported in the New Zealand Population. Colin Green1, S. Kanduri1. 1Department of Ophthalmology and Visual Science, Yale University School of Medicine, New Haven, CT

2057 – B0262 Ocular Anomalies and Treatments of Pediatric Incontinentia Pigmenti Patients. Peiquan Zhao. Ophthalmology, Xinhua Hospital, Shanghai Jiaotong University, Shanghai, China

2058 – B0263 Five-Year Incidence and Risk Prediction for Idiopathic Epiretinal Membranes in a Korean Population. DAYEONG KIM, J. Bae, S. Song. Ophthalmology, Kangbuk Samsung Hospital, Seoul, Korea (the Republic of)

2059 – B0264 Macular Thickness Changes on Spectral Domain Optical Coherence Tomography in Pediatric Population with Sickle Cell Disease at Yale. Syed A. Hussaini1, P. Coady1, J. Carbonella1, F. Pashanker2, R. A. Adelman1, K. Stoessel1. 1Ophthalmology and Visual Science, Yale University School of Medicine, New Haven, CT; 2Pediatric Hematology, Yale University School of Medicine, New Haven, CT

2060 – B0265 The Relationship of Cataract Surgery to Retinal Thickness: The Beaver Dam Eye Study (BDES). Stacey M. Meuer1, K. E. Lee1, K. Lee1, 2, M. D. Abramoff1, R. Klein1, B. E. Klein1. 1Ophthalmology, University of Wisconsin-Madison, Madison, WI; 2Electrical and Computer Engineering, University of Iowa, Iowa City, IA; 3Iowa Institute for Biomedical Imaging, University of Iowa, Iowa City, IA; 4Ophthalmology and Visual Sciences, University of Iowa, Iowa City, IA *CR

2061 – B0266 Acquired Vitelliform Lesions in Age-Related Macular Degeneration. Celine Saade1, P. B. Greenberg1, 2. 1Ophthalmology, Alpert Medical School, Brown University, Providence, RI; 2Ophthalmology, Providence VA Medical Center, Providence, RI

2062 – B0267 Beyond the Exon: Variants in regulatory and non-coding regions play a functional role in the pathogenesis of inherited retinal disease. Evan Jones3, J. Branch4, R. Sui5, R. K. Koenekoop1, F. B. Porto1, A. Milosavljevic1, Y. Li1, R. Chen1. 1Molecular and Human Genetics, Baylor College of Medicine, Houston, TX; 2Human Genome Sequencing Center, Baylor College of Medicine, Houston, TX; 3Ocular Genetics Laboratory, McGill University, Montreal, QC, Canada; 4Optics, Peking Union Medical College, Beijing, China; 5INRET - Clinica e Centro di Pesquisa, Belo Horizonte, Brazil


2064 – B0269 Cytokine abundancies in the vitreous of patients with epiretinal fibrosis: chronic inflammatory activity? Souska Zandt1, C. Tappeiner1, I. Pfister1, J. Garweg3. 1Ophthalmology, Swiss Eye Institute, Bern, Switzerland; 2Ophthalmology, University of Bern, Bern, Switzerland; 3Swiss Eye Institute and University of Bern, Bern, Switzerland

2065 – B0270 Natural History of Early-Onset Stargardt Disease. Ronald BUGGAGE1, A. Piscopo1, J. Milce1, P. Le Calve1, C. Brun-Strang1. 1R&D, Sanofi, PARIS, France; 2Kantar Health, Montrouge, France *CR

Moderators: Vinit B. Mahajan and Makoto Inoue

2066 – B0298 Impact of Ranibizumab on visual impairment among patients with bilateral diabetic macular oedema. Franck Fajnkuchen1, 2, L. Hrara2, A. Best2, S. Y. Cohen1, C. Delahaye-Mazza1, T. Grenet1, S. nghiem-buffet1, G. quentel1, G. Chaine1, A. Giocanti1. 1Ophthalmology, Centre d’Imagerie et de Laser, Paris, Paris, France; 2Hôpital Avicenne, Bobigny, France *CR

2067 – B0299 Effect of long-term anti-VEGF treatment on the retinal microarchitecture of patients with diabetic macular edema. Magdalena A. Wirth1, M. D. Becker2, 3, S. Michels1, 4. 1Department of ophthalmology, Triemli Hospital, Zurich, Switzerland; 2Ophthalmology, University Heidelberg, Heidelberg, Germany; 3Ophthalmology, University Zurich, Zurich, Switzerland *CR

2068 – B0300 Comparison of aqueous concentrations of angiogenic and inflammatory cytokines based on optical coherence tomography patterns of diabetic macular edema. Seung Jun Lee. Ophthalmology, Kangwon National University, Chuncheon, Korea (the Republic of)

2069 – B0301 Effects of second-line intravitreal anti-VEGF therapy for refractory diabetic macular edema. Sachio Abe1, S. Goto1, K. Nishit1, T. Yamamoto1, H. Yamashita1. 1Department of Ophthalmology and Visual Sciences, Yamagata University School of Medicine, Yamagata, Japan; 2Kaname-cho Yamamoto Eye Clinic, Tokyo, Japan *CR

2070 – B0302 The efficacy of aflibercept in the management of treatment-resistant diabetic macular edema: a 12-month prospective study. Bobak Bahrami1, 2, E. Ewe3, T. H. Hong1, M. Zhu1, A. A. Chang1, 3. 1University of Sydney, Sydney, NSW, Australia; 2Sydney Institute of Vision Science, Sydney, NSW, Australia; 3Save Sight Institute, Sydney, NSW, Australia *CR, *

2071 – B0303 Conversion to aflibercept after prior anti-VEGF therapy for persistent diabetic macular edema. Ehsan Rahimi1, A. Shahlaee1, M. Khan1, G. Ying1, J. Maguire1, A. Ho1, C. D. Regillo1, J. Hsu1. 1Wills Eye Hospital, Philadelphia, PA; 2Scheie Eye Institute, Philadelphia, PA *CR

2072 – B0304 Changes in aqueous concentrations of various cytokines after intravitreal ranibizumab for diabetic macular edema. Yuichi Toriyama, T. Hirano, M. Tokimoto1, D. Chiba, T. Kyomoto, T. Murata. 1Department of Ophthalmology, Shinshu university, Matsumoto, Japan *CR, *

Exhibit/Poster Hall B0298-B0352
Monday, May 02, 2016 11:00 AM-12:45 PM
Retina

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The Commercial Relationships (CR) Index for Disclosures and the Clinical Trial (CT) Registration Index Are at arvo.org/amindices.
2073 — B0305 Efficacy of intravitreal aflibercept injection in eyes with diabetic macular edema. Norihito Shimizu, T. Oshii, T. Tatsumi, E. Sato, Y. Takatsuna, S. Yamamoto. Chiba University Hospital, Funabashi, Japan

2074 — B0306 Intravitreal ranibizumab for diabetic macular edema in vitrectomized versus nonvitreoretinomed eyes. Yoshiho Koyanagi, S. Yoshida, Y. Kobayashi, Y. Kudo, M. Yamaguchi, T. Nakama, S. Nakao, Y. Oshima, T. Ishibashi, K. Sonoda. Department of Ophthalmology, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan

2075 — B0307 Contrast sensitivity after intravitreal bevacizumab versus modified grid laser in clinically significant macular edema - a comparative study. Henna Garg, Ophthalmology, Government Medical College & Hospital, Chandigarh, Panchkula, India

2076 — B0308 A quantitative approach to predict differential effects of anti-VEGF treatment on diffuse and focal leakage in patients with diabetic macular edema. Michael J. Allingham1, D. Mukherjee2, E. Lally3, H. Rabbani4, P. S. Mettler5, S. W. Cousins6, S. Farzadi7. 1Ophthalmology, Duke University Eye Center, Durham, NC; 2Biomedical Engineering, Duke University, Durham, NC; 3Medical Image & Signal Processing Research Center, Isfahan University of Medical Sciences, Isfahan, Iran (the Republic of) *CR

2077 — B0309 Conversion to Aflibercept for Diabetic Macular Edema Unresponsive To Bevacizumab in Chicago Cook County Health System. Christy Cunningham1, S. Sahn1, M. Farahani2, C. Thomas3, S. Anderson-Nelson4, V. Raji5, D. Skondu6, E. Rosalind Franklin University of Medicine and Science, North Chicago, IL; 7Stroger Cook County Hospital, Chicago, IL; 8Feinberg School of Medicine, Northwestern, Chicago, IL; 9Ophthalmology, Loyola University, Maywood, IL

2078 — B0310 Effects of anti-VEGF antibodies to the viability, proliferation and wound healing activity of cultured human retinal pigment epithelial cells under high glucose stress. Tae Kwann Park, J. Oh, Y. Ohn. Ophthalmology, Soon Chunhyang Univ Hospital, Bucheon-si, Korea (the Republic of)

2079 — B0311 Achievement of ≥20/40 vision with ranibizumab in patients with diabetic macular edema: a post-hoc analysis of the RESTORE study. Victor Chong1, J. Alsop2, P. Margarion1, P. Mitchell1. 1Oxford Eye Hospital, Oxford, United Kingdom; 2Numerus Ltd, Wokingham, United Kingdom; 3Novartis Pharma AG, Basel, Switzerland; 4Department of Ophthalmology, Centre for Vision Research, Westmead Millennium Institute, The University of Sydney, Sydney, NSW, Australia *CR, *

2080 — B0312 OCT Predictors for BCVA Response to Intravitreal anti-VEGF Treatment in Eyes with Diabetic Macular Edema. Ana Rita Santos1, C. Schwartz2, S. N. Simao3, M. Costa4, D. Alves5, M. Ribeiro6, J. Figueira7, J. G. Cunha-Vaz8, 9, C. E. C. AIBILI, Coimbra, Portugal; 4CORC, AIBILI, Coimbra, Portugal; 4AIBILI, Coimbra, Portugal; 4AIBILI, Coimbra, Portugal; 20; 4AIBILI, Coimbra, Portugal; 4Faculty of Medicine, University of Coimbra, Coimbra, Portugal; 4Center for Ophthalmology, University Hospital, Coimbra, Portugal; *AIBILI, Coimbra, Portugal; *Faculty of Medicine, University of Coimbra, Coimbra, Portugal *CR, *

2081 — B0313 Intravitreal Aflibercept Injection (IAI) for Diabetic Macular Edema (DME): 148-Week Results from VISTA and VIVID. Diana V. Do, School of Medicine, Truhlsen Eye Institute, U of Nebraska, Omaha, NE *CR, *


2083 — B0315 Long-term diabetic retinopathy and macular edema outcomes with anti-VEGF treatments in randomized controlled clinical studies. Marco A. Zarbin1, I. Stoilov2, N. Lie3. 1Institute of Ophthalmology & Visual Science, Rutgers-New Jersey Medical School, Newark, NJ; 2Genentech, Inc., South San Francisco, CA *CR, *

2084 — B0316 Grading OCT characteristics did not clearly predict treatment outcomes in the RELIGHT study participants. Tunde Peto1, U. Chakravarthy2, S. Lupton3, K. Gibson3. 1Ophthalmology, NIHR BMRC for Ophthalmology at Moorfields Eye Hospital NHS Foundation Trust and UCL Institute of Ophthalmology, London, United Kingdom; 2Vision Sciences, Queen’s University Belfast, Belfast, United Kingdom; 3Novartis Pharmaceutical UK Limited, Frimley Park, United Kingdom; 4Ophthalmology, Royal Liverpool Hospital, Liverpool, United Kingdom; 5Novartis Pharma AG, Basel, Switzerland *CR, *

2085 — B0317 OCT retinal thickness response after first intravitreal injection is a predictor of visual acuity response to anti-VEGF treatment of DME. Miguel Costa1, A. Santos2, S. Nunes3, D. Alves4, C. Schwartz5, J. Figueira6, S. N. Simao7, J. G. Cunha-Vaz8, 9. 1Ophthalmology Department, Coimbra University Hospital, Coimbra, Portugal; 24AIBILI, Coimbra, Portugal; 3Faculty of Medicine, University of Coimbra, Coimbra, Portugal; 4C. E. C. AIBILI, Coimbra, Portugal; 4CORC, AIBILI, Coimbra, Portugal; *AIBILI, Coimbra, Portugal *CR, *

2086 — B0318 Management of diabetic macular edema with visual impairment in real-life practice in France: findings from the cross-sectional BOREAL DME study. Catherine P. Gurcher1, P. G. Massin2, F. Fajnichen3, A. Glacet-Bernard4, L. Kodikian5, J. M. Girmens6, C. Delcour7, P. Guillausseau7, A. Ponthieux8. 1Ophthalmology, CHU Dijon, Dijon, France; 2Ophthalmology, Hôpital Lariboisière, Paris, France; 3Centre Imagierie et Laser, Paris, France; 4Centre Hospitalier Intercommunal de Créteil, Créteil, France; 5Hôpices Civils de Lyon, Lyon, France; 6Hôpital des Quinze-Vingts, Paris, France; 7ISPEP, Bordeaux, France; 8Hôpital Lariboisière, Paris, France; 9Retine, Novartis Pharma SAS, Rueil-Malmaison, France *CR


2088 — B0320 Impact of Baseline Characteristics on Change in Diabetic Retinopathy Severity Score (DRSS) Score in the VISTA and VIVID Studies. Dilsher Dhoot. California Retina Consultants, Santa Barbara, CA *CR, *

2089 — B0321 Visual Outcome of Patients in Ranibizumab for Edema of the mAcula in Diabetes (READ-3) Study Based on the Characteristics of Edema on Optical Coherence Tomography. Kanika Aggarwal1, A. Agarwal2, R. Afridi3, M. A. Sadou3, M. Hassan4, M. K. Soliman5, S. Sarwar6, Q. Nguyen7, D. V. Do8, Y. J. Sepah9. 1Advanced Eye Center, Department of Ophthalmology, Post Graduate Institute of Medical Education and Research, Chandigarh, India; 2Department of Ophthalmology and Visual Sciences, Stanley M. Truhlsen Eye Institute, University of Nebraska Medical Center, Omaha, NE; 3Ophthalmology, Assiut University, Assiut, Egypt *CR

2090 — B0322 The predictive features of optical coherent topography in anatomical response to ranibizumab in patients with diabetic macular edema. Angela Ding, S. Fatum, V. Chong. Ophthalmology, Oxford Eye Hospital, Oxford, United Kingdom *CR, *

2091 — B0323 Impact of vitrectomy on outcomes of treatment for diabetic macular oedema with intravitreal ranibizumab. Sheelah Antau1, M. Fajenbaum1, N. V. Patrau2, R. Wong2, L. da Cruz3, J. W. Bainbridge4, R. Rajendram5. 1Moorfields Eye Hospital, London, United Kingdom; 2St Thomas’ Hospital, London, United Kingdom; 3AIBILI, Portugal; 4Laboratoire de Physiologie des Reponses Visuelles, Université de Lyon, France; 5Department of Ophthalmology, Campus Bio-Medico University, Madrid, Spain *CR

2092 — B0324 Ischemic index as a predictor of response to antivgef therapy. Anvi Badami, N. Warrier, K. McConnell, S. Ness. Boston Medical Center, Boston, MA

*CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.

2011 - B0340 Effects of antiangiogenic treatment in vitreomacular adhesion in patients with diabetic macular edema. Alexandros Deligiannis, J. Lorenzo Carrero. POvisa Hospital, Vigo, Spain

2011 - B0341 Effects of selective oral inhibition of CCR2/5 chemokine receptors compared to intravitreal ranibizumab on diabetic macular edema (DME). Brian B. Berger1, J. Gale2, S. Gilbert3, S. Popa4, M. Sultan5, R. Schachar5, R. Webster6, C. Perros-Huguet7. 1Retina Research Center, Austin, TX; 2Pfizer Inc., Cambridge, MA; 3Alexion Pharmaceutical, Inc., Cheshire, CT; 4Spatial Clinic Republican, Chisnau, Moldova (the republic of)  *CR

2011 - B0342 Evaluation of En-face OCT Images in Diabetic Macular Edema with Anti-VEGF Treatment. Shintaro Horiie, M. Ide, K. Morohoshi, K. Ohno-Matsui. Ophthalmology, Tokyo Medical and Dental University, Tokyo, Japan

2011 - B0343 Effects of Two Different Doses of Ranibizumab on the Resolution and Recurrence of Diabetic Macular Edema in the Ranibizumab for the Edema of the Macula in Diabetes (READ-3) Study.Rubbia Afidi1, A. Aggarwal2, M. A. Sadiq2, K. Aggarwal2, M. Hassan2, M. K. Soliman2, S. Sarwar3, D. V. Do4, Q. Nguyen5, Y. J. Sepahi6. 1Stanley M.Truhlsen Eye Institute, Omaha, NE; 2Dept. Of Ophthalmology, Assiut University Hospital, Assiut, Egypt; 3Advanced Eye Center, Post-Graduate Institute of Medical Education and Research, Chandigarh, India  *CR


2011 - B0345 Compliance for angiogenesis inhibitor treatment with ranibizumab in diabetic macular edema. A seven years experience in Mexican population of the Mexican Institute Mexicano de Oftalmologia I.A.P., Mexico State, Mexico; 1Instituto Mexicano de Oftalmologia I.A.P., México; 2Hospital Oftalmologico De Sorocaba, Sorocaba, Brazil

2011 - B0346 Hyperuricemia is associated with anti-VEGF response in patients with diabetic macular edema. Yun Wen Chen, W. Chiang, J. Lee. Kaohsiung Chang Gung Memorial Hospital, Kaohsiung, Taiwan

2011 - B0347 Diabetic Macular Oedema and Chronic Kidney Disease: Response to treatment with anti-vascular endothelial growth factor (VEGF). Alice Bruynseels1, 2, R. Pinto1, D. Sim1, R. Rajendram2. 1Ophthalmology, Moorfields Eye Hospital, Surrey, United Kingdom; 2Ophthalmology, St George’s Hospital, London, United Kingdom  *CR
2116 — B0348 The response to ranibizumab therapy after three injections predicts 12-month outcomes in DME in the absence of rescue laser therapy. Joanna Dilley, S. Taylor. Royal Surrey County Hospital, Surbiton, United Kingdom

2117 — B0349 Retinal Vasculature Changes in Patients with Diabetic Macular Edema treated with Intravitreal Anti-VEGF. Jay Berdia, J. Levine, B. B. Johnson. Ophthalmology, Bronx Lebanon Hospital Center, New York, NY

2118 — B0350 Intravitreal Aflibercept reduces the retinal vessel diameter in patients with diabetic macular edema. Andrea Consigli1, A. Papnastassiou1, S. Roy1, G. Thumann1, A. Chronopoulos2. 1Department of Ophthalmology, University Hospitals and School of Medicine, Geneva, Switzerland; 2Departments of Medicine and Ophthalmology, Boston University School of Medicine, Boston, MA

2119 — B0351 Blockade of Angiotensin II retards the progression of diabetic retinopathy through downregulating Muller cell-derived VEGF. PENG QIN1, A. C. Lo1, I. Wong1, 2. 1Ophthalmology, The University of Hong Kong, Hong Kong, Hong Kong; 2Research Centre of Heart, Brain, Hormone & Healthy Aging, The University of Hong Kong, Hong Kong, Hong Kong

2120 — B0352 Diabetic retinopathy: what happens before VEGF? Samir Jabbour, M. G. Quigley1, 2. 1Ophthalmology, Centre hospitalier de l’Université de Montréal, Montreal, QC, Canada; 2Bellevue Ophthalmology Clinic, Montreal, QC, Canada

Exhibit/Poster Hall C0028-C0061

Monday, May 02, 2016 11:00 AM-12:45 PM

Retina

244 AMD and CNV: Clinical and Translational

Moderators: Kamaljit S. Balagag and Se Joon Woo

2121 — C0028 Hypoxia-Inducible Factor-1a Is Associated With Sprouting Angiogenesis in the Murine Laser-Induced Choroidal Neovascularization Model. Helder Andre, S. Tunik, M. Arowson, A. P. Kanta. St. Erik Eye Hospital, Karolinska Institute, Stockholm, Sweden

2122 — C0029 Griseofulvin inhibits choroidal neovascularization. Timothy W. Corson, R. S. Sulaiman, S. Alkhairy, G. Gupta, H. D. Basavarajappa. Ophthalmology, Indiana University School of Medicine, Indianapolis, IN *CR

2123 — C0030 The complement system is dual-hatted, acting in both damage and repair processes in the murine model of choroidal neovascularization. Baerbel Rohrer1, N. Parsons1, 2, G. Schnabl1, 2, S. Tomlins1, 2. 1Med Univ of South Carolina, Charleston, SC; 2Ralph H. Johnson VA Medical Center, Charleston, SC *CR

2124 — C0031 Dyslipidemia and Lipoprotein Profile in Age-related Macular Degeneration. Gemmy Cheung1, 2, A. Gan1, Q. Fan1, 2, S. Apte1, S. Chaurasia1, C. Cheng1, T. Y. Wong1, 2, T. E. Tai1. 1Singapore National Eye Center, Singapore; 2Singapore Eye Research Institute, Singapore; 3Washington University, St Louis, MT; 4National University of Singapore, Singapore, Singapore

2125 — C0032 Step towards the resolution of mystery behind ocular lipofuscin. Ankit Kotnala1, S. Srinivasan1, N. Halder1, B. Jayaraman1, A. Kumar1, T. Velpandian1. 1Ophthalmology, All India Institute of Medical Sciences, New Delhi, India; 2Ocular Pharmacology, AMRF, Dr. G. Venkataswamy Eye Research Institute, Madurai, India; 3Dept of Chemistry, Indian Institute of Technology, New Delhi, India; 4Ocular Pharmacology, All India Institute of Medical Sciences, New Delhi, India

2126 — C0033 Mitochondrial Dysfunction in Experimental Mouse Models of SubRPE Deposit Formation and Reversal by the Mito-Reparative Drug MTP-131. Scott W. Cousins1, 2, P. Saloupis1, M. V. Brahmajoti1, P. S. Mettu1. 1Ophthalmology, Duke University School of Medicine, Durham, NC; 2Immunology, Duke University School of Medicine, Durham, NC *CR

2127 — C0034 Functional Validation of GLP-grade Induced Pluripotent Stem Cell Derived Retinal Pigment Epithelium: developing a Cell Therapy for AMD. Fnu Ruchi, V. Khristov, B. Jha, D. Patel, Q. Wan, N. Hotaling, C. Zhang, K. Bharati, NEI, NIH, Bethesda, MD

2128 — C0035 Lentiviral gene transfer of E2F2 induces regeneration of retinal pigment epithelium in situ. Daniel Kämpf1, 2, U. F. Luhmann1, K. M. Nishiguchi1, M. Basche1, A. J. Smith1, H. Han1, J. Williams3, J. Greenwood3, S. Taylor1, 2. 1Department of Ophthalmology, University of Würzburg, Würzburg, Germany; 2Department of Genetics, UCL Institute of Ophthalmology, London, United Kingdom; 3Department of Cell Biology, UCL Institute of Ophthalmology, London, United Kingdom; 4Moorfields Eye Hospital, London, United Kingdom

2129 — C0036 Complement Factor I Bioactivity: A Potential Biomarker For Anti-Amyloid Beta Treatment In Age-Related Macular Degeneration/Geographic Atrophy. Francisco J. Lopez1, H. Chen1, Y. Liu1, S. Kumar1, M. M. McLaughlin1. 1GSK, King of Prussia, PA; 2Alliance Pharma, Malvern, PA *CR

2130 — C0037 Three-Month Outcome of Ziv-aflibercept for exudative age-related macular degeneration. Rafic Antonios1, A. M. Mansour1, 2, J. Chhablani1, R. Yogi1, M. Younis2, 3, M. Kekal1, R. Dakroub1, H. Chahine1. 1Ophthalmology, American University of Beirut Medical Center, Beirut, Lebanon; 2Ophthalmology, Rafic Hariri University Hospital, Beirut, Lebanon, Beirut, Lebanon; 3Smt. Kamru Sanhamma Centre for vitreoretinal Diseases, LV Prasad Eye Institute, Hyderabad, India *CR

2131 — C0038 Prognostic Value Of The Tomographic Phenotypic Characterization Of Myopic Choroidal Neovascularization. Isabel Pascual-Camps1, P. Hernández-Martínez1, L. Monje-Fernandez2, M. Andreu-Fonoll3, R. Dolz-Marco1, R. Gallego-Pinazo1. 1Department of Ophthalmology, University of Polytécnich Hospital La Fe, Valencia, Spain; 2Ophthalmology Department, University Assistential Complex of León, León, Spain

2132 — C0039 Intravitreal antiangiogenic treatment for choroidal neovascularization secondary to punctate inner choroidopathy. Teresa Barth, M. Gamulescu, H. Hellbig. University Eye Clinic, University Hospital Regensburg, Regensburg, Germany

2133 — C0040 3-month efficacy of anti-VEGFs and vPDT in the treatment of visual impairment due to myopic CNV: An indirect treatment comparison. Stephane Regnier1, W. Macfadden1, T. Y. Wong1. 1Singapore National Eye Centre, National University of Singapore, Singapore, Singapore; 2Novartis AG, Basel, Switzerland *CR

2134 — C0041 Differential hypoxic response of human choroidal and retinal endothelial cells proposes tissue heterogeneity of ocular angiogenesis. Parviz Mammadzada1, 2, 3, J. Gudmundsson1, 2, 3, A. P. Kanta1, 2, H. Andre1, 2, 3. 1Clinical Neuroscience, Karolinska Institute, Stockholm, Sweden; 2St. Erik Eye Hospital, Stockholm, Sweden

2135 — C0042 Improved visual outcome with early treatment in myopic choroidal neovascularization after intravitreal anti-VEGF and associated prognostic factors. Byung Gil Moon, J. LEE, J. Kim, Y. Yoon. Ophthalmology, Asan Medical Center, Seoul, Korea (the Republic of)

2136 — C0043 Multicenter Evaluation of Pediatric Choroidal Neovascular Membrane: Clinical characteristics and treatment outcomes. Bradley Anderson1, T. R. Padi1, A. Abbey1, Y. Yonekawa1, K. A. Dresner1, A. Capone, Jr1, K. T. Tres1, C. G. Besritz3. 1Ophthalmology, Beaumont Hospital, Royal Oak, United Kingdom; 2Massachusetts Eye and Ear Infirmary, Boston, MA; 3Associated Retinal Consultants, Royal Oak, MI; 4University of Michigan, Ann Arbor, MI *CR

Refer to the Program Number in the Clinical Trial (CT) Registration Index. *CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
2137 — **C0044**  
**OCT Angiography for Diagnosis and Possible Guided Laser Therapy of Choroidal Neovascular Membranes.**  
Amy Patel.  
Ophthalmology, University of California, Irvine, Irvine, CA

2138 — **C0045**  
Ophthalmology, CHU de Bordeaux, Bordeaux, France *CR

2139 — **C0046**  
**Investigating the laser model of experimental choroidal neovascularization in Long Evans rats.** Selwyn M. Pream 1, 2, G. Liu 1, G. J. Dusting 1, 2, A. J. Vinygris 2, B. Y. Bai 2.  
‘Optometry and Vision Science, University of Melbourne, Parkville, VIC, Australia; 3Centre for Eye Research Australia, Royal Victorian Eye and Ear Hospital, East Melbourne, VIC, Australia

2140 — **C0047**  
**Ranibizumab in patients with myopic choroidal neovascularization: latest results from the third interim analysis of the LUMINOUS™ study.** Robin D. Hamilton.  
Moorfields Eye Hospital, London, United Kingdom *CR, R

2141 — **C0048**  
**The protective effect of activated protein C (APC) on cell permeability and laser-induced CNV progression.** Iris Deitch 1, T. Barliya 2, O. Bialer 1, 2, Y. Nisgav 2, M. A. Schelling 1, R. Stuart 1, R. F. Mullins 1, E. H. Sohn 1, Chunhua Jiao, S. Zeng,  
1Department of Ophthalmology, Rabin Medical Center, Petach-Tikva, Israel; 2Laboratory of Eye Research, Felsenstein Medical Research Center, Rabin Medical Center, Petach-Tikva, Israel; 3Sackler School of Medicine, Tel Aviv University, Tel Aviv, Israel

2142 — **C0049**  
**Long-term outcomes of anti-vascular endothelial growth factor treatment in East-Asian patients with myopic choroidal neovascularization.** Wayne Macfadden 1, A. Skelly 1.  
1Ophthalmology, Novartis Pharma AG, Basel, Switzerland; 2Ophthalmology, Novartis Ireland Limited, Dublin, Ireland *CR

2143 — **C0050**  
Stephen A. Wynn Institute for Vision Research, Ophthalmology and Visual Sciences, University of Iowa, Iowa City, IA

2144 — **C0051**  
**Functional and anatomical outcomes of anti-VEGF therapy for CNV due to angiod streaks: 4 and a half years of follow up.** May Cadena-Torres, M. Martinez-Serrano, A. Rodriguez-Reyes, V. Cortés-González, V. Morales-Canton, R. Velez-Montoya, G. Salcedo.  
Ophthalmology, Asociación Para Evitar La Ceguera en México, Mexico, Mexico

2145 — **C0052**  
**The use of anti-vascular endothelial growth factor therapies in the neovascular maculopathy associated with choroidal neovascularization.** Musa Abdelaziz 1, M. Rostamizadeh 2, J. Schuurman 1, H. Zegarra 2, Z. Zakov 2, M. Novak 1, S. Pendorgas 1, J. Coney 1, L. J. Singerman 1, D. Miller 1.  
1Ophthalmology, University Hospitals, Cleveland Heights, OH; 2Retina Associates of Cleveland, Cleveland, OH *CR

2146 — **C0053**  
**Optical coherence tomography findings predictive of choroidal neovascularization(CNV) activity in pathologic myopia: correlation with fluorescein angiography in Korean patients.** Min Kim 1, D. Lee 2, E. Choi 3, S. Byeon 1, H. Koh 1, S. Kim 1, S. Lee 2.  
1Department of Ophthalmology, Gangnam Severance Hospital, Yonsei University College of Medicine, 211, Eonjuro, Gangnam-gu, Korea (the Republic of); 2Department of Ophthalmology, Yonsei Severance Hospital, Yonsei University College of Medicine, 50-1, Yonseio, Seodaemun-gu, Korea (the Republic of)

2147 — **C0054**  
**Sustained suppression of murine choroidal neovascularization by intravitreous injection of sunitinib-encapsulated polymer microparticles.** Raquel Formica 1, J. Fu 1, J. Shen 1, M. Yang 1, Y. Yu 1, J. Kaye 1, Y. Liu 1, W. M. Peterson 1, J. Cleland 1, J. Hanes 1, P. A. Campuschiar 1.  
Ophthalmology, Johns Hopkins University Wilmer Eye Institute, Baltimore, MD; 2Graybug, Inc., Baltimore, MD *CR

2148 — **C0055**  
**Optical Coherence tomographic Angiography features in neovascularization secondary to angiod streaks.** thibaut Chapron 1, 2, G. Minoun 1, M. Sour 1, A. Miere 1, A. Elameleon 1, O. Semoon 1, E. H. Sowied 1, 2, 3.  
1Paris Descartes University, Paris, France; 2ophthalmology, Centre Inter Communal Créteil, Créteil, France; 3Paris Est University Créteil Val de Marne, Créteil, France

2149 — **C0056**  
**Anti-vegf Therapy Versus Pdt in the Treatment of Cnv Secondary to Crsc.** Giulia Caminiti, R. Saldì, G. Satta, B. Lobina, E. Peiretti.  
Department of Ophthalmology, University of Cagliari, Cagliari, Italy

2150 — **C0057**  
**Usefulness of Optical Coherence Tomography Angiography in Myopic Choroidal Neovascularization.** Ioannis K. Petropoulos, Richard B. Rosen,  
Moorfields Eye Hospital NHS Foundation Trust, London, United Kingdom; 2University College London Institute of Ophthalmology, London, United Kingdom; 3NIHR Moorfields Biomedical Research Centre, London, United Kingdom *CR

2151 — **C0058**  
**Frequency, phenotype and progression of geographic atrophy associated with pseudoxanthoma elasticum, a model disease for a diseased Bruch's membran.** Peter Charbel Issa 1, M. Glien 1, P. L. Mueller 1, J. Birtel 1, D. Hendig 2, F. G. Holz 1.  
1Department of Ophthalmology, University of Bonn, Bonn, Germany; 2Institute for Laboratory and Transfusion Medicine, Heart and Diabetes Center North Rhine- Westphalia, University Hospital of the Ruhr University of Bochum, Bad Oeynhausen, Germany *CR

2152 — **C0059**  
**Effect of a new dietary supplement formula on the activity and expression of pro-inflammatory genes in vitro.** Francesco Giuliani 1, M. Santonocito 2, L. R. La Rosa 1, C. Zappulla 1, S. Viola 1, M. Santonoco 1.  
1Research and Development, S.I.F.I. (Società Industria Farmaceutica Italiana) S.P.A., Lavinio - Acic San’Antonio, Italy; 2Ophthalmology Unit, Di Stefano Vélona Private Hospital S.r.l., Catania, Italy *CR

2153 — **C0060**  
Ophthalmology, UT Southwestern Medical Center, Dallas, TX

2154 — **C0061**  
**Ocular Pharmacokinetics of Brimonidine Drug Delivery System in Rabbits and Monkeys and Its Application in Selection of Dosing Frequency in Human Clinical Trials.** Mitalee Tamhane 1, R. R. Robinson 2, M. Attar 2.  
1Nonclinical and Translational Sciences, Allergan, Irvine, CA; 2Clinical Development and Translational Drug Delivery, Allergan, Irvine, CA *CR

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Exhibit/Poster Hall D0001-D0032

Monday, May 02, 2016 11:00 AM-12:45 PM

Multidisciplinary Ophthalmic Imaging Group

245 Choroidal imaging

**Moderators:** Brandon J. Lujan and Richard B. Rosen

2155 — **D0001**  
**Structural changes of inner and outer choroid in eyes with central serous chorioretinopathy determined by optical coherence tomography.** Shojo Sonoda 1, T. Sakamoto 1, N. Yoshihara 2, T. Yamashita 2, Y. Mitamura 1.  
1Ophthalmology, Kagoshima University, Kagoshima, Japan; 2ophthalmology, tokushima University, Tokushima, Japan

2156 — **D0002**  
**Decrease of macular choroidal blood flow velocity and choroidal thickness of acute central serous chorioretinopathy treated by photoocoagulation.** Kouhei Hashizume, Y. Nishida, M. Nagasawa, T. Fujisawa, D. Karusaka.  
Iwate Medical University, Morioka, Japan

2157 — **D0003**  
**Central serous chorioretinopathy in women.** Priyanka Sanghi 1, M. Zola 1, D. Menon 1, N. Patnaad 1, J. Ramu 1, P. Hykin 1, S. Sivaprasad 1.  
1Moorfields Eye Hospital NHS Foundation Trust, London, United Kingdom; 2University College London Institute of Ophthalmology, London, United Kingdom; 3NIHR Moorfields Biomedical Research Centre, London, United Kingdom *CR

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The Commercial Relationships (CR) Index for Disclosures and the Clinical Trial (CT) Registration Index are at arvo.org/amindices.
Monday – Posters – 2158 – 2180

2158 — D0004 Detection of abnormal findings at the Bruch’s membrane to chorioiocapillaris level in central serous choriorretinopathy using en face OCT and indocyanine green angiography. Ari Shinohjima1, K. Fujita1, R. Morikawa2, A. Kawamura1, T. Yatsukawa3, M. Itzawa1. Ophthalmology, Nihon University School of Medicine, Tokyo, Japan; 2Ophthalmology, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan

2159 — D0005 Choroidal Vessel Enlargement at Choriocapillaris Layer in Central Serous Choriorretinopathy: Analysis with Optical Coherence Tomography and Angiography. Mingui Kong, S. Park, D. Ham. Samsung Medical Center, Seoul, Korea (the Republic of)

2160 — D0006 Short-term effects of photodynamic therapy on choroidal neovessels in central serous choriorretinopathy. Chiara M. Eandi, C. Alovisi, M. Nassisi, C. Lavia, F. Grignolo. Department of Surgical Science, Eye Clinic, University Torino, Torino, Italy

2161 — D0007 Optical Coherence Tomography Angiography Video and Choroid Neovascularization (Type 2): Longitudinal Study. Bruno Lumbruso1, C. M. Savastano2, 1, M. Rispoli1, 1, Human Morphology & Dev Biol, Centro Oftalmologico Mediterraneo, Rome, Italy; 1Ophthalmology, Catholic University, Rome, Italy; 2Ophthalmology, Ospedale Nuovo Regina Margherita, Rome, Italy


2163 — D0009 Optical coherence tomography angiography of choroidal neovascularization in inherited retinal dystrophies. Rachel C. Patel1, 2, S. S. Gao, M. Zhang, T. Alabduljalil1, A. A. Alqahtani1, Y. Jia1, D. Huang1, P. Yang1, M. E. Pennesi. 1Casey Eye Institute, Oregon Health and Science University, Portland, OR; 2University of Massachusetts Medical School, Worcester, MA


2165 — D0011 Optical coherence tomography angiography study of submacular hemorrhage and choroidal neovascularization secondary to pathological myopia. Frank Lau1, 2, D. Ng1, M. Brelen1, C. Y. Cheung1, T. Y. Lai1, F. Luk1, A. Young1. 1Ophthalmology and Visual Sciences, The Chinese University of Hong Kong, Hong Kong, Hong Kong; 2Ophthalmology and Visual Sciences, Prince of Wales Hospital, Hong Kong, Hong Kong

2166 — D0012 Choroidal vascularity in high myopia. Jay Chhablani1, M. Goud2, K. Kumar1, S. Jana2. 1Vitreo-retina, L V Prasad Eye Institute, Hyderabad, India; 2IIT, Hyderabad, India

2167 — D0013 Choroid Thickness Change detected by OCT in Myopia Children after Orthokeratology. Yan Lian, Y. R. Wang, W. J. Huang, X. J. Mao, S. H. Huang, J. Jiang, M. Shen, W. Jin. Eye Hospital of Wenzhou Medical University, Wenzhou, China

2168 — D0014 Choroidal, Haller’s and Sattler’s layer thickness in Myopia Using 3-Dimensional 1060nm Optical Coherence Tomography. Maria Weber1, B. Zabihian2, B. Herrmann1, W. Drexler2, O. Findl1. 1Ophthalmology, University of Vienna, Vienna Institute for Research Ocular Surgery (VIROS), Department of Ophthalmology, Hanusch Hospital, Vienna, Austria; 2Center for Medical Physics and Biomedical Engineering, Medical University of Vienna, Vienna, Austria; 3Moorfields Eye Hospital, London, United Kingdom

2169 — D0015 Intraseason repeatability of swept-source optical coherence tomography derived choroidal thickness measurements in neovascular age related macular degeneration. Daren Hamunuthadu1, T. Ilginis1, M. Restori1, M. S. Sagoo2, A. Tufail1, K. S. Balaggan1, 2, P. J. Patel1. 1NIHR Biomedical Research Centre at Moorfields Eye Hospital and UCL Institute of Ophthalmology, London, United Kingdom; 2Barts Health NHS Trust, London, United Kingdom; 3Wolverhampton and Midland Counties Eye Infirmary, Wolverhampton, United Kingdom

2170 — D0016 Lesion size measurement using optical coherence tomography in polypoidal choroidal vasculopathy. Machiko Kimura1, I. Maruko1, M. Kawai1, H. Koizumi1, Y. Sugano1, T. Muraki1, H. Arakawa1, T. Sekiryu1, T. Iida1. 1Fukushima medical university, Fukushimashi, Fukushima, Japan; 2Tokyo Women’s medical university, Shinjyuku, Japan


2172 — D0018 Assessment of the choroid following cataract surgery in diabetic patients using choroidal thickness and vascularity index as optical coherence tomography parameters. Vivien Yip1, K. Tan2, A. Laude1, E. Loo1, E. Wong1, R. V. Agrawal1. Ophthalmology, Tan Tock Seng Hospital, Singapore, Singapore; 2Yong Loo Lin School of Medicine, National University of Singapore, Singapore

2173 — D0019 Correlation of Enhanced Deep Imaging Optical Coherence Tomography (EDI-OCT) choroidal findings and visual acuity in sickle cell disease. Pedro C. Carricordo, M. Abalem, M. B. Bonanomi, R. Preti, S. L. Pimentel, M. L. Monteiro, W. Y. Takahashi. Hospital das Clínicas, Ophthalmology Department, University of Sao Paulo, Sao Paulo, Brazil

2174 — D0020 Using Optical Coherent Tomography (OCT) to detect choroidal thinning in rodents with Oxygen-Induced Retinopathy. Tianwe (Ellen) Zhou1, S. Chemtob2. 1Medicine, McGill University, Montreal, QC, Canada; 2Ophthalmology, Pediatrics and Pharmacology, University of Montreal, Montreal, QC, Canada


2176 — D0022 Comparison of choroidal thickness measurements between SD-OCT and SS-OCT in normal and diseased eyes in South Asian populations. Sidra Zafar1, R. Siddiqui1, R. Shahrzad1. 1Medical College, Aga Khan University Hospital, Karachi, Pakistan; 2Shahzad Eye Hospital, Karachi, Pakistan; 3South City Hospital, Karachi, Pakistan

2177 — D0023 Repeatability of choroidal thickness measurements on Enhanced Depth Imaging OCT using different posterior boundaries. Vivian Yip1, 2, E. Moisseiev1. 1Ophthalmology, Nihon University, Tokyo, Japan; 2Barts Health NHS Trust, London, United Kingdom


2179 — D0025 Comparison of macular retinal and choroidal thicknesses from Spectral Source and Spectral Domain Optical Coherence Tomography. Kai Xiong Cheong1, 2, L. W. Lim1, 2, W. Ngo1, 2, C. S. Tan1, L. T. Lam1. 1Ophthalmology, National Healthcare Group Eye Institute, Singapore, Singapore; 2Fundus Image Reading Center, National Healthcare Group Eye Institute, Singapore, Singapore

2180 — D0026 Measurable Range of Subfoveal Choroidal Thickness with Conventional Spectral Domain Optical Coherence Tomography. Sung Min Kim. Ophthalmology, Samsung Medical Center, Seoul, Korea (the Republic of)

*Refer to the Program Number in the Clinical Trial (CT) Registration Index.  *CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
2181 — D0027 Peripapillary Choroidal Thickness In A Portuguese Population By Enhanced Depth Imaging Optical Coherence Tomography - The Role Of Metabolic Syndrome. Mónica Loureiro1, 2, A. Braga1, D. Meira1, P. Sepúlveda1, L. Agrelés2, P. Torres2.
1Ophthalmology, Centro Hospitalar de Vila Nova de Gaia, Vila Nova de Gaia, Portugal; 2Instituto de Ciências Biomédicas Abel Salazar - Oporto University, Oporto, Qatar; 3ALGORTMI Centre, Minho University, Braga, Portugal; 4Ophthalmology, Centro Hospitalar do Porto, Oporto, Portugal

2182 — D0028 Evaluation of macular and peripapillary choroidal thickness using enhanced depth imaging spectral domain optical coherence tomography (SD-OCT) in patients with essential hypertension. Siddharth Narendran, M. Tandon, K. Ramasamy. Aravind Eye Hospital, Coimbatore, India

1Ophthalmology, The Affiliated Hospital of Inner Mongolia Medical University, Hohhot, China; 2Beijing Institute of Ophthalmology, Beijing Tongren Hospital, Capital Medical University, Beijing, China; 3Jacobs Retina Center, Shirley Eye Institute, University of California San Diego, San Diego, CA; 4Beijing People’s Hospital, Beijing University Beiyingshi, China; 5Department of Ophthalmology, Medical Faculty Mannheim of the Ruprecht-Karls-University of Heidelberg, Mannheim, Germany

1Ophthalmology, Hospital Universitario Clínico San Carlos, Madrid, Spain; 2Hospital Bellvitge, Barcelona, Spain; 3Universidad de Castilla-La Mancha, Albacete, Spain; 4Pio del Rio Hortega University Hospital, Valladolid, Spain; 5New England Eye Center, Tufts Medical Center, Boston, MA

2185 — D0031 Variations Of Choroidal And Retinal Thickness Measurements Analyzed By Enhanced Depth Imaging Optical Coherence Tomography In Uveitis. Ozlem Gurses1, 2, E. Karaismaiquoglu1.
1Middle East Technical University, Ankara, Turkey; 2Ophthalmology/Uveitis, Kim’s Eye Hospital, Seoul, Korea (the Republic of)

2186 — D0032 Associations of choroidal thickness with vascular risk factors: the ALIENOR study. Audrey Cognard-Gregoire1, S. Gattoussi2, J. Korobelnik1, 3, M. B. Roubier1, M. Delyfer1, 2, C. Schweitzer2, 3, M. Le Goff2, B. M. Merle1, 4, J. Dartigues1, 2, 4, C. Delcourt1, 2, 4.
1Univ. Bordeaux, ISPED, Inserm, U1219 - Bordeaux Population Health Research Center, Bordeaux, France; 2CHU de Bordeaux, Service d'Ophthalmologie, Bordeaux, France; 3CR

2187 — D0083 Comparison of SD-OCT with slit lamp grading of anterior chamber cell in a rabbit model of anterior uveitis. Alex Yuan1, M. Edmond1, 2, B. A. Bell2, A. Sharma1, R. M. DiCicco2, L. Tucker1, Y. Tao1, S. K. Srivastava1.
1Ophthalmology, Cleveland Clinic Foundation, Cleveland, OH; 2Hiram College, Hiram, OH; 3CR

2188 — D0084 Preclinical study of conjunctival goblet cell density in living mice with dry eye syndrome. Jean-Luc Desseyn, C. Portal, V. Gouyer, F. Gottrand. LIRIC UMR 995, Inserm/Univ. Lille/CHU, Lille, France

2189 — D0085 Comparison of Spectral Domain and Swept Source Optical Coherence Tomography in a Rat Model of Anterior Uveitis. Leslie Wilson1, W. Choi1, R. K. Wang1, R. N. Van Gelder1, K. L. Pepple1, 2, Bioengineering, University of Washington, Seattle, WA; 3Ophthalmology, University of Washington, Seattle, WA

2190 — D0086 In vivo linear and nonlinear imaging of corneal structures on BALB/c and streptozocin-diabetic Thy1-YFP mice. Oliver Stacks1, T. Ehnke2, J. Leckel1, M. Reichard1, H. Weiss1, M. Hovakimyan1, A. Heisterkamp1, S. Baltрус1, 2, Department of Ophthalmology, University of Rostock, Rostock, Germany; 3Laser Zentrum Hannover e.V., Hannover, Germany; 4Institute of Medical Biochemistry and Molecular Biology, University of Rostock, Rostock, Germany; 5Institute for Biomedical Engineering, University of Rostock, Rostock, Germany; 6Institute of Quantum Optics, Leibniz University Hannover, Hannover, Germany

1Ophthalmology, International St. Mary’s Hospital, Incheon, Korea (the Republic of); 2Ophthalmology, Yonsei University College of Medicine, Seoul, Korea (the Republic of); 3Kim’s Eye Hospital, Seoul, Korea (the Republic of)

2192 — D0088 A comparison of retinal layer changes in diabetic mouse models using spectral-domain optical coherence tomography (SDOCT). Justin Elstrott1, 2, T. Malato1, T. Truong2, M. Van Looikeren Campagne1, B. McKenzie1, R. Weiner1.
1Biomedical Imaging, Genentech, South San Francisco, CA; 2Diabetes and Metabolism, Genentech, South San Francisco, CA; 3Immunology, Genentech, South San Francisco, CA; 4CR

Exhibit/Poster Hall D0083-D0117
Monday, May 02, 2016 11:00 AM-12:45 PM
Multidisciplinary Ophthalmic Imaging Group / Nanotechnology and Regenerative Medicine

2193 — D0089 Multifunctional OCT Imaging Facility for Rodent Eye Imaging. Jens Horsmann1, 2, U. Geisler1, 2, S. E. Siebelmann1, 2, D. Hos1, F. Bock1, R. S. Grajewski1, S. Fauser1, T. Langmann1, G. Huittmann1, C. Curtesief2, P. Steven2.
1Department of Ophthalmology, University Hospital Cologne, Cologne, Germany; 2Cluster of Excellence: Cellular Stress Responses in Aging-associated Diseases (CECAD), Cologne, Germany; 3Institute of Biomedical Optics, University of Luebeck, Luebeck, Germany

2194 — D0090 Multi-Functional OCT for Long-Term Study of Retinal Changes in a VLDLR Mouse Model. Marco Augustin1, S. Fialova1, R. Plasenzotti1, M. Pircher1, C. K. Hitzenberger1, B. Baumann1.
1Center for Medical Physics and Biomedical Engineering, Medical University of Vienna, Vienna, Austria; 2Division of Biomedical Research, Medical University of Vienna, Vienna, Austria

2195 — D0091 Imaging microvascular hemodynamics in the rat retina and choroid with dynamic contrast OCT. Conrad Merkle, V. J. Srinivasa. Biomedical Engineering, University of California, Davis, Davis, CA

2196 — D0092 Imaging the Adult Zebrafish Cone Photoreceptor Mosaic Using Optical Coherence Tomography (OCT). Alison Huckenpahler1, M. A. Wilk2, R. F. Cooper3, J. Carroll4, 5, B. Link1, 2, R. F. Collier1, 2, Cell Biology, Neurobiology, and Anatomy, Medical College of Wisconsin, Milwaukee, WI; 3Ophthalmology, University of Pennsylvania, Philadelphia, PA; 4Psychology, University of Pennsylvania, Philadelphia, PA; 5Ophthalmology, Medical College of Wisconsin, Milwaukee, WI

2197 — D0093 Correlation of spectral domain optical coherence tomography and histology in the porcine retina. Wankun Xie1, 2, M. Zhao1, 2, S. Tsai1, W. Burkes1, Y. Ren1, W. Xu1, C. Du1, T. W. Hein1, 2, L. Kuo1, 2, R. H. Ross1, 2, 3, 4, Ophthalmology, Baylor Scott & White Eye Institute, Temple, TX; 5Surgery and Medical Physiology, Texas A&M Health Science Center, Temple, TX; 6College of Medicine, Texas A&M Health Science Center, Temple, TX; 7Comparative Medicine, Baylor Scott & White Health, Temple, TX

2198 — D0094 Acute Intraocular Pressure Elevation Rat Model Studied Using High Resolution Multifunctional Optical Coherence Tomography. Stanislava Fialova1, M. Augustin1, C. Knop1, M. Pircher1, L. Schmetterer1, 2, C. K. Hitzenberger1, B. Baumann1, 2, Center for Medical Physics and Biomedical Engineering, Medical University of Vienna, Vienna, Austria; 3Department of Clinical Pharmacology, Medical University of Vienna, Vienna, Austria

The Commercial Relationships (CR) Index for Disclosures and the Clinical Trial (CT) Registration Index are at arvo.org/amindices.
Monday Posters
11:00 am – 12:45 pm

2199 — D0095 Characterization of Retinal Layer Thickness Changes Using Volumetric SD-OCT Images in a Multiple Sclerosis Mouse Model. Bhavna J. Antony1, B. Kim2, D. J. Zach2, P. A. Cabalres1, J. L. Prince1. Ophthalmology & Visual Sciences, Johns Hopkins University, Baltimore, MD; 2Electrical & Computer Engineering, Johns Hopkins University, Baltimore, MD; 3Dept. Of Neurology, Johns Hopkins University, Baltimore, MD *CR

2200 — D0096 Hemiretinal Endodiathermy Axotomy (HEA) In Non-Human Primates: Structural Changes by Spectral Domain Optical Coherence Tomography (sdOCT). Carol Rasmussen1,2, A. Katz1, C. B. Kim1,2, A. K. Goulding1, P. L. Kaufman1,2, C. J. Murphy3,4, Y. Huang5, T. Nork1,2. Ophthalmology and Visual Sciences, University of Wisconsin - Madison, Madison, WI; 2Ocular Services On Demand (OSOD), Madison, WI; 3EyeKor, LLC, Madison, WI; 4Department of Ophthalmology & Vision Science, School of Medicine, UC, Davis, Davis, CA *CR


2202 — D0098 Preclinical Single photon emission computed tomography/computed tomography (SPECT/CT) imaging of choroidal neovascularization in macular degeneration mice using integrin-binding 99mTc-IDA-D-[RGDIK]2. Hye kyoungh Song, S. Ahn, S. Woo, K. Park, J. park, J. Jeong, B. Lee. Department of Nuclear Medicine, Seoul National University Bundang Hospital, Seongnam, Gyeonggi-do, Korea (the Republic of)


2204 — D0100 Imaging laser-induced choroidal neovascularization in the rodent retina using optical coherence tomography angiography. Jang Ryal Park1,6, W. Choi, Y. Hong1, Y. Kim1, S. Park4, Y. Hwang1, P. Kim4, S. Woo1, K. Park3, W. Oh1. 1Department of Ophthalmology, Seoul National University Bundang Hospital, Seongnam, Korea (the Republic of); 2Department of Mechanical Engineering, KAIST, Daejeon, Korea (the Republic of); 3Graduate school of nanoscience and technology, KAIST, Daejeon, Korea (the Republic of); 4Information & Electronics Research Institute, KAIST, Daejeon, Korea (the Republic of); 5Department of Optics, University of Rochester, Rochester, NY; 6College of Optical Science and Engineering, University of Arizona, Tucson, AZ

2205 — D0101 Normative Values of Retinal Oxygen Saturation in Rhesus Monkeys: The Beijing Intracranial and Intracerebral Pressure (iCOP) Study. Jing Li, D. Yang, Y. Yang, N. Wang. Ophthalmology, Beijing Tongren Hospital, Beijing, China


2207 — D0103 Effect of systemic blood pressure modification on ocular and cerebral blood vessels. Shajjan Velaedan2,3, Y. Vingrys, B. V. Bui. Optometry & Vision Sciences, Melbourne University, Melbourne, VIC, Australia *CR

2208 — D0104 Cellular-scale fluorescence lifetime imaging of the retina in living mice. James Feeks1,2, Q. Yang, J. J. Hunter1,2. 1Institute of Optics, University of Rochester, Rochester, NY; 2Center for Visual Science, University of Rochester, Rochester, NY; 3Flaum Eye Institute, University of Rochester, Rochester, NY *CR


2210 — D0106 Topography and elasticity measurements of the adult porcine retina using Atomic Force Microscopy. Belmin Zilancikovic1, L. Taylor1, S. Yngman1, R. Timmi1, K. Arner1, F. K. Ghosh1. 1Department of Ophthalmology, Lund University Hospital, Lund, Sweden; 2Nano.lund, Lund University, Lund, Sweden; 3Department of Physics, Lund University, Lund, Sweden

2211 — D0107 Contact lenses can correct ocular spherical aberration and improve the quality of retinal images in the rat. Ian Andrews1, M. L. Kisilak1, L. Emptage1, M. C. Campbell1. 1Physics and Astronomy, University of Waterloo, Waterloo, ON, Canada; 2School of Optometry and Vision Science, University of Waterloo, Waterloo, ON, Canada *CR

2212 — D0108 Low-power two-photon fluorescence imaging of mouse retinal pigmented epithelium in vivo. Nathan Alexander1, P. Strempleski1, M. D. Wojtkowski1, K. Palczewski2, G. Palczewski1. Polgenix Inc., Cleveland, OH; 2Institutes of Optics, University of Rochester, Rochester, NY; 3The Institute of Optics, University of Rochester, Rochester, NY; 4Institute of Experimental Clinical Optics, University of Rochester, Rochester, NY *CR

2213 — D0109 Quantification of retinal production and removal in photoreceptors in the living primate eye using two-photon ophthalmoscopy. Robin Sharma1, C. Schwarz2, G. Palczewski1, K. Palczewski1, D. R. Williams1, J. J. Hunter1,2. 1Center for Visual Science, University of Rochester, Rochester, NY; 2Department of Medical Devices, Polgenix, Inc, Cleveland, OH; 3The Institute of Optics, University of Rochester, Rochester, NY; 4Institute of Pharmacology, Cleveland Center for Membrane and Structural Biology, School of Medicine, Case Western Reserve University, Cleveland, OH *CR

2214 — D0110 Macrophages contribute to the two-dimensional patterns observed using Fundus Autofluorescence (FAF) in a rodent model of retinal damage. Natalie Pankova, H. Wang, X. Zhao, H. Liang, S. R. Boyd. University of Toronto/T. St. Michael’s Hospital, Toronto, ON, Canada

2215 — D0111 Amyloid-beta in the rodent retina exhibits a characteristic hyperspectral profile. Christine T. Nguyen1, J. K. Lim1, Z. He1, A. J. Vingrys2, H. R. Chinnery1, T. M. Ryan2, Q. Li3, B. V. Bui4. Optometry and Vision Sciences, University of Melbourne, Parkville, VIC, Australia; 2Florey Institute of Neuroscience and Mental Health, Parkville, VIC, Australia


2217 — D0113 In vivo and ex vivo multi-modal images in the canine model of Alzheimer’s disease. Melanie C. Campbell1,2, L. Emptage1, C. Schwarz1, S. Walters2, M. L. Kisilak1, M. L. Brooks4, J. J. Hunter1,4. 1Physics and Astronomy, University of Waterloo, Waterloo, ON, Canada; 2School of Optometry and Vision Science, University of Waterloo, Waterloo, ON, Canada; 3Center for Visual Science, University of Rochester, Rochester, NY; 4ViviCore Inc, Toronto, ON, Canada; 5Flaum Eye Institute, Center for Visual Science and Biomedical Engineering, University of Rochester, Rochester, NY; 6The Institute of Optics, University of Rochester, Rochester, NY *CR

* Refer to the Program Number in the Clinical Trial (CT) Registration Index. *CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
2218 — D0114 Retinal amyloid stained with CRANAD-28 is visible in vivo with fluorescence imaging but not OCT in a canine model of Alzheimer’s disease. Laura Emptage1, J. J. Hunter2, M. L. Kisiluk1, M. L. Brooks2, J. M. Strazzeri2, W. S. Fischer3, L. DiVincenti4, J. Araujo1, C. Ran1, M. C. Campbell1, 4Physics and Astronomy, University of Waterloo, Waterloo, ON, Canada; 2Flaum Eye Institute, University of Rochester, Rochester, NY; 3Vivicore Inc, Toronto, ON, Canada; 4Department of Comparative Medicine, University of Rochester School of Medicine & Dentistry, Rochester, NY; 4InterVivo Solutions, Toronto, ON, Canada; 4School of Optometry and Vision Science, University of Waterloo, Waterloo, ON, Canada; 4Flaum Eye Institute, Center for Visual Science and Biomedical Engineering, University of Rochester, Rochester, NY; 4Molecular Imaging Laboratory, Massachusetts General Hospital and Harvard Medical School, Boston, MA *CR

2219 — D0115 Evaluation of damaged photoreceptors in a macaque model of viral vector induced retinal degeneration using an AOSLO. Sarah Walters1, C. Schwartz2, W. S. Fischer1, D. DiLoreto1, D. Neldova1, A. Drinnenberg2, J. Juettner1, B. Roska4, D. R. Williams4, J. J. Hunter7, W. H. Merigan3, 2Institute of Optics, University of Rochester, Rochester, NY; 2Center for Visual Science, University of Rochester, Rochester, NY; 2Flaum Eye Institute, University of Rochester, Rochester, NY; 4School of Optometry and Vision Science, University of Waterloo, Waterloo, ON, Canada; 4Flaum Eye Institute, Center for Visual Science and Biomedical Engineering, University of Rochester, Rochester, NY; 4Molecular Imaging Laboratory, Massachusetts General Hospital and Harvard Medical School, Boston, MA

2220 — D0116 Spectral dependence of light exposure on retinal pigment epithelium (RPE) disruption in living primate retina. Jie Zhang1, R. Sabarinathan1, T. Bubel1, D. R. Williams1, J. J. Hunter7, 1Center for Visual Science, University of Rochester, Rochester, NY; 2Institute of Optics, University of Rochester, Rochester, NY; 3Flaum Eye Institute, University of Rochester, Rochester, NY; 4School of Optometry and Vision Science, University of Waterloo, Waterloo, ON, Canada; 4Flaum Eye Institute, Center for Visual Science and Biomedical Engineering, University of Rochester, Rochester, NY; 4Molecular Imaging Laboratory, Massachusetts General Hospital and Harvard Medical School, Boston, MA


2222 — D0187 Chronic accumulations of complement-expressing microglia/macrophages accompany the progressive expansion of the retinal lesion in an animal model of atrophic AMD. Nilisha Fernando1, T. Racic1, R. N. Natoli1, 2Institute of Optics, University of Rochester, Rochester, NY; 3Center For Development And Regenerative Biology, Indiana University Purdue University Indianapolis, Indianapolis, IN; 4The John Curtin School of Medical Research, The Australian National University, Canberra, ACT, Australia; 5ANU Medical School, The Australian National University, Canberra, ACT, Australia

2223 — D0188 BMP-7 Activation of Microglia Drives Reactive Retinal Gliosis. Subramanian Dharmarajan1, N. Sheibani1, T. L. Belecky-Adams1, 2Biology, Indiana University Purdue University Indianapolis, Indianapolis, IN; 1Center For Development And Regenerative Biology, Indiana University Purdue University Indianapolis, Indianapolis, IN; 2Ophthalmology And Visual Sciences, University Of Wisconsin, Madison, WI

2224 — D0189 Activated Microglia Induce the Production of Reactive Oxygen Species and Promote Apoptosis of Cocultured Retinal Microvascular Pericytes. Xinyi Ding1, H. Wu1, M. Zhang1, R. Gu1, G. Xu1, 2Ophthalmology, EYE&ENT Hospital of Fudan University, Shanghai, China; 3Institute of Brain Science, Fudan University, Shanghai, China

2225 — D0190 The Role of Microglia During Retinal Neurogenesis. Sarah Anderson1, 2Neurobiology and Anatomy, University of Utah, Salt Lake City, UT; 2Interdepartmental Program in Neuroscience, University of Utah, Salt Lake City, UT

2226 — D0191 Quantitative and topographical microglial cell changes in the ganglion cell layer and inner plexiform layer after optic nerve axotomy. Manuel Vidal-Sanz1, F. M. Nadal-Nicolás1, P. Sobrado-Calvo1, M. Jimenez-Lopez3, G. Rovere1, M. C. Sanchez-Migallon2, L. Nieto-Lopez2, F. Lucas-Ruiz2, M. Salinas-Navarro2, M. Agudo-Barriuso2. IMIB-Arrizketa and Departamento de Oftalmologia, Facultad de Medicina, Universidad de Murcia, Murcia, Spain

2227 — D0192 Oxidative DNA Damage in Microglia Exacerbates Retinal Inflammation and Degeneration through MUTYH-mediated Base Excision Repair in a Mouse Model of Retinitis Pigmentosa. Shunji Nakatake1, Y. Murakami1, Y. Ikeda1, K. Fujii1, T. Tachibana1, T. Hisatomi1, S. Yoshida1, T. Ishibashi1, Y. Nakabeppu1, K. Sonod1. Ophthalmology, Kyushu University, Fukuoka, Japan; 2Ophthalmology, Akita University, Akita, Japan; 3Immunobiology and Neuroscience, Kyushu University, Fukuoka, Japan; 4Research Center for Nucleotide Pool, Kyushu University, Fukuoka, Japan

2228 — D0193 Neovascular tufts are perfused vascular structures formed in part by macrophage/microglial cells. Mauricio Rosenfeld, F. H. Barnett, E. Aguilar; M. Friedlander. Cell and Molecular Biology, The Scripps Research Institute, La Jolla, CA

2229 — D0194 Mobilization of endogenous microglia is coordinated with systemic monocyte infiltration in a model of RPE cell injury. Wensin Ma1, C. Guo1, R. N. Fariss2, W. T. Wong1. 1UNGIRD, NEI, Bethesda, MD; 2Biological Imaging Core, NEI, Bethesda, MD

2230 — D0195 Microglia specialization in the primate macula: Changes in distribution and morphology with retinal position and aging. Jannji Sinargaravelu1, L. Zhao1, R. N. Fariss2, T. Nork1, W. T. Wong1. 1Unit on Neuron-Glia Interactions in Retinal Disease, National Eye Institute, Bethesda, MD; 2Department of Ophthalmology and Visual Sciences, University of Wisconsin-Madison, Madison, WI

2231 — D0196 Microglial regulation of stem cell responsiveness and cell replacement kinetics during retinal regeneration. Jeff S. Mann, D. T. White, S. Sengupta. Ophthalmology, Johns Hopkins University, Baltimore, MD


2233 — D0198 Microglia cells in cone-dominant ground squirrel retina. Tantai Zhao1, J. Qi1, S. Chen1, W. Li1. Ophthalmology, the second Xiangya hospital of Central South University, Changsha, China; 2National Eye Institute, National Institutes of Health, Bethesda, MD

2234 — D0199 Merkt-mediated phagocytosis inhibits the inflammatory response to TLR4 activation in a novel microglial cell line exhibiting temperature-induced quiescence and differentiation. Sumathi Shanmugam, D. Kong, D. A. Thompson, S. F. Abcouwer. Ophthalmology and Visual Sciences, University of Michigan Kellogg Eye Center, Ann Arbor, MI

The Commercial Relationships (CR) Index for Disclosures and the Clinical Trial (CT) Registration Index are at arvo.org/amindices.
2235 — D0200  Loss of retinal microglia exacerbates vascular outcomes in mouse oxygen-induced retinopathy model. Jin Liu1, S. Chung1, A. C. Lo1, 2, 3. 1Department of Ophthalmology, The University of Hong Kong, Hong Kong, Hong Kong; 2School of Biomedical Sciences, The University of Hong Kong, Hong Kong, Hong Kong; 3Research Centre of Heart, Brain, Hormone & Healthy Aging, The University of Hong Kong, Hong Kong, Hong Kong

2236 — D0201  Late optic nerve damage and long-lasting microglia-activation in a new NMDA model. Sandra Kuehn, C. Rodust, G. Stute, H. Dick, S. C. Joachim. Ruhr University Bochum, Bochum, Germany

2237 — D0202  Increased inflammasome priming and microglial activation in a mouse model of choroideremia retinopathy. Wennan Lu1, N. Mas Gomez1, A. M. Lattes1, C. H. Mitchell1,2, 3. 1Anatomy and Cell Biology, Univ of Pennsylvania, Philadelphia, PA; 2Physiology, Univ of Pennsylvania, Philadelphia, PA; 3Ophthalmology, Univ of Pennsylvania, Philadelphia, PA

2238 — D0203  Identification of microglia specific genes using a new mouse model of rod photoreceptor degeneration. Sumiko Watanabe, H. Koso. Molecular and Developmental Biology, Univ of Tokyo, Inst Med Science, Tokyo, Japan


2240 — D0205  Beta-Amyloid Deposition and Glial Changes in an APPPS1 Mouse Model of Alzheimer’s Disease. Tanja Himml1, S. Fialova1, M. Augustin2, B. Baumann2, M. Glösmann1. 1Vetcore Facility for Research and Technology, University of Veterinary Medicine Vienna, Vienna, Austria; 2Center for Medical Physics and Biomedical Engineering, Medical University of Vienna, Vienna, Austria

2241 — D0206  Glial cell activation and migration during photoreceptor death in two rat models of inherited retinal degeneration. Johnny Di Pierdomenico, D. García-Ayuso, M. Aguado-Barriuso, M. Vidal-Sanz, M. P. Villegas-Pérez. Instituto Murciano de Investigacion Biosanitaria Hospital Virgen de la Arrixaca (IMIB-Virgen de la Arrixaca), and Departamento de Oftalmologia, Facultad de Medicina, Universidad de Murcia, Murcia, Spain, El Palmar, Spain

2242 — D0207  Real-time imaging of retinal vascular inflammation. Wei Liu1, Y. Hu1, H. Liu1, S. Zhu1, H. Tie2, 3, M. Motamedii1, 4, W. Zhang4, 5. 1Ophthalmology, UTMB, Galveston, TX; 2Ophthalmology, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China; 3Center for Biomedical Engineering, UTMB, Galveston, TX; 4Biology, Research Center for Neurobiology, Xuzhou Medical College, Xuzhou, China; 5Ophthalmology, Second Affiliated Hospital of Zhengzhou University, Zhengzhou, China

2243 — D0208  The role of the Interferon Regulatory Factor 8 for retinal tissue homeostasis and development of choroidal neovascularisation. Franziska Fischer1, P. Wieghofer1, 2, J. Koch1, 2, J. Baumann1, M. Leinweber1, Y. Laich1, P. Zhang1, G. R. Schlunck1, H. Agostini1, M. Prinz2, 3, C. Lange1. 1Eye Center, University of Freiburg, Freiburg, Germany; 2Institute of Neuroradiology, University of Freiburg, Freiburg, Germany; 3Faculty of Biology, University of Freiburg, Freiburg, Germany; 4BIOSS Center for Biological Signaling Studies, University of Freiburg, Freiburg, Germany

2244 — D0209  Attenuation of photoreceptor cell death using the Galectin-3 inhibitor TD139 in an in vitro model of retinal degeneration. Oscar Manouchehrian1, K. Arner1, A. Boza Serrano1, U. Nilsson1, H. Leffler3, T. Deierborg2, L. Taylor2. 1Ophthalmology, Lund University Hospital, Lund, Sweden; 2Experimental Neuroinflammation Laboratory, BMC Lund University, Lund, Sweden; 3Lund University, Lund, Sweden

2245 — D0210  CCR2-independent perivascular macrophage recruitment in vein occlusion is associated with increased survival of endothelial cells. Christophe Roubeix1, 2, E. Dominguez1, X. P. Guillaume1, M. Paques1, F. Sennlaub1, 3. 1Charité CKV, BERLIN, Germany; 2Institut de la vision, Paris, France

2246 — D0211  Loss of zebrafish Mfpr causes nanophthalmia and hyperopia. Joseph C. Besharse1, P. Volberding2, B. Link1, R. F. Collery2, 3. 1Cell Biology, Neurobiology and Anatomy, Medical College of Wisconsin, Milwaukee, WI

2247 — D0212  Ganglion cell loss in ocular and glaucoma is facilitated by the Panx1-regulated inflammasome. Valery I. Shestopalov1, 2, 3, G. Dvoriantchikova1, S. Kartenbach1, A. Reiser1, Z. kokzhekbayeva1, A. Tuzhikov1, 4. 1Ophthalmology, Univ. of Miami Miller School of Medicine, Miami, FL; 2Cell Biology, University of Miami Miller School of Medicine, Miami, FL; 3Kharkevich Institute for Information Transmission Problems, Moscow, Russian Federation

2248 — D0213  NMDA-induced Retinal Excitotoxicity Triggers Inflammation and Inflammatory Activation in Mice. Pavlina Tsoka, K. Kataoka, J. W. Miller, D. G. Vavvas. Ophthalmology, Massachusetts Eye and Ear Infirmary, HMS, Boston, MA

Moderators: Francesca Mazzoni and Tanya L. Dilan

2249 — D0239  Comparative proteomic analysis between the degenerated human and zebrafish retina. Karen Eastlake1, W. Heywood2, D. Tracey-White1, M. Moosajee1, K. Mills1, P. Banerjee2, D. G. Charteris1, P. T. Khaw1, G. Limb3, 4. 1NIHR Biomedical Research Centre for Ophthalmology, UCL Institute of Ophthalmology and Moorfields Eye Hospital, London, United Kingdom; 2UCL Institute of Child Health, London, United Kingdom

2250 — D0240  Effects of Targeted Cone Ablation on the Integrity of Neighbouring Photoreceptor Subtypes. Nicole C. Noel1, G. Hagerman1, M. G. DuVal1, A. Oel1, W. Allison1, 2. 1Department of Biological Sciences, University of Alberta, Edmonton, AB, Canada; 2Department of Medical Genetics, University of Alberta, Edmonton, AB, Canada

2251 — D0241  C8orf37 knockout mice display abnormal photoreceptor outer segment morphogenesis and progressive photoreceptor degeneration. Ali S. Shariff1, 2, J. Zou1, Q. Chen1, W. Zhang1, S. Loertscher1, K. Nguyen1, J. Yang1. 1Ophthalmology and Visual Science, University of Utah, Salt Lake, UT; 2Neurobiology and Anatomy, University of Utah, Salt Lake City, UT


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2253 — D0243 Sodium iodate-induced retina and choroid damage model in rabbits to test efficacy of RPE auto-transplants. Raymond Zhou1, Y. Li2, H. Qian3, A. Mamintshik3, B. Jha1, M. M. Compos1, J. Amaral3, B. Stanzel1, K. Bharth1. 1SERPD, National Eye Institute, North Potomac, MD; 2Office of the Scientific Director, National Eye Institute, Bethesda, MD; 3OCTRU, National Eye Institute, Bethesda, MD; 4Visual Function Core, National Eye Institute, Bethesda, MD; 5Histology Core, National Eye Institute, Bethesda, MD; 6Ophthalmology, University of Bonn, Bonn, Germany

2254 — D0244 Evaluation of Congo Red Fluorescence in Degenerating Cultured Porcine Retina. Camilla Mohlin1, T. Mollik2, A. P. Kvanta1, K. Johansson1. 1Chemistry and Biomedicine, Natural Sciences, Kalmar, Sweden; 2School of Health and Medicine, Örebro, Sweden; 3St Eriks Eye Hospital, Ophthalmology, Stockholm, Sweden

2255 — D0245 Mouse models of VMA-TT-Leber congenital amaurosis recapitulate key features of the human disease. Scott H. Greenwald1, J. R. Charette2, M. Staniszewska1, L. Shi3, B. Brown1, S. Stone1, W. Hicks1, M. R. Bowl1, M. P. Krebs1, P. M. Nishina1, E. A. Pierce1. 1Ophthalmology, Massachusetts Eye & Ear Infirmary, Harvard Medical School, Boston, MA; 2The Jackson Laboratory, Bar Harbor, ME; 3Mammalian Genetics Unit, Medical Research Council (MRC), Harwell, Harwell Oxford, United Kingdom

2256 — D0246 Progressive retinal remodeling in a transgenic rabbit model of retinitis pigmentosa. Rebecca L. Pfieffer1, B. W. Jones1, R. E. Marc1. 1Ophthalmology, University of Utah, Salt Lake City, UT; 2Interdepartmental Program in Neuroscience, University of Utah, Salt Lake City, UT

2257 — D0247 Creation and Characterization of a Bardet-Biedl Syndrome (BBS) Mouse Model Containing Mutations in Sidcag8 Using CRISPR/Cas9. Michelle Reed1, L. Jiang1, W. Baehr1. 1Ophthalmology, University of Utah, Salt Lake City, UT; 2Sichuan Academy of Medical Sciences & Sichuan Provincial People’s Hospital, Chengdu, China

2258 — D0248 Distinct Expression of Heat Shock Proteins in Mouse Models of Retinal Degeneration. Elizabeth Fairless1, K. Koorgayal2, G. Karakulah1, J. Kim, A. Boleda, T. Cogliati, A. Swarnegop. Neurobiology Neurodegeneration & Repair Laboratory, National Eye Institute, Bethesda, MD

2259 — D0249 An in vitro model of human retina detachment reveals a common death mechanism with other models of retinal dystrophies. Jelena Potic1, M. Mbefo2, M. Nicolas2, Y. Arsenjevic2. 1Univ Eye Hosp, Clinical Center of Serbia, Belgrade, Lausanne, Switzerland; 2Jules-Gonin Eye Hospital, Lausanne, Switzerland

2260 — D0250 Metabolic changes during late stage retinal degeneration in heterozygous Crx mutant cats (Crx<sup>+/−</sup>). Laurence M. Occoli1, B. W. Jones3, S. M. Petersen-Jones3. 1Small Animal Clinical Sciences, Michigan State University, East Lansing, MI; 2Ophthalmology, Moran Eye Center, University of Utah, Salt Lake City, UT

2261 — D0251 Characterization of Sphingosine kinase 1 Knockout Mouse Retina. Navajes A. Mandal1, J. Wilkerson1, M. Stiles2. 1Ophthalmology, Univ of Utah Hlf Sc Cer, Oklahoma City, OK; 2Dean McGee Eye Institute, Oklahoma City, OK

2262 — D0252 Oxidative stress and autophagy markers in rd10 mice retina. Maria Miranda1, L. Trachsel-Moncho2, S. Benlloch-Navarro2, M. Grima1, J. Almansa1, J. Arzau2, E. Poch1. 1Biomedical Sciences, CEU Cardenal Herrera University, Moncada, Spain; 2Ophthalmology Department, School of Medicine and Dentistry, Leio, Spain; 3R&D Dept, Instituto Clinico-Quirurgico de Ophthalmologia, Bilbao, Spain

2263 — D0253 Longitudinal phenotypic analysis of the early onset retinal degeneration in the homozygous kcnj13<sup>−/−</sup> zebrafish model. Dhakshi Mahendhakum1, M. Toms, D. Tracey-White, R. Richardson, A. Webster, M. Moosajee. Institute of Ophthalmology, ORBIT, University College London, London, United Kingdom

2264 — D0254 The nicotinamide phosphoribosyltransferase (NAMPT)-mediated NAD<sup>+</sup> biosynthetic pathway is essential for photoreceptor survival and vision. Jonathan B. Lin1, S. Kubota1, N. Ban1, M. Yoshida1, A. Santeford2, A. Sene2, M. Kubota2, K. Tsuji2, J. Yoshino2, S. Imai2, R. S. Apte2. 1Ophthalmology & Visual Sciences, Washington University School of Medicine, Saint Louis, MO; 2Developmental Biology, Washington University School of Medicine, Saint Louis, MO; 3Medicine, Washington University School of Medicine, Saint Louis, MO; 4Ophthalmology, Keio University School of Medicine, Tokyo, Japan

2265 — D0255 The bacterial toxin CNF1 as a tool to induce RP-like retinal degeneration. Enrica Strettoi1, M. Caleo1, M. Gargini2, I. Piano2. 1CNR Neuroscience Institute, Pisa, Italy; 2Pharmacy, University of Pisa, Pisa, Italy; 3Accademia dei Lincei, Rome, Italy

2266 — D0256 Inhibition of Endoplasmic Reticulum Calcium Channels Reduces Endoplasmic Reticulum Stress and Cone Death in CNG Channel-Deficient Mice. Josh Belcher1, M. R. Butler1, H. Ma1, C. Xu1, M. Bie1, S. Michalakis1, A. Iuso1, D. Krijg1, X. Ding1. 1Cell Biology, University of Oklahoma Health Sciences Center, Oklahoma City, OK; 2Pharmacy, Center for Integrated Protein Science Munich (CIPSM) - Center for Drug Research, Ludwig-Maximilians-Universität München, Munich, Germany; 3Department of Ophthalmology, University of Utah School of Medicine, Salt Lake City, UT

2267 — D0257 CX3CR1 deficiency affects microglial phagocytosis in rd10 retinal degeneration. Lian Zhao1, M. Zabel1, Y. Zhang1, S. Gonzalez2, W. Ma1, X. Wang2, R. N. Fariss3, W. T. Wong4. 1Biological Imaging Core, National Eye Institute, Bethesda, MD; 2Unit on Neuron-Glia Interactions in Retinal Disease, National Eye Institute, Bethesda, MD

2268 — D0258 HDAC inhibitors alter retinal degeneration phenotypes and induce autophagy in Xenopus laevis models of retinal degeneration. Runxia Wen1, R. Y. Lai1, C. Chiu1, B. M. Tam1, O. L. Moritz1. Ophthalmology and Visual Science, University of British Columbia, Vancouver, BC, Canada

2269 — D0259 Photoreceptors influence retinal vascular degeneration: retinal degeneration and diabetest. Timothy S. Kerr1, J. Tang1, H. Liu1, K. Falczewski1, Y. Du1. 1Case Western Reserve Univ, Cleveland, OH; 2Veterans Administration Hospital, Cleveland, OH

2270 — D0260 Retinal Amloid Precursor Protein (APP) processing and amyloid-beta (Ab) transport in an Alzheimer’s disease (AD) mouse model. Jana Löffler1, F. Karich1, M. Valtink1, R. Funk1, L. Knels1. 1TU Dresden, Institute of Anatomy, Dresden, Germany; 2CRTD Center for Regenerative Therapies, Dresden, Germany

2271 — D0261 Ablation of Crb1 and Crb2 Specifically in Mouse Müller Cells mimics early onset Retinitis Pigmentosa. Peter M. Quinn, J. Wijnholds. Ophthalmology, Leiden University Medical Center, Leiden, Netherlands

2272 — D0262 Ultrastructural pathology of drusen in monkey retina. Peter Gouras1, L. Ivert1, M. Neuringer2, T. Nagasaki1. 1Ophthalmology, Columbia University, New York, NY; 2Oregon National Primate Research Center, Oregon Health and Science University, Beaverton, OR; 3St. Erik Eye Hospital, Karolinska Institute, Stockholm, Sweden

2273 — D0263 Remodeling of the blood-retinal barrier in neurodegenerative disease. Elena Ivanova, C. Yee, B. T. Sagulaneva. Burke-Cornell Medical Research Institute, White Plains, NY
The session compiles an overall summary of top large animal eye research currently ongoing on the field. It will start by making a general case for large animals in research and a comparison of the advantages and disadvantages of using animals closer to human size and physiology. It will then include presentations from large animal models on representatives eye diseases. From the basic to the clinic, the session will convey a new awareness on the relevance of results obtained from small versus large animal model research.

Moderators: Christine F. Wildsoet, Uday B. Kompella and Thomas A. Fuchsluger

--- 1:00 The pig as a large animal model. Randy Prather. National Swine Resource and Research Center, Columbia, MO; University of Missouri, Columbia, MO *CR

--- 1:15 Photoreceptor replacement in the porcine retina. Michael J. Young. Harvard Medical School, Boston, MA

--- 1:30 Non-human primates as a preferred basic and translational model for glaucoma therapeutics. Carol B. Toris. Case Western Reserve University, Cleveland, OH; University of Nebraska Medical Center, Ophthalmology, Omaha, NE

--- 1:45 Ferrets as a New Experimental Animal Model for Corneal Endothelial Research. Yuji Sakamoto. SENJ Pharmaceutical Co., Ltd., Kobe, Japan

--- 2:00 Sheep as a potential large animal model for gene therapy. Terete Borras. University of North Carolina, Chapel Hill, NE

--- 2:15 The pros and cons of vertebrate animal models to study inherited retinal dystrophies. Rob W J Collin. Human Genetics, Radboud University Medical Centre, Nijmegen, Netherlands

--- 1:05 In search of mechanism for congenital cataracts using patient-specific induced pluripotent stem-cell and lentoid body disease models. Ke Yao. Zhejiang Provincial Key Lab of Ophthalmology, Hangzhou, China; Eye Center of the 2nd Affiliated Hospital, Medical College of Zhejiang University, Hangzhou, China


--- 1:25 Studies on the mechanisms involved in the development of Behcet’s disease and Vogt-Koyanagi-Hayagani-Harada syndrome. Peizeng Yang. The First Affiliated Hospital, Chongqing Medical University, Chongqing, China; Chongqing Key Laboratory of Ophthalmology, Chongqing, China

--- 1:35 Optic nerve restoration: Bench to bedside. Jeffrey L. Goldberg. Byers Eye Institute at Stanford University, Palo Alto, CA *CR

--- 1:45 Peri-Scleral sustained drug deliveries to combat chronic choroiditis diseases. Lingyan Cheng. Ophthalmology, Shirley Eye Institute, La Jolla, CA; Institute of Ocular Pharmacology, School of Ophthalmology and Optometry, Wenzhou, China

--- 1:55 Epigenetic therapy for ocular inflammation. Lai Wei. Zhongshan Ophthalmic Center, Sun Yat-sen Univ., Guangzhou, China

--- 2:05 Open Discussion

--- 2:20 OCAVER Awards

Cell therapy is an emerging novel therapeutic strategy for incurable retinal and macular degeneration diseases. The workshop will focus on the ethical challenges and solutions in transitioning from animal studies to human clinical trials. These include the identification and definition of the ethical questions raised by recent pre-clinical and clinical trials, evaluating sufficient efficacy and safety data in animals for submitting IRB for human phase I/II trial, appropriate animal models and group sizes for safety assessment, Efficacy and safety testing in preclinical animal models with emphasis on visual function and toxicity assays, Informed consent forms for cell therapy, Use of allogeneic Vs. autologous cell therapy and Risk-benefit ratio.

Moderators: Ygal Rotenstreich and Hari Jayaram

--- 1:00 Introduction

--- 1:02 My experience in moving from animal studies to clinical trials with iPSC cells and regenerative medicine. Jose Sahel. Institut de la Vision, University P&M Curie, Paris, France *CR, *

--- 1:17 End points in preclinical translational studies. Ygal Rotenstreich. Sheba Medical Center, Tel Hashomer, Israel; Sackler Medical School, Tel Aviv University, Tel Aviv, Israel

--- 1:32 When and should FDA regulation be taken into consideration in cell therapy. Denise Hampton. FDA, Silver Spring, MD

--- 1:47 What are the regulatory agencies expectations on the non clinical package to move to a first in human study with cellular therapy? Focus on Europe. Anne Dupraz. Voinis consulting, Paris, France

--- 2:02 Case study: Moving a cell therapy program from Research to Human Clinical Trials. Susan C. Orr. Global Medical Affairs, Ophthalmology, Janssen, Pharmaceutical Companies of J&J, Horsham, PA *CR, *

--- 2:17 Discussion

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Monday – Workshops/SIGs

Room 608
Monday, May 02, 2016 1:00 PM-2:30 PM

252 Clinician-Scientist Forum: How to Become a Successful Clinician-Scientist

Internationally renowned clinician-scientists at various stages in their careers will share their experiences and provide valuable advice on how to become a successful clinician-scientist. An NEI extramural representative will be available to discuss clinician-scientist specific funding mechanisms.

Moderators: Jaafar El Annan, Richard J. Blanch and Yureeda Qazi

— 1:00 Introductory remarks
— 1:02 NEI and the role of clinician-scientists in vision research. Paul A. Sieving. Ophthalmology, National Eye Institute, Bethesda, MD
— 1:10 How to do Research whilst working in Clinical Medicine. Alastair K. Denniston. University Hospitals Birmingham NHSFT, Birmingham, United Kingdom; University of Birmingham, Birmingham, United Kingdom
— 1:18 Clinician-Scientist: A Chairman’s Perspective. Tim Stout. Ophthalmology, Baylor College of Medicine, Houston, TX
— 1:26 Early Career Work-Life Balance: Juggling While on a Tightrope. Iris S. Kassen. The Eye Institute, Medical College of Wisconsin, Milwaukee, WI *CR
— 1:34 The Road Less Traveled: Survival Tips for Your Journey. Holly B. Hindman. Flaum Eye Institute, University of Rochester, Rochester, NY; Center for Visual Science, University of Rochester, Rochester, NY
— 1:42 Lessons learned in the career path of a clinician-scientist. Ula V. Jurkanas. MA Eye & Ear Infirrm Schepens Eye Res, Boston, MA *CR
— 1:50 Career Development Tips for the Clinician-Scientist. Jeffrey L. Goldberg. Byers Eye Institute at Stanford University, Palo Alto, CA
— 1:58 Research and Career Development and Loan Repayment Opportunities at NEI. Neeraj Agarwal. NIH, USA, National Eye Institute/NIH, Bethesda, MD
— 2:06 Q&A
— 2:27 Closing remarks

Room 609
Monday, May 02, 2016 1:00 PM-2:30 PM

253 NEI Grants Extramural Roundtable

This session is organized by the NEI Division of Extramural Research (DER) staff, in a new outreach format, to provide the community with the latest updates on the research programs, new initiatives, and changes in policies that will impact funding. Currently funded investigators and new applicants will have the opportunity to query NEI staff regarding future directions in vision research, and meet the DER staff to learn about the NIH grants submission, review, and funding processes.

— 1:00 An NEI update of grant policies and funding opportunities. Michael A. Steinmetz. Extramural Research, National Eye Institute, Bethesda, MD

Room 6A
Monday, May 02, 2016 1:00 PM-2:30 PM

Retina

254 Geographic Atrophy Secondary to AMD: A Discussion on Diagnosis, Classification and Management - SIG

Geographic atrophy (GA) due to AMD is a leading cause of severe visual loss. Relevant pathophysiological factors, revised classification schemes, functional and anatomical endpoints as well as potential therapeutic targets will be discussed.

Moderator: Frank G. Holz
Chairman’s Introduction. Frank G. Holz. Department of Ophthalmology, University of Bonn, Bonn, Germany *CR

Lessons from histopathology in Geographic Atrophy. Christine A. Curcio. Department of Ophthalmology, School of Medicine, University of Alabama at Birmingham, Birmingham, AL *CR

Classification of Geographic Atrophy: An Update from CAM. Srinivas R. Siddha. Doheny Eye Institute, Department of Ophthalmology, University of California, Los Angeles, CA *CR

Pitfalls in Differential Diagnosis of Geographic Atrophy. Giovanni Staurenghi. Eye Clinic, Department of Clinical Science “Luigi Sacco”, Luigi Sacco Hospital, University of Milan, Milan, Italy *CR

Current and Future Clinical Management of Geographic Atrophy Patients. Philip J. Rosenfeld. Department of Ophthalmology, Bascom Palmer Eye Institute, University of Miami Miller School of Medicine, Miami, FL *CR

Anatomical and Functional assessment in Geographic Atrophy. Frank G. Holz. Department of Ophthalmology, University of Bonn, Bonn, Germany *CR

Summary. Frank G. Holz. Department of Ophthalmology, University of Bonn, Bonn, Germany *CR

Room 618/620
Monday, May 02, 2016 1:00 PM-2:30 PM

Retina / Clinical/Epidemiologic Research

255 The role of quality assurance in improving outcomes for ocular telemedicine programs for diabetic retinopathy - SIG

Given the increasing utilization of telemedicine as an alternate means of assessing patients with diabetes for diabetic retinopathy, efforts should now focus on optimizing long-term outcomes with approaches including quality assurance benchmarks.

Moderator: Ingrid E. Zimmer-Galler

Quality assurance metrics and benchmarks in telemedicine diabetic retinopathy programs. Ingrid E. Zimmer-Galler. Clinical-Retina, Johns Hopkins Medical Institutions, Baltimore, MD

Validation of ocular telehealth diabetic retinopathy programs. Paolo S. Silva. Ophthalmology, Joslin Diabetes Center, Boston, MA

Achieving quality health care through quality assurance at the remote reading center. Mark B. Horton. Ophthalmology, Phoenix Indian Medical Center, Phoenix, AZ

Improving quality assurance and outcomes through integration with electronic health records. Yvonne Chu. Ophthalmology, Baylor College of Medicine, Houston, TX

Room Skagit 4/5, TCC
Monday, May 02, 2016 1:00 PM-2:30 PM

Visual Neuroscience / Biochemistry/Molecular Biology / Genetics / Retina / Visual Neuroscience

256 Dissection of retinal signaling studying congenital stationary night blindness - SIG

Congenital stationary night blindness (CSNB) a clinically and genetically non progressive retinal disorder with different retinal pathways affected. Clinics, genetics, proteomics and potential treatment of CSNB will be discussed.

Moderator: Christina Zeitz
Gene defect identification in patients with CSNB. Christina Zeitz. Sorbonne Universités, UPMC Univ Paris 06, INSERM, CNRS, Institut de la Vision, 75012 Paris, France

The variety of phenotypes found in patients with CSNB. Isabelle S. Audo. Sorbonne Universités, UPMC Univ Paris 06, INSERM, CNRS, Institut de la Vision, CHNO des Quinze-Vingts, DHU Sight Restore, INSERM-DHOS CIC, 75012 Paris, France, UCL-Institute of Ophthalmology, London, United Kingdom

Contribution of mouse models to understanding of CSNB. Neal S. Peaches. Department of Ophthalmic Research and the Cole Eye Institute, Cleveland, OH

Degrading vision with too much calcium - role of Cav1.4 L-type calcium channels. Alexandra Koschak. University of Innsbruck, Innsbruck, Austria

Night blind mice and depolarizing bipolar cell function. Ronald G. Gregg. University of Louisville, Louisville, KY

This SIG will explore the role of tissue stiffness in the physiology and pathophysiology of the trabecular meshwork (TM)/Schlemm’s Canal (SC) and sclera/optic nerve head (ONH) in aging and glaucoma. The wisdom and approach to therapeutically manipulating stiffness in the TM/SC and sclera/ONH will be debated.

Moderator: Gunther R. Schlunck

Panelist. Claude F. Burgoyne. Devers Eye Institute, Portland, OR

Tissue Stiffness changes in scera and optic nerve head. C R. Ethier. Georgia Institute of Technology, Atlanta, GA

Panelist. Harry A. Quigley. Wilmer Eye Institute, Johns Hopkins University, Baltimore, MD

Tissue stiffness changes in trabecular meshwork and Schlemm’s canal. W D. Stamer. Duke University, Durham, NC

Panelist. Ernst R. Tamn. Institute of Human Anatomy & Embryology, University of Regensburg, Regensburg, Germany

Organizer. Gunther R. Schlunck. Eye Center, Medical Center - University of Freiburg, Freiburg, Germany

Room Tahoma 3, TCC

Monday, May 02, 2016 1:00 PM-2:30 PM

Retinal Cell Biology

258 Crosstalk in the retina: the RPE communication hub - SIG

The SIG will address the role of the RPE in communication between the choriocapillaris and retina. We will consider how changes to Bruch’s membrane, exposure to the complement system and metabolic stress impinge on RPE regulatory functions.

Moderator: Aparna Lakkaraju


Choroid endothelial cells secrete factors that regulate RPE tight junctions through modulation of Bruch membrane assembly. Enrique J. Rodríguez-Boulan. Weill Cornell Medical College, New York, NY

Recycling of metabolites from ingested photoreceptor outer segments, a process critical for cell function. Kathleen Battaglia. University of Pennsylvania, Philadelphia, PA

Panelist. David Williams. Jules Stein Eye Institute, UCLA David Geffen School of Medicine, Los Angeles, CA

Room Tahoma 4, TCC

Monday, May 02, 2016 1:00 PM-2:30 PM

Multidisciplinary Ophthalmic Imaging Group

259 Advanced Computational Imaging: Big Datasets, Trends and Predictive Analysis - SIG

OCT angiography is a rapidly developing technology to non-invasively image and measure retinal, choroidal, and optic nerve blood flow. This forum discusses technological approaches, disease applications, and clinical interpretation.

Moderator: Karin Roesch

Panelist. Karin Roesch. MIT Media Lab, MIT, Cambridge, MA

Panelist. Ramesh Raskar. MIT Media Lab, MIT, Cambridge, MA

Panelist. Koen Vermeer. Rotterdam Ophthalmic Institute, Rotterdam, Netherlands *CR

Panelist. Sebastian M. Waldstein. Ophthalmology, Medical University of Vienna, Vienna, Austria *CR

Crowdsourcing recruits distributed human intelligence for tasks too complex for artificial intelligence. It has been used to map the connectome of retinal neurons, and to rapidly identify glaucoma and diabetic retinopathy. What can it do for you?

Moderator: Christopher J. Brady

Why would someone grade a retinal photograph for $0.10? Christopher J. Brady. Wilmer Eye Institute, Bethesda, MD

Moving from individual grades to the wisdom of the crowd; statistical considerations when working with crowdsourced data. Xiangrong Kong. Bloomberg School of Public Health, Baltimore, MD

Early challenges with glaucoma and the need for specialized tutorials to grade optic nerve images. Xueyang Wang. Wilmer Eye Institute, Bethesda, MD
Monday – CATT Study

Room 6B

Monday, May 02, 2016 2:45 PM-4:15 PM

261 Two NEI Clinical Trials on Anti-VEGF Therapy for Neovascular AMD and Diabetic Retinopathy

The Comparison of AMD Treatment Trials (CATT) research group will present five-year results in patients with AMD and choroidal neovascularization treated with anti-VEGF. The Diabetic Retinopathy Clinical Research Network (DRCRnet) group will present results from a randomized clinical trial comparing scatter photocoagulation with anti-VEGF for proliferative diabetic retinopathy.

Outcomes Five Years After Initiating Anti-VEGF Treatment for Neovascular AMD in the Comparison of AMD Treatments Trials (CATT): Speakers will provide detailed descriptions of visual acuity and morphological outcomes in eyes five years after the initiation of anti-VEGF treatment for neovascular AMD.

Diabetic Retinopathy Clinical Research Network (DRCRnet): Recent Results from Randomized Clinical Trials: Presenters will describe two-year efficacy and safety results from a randomized clinical trial comparing anti-VEGF treatment versus panretinal photocoagulation for eyes with proliferative diabetic retinopathy. Additionally, speakers will present data from a randomized clinical trial comparing aflibercept, bevacizumab and ranibizumab for diabetic macular edema.

CATT Presentations:
— 2:45 Adam R. Glassman
— 2:45 Jeffrey M. Gross
— 2:45 John A. Wells III
— 2:45 Lee M. Jampol

DRCR Presentations:
— 2:45 Daniel F. Martin
— 2:45 Glenn J. Jaffe

The Commercial Relationships (CR) Index for Disclosures and the Clinical Trial (CT) Registration Index are at arvo.org/amindices.
Exhibit/Poster Hall

Monday, May 02, 2016 2:45 PM-3:45 PM

262 All Posters / Networking

All presenters will be at their posters.

* Refer to the Program Number in the Clinical Trial (CT) Registration Index.  *CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
Monday, May 02, 2016 3:45 PM-5:30 PM

Glucoma

263 Tele glucoma

Moderators: Lisa A. Hark and Brian J. Song

2274 – 3:45 Machine Learning for Optic Disc Evaluation: Modelling the Gone dataset. Jason Ha1, B. Aliahmad2, Y. Kong2, M. Coote3, M. Sarosyy4, Monash University, Doncaster, VIC, Australia; RMIT University, Melbourne, VIC, Australia; ‘Centre for Eye Research Australia, Royal Victorian Eye and Ear Hospital, East Melbourne, VIC, Australia; Department of Surgery, University of Melbourne, Melbourne, VIC, Australia

2275 – 4:00 Crowdsourcing to evaluate fundus photos for the presence of glaucoma. Xueyang Wang1, L. I. Mudi1, B. Mani1, C. Cheng2, D. S. Friedman3, C. J. Brady3, ’Wilmer Eye Institute, Johns Hopkins School of Medicine, Baltimore, MD; Singapore Eye Research Institute, Singapore National Eye Center, Singapore, Singapore; Duke-NUS Graduate Medical School, Singapore, Singapore


2277 – 4:30 Comparison of iPAD-Based Visual Function Tests for the Detection of Early Manifest Glaucoma. Meredith Kim1, A. Rent1, P. Bex1, M. Gardiner1, C. Kloek1, R. Chang2, L. Shen2, A. Turaba1, L. R. Pasquale2, B. J. Song3, ’George Washington University School of Medicine, Washington, DC; ’Ophthalmology, Harvard Medical School, Boston, MA; Ophthalmology, Massachusetts Eye and Ear Infirmary, Boston, MA; College of Science, Northeastern University, Boston, MA


2279 – 5:00 Performance Evaluation of a Novel Computer-Based Self-Administered Visual Field Screening Test for Glaucoma. Emmanouil Tsimas1, C. Fenerty1, R. Harper1, T. Aslam1, D. Henson1, ‘Institute of Human Development, University of Manchester, Manchester, United Kingdom; ’Manchester Royal Eye Hospital, Manchester, United Kingdom

2280 – 5:15 Photopic Negative Response Obtained Using a Handheld Electroretinography (ERG) Device: Repeatability and Comparison with Optical Coherence Tomography in Glaucoma. Zhichao Wu1, X. Hadous1, M. Sarosyy2, J. G. Crowston3, ’Ophthalmology, Department of Surgery, The University of Melbourne, Melbourne, VIC, Australia; ’Centre for Eye Research Australia, Royal Victorian Eye and Ear Hospital, East Melbourne, VIC, Australia

2281 – 3:45 Early glaucomatous damage is missed by standard metrics of the 24-2 visual field test and OCT circusmapparretilal nerve fiber layer thickness analysis. Donald C. Hood1, N. de Cuir1, C. de Morera1, R. Jarakeshetphop1, D. Wang1, L. Grillo1, J. M. Liebmann1, A. Thenappan1, D. Xin1, R. Ritch1, ’Psychology, Columbia University, New York, NY; ’Ophthalmology, Columbia University, New York, NY; ’Einhorn Clinical Research Center of Mount Sinai, New York Eye and Ear, New York, NY

2282 – 4:00 Early glaucoma detection using chromatic pupillometry. Raymond Najjar1, S. Sharma1, E. Atalay1, A. Rukmini2, M. Baskaran1, R. Husain1, G. Gooley2, T. Aung1, D. Miled1, ’Singapore Eye Research Institute, Singapore National Eye Center, Singapore, Singapore; ’Program in Neuroscience and Behavioral Disorders, Duke-National University of Singapore Graduate Medical School, Singapore, Singapore; ’EYE-ACP, Office of Academic, Clinical and Faculty affairs, Duke-NUS medical School, Singapore, Singapore; ’Department of Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore

2283 – 4:15 Differences Between Healthy and Glaucomatous Myopic Eyes Using Automated Determination of Beta Peripapillary Atrophy Zone with Intact Bruch’s Membrane. Patricia Isabel C. Manalastas1, A. Belghith2, J. B. Jonas3, M. Sub4, A. Yarmohammadi1, R. N. Weinreb1, F. A. Medeiros5, L. M. Zangwill1, ’Ophthalmology, Ruprecht-Karls-University of Heidelberg, Heidelberg, Germany; ’Ophthalmology, Hacendae Paik Hospital, Inje University, Busan, Korea (the Republic of); ’Ophthalmology, Hamilton Glaucoma Center, Shiley Eye Institute, Department of Ophthalmology, University of California, San Diego, San Diego, CA

2284 – 4:30 Investigating the relationship between changes in retinal nerve fiber layer (RNFL) thickness and visual field (VF) damage in glaucoma patients with existing visual field loss. Luke J. Saunders1, A. Li2, A. Belghith1, F. A. Medeiros5, J. L. Goldberg6, J. M. Liebmann7, C. A. Girkin3, C. Bond1, R. N. Weinreb1, L. M. Zangwill1, ’Hamilton Glaucoma Center, Department of Ophthalmology, University of California San Diego, San Diego, CA; ’Harkness Eye Institute, Columbia University Medical Center, New York, NY; ’School of Medicine, University of Alabama, Birmingham, AL; ’Byers Eye Institute, Stanford University, Palo Alto, CA

2285 – 4:45 Glaucoma Progression Detection at the Preperimetric Stage Through the Combination of Structural and Functional Information. Katie Lucy1, G. Wollstein2, H. Ishikawa1, L. Kagemann1, J. S. Schuman1, ’UPMC Eye Center, Eye and Ear Institute, Department of Ophthalmology, University of Pittsburgh School of Medicine, Pittsburgh, PA; ’Department of Bioengineering, Swanson School of Engineering, University of Pittsburgh, Pittsburgh, PA

2286 – 5:00 Macula Structure Function Relationships Incorporating the Stimulus Area. Nimesh B. Patel, R. S. Harwerth. Vision Science, University of Houston, Houston, TX

2287 – 5:15 The longitudinal relationship between rates of progressive retinal nerve fiber layer (RNFL) loss and driving performance in glaucoma. Andrew J. Tatham1, A. Diniz-Filho1, E. R. Boer3, F. A. Medeiros1, ’Princess Alexandra Eye Pavilion and Department of Ophthalmology, University of Edinburgh, Edinburgh, United Kingdom; ’Visual Performance Laboratory, Department of Ophthalmology, University of California San Diego, La Jolla, CA; ’Department of Ophthalmology and Otorhinolaryngology, Federal University of Minas Gerais, Belo Horizonte, Brazil

The Commercial Relationships (CR) Index for Disclosures and the Clinical Trial (CT) Registration Index are at arvo.org/amindices.
Room 611/612

Monday, May 02, 2016 3:45 PM-5:30 PM
Visual Psychophysics/Physiological Optics / Clinical/Epidemiologic Research / Eye Movements/Strabismus/Amblyopia/Neuro-Ophthalmology / Retina

265 Early visual experience - Minisymposium

Early visual experience guides the growth of neural and other visual system elements in important ways. The adult visual acuity, color discrimination, binocular vision, and other functions must develop. Some of these functions develop early, others take considerably longer. The development of visual functions impacts on a range of changes that occur after birth, from eye growth to minimize refractive error to progression of retinal degeneration.

Moderators: Ann E. Elsner and Rigmor C. Baraas

— 3:45 Introduction

2288 — 3:50 Time outdoors, light exposure, and refractive error. Donald O. Mutti. Ohio State University, Columbus, OH

2289 — 4:10 Retinal shape and structure of fovea due to development and growth. Christopher A. Clark. University of Indiana, Bloomington, IN

2290 — 4:30 The development of colour discrimination. Caterina Ripamonti. Cambridge Research Systems Ltd, Rochester, United Kingdom

2291 — 4:50 Development of visual acuity and visual sensitivity in human infants. Angela M. Brown. College of Optometry, Ohio State University, Columbus, OH

2292 — 5:10 The development of binocular function in infancy and early childhood. T. Rowan Candy. Indiana University, Bloomington, IN


2293 — 3:45 AAV-mediated gene augmentation restores retinal function and vision in the canine model of NPHS1 Leber congenital amaurosis. Gustavo D. Aguirre1, A. V. Cideciyan2, S. L. Boye1, S. Iwabé3, V. Dufour4, F. Pompeo Martinho5, L. M. Downs1, W. Hauswirth6, S. G. Jacobson5, W. A. Beltran2. 1Opthalmology, Univ of Penn Sch Veterinary Med, Philadelphia, Pa; 2Scheie Eye Institute, School of Medicine, University of Pennsylvania, Philadelphia, PA; 3Ophthalmology, College of Medicine, University of Florida, Gainesville, FL; 4RxGen Inc, Hamden, CT

2294 — 4:00 Intracorneal gene expression and functional safety evaluation following intravitreal delivery of cone specific GFP-expressing AAV vectors in nonhuman primates. Kathryn W. Woodburn6, S. J. Samuelsson5, S. Vijay6, T. W. Chalberg7, V. Woodley8, J. Atwood9, M. S. Lawrence10, M. Gasmii. 1Avalanche Biotechnologies, Menlo Park, CA; 2RxGen Inc, Hamden, CT

2295 — 4:15 Micro-RNA induced silencing of cytotoxic transgenes leads to increased recombinant adeno-associated virus (AAV) titers. Chris Reid1, 2, W. Hauswirth1, D. M. Lipniaski2, 2Ophthalmology, University of Florida, Gainesville, FL; 2Ophthalmology, Medical College of Wisconsin, Milwaukee, WI


2297 — 4:45 Long term vision results following retinal gene therapy for choroideremia. Robert E. MacLaren1, 2, T. L. Edwards3, 2, J. Jolly3, 2, A. R. Barnard3, K. Xue4, 2, S. Downes3, 2, G. E. Holder4, 2, G. C. Black4, A. J. Lotery3, A. Webster4, 2, M. Seabrod4. 2Nuffield Laboratory of Ophthalmology, University of Oxford, Oxford, UK; 2Oxford University Hospitals NHS Foundation Trust, Oxford Eye Hospital, Oxford, UK; 3UCL Institute of Ophthalmology, London, UK; 4Moorfields Eye Hospital, London, UK; 5University of Southampton, Southampton, UK; 6NHLI Imperial College, London, UK; 7CEDOC Nova Medical School, Lisbon, Portugal; 8University of Manchester, Manchester, United Kingdom

Refer to the Program Number in the Clinical Trial (CT) Registration Index.  *CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
2303 – 4:30  Viral double-strand RNA increases the membrane-associated mucin mRNA expression in immortalized corneal and conjunctival epithelium. *Turiko Bar1, 2*, T. Fukuyama1, C. Sotomoto1, S. Kinoshita1. 1Ophthalmology, Nantan General Hospital, Nantan, Japan; 2Ophthalmology, Kyoto Prefectural University of Medicine, Kyoto, Japan; 3Faculty of Life and Medical Sciences, Doshisha University, Kyotanabe, Japan; 4Frontier Medical Science and Technology for Ophthalmology, Kyoto Prefectural University of Medicine, Kyoto, Japan

2304 – 4:45  A New Clinical Score System to Classify the Severity of Limbal Stem Cell Deficiency. Carolina Aravana1, T. Bozkurt2, P. Chuephanich3, C. Supiyaphun4, F. Yu5, S. X. Deng6. 1University of California Davis, Davis, CA; 2Cell Biology and Human Anatomy, University of Oregon, Eugene, OR; 3School of Engineering Science, Simon Fraser University, Burnaby, BC, Canada; 4Biomedical Engineering, University of Southern California, Los Angeles, CA; 5Analytics, Duke Eye Center, Durham, NC; 6Biomedical Sciences, Doshisha University, Kyotanabe, Japan

2305 – 5:00  miRs-103/107 regulate macropinocytosis in limbal/corneal epithelia. Robert M. Lavker1, J. Park1, J. Katsnelson1, W. Yang2, C. He3, H. Peng4. 1Dermatology, Northwestern University, Chicago, IL; 2Rush Medical Center, Chicago, IL; 3Cell and Molecular Biology, Northwestern University, Chicago, IL

2306 – 5:15  Novel Nan conjugates for Gene Therapy Normalization of Controlled Human Diabetic Limbal Epithelial Cells. Andre A. Kramerov1, P. Gangalum2, H. Ding3, J. Y. Ljubimova4, A. V. Ljubimov1, 2, 5Biomedical Sciences, Cedars-Sinai Medical Center, Los Angeles, CA; 6Neurosurgery, Cedars-Sinai Medical Center, Los Angeles, CA

Room Tahoma 1/2, TCC

Monday, May 02, 2016 3:45 PM-5:30 PM

Multidisciplinary Ophthalmic Imaging Group

268 Innovations in Imaging

Moderators: Donald T. Miller, Mahnaz Shahidi and Ruikang K. Wang


2308 – 4:00  Motion-free 3-D Optical Coherence Tomography Imaging. Yiwel Chen, Y. Hong, S. Makita, Y. Yasuno. University of Tsukuba, Tsukuba, Japan *CR


2310 – 4:30  Parafocal cone photoreceptor imaging in infants and young children using an ultra-compact SLO/OCT handheld probe. Francesco LaRocca1, D. Nankivil2, T. Dubose3, C. A. Toth1, 2, S. Farsiu1, 3, J. A. Izatt1, 2, 5Biomedical Engineering, Duke University, Durham, NC; 6Ophthalmology, Duke University, Durham, NC *CR

2311 – 4:45  Adaptive optics SLO/OCT for phase sensitive retinal imaging. Michael Pincher1, F. Felberer2, M. Sakas2, R. Haindl2, B. Baumann2, A. Wartak3, C. K. Hittenberger, Center for Medical Physics and Biomedical Engineering, Medical University of Vienna, Vienna, Austria *CR

2312 – 5:00  Clinical-grade Adaptive Optics Swept Source Optical Coherence Tomography. Myeong Jin Ju1, S. Lee1, M. Heisler1, R. J. Zawadzki2, S. Bonora3, Y. Jian4, M. V. Sarunic1. 1School of Engineering Science, Simon Fraser University, Burnaby, BC, Canada; 2Department of Cell Biology and Human Anatomy, University of California Davis, Davis, CA; 3CRNI Institute for Photonics and Nanotechnology, Padova, Italy

— 5:15  MOI business meeting

Room Tahoma 3, TCC

Monday, May 02, 2016 3:45 PM-5:30 PM

Retina

269 Diabetic Macular Edema Treatment

Moderators: Lee M. Jampol and Milam A. Brantley

2313 – 3:45  Consistency of visual acuity response to anti-VEGF therapy in diabetic macular edema patients: An analysis of DRCRnet Protocol I data. Scott M. Whitcup1, J. Campbell1, N. Holekamp2, 3, S. Kiss4, A. Loewenstein4, 5, A. J. Augustin6, A. C. Ho7, V. Gonzalez7, V. Shih8, A. Orejudos8, P. U. Dugel8, 9. 1Allergan plc, Irvine, CA; 2Pepose Vision Institute, St. Louis, MO; 3Washington University School of Medicine, St. Louis, MO; 4Weill Cornell Medical College, New York, NY; 5Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel; 6Tel Aviv Medical Center, Tel Aviv, Israel; 7Staedisches Klinikum Karlsruhe, Karlsruhe, Germany; 8Valley Retina Institute, McAllen, TX; 9Retinal Consultants of Arizona, Phoenix, AZ; 10Keck School of Medicine, University of Southern California, Los Angeles, CA; 11AkriVista, LLC, Mission Viejo, CA; 12Wills Eye Hospital, Philadelphia, PA *CR

2314 – 4:00  The top 10 findings from the RIDE/RISE trials of ranibizumab in patients with diabetic macular edema. Rishi P. Singh1, L. Tuomi2, I. Stoilov1. 1Department of Ophthalmology, Cole Eye Institute, Cleveland, OH; 2Genentech, Inc., South San Francisco, CA *CR

2315 – 4:15  Prospective Trial Comparing Ranibizumab Monthly to Treat & Extend With & Without Angiography-Guided Laser for DME: TREX-DME 1 Year Outcomes. John Payne1, C. C. Wykoff2, W. L. Clark3, B. B. Bruce4, D. M. Brown5, D. S. Boyer6. 1Palmetto Retina Center, West Columbia, SC; 2Ophthalmology, Emory University, Atlanta, GA; 3Retina Consultants of Houston, Houston, TX; 4Retina-Vitreous Associates Medical Group, Los Angeles, CA *CR

2316 – 4:30  Shape Discrimination Hyperacuity (SDH) Improvement After Treatment of Diabetic Macular Edema (DME): One-Year Results of the DRAMA Study. Yi-Zhong Wang1, 2, Y. He3, K. G. Csaky4, L. Rodriguez5, P. Mejia2, S. Zhang6, M. B. Bartlett4. 1Retina Foundation of the Southwest, Dallas, TX; 2Ophthalmology, UT Southwestern Medical Center, Dallas, TX; 3Texas Retina Associates, Dallas, TX; 4Clinical Sciences, UT Southwestern Medical Center, Dallas, TX; 5Vital Art & Science, LLC, Richardson, TX *CR

Room Tahoma 4, TCC
Monday, May 02, 2016 3:45 PM-5:30 PM
Biochemistry/Molecular Biology

270 Ocular transcriptomics

Moderators: J. M. Nickerson, Neena B. Haider and Rinki Ratnapriya

2320 — 3:45 RNA editing shows differences between macular and peripheral regions of human retina and supporting tissues. David Cho', C. A. Curcio', D. Stambolian'', M. Li', Ophthalmology, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA; ''Biostatistics and Epidemiology, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA; ''University of Alabama at Birmingham, Birmingham, AL *CR

2321 — 4:00 A high-resolution view of the human retina miRNome. Sandro Banfi', M. Karali', M. Persico', M. Maturilli', A. Carissimo', M. Pizzo', C. Ambrosio', M. Pinelli', D. di Bernardo'. 1Telethon Institute of Genetics and Medicine, Pozzuoli (NA), Italy; 2Biochemistry, Biophysics and General Pathology, Second University of Naples, Naples, Italy

2322 — 4:15 Retinal transcriptome signatures associated with age-related macular degeneration. Rinki Ratnapriya', A. Walton', M. Starostik', S. R. Montezuma', D. A. Ferrington', A. Swaroop'. 1Neurobiology Neurodegeneration & Repair Laboratory, National Eye Institute, Bethesda, MD; 2Department of Ophthalmology & Visual Neurosciences, University of Minnesota, Minneapolis, MN

2323 — 4:30 Transcriptional control of glaucoma pathogenesis. Dorota Skovronska-Krawczyk, L. Zhao, J. Zhu, C. Wen, M. Jafari, S. Patel, M. Ai, R. N. Weinreb, K. Zhang, Ophthalmology, University of California San Diego, La Jolla, CA

2324 — 4:45 Identifying Signature Profiles of Transcription Factors in Human and Mouse Models of Retinal Disease. Ana Maria Olivarres', J. Veira', K. Flattery', M. Morrisson', M. M. D'Angelis', N. B. Haider'. 1Dept of Ophthalmology, Schepens Eye Research Institute/Massachusetts Eye and Ear, Boston, MA; 2Dept of Ophthalmology, Harvard Medical School, Boston, MA; 3Department of Physiology, Ophthalmology and Visual Science, University of Utah, Salt Lake City, UT; 4John A. Moran Eye Center, Center for Translational Medicine, Salt Lake City, UT

2325 — 5:00 Microarray analysis of microRNA expression patterns involved in Aβ-induced retinal degeneration. Peirong Huang', T. Liu', X. Luo', X. Sun'. 1Shanghai First People’s Hospital, Shanghai Jiaotong University, Shanghai, China; 2Shanghai Jiao tong University, Shanghai, China., 3Geriatric Institute of Chinese Medicine, Longhua Hospital, Shanghai University of Traditional Chinese Medicine, Shanghai, China


Room Tahoma 5, TCC
Monday, May 02, 2016 3:45 PM-5:30 PM
Cornea

271 Corneal Surgery; non-refractive

Moderators: Anthony J. Aldave and Sophie X. Deng


2328 — 4:00 Ultraviolet A/Riboflavin Collagen Cross-linking for Conjunctiva. Ahmad Kheirkhah', V. K. Raju', P. Hamrah', R. Dana'. 1Massachusetts Eye and Ear Infirmary, Boston, MA; 2West Virginia University, Morgantown, WV; 3Tufts Medical Center, Boston, MA *CR


Monday – Papers/Minisymposium – 2318 – 2333


2332 — 5:00 Refractive outcomes after descemet stripping automated endothelial keratoplasty surgery associated with graft thickness. Natalie Cheung. Cornea, Wills Eye Hospital, Philadelphia, PA

Moderator: Paul G. McMenamin

2334 — A0001 Interrelationship of primary virus replication in the eye, level of latency and time to reactivate in the trigeminal ganglia (TG) of latently infected mice. Homayon Ghiasi1, K. Mort1, S. Allen1, Y. Ghiasi1, T. Town1, S. Wechsler3, R. Brandt1, A. W. Kolb1, K. Lee2, M. W. Craven2. Involved in Viral Regulatory and Innate Immune Interrelationship of primary infections of latently infected mice. Sinai Medical Center, Los Angeles, CA; 3USC, Los Angeles, CA; 2USC, Los Angeles, CA; UCI, Irvine, CA


2337 — A0004 1 Benzalkonium Chloride (BAK) & An Effective Antiviral against Adenovirus? Eric G. Romanowski, K. A. Yates, R. M. Shanks, R. P. Kowalski. The Charles T. Campbell Ophthalmic Microbiology Laboratory, UPMC Eye Center, Ophthalmology and Visual Sciences Research Center, Eye and Ear Institute, Department of Ophthalmology, University of Pittsburgh School of Medicine, Pittsburgh, PA

2338 — A0005 Diagnosis cytomegalovirus anterior uveitis/endothelitis in immunocompetent patients. Laure E. Caspers1, J. Antoon1, J. de Groot-Mijnes2, E. Motulsky3, N. Dan-van Loon1, F. Willerman1, L. Judicke Velvas2. 1Univ of Brussels-St Pierre Hosp, Brussels, Belgium; 2Ophthalmology, CHU St Pierre, Brussels, Belgium; 3Université Libre de Bruxelles, Brussels, Belgium; 4University Medical Center Utrecht, Utrecht, Netherlands

2339 — A0006 QTL Based Virulence Determinant Mapping of the HSV-1 Genome in Murine Ocular Infection Reveals Genes Involved in Viral Regulatory and Innate Immune Networks that Contribute to Virulence. Curtis R. Brandt1, A. W. Kolb1, K. Lee1, M. W. Craven1. 1Ophthal & Visual Sci, Univ of Wisconsin-Madison, Madison, WI; 2Dept of Biostatistics and Medical Informatics, UW-Madison, Madison, WI

2340 — A0007 In vitro evaluation of anti HSV-1 siRNAs and in vivo evaluation of electropropagation to transfect siRNAs on murine cornea. Antoine Roussene1, V. Escrivou2, P. Roy3, N. Poccard1, J. Takissian1, Y. Gaudin1, P. Bigey2, M. Labedoutte1. 1Ophthalmology, Bicêtre Hospital, Le Kremlin Bicetre, France; 2Pharmacologie moleculaire et genetique, Unité des Technologies Chimiques et Biologiques de la Santé CNRS UMR 8258-Inserm U1022, Paris, France; 3Virologie, Institut de Biologie Integrative de la cellule, Gif-Sur-Yvette, France; 4OPIA SAS Technologies, Paris, France

2341 — A0008 Human Leukocyte Antigen Associations with Cytomegalovirus Anterior Uveitis. Jay J. Siak1,2, N. Yawata1, A. Jansen1, S. Waduthantri3,2, A. Chan1,2, G. Cheung1,2, S. Chee1,2. 1Singapore National Eye Centre, Singapore; 2Singapore Eye Research Institute, Singapore, Singapore; 3Singapore Eye Research Institute, Singapore, Singapore

2342 — A0009 Reducing the concentration and irradiation time of rose bengal-mediated photodynamic antimicrobial therapy for inhibition of fungal keratitis isolates. Alejandro Arboleda1, N. Belhan1, H. A. Durke1, M. C. Aguilar1, K. A. Alawa1, F. Halli1, C. Rowan1, G. Amescua2, H. W. Flynn2, D. Miller1, J. A. Parel4. 1Ophthalmic Biophysics Center, Department of Ophthalmology, Bascom Palmer Eye Institute, University of Miami Miller School of Medicine, Miami, FL; 2Anne Bates Leach Eye Hospital, Department of Ophthalmology, Bascom Palmer Eye Institute, University of Miami Miller School of Medicine, Miami, FL; 3Ocular Microbiology Laboratory, Department of Ophthalmology, Bascom Palmer Eye Institute, University of Miami Miller School of Medicine, Miami, FL; 4CHU Sart-Tillman, Department of Ophthalmology, University of Liege, Liege, Belgium

2343 — A0010 Photodynamic Antimicrobial Therapy to inhibit P Furaceiillum 1luminum, Pseudallescheria boydii and Cochliobolus lunatus isolates. Nidhi Relhan1, A. Arboleda1, H. A. Durke1, M. C. Aguilar1, K. A. Alawa1, C. Rowan1, G. Amescua2, D. Miller1, H. W. Flynn2, J. A. Parel4. 1Ophthalmic Biophysics Center, Department of Ophthalmology, Bascom Palmer Eye Institute, University of Miami Miller School of Medicine, Miami, FL; 2Anne Bates Leach Eye Hospital, Department of Ophthalmology, Bascom Palmer Eye Institute, University of Miami Miller School of Medicine, Miami, FL; 3CHU Sart-Tillman, Department of Ophthalmology, University of Liege, Liege, Belgium

2344 — A0011 Cereolysin O influences TLR4-dependent retinal gene expression during Ba ccill us cereus endophthalmitis. Phillip S. Coburn1, F. C. Miller2,3, C. Land1, A. L. LaGrow1, M. Callegari1. Ophthalmology, The Univ of Oklahoma Hlth Sci Ctr, Oklahoma City, OK; 2Microbiology and Molecular Genetics, Oklahoma State University, Stillwater, OK; 3Cell Biology, The Univ of Oklahoma Hlth Sci Ctr, Oklahoma City, OK; 4Family and Preventative Medicine, The Univ of Oklahoma Hlth Sci Ctr, Oklahoma City, OK

2345 — A0012 Microbial Keratitis in North Texas: Public and Private Patient Populations. David Truong, H. D. Cavanagh. UT Southwestern Medical Center, Dallas, TX

2346 — A0013 Global gene expression in ocular isolates of Escherichia coli with potential to form biofilm. Shivaji Sisinthy1, R. Konduri2, A. Kottakonda2, R. Satyanarayana Gundlapally1, S. Sharma1. 1V.Prasad Eye Institute, Hyderabad, India; 2ICMB, Hyderabad, India

2347 — A0014 Role of Pseudomonas aeruginosa Condensins in Corneal Infection. Michelle Callegari1, P. S. Coburn1, H. Zhao1, V. V. Rybenko1. 1Ophthalmology, University of Oklahoma Health Sciences Center, Oklahoma City, OK; 2Microbiology/Immunology, University of Oklahoma Health Sciences Center, Oklahoma City, OK; 3Chemistry and Biochemistry, University of Oklahoma, Norman, OK

2348 — A0015 In Vitro Antibiotic Susceptibility of Ocular Pathogens Collected from the Aqueous and Vitreous Humor during the ARMOR Surveillance Study. Penny A. Ashbell1, H. H. DeCory2, D. F. Sahn2, C. M. Sanfilippo2. 1Ophthalmology, Icahn School of Medicine at Mount Sinai, New York, NY; 2Medical Affairs, Bausch + Lomb, Rochester, NY; 3IHMA, Inc, Schaumburg, IL


2350 — A0017 Granulicatella Adiacens bleb-associated endophthalmitis. Samuel Yun, M. Kesen. Ophthalmology, WVU Eye Institute, Morgantown, WV

2352 — A0019 Carragenan - a natural inhibitor of ocular chlamydial infection in vitro and in vivo. Nadine Schuerer1, E. Stein2, A. Inci-Kanada1, S. Belij1, M. Stojanovic1, J. Montanaro1, E. Ghasebian1, E. Marinovic2, A. Filipovic2, T. Barisani-Asenbauer1, 3OCUAC - Laura Bassi, Center for Pathophysiology, Infectiology and Immunology, Medical University Vienna, Vienna, Austria; 2Department of Research and Development, Institute of Virology, Vaccines and Sera - TORLAK, Belgrade, Serbia

2353 — A0020 Clinical manifestations and challenge of ocular tuberculosis in Mexican population. Erick Rebollo Ledezma1, R. Dalli2, R. Bobadilla1, M. Pedroza-Seres1, 2, 3Ophthalmology, Fundación Conde de Valenciana, Mexico, Mexico; 4Uveitis, Clinica de Retina, Guadalajara, Mexico

2354 — A0021 Methicillin-Resistant Staphylococcus Keratitis in a Referral Ophthalmology Center. Ismael Avila-Lule1, A. Terán-Tejada2, N. Ramos Betancourt1, J. D. Rodríguez-Pedroza1, F. Beltrán-Díaz De La Vega1, E. Hernandez-Quintela1. 1Asociación para Evitar la Ceguera en México. Hospital “Dr. Luis Sánchez Bulnes”, Mexico City, Mexico; 2Cornea and Refractive Surgery, Asociación para Evitar la Ceguera en México, Hospital “Dr. Luis Sánchez Bulnes”, Mexico City, Mexico

Monday, May 02, 2016 3:45 PM-5:30 PM

Exhibit/Poster Hall A0084-A0129

Cornea

273 Corneal Extracellular matrix and biomechanics

Moderators: Thomas A. Fuchsluger and Andrew J. Huang

2355 — A0084 Identifying the role of PDGFRA in the fibrotic pathway of TGF-β3. Srinivas Sriram1, 2, J. A. Tran1, X. Q. Guo1, 2, H. Lei1, 3A. Kazlauskas1, 3J. D. Zieske1, 3Schepens Eye Research Institute/MEE, Boston, MA; 4Ophthalmology, Harvard Medical School, Boston, MA

2356 — A0085 Utility of TGFBI screening in the diagnosis of suspected paraneoplastic keratopathy. Marina Zakharevich1, T. Mannis2, G. Mannis1, J. Rose-Nussbaumer1, A. J. Alldave1, 1Stein Eye Institute, Los Angeles, CA; 2University of California San Francisco, San Francisco, CA

2357 — A0086 p38/TGFβ-signaling pathway involved in induction of thrombospondin-1 in human corneal fibroblasts. A. E. Hutcheon1, 2, X. Q. Guo1, 2, S. Sriram1, 2, J. A. Tran1, J. D. Zieske1, 2, Audrey E. Hutcheon1, 2, 3Schepens Eye Research Institute/MEE, Boston, MA; 4Ophthalmology, Harvard Medical School, Boston, MA

2358 — A0087 Comparison of human corneal fibroblasts cultured in human or fetal bovine serum in an in vitro 3D model. Wenjing Wi1, 2, S. Priyadarshini3, J. D. Zieske1, 2, D. Karamichos1, 4, 1Schepens Eye Research Institute/MEE, Boston, MA; 2Ophthalmology, Harvard Medical School, Boston, MA; 3Ophthalmology/Dean McGee Eye Institute, University of Oklahoma Health Sciences Center, Oklahoma City, OK; 4Cell Biology, University of Oklahoma Health Sciences Center, Oklahoma City, OK

2359 — A0088 RAFT tissue equivalent model of keratoconus: A novel 3D system useful for interrogating disease phenotype and functional differences of corneal stromal cells. Alvena Kureishi1, C. Patur1, J. Phillips1, J. L. Funderburgh1, J. T. Danis1, 1Institute of Ophthalmology, University College London, London, United Kingdom; 2UCL Eastman Dental Institute, London, United Kingdom; 3University of Pittsburgh, Pittsburgh, PA

2360 — A0089 The distribution of elastic fibres in keratoconic corneas using en bloc tunicic acid and orcein staining. Tomas L. White1, P. N. Lewis2, J. Mannis3, 1Staphylococcus Keratitis in a Referral Ophthalmology Center.

2361 — A0090 Collagen-Protocelgan Interactions in the Corneal Stroma: A Computer Simulation. Carlo Knupp, R. D. Young, A. J. Quantock, K. M. Meek. 1Cardiff University, Cardiff, United Kingdom

2362 — A0091 Collagen-Proteolytic Matrix Scaffolds for Corneal Regeneration. Scott Matthyssen. 1Materials for Living Systems, University of Antwerp, Antwerp, Belgium; 2Advanced Manufacturing laboratory, Department of Materials Engineering, KU Leuven, Leuven, Belgium; 3Materials for Living Systems, Department of Materials Engineering, KU Leuven, Leuven, Belgium; 4Ophthalmology, Antwerp University Hospital, Edegem, Belgium


2364 — A0093 Chitosan membrane-cultivated keratocyte spheres suppress stromal fibrosis via inhibition of epithelial mesenchymal transition (EMT). Chi-Chin Sun1, 2, K. Lee1, J. S. Pang3, 1Department of Ophthalmology, Chang Gung Memorial Hospital, Keelung, Keelung, Taiwan; 2Department of Chinese Medicine, School of Medicine, Chang Gung University, Taoyuan, Taiwan; 3Institute of Clinical Medical Sciences, Chang Gung University, Taoyuan, Taiwan

2365 — A0094 Confocal microscopy findings after 3 different techniques: epi-off, trans-epithelial and iontophoresis-assisted cross-linking. Manuel Ramirez, E. Cabrera, E. Hernandez-Quintela. Cornea and Refractive Surgery, APEC, Mexico City, Mexico

2366 — A0095 Human Stromal Lamellar Morphology and Its Relationship to Peripheral Thickness Change. Jan P. Bergmanson, C. Mosquessa, A. Burns. College of Optometry, University of Houston, Houston, TX

2367 — A0096 Differentiation of Normal Human Corneal Induced Pluripotent Stem Cells to Retinal Progenitor Cells. Roy Joseph1, O. P. Srivastava1, R. R. Pfister1, 1Ophthalmology, Univ of Alabama at Birmingham, Birmingham, AL; 2Vision Sciences, University Of Alabama at Birmingham, Birmingham, AL

2368 — A0097 Cellulose XIII is Present in the Corneal Stroma. Zsuzsanna Z. Orozs1, 2, A. Shenimir1, H. Bárány1, B. Nagy1, A. Faccská1, A. Berta1, A. Dávid1, L. Muszbek1, 2, 3Department of Ophthalmology, University of Szeged, Szeged, Hungary; 4Division of Clinical Laboratory Science, Department of Laboratory Medicine, University of Debrecen, Debrecen, Hungary; 5Department of Preventive Medicine, University of Debrecen, Debrecen, Hungary; 6Department of Pathology, University of Szeged, Szeged, Hungary; 7Department of Ophthalmology, University of Debrecen, Debrecen, Hungary; 8Thrombosis, Hemostasis and Vascular Biology Research Group of the Hungarian Academy of Sciences, University of Debrecen, Debrecen, Hungary

2369 — A0098 Investigation of the Corneal Biomechanics in Healthy Chinese Subjects Using a Corneal Visualization Scheimpflug Technology. Miao He1, H. Ding2, X. Zhong2, 1Zhongshan Ophthalmic Center, Sun Yat-sen University, Guangzhou, China; 2Hainan Eye Hospital, Zhongshan Ophthalmic Center, Sun Yat-sen University, Haikou, China

2370 — A0099 Comparative Study of the Effect of Pilocarpine and Tropicamide Eye Drops on Corneal Topography. Abbas Azimikhorasani, S. Mirzahoseini, J. Heraviun, A. Parizad. Mashhad University of Medical Sciences, Mashhad, Iran (the Islamic Republic of)

2371 — A0100 Depth-dependent extracellular matrix stiffness of the human cornea predicts spherical aberration induced by laser refractive surgery. Mengchen Xu1, 2, M. Buckley3, A. L. Lerner1, 2, G. Yoon1, 2, 1Mechanical Engineering, University of Rochester, Rochester, NY; 2Flaum Eye Institute, University of Rochester, Rochester, NY; 3Biomedical Engineering, University of Rochester, Rochester, NY

* Refer to the Program Number in the Clinical Trial (CT) Registration Index. *CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
2372 — A0101 Anisotropic Diffusion in the Corneal Stroma Measured by Three-Dimensional Fluorescence Recovery After Photobleaching. R Glenn Hepfer1, P. Chen1, G. Waring2, H. Yao.1 Bioengineering, Clemson University, Charleston, SC; Ophthalmology, Medical University of South Carolina, Charleston, SC.

2373 — A0102 Corneal Thickness is Positively Correlated with Tissue Elasticity by Elastography Imaging. Michael D. Twa1, S. Vantipalli1, M. Singh1, J. Li1, K. Larin1. Vision Science, University of Alabama at Birmingham, Birmingham, AL; Optometry, University of Houston, Houston, TX; Biomedical Engineering, University of Houston, Houston, TX.

2374 — A0103 Adhesion Strength of Descemet Membrane in Healthy and Diabetic Donor Corneas. Chaid Schwarz1, B. T. Aldrich2, K. Burckart3, G. Schmidt3, C. Reed3, Engineering, The University of Iowa, Iowa City, IA; Department of Ophthalmology and Visual Sciences, The University of Iowa, Iowa City, IA; Iowa Lions Eye Bank, Coralville, IA.

2375 — A0104 Decreased corneal biomechanical properties in children with osteogenesis imperfecta. Brenda L. Bohnsack, L. Lagrou, S. E. Moroi. University of Michigan, Ann Arbor, MI.


2377 — A0106 WST11-D and Near Infrared Red (NIR) light induces ex vivo- and in vivo corneal stiffening using low energy and short irradiation time. Jurriaan Brekelmans1,2, A. Goz1, A. Brands1, M. Dickman1, R. M. Nuijts1, A. Scherz1, A. Marocco1,3. Ophthalmology, University Eye Clinic Maastricht, Maastricht, Netherlands; Plant and Environmental Sciences, Weizmann Institute of Science, Rehovot, Israel; Ophthalmology, Kaplan Medical Center, Rehovot, Israel; Biological Services, Weizmann Institute of Science, Rehovot, Israel; *CR

2378 — A0107 Remodeling of the Cornea Induced by a Shape-Changing Hydrogel Inlay. Alan J. Lang1, A. Chayer1, E. Barragán-Garza1. R&D, ReVision Optics, Lake Forest, CA; Codet Vision Institute, Tijuana, Mexico; *Laser Ocular Hidalgo, Monterrey, Mexico; *CR

2379 — A0108 Retropathetic Membrane Formation in Boston Keratoprosthesis: A Case Control Matched Comparison of Titanium versus PMMA Back Plate. Joelle Hallak1, R. K. Talar1, J. De la Cruz1, M. S. Cortina1. Ophthalmology, University of Illinois at Chicago, Chicago, IL; Ophthalmology, Northwestern University, Chicago, IL; *CR


2381 — A0110 Biomechanical properties of the cornea measurement using Scheimpflug noncontact tomometry in aniridia patients. Bogumil Wozowa, D. Dobrowolski, D. Tarinavskia, E. Wylegalga. Railway Hospital Katowice. II School of Medicine with the Division of Dentistry in Zabrze Medical University of Silesia, Katowice, Poland.

2382 — A0111 Cross-linking biomechanical effect in human corneas by same energy, different UV-A fluence: an enzymatic digestion comparative evaluation. George Asimelis1,2, A. J. Kanellopoulos1,2. Kentucky College of Optometry, Pikeville, KY; LaserVision gr Clinical & Research Eye Institute, Athens, Greece; Ophthalmology, NY University, NY, *CR


2384 — A0113 The Mechanics of Corneal Deformation and Rupture for Penetrating Injury in the Human Eye. Andrew Rue1, S. Lovald1, S. Nissman1, J. McNulty1, J. Ochoa1, M. Baldwinson1. University of Pennsylvania Perelman School of Medicine, Scheie Eye Institute, Philadelphia, PA; Materials and Corrosion Engineering, Exponent, Inc., Menlo Park, CA; Biomedical Engineering Practice, Exponent, Inc., Philadelphia, PA; Google[X], Mountain View, CA; *CR

2385 — A0114 Comparison between the diagnostic ability of corneal Tomography and novel biomechanical parameters in keratoconus. Vishal Janjani1, T. Chan1, M. Yu1. Ophthalmology, Chinese Univ of Hong Kong, Kowloon, Hong Kong; Hang Seng Management College, Kowloon, Hong Kong.

2386 — A0115 Physical properties of electron-beam irradiated corneas stored in recombinant human serum albumin. Khoo D. Tran1,2, M. A. Terry3, C. Stoeger1. Lions VisionGift, Portland, OR; Devers Eye Institute, Portland, OR.

2387 — A0116 Hierarchical changes in corneal collagen structure under load. James S. Bell1, S. Hayes2, C. Whittord1, A. Elsheikh1, K. M. Meek1. 1Cardiff University, Cardiff, United Kingdom; 2University of Liverpool, Liverpool, United Kingdom.

2388 — A0117 3D Inflation Strains in Porcine Corneas. Keyton Claysou1,2, E. Pavlatos1, J. Liu1. 1Biomedical Engineering, The Ohio State University, Columbus, OH; 2Biophysics, The Ohio State University, Columbus, OH.

2389 — A0118 A Multicenter Study of Ocular Response Analyzer Custom Variables in Disqualified and Candidate Refractive Surgery Screening Patients. Vincieus S. De Stefano1,2, I. Seven1, J. B. Randeleman1, W. J. Dupps3, Cole Eye Institute, Cleveland Clinic, Cleveland, OH; Ophthalmology, Federal University of Sao Paulo, Sao Paulo, Brazil; *Emory Eye Center, Emory University, Atlanta, GA; *CR

2390 — A0119 A New Stiffness Parameter in Air Puff Induced Corneal Deformation Analysis. Cynthia J. Roberts1, A. M. Mahmoud1, J. Bons1, A. Hossain1, A. Elsheikh2, R. Vinciguerra3, R. Vinciguerra1,4, R. Ambrosio6,7. Ophthalmology & Visual Science; and Biomedical Engineering, The Ohio State University, Columbus, OH; Rio de Janeiro Corneal Tomography and Biomechanics Study Group, Rio de Janeiro, Brazil; Ophthalmology, Federal University of Sao Paulo, Rio de Janeiro, Brazil; Mechanical & Aerospace Engineering, The Ohio State University, Columbus, OH; School of Engineering, University of Liverpool, Liverpool, United Kingdom; Division of Ophthalmology, University of Insubria, Varese, Italy; Eye Center, Humanitas Clinical and Research Center, Rozzano, Italy; Vincieye Clinic, Milano, Italy; *CR

2391 — A0120 Assessment of biomechanical properties of porcine corneas with air-puff swept source OCT. Ewa C. Maczynska1, K. M. Karnowski1, B. Kaluzny2, I. Grulkowski3, M. D. Wojtkowski3. 1Faculty of Physics, Astronomy and Informatics, Nicolaus Copernicus University, Torun, Poland; 2Collegeium Medicum, Nicolaus Copernicus University, Bydgoszcz, Poland.

2392 — A0121 Two-photon fluorescence microscopy (TFM) and UVA transmission of cornea with HPMC and dextrin solutions prior to corneal crosslinking (CXL). Theo G Seiler1, T. Ehmkel1, I. Fischinger3, A. Heisterkamp, B. E. Frueh3. Universitätsklinik für Augenheilkunde, Inselspital Bern, Bern, Switzerland; 2IROC AG, Zuerich, Switzerland; 3Laserzentrum Hannover e.V., Hanover, Germany; Institut für Quantenoptik, Universität Hannover, Hanover, Germany.


2394 — A0123 Effect of cataract surgery on the biomechanical property of the cornea. Yoshiaki Kuchi1, Y. Nakao1, N. Ibata2, S. Nakakura2, R. Asaoka1, M. Aihara1. Ophthalmology, Hiroshima University, Minami-Ku, Japan; Department of Ophthalmology, Tsukazaki Hospital, Himeji, Japan; Department of Ophthalmology, The University of Tokyo, Tokyo, Japan.

[178] The Commercial Relationships (CR) Index for Disclosures and the Clinical Trial (CT) Registration Index are at arvo.org/amindices.
1Department of Ophthalmology, Nassau University Medical Center, East Meadow, NY; 2Laserson.  

2396 — A0125 Blood thyroid hormone levels and corneal topographical, topographical and biomechanical properties. Zsuzsa Flaskó1, E. Zemova1, T. Eppig1, I. Módis1, A. Langenbucher4, Z. Gatzioyfas2, N. Szentmáry3, A. Seitz1.
1Department of Ophthalmology, Kenézy Hospital, Debrecen, Hungary; 2Department of Ophthalmology, University Hospital Jena, Jena, Germany; 3Experimental Ophthalmology, Saarland University Medical Center, Homburg/Saar, Germany; 4Department of Ophthalmology, Debrecen Medical University Center, Debrecen, Hungary; 5Moorfields Eye Hospital, London, United Kingdom; 6Department of Ophthalmology, Semmelweis University, Budapest, Hungary  

2397 — A0126 New dynamic corneal biomechanical parameters derived from curvature versus pressure analysis of Ocular Response Analyzer (ORA) data. David Luce, Ophthalmic Consultants of Long Island, East Meadow, NY  


1Biomedical Engineering, Exponent, Menlo Park, CA; 2School of Optometry, University of Pennsylvania Perelman School of Medicine, Philadelphia, PA; 3Mechanical Engineering, Exponent, Boulder, CO; 4Materials and Corrosion Engineering, Exponent, Menlo Park, CA; 5Google[x], Mountain View, CA  

1School of Optometry, The Hong Kong Polytechnic University, Hong Kong, China; 2Department of Mechanical and Aerospace Engineering, The Hong Kong University of Science and Technology, Hong Kong, China; 3Department of Ophthalmology, Eye Institute, University of Pennsylvania, Philadelphia, PA  

Monday Posters
3:45 pm – 5:30 pm

Exhibit/Poster Hall A0216-A0246
Monday, May 02, 2016 3:45 PM-5:30 PM

Anatomy and Pathology/Oncology

2401 — A0216 Epidemiology of Ocular Surface Squamous Neoplasia in an Ophthalmology Center in Mexico City. Nallely Ramos Betancourt1, J. D. Rodríguez-Pedraza1, A. Rodríguez-Reyes2, F. Beltrán-Díaz De La Vega1, A. Terán-Tejada3, E. Hernandez-Quintela1.  
1Cornea and Refractive Surgery, Asociación Para Evitar la Ceguera, Hospital “Dr. Luis Sánchez Bulnes”, Mexico City, Mexico; 2Ocular Pathology, Asociación para Evitar la Ceguera en México, Hospital “Dr. Luis Sánchez Bulnes”, Mexico City, Mexico  

Ocular Oncology, Wills Eye, Philadelphia, PA  

2403 — A0218 Melanocytic Conjunctival Lesions in a High Referral Ophthalmology Center in Mexico City. Laura A. González-Díbido1, J. D. Rodríguez-Pedraza2, N. Ramos Betancourt1, A. Rodríguez-Reyes1, A. Terán-Tejada3, F. Beltrán-Díaz De La Vega1, E. Hernandez-Quintela1.  
1Asociación para Evitar la Ceguera en México, Hospital “Dr. Luis Sánchez Bulnes”, Mexico City, Mexico; 2Cornea and Refractive Surgery, Asociación Para Evitar la Ceguera en México, Hospital “Dr. Luis Sánchez Bulnes”, Mexico City, Mexico; 3Ocular Pathology, Asociación para Evitar la Ceguera en México, Hospital “Dr. Luis Sánchez Bulnes”, Mexico City, Mexico  

1Ophthalmology, Leiden University Medical Center, Leiden, Netherlands; 2Pathology, Leiden University Medical Center, Leiden, Netherlands; 3Gynecology, VU University Medical Center, Amsterdam, Netherlands  

1Ophthalmology, The University of Ottawa, Ottawa, ON, Canada; 2Pathology & Laboratory Medicine, The University of Ottawa, Ottawa, ON, Canada  

1Department of Ophthalmology and Eye Hospital, University Cologne, Cologne, Germany; 2Institute of Pathology, University Hospital of Cologne, Cologne, Germany  

Ophthalmology, University Hospital of Cologne, Cologne, Germany  

Ocular Pathology, The Henry C. Wiltson Ocular Pathology Laboratory, Sao Paulo, Brazil  

2409 — A0224 Treatment of nodular conjunctival squamous neoplasia at UCFS. Andrew A. Kao, A. Afshar, B. E. Damato.  
Ophthalmic Consultants of Long Island, East Meadow, NY  

2410 — A0225 Expression of the biomarkers K19, SOX2 und p63 in conjunctival squamous cell carcinoma. Henning Thomasen1, D. Dekowski1, S. Synoracki1, K. Steuhl2, D. Meller2.  
1Ophthalmology, University of Duisburg-Essen, Essen, Germany; 2Ophthalmology, University Hospital Jena, Jena, Germany; 3Pathology, University Hospital Essen, Essen, Germany  

McGill University, Montreal, QC, Canada  

1Ophthalmology, Emory University, Atlanta, GA; 2Pathology, Emory University, Atlanta, GA; 3Eye and Vision Science, University of New South Wales, Marsfield, NSW, Australia; 4Ophthalmology, Univ of Tennessee Health Sci Ctr, Memphis, TN; 5Physiol & Biophysics, Univ of New South Wales, Randwick, NSW, Australia  

2413 — A0228 Topical 1% 5-Fluoruracil as a sole treatment of corneal-conjunctival ocular surface squamous neoplasia: long term results. Giulia Midena1, R. Parrozzani1, L. Frizziero1, I. Testi2, E. Miden1a1, 2.  
1GB Bietti Foundation, IRCCS, Roma, Italy; 2Department of Ophthalmology, University of Padova, Padova, Italy  

Refer to the Program Number in the Clinical Trial (CT) Registration Index.  
CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
2414 — A0229 Palisaded encapsulated neurauma of the eyelid: Clinicopathological correlation. Shaza N. Al-Holou1, E. D. Hansen2, A. Bermudez3, M. Fernandez4, S. R. Dubovyi5, 1Henry Ford Hospital, Detroit, MI; 2Bascom Palmer Eye Institute, Miami, FL


2418 — A0233 GATA-3 immunoreactivity in periocular sebaceous neoplasms. Austin Nakatsuka1, K. Gnan2, P. Tsutsumi-Nishii2, 1Transitional Program, University of Hawaii, Honolulu, HI; 2Pathology, Queens Medical Center, Honolulu, HI

2419 — A0234 Orbital Solitary Fibrous Tumor of the Orbit: Case Series with Clinicopathological Correlation. Sander R. Dubovyi1, M. Fernandez2, A. Bermudez3, N. Blessing4, A. E. Rosenberg5, 1Bascom Palmer Eye Inst - Ophthalmology, University of Miami Miller School of Medicine, Miami, FL; 2Pathology, University of Miami Miller School of Medicine, Miami, FL

2420 — A0235 Malignant Solitary Fibrous Tumor of the Orbit: Revamping the Immunophenotypic and Histopathological Gold Standard for Diagnosis. Lilangi S. Edirwicremaw1, M. Burstine2,3, M. Saber2, N. A. Rao2, 1University of Southern California Eye Institute, Los Angeles, CA; 2Eyeethetica, Los Angeles, CA


2422 — A0237 Optical Coherence Tomography parameters Predictive of post-operative visual field loss in patients with Chiasmal Compression. Tarek A. Shazly, G. R. Bonhoom. University of Pittsburgh, Pittsburgh, PA

2423 — A0238 Comparison of Modified and Classic Pathologic Criteria for Clinicopathologic Correlation of Giant Cell Arteritis. Sonya T. Blizzard1, P. S. Subramaniam1, C. Eberhart2, W. R. Bell3, S. Sharma4, K. Fallano1. 1Ophthalmology, Johns Hopkins School of Medicine, Baltimore, MD; 2Ophthalmology, Johns Hopkins University, Baltimore, MD; 3Pathology, Johns Hopkins School of Medicine, Baltimore, MD; 4Ophthalmology, Oxford University, Oxford, United Kingdom; 5Internal Medicine, University of Rochester School of Medicine, Rochester, NY

2424 — A0239 Clinical and pathologic characterization of persistent fetal vasculature associated with vitreous hemorrhage. Maleed Alsarhani1, H. Al-Khatani2, A. Maktabi2, F. Fajer3, I. Kozak1. 1King Saud bin Abdulaziz University, Riyadh, Saudi Arabia; 2King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia

2425 — A0240 Immunohistochemical characterization of subretinal bands in proliferative vitreoretinopathy. Mokamed D. Alothai2, A. Maktabi1, H. Al-Khatan1, D. P. Edward1, I. Kozak1. 1Medicine, King Saud bin Abdulaziz University for Health Sciences, Riyadh, Saudi Arabia; 2Pathology, King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia; 3King Khaled Eye Specialist Hospital, Retina, Saudi Arabia; 4King Saud University, Riyadh, Saudi Arabia


2427 — A0242 Investigating the Posterior Pole: A Tool and Technique for Post Mortem Tissue Recovery. Jerome V. Giovinozzi1, V. Giovinozzi1, C. E. Iacob1, R. B. Rosen1, P. T. Finger3. 1Ophthalmology, New York Eye and Ear of Mount Sinai, New York, NY; 2Ophthalmology, Staten Island University Hospital, Staten Island, NY; 3Pathology, New York Eye Cancer Center, New York, NY *CR

2428 — A0243 Ocular manifestations of systemic amyloidosis. Margaret Reynolds1, J. Pulido2, K. Veverka2. 1Ophthalmology, Mayo Clinic, Rochester, MN; 2Mayo Medical School, Rochester, MN

2429 — A0244 Clinicopathological and Proteomic Analysis of Amyloid Deposition in Ocular Surface and Adnexa. Maria J. Suarez B, J. Levi1, R. Rivera-Michlig1, A. Rosenberg2, F. Rodriguez2. 1Pathology, Johns Hopkins University, Baltimore, MD; 2Ophthalmology, Wilmer Eye Institute, Baltimore, MD; 3National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, MD; 4Children’s National Health System, Washington, DC

2430 — A0245 External Beam Radiation in the Treatment of Primary Diffuse Periocular Amyloidosis. Thomas Bacon, J. Berk, M. Truong, R. Sobel. 1Radiation Oncology, Boston University, Boston, MA; 2Ophthalmology, Boston University, Boston, MA; 3Amyloid Center, Boston University, Boston, MA

2431 — A0246 Intraocular Extramural Hematopoiesis: A Clinicopathologic Case Series. Oliver G. Fisher1, M. Fernandez2, F. Vega1, S. R. Dubovyi1. 1Ophthalmology, Bascom Palmer Eye Institute, University of Miami, Miami Beach, FL; 2Pathology, University of Miami, Miami, FL

Exhibit/Poster Hall A0317-A0347

Monday, May 02, 2016 3:45 PM-5:30 PM

Eye Movements/Strabismus/Ambylopiay/Neuro-Ophthalmology

275 Strabismus

Moderator: Fatema F. Ghasia


2431 — A0318 Surgical Correction of Strabismus in Monkeys: Longitudinal evaluation of responses of near-response cells in the Supraoculomotor Area. Mythri Pullela1, D. K. Coats2, V. E. Das1. 1Optometry, University of Houston, Houston, TX; 2Ophthalmology, Baylor College of Medicine, Houston, TX

2434 — A0319 Predicting outcomes for children undergoing botulinum toxin treatment for horizontal strabismus. Anne-Marie Hinds1, L. Solebo1, M. Theodorou1, J. Hancox2, G. Adams1. 1Moorfields Eye Hospital, London, United Kingdom; 2Moorfields Biomedical Research Centre, London, United Kingdom *CR

2435 — A0320 Surgical Results of Three Horizontal Muscle Surgery in Large-angle Exotropia. Joo Yeon Lee MD, PhD, D. Choi, H. Lee. Ophthalmology, Hallym University Medical College, Anyang, Korea (the republic of)
2436 — A0321 The role of MRI in infants with strabismus and central nervous system disorders. Sjoekje E. Louradour1, D. J. Budnik2, L. Smitt3, J. Polling3, H. J. Sinonisz4. 1Neonatology, ErasmusMC University Medical Center, Rotterdam, Netherlands; 2Pediatric Neurology, ErasmusMC University Medical Center, Rotterdam, Netherlands; 3Pediatr Orthopt, ErasmusMC University Medical Center, Rotterdam, Netherland

2437 — A0322 Sedated suture adjustment in children undergoing adjustable-suture strabismus surgery. Warachaya Phanphruk1, 2, M. Alkarashli1, A. Bilge1, D. G. Hunter1, 2, 3. 1Ophthalmology, Boston Children’s Hospital, Boston, MA; 2Ophthalmology, Khon Kaen University, Khon Kaen, Thailand; 3Anesthesiology, Boston Children’s Hospital, Boston, MA; 4Ophthalmology, Harvard Medical School, Boston, MA CR

2438 — A0323 Trends in Paediatric Strabismus Procedures in Ontario, Canada from 2000–2013. Kamiar Mireskandari1, 2, M. Caldwell1, A. Szigiato3, Y. M. Buys4. 1Ophthalmology, Hospital for Sick Children, Toronto, ON, Canada; 2University of Toronto, Toronto, ON, Canada

2439 — A0324 Consecutive esotropia in contralateral recess-resect for recurrent intermittent exotropia after unilateral recess-resect. Soon Young Cho1, S. Lee2. 1Ophthalmology, Dongguk University Gyeongju Hospital, Gyeongju, Korea (the Republic of); 2Ophthalmology, Keimyung University Dongsan Medical Center, Daegu, Korea (the Republic of)

2440 — A0325 The Prevalence of Strabismus and Associated Risk Factors In A Southeastern Region Of Brazil. Luisa F. Schaal1, S. A. Schellini2, C. R. Padovan2, A. Galindo1, J. E. Corrente2, L. D. Pesci4. 1Ophthalmology, Faculidade de Medicina de Botucatu, Jaú, Brazil; 2Bioestatistica, Instituto de Biociências de Botucatu, Botucatu, Brazil; 3King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia

2441 — A0326 Prism under cover test in alternate fixation horizontal strabismus. Jaime Tejedor1, 2, F. J. Gutierrez-Carmona1. 1Ophthalmology, Hospital Ramon y Cajal, Madrid, Spain; 2Neuroscience, Universidad Autónoma de Madrid, Madrid, Spain

2442 — A0327 Treatment of convergence insufficiency exotropia in adults using a selective muscle fiber surgery treatment algorithm. Melinda Fry, S. Pinoles, F. Velez, Ophthalmology, UCLA Jules Stein Eye Institute, Los Angeles, CA

2443 — A0328 Prevalence and Risk Factors of Wrong Site Surgery in Strabismus Surgeries. Donny W. Suh, L. Maloley, R. High. Ophthalmology, University of Nebraska, Omaha, NE

2444 — A0329 Correlation between facial asymmetry and laterality of congenital IV cranial nerve palsy at an Ophthalmological Reference Center: Correlation between facial asymmetry and laterality of congenital IV cranial nerve palsy at an Ophthalmological Reference Center. David Islas, P. Cepeda, C. E. Marillo. Strabismus, Instituto de Oftalmologia Fundacion Conde de Valenciana, Mexico, Mexico

2445 — A0330 Scanning Brückner test with tilting mirror for objective calibration of the projection of the fovea in small children. Bas Bikker1, G. van Diepen1, M. Swart1, F. Somerwil2, J. L. Herder1, H. J. Sinonisz2. 1Mechanical Engineering, Delft University of Technology, Delft, Netherlands; 2Ophthalmology, Erasmus Medical Center, Rotterdam, Netherlands

2446 — A0331 Lateral Rectus Central Plication Versus Medial Rectus Recession in Age-Related Distance Esotropia. Kenneth W. Wright, G. Corradetti. Wright Foundation for Pediatric Ophthalmology and Strabismus, Los Angeles, CA CR

2447 — A0332 Factors Associated with the Effectiveness of Alternate Patch Treatment in Patients with Overcorrected Intermittent Exotropia. Soo Jung Lee1, J. Park2. 1Ophthalmology department, Haeadungae Paik Hospital, Busan, Korea (the Republic of); 2Ophthalmology, Maryknoll medical center, Busan, Korea (the Republic of)

2448 — A0333 Comprehensive analysis of variances in strabismus surgery to permit quantitative comparison between surgical techniques. Hubert J. Sinonisz1, S. Schatte1. 1Ophthalmology, Erasmus Medical Center Rotterdam, Rotterdam, Netherlands; 2Netherlands Institute of Neuroscience, Amsterdam, Netherlands; 3Mechanical Engineering, Delft University of Technology, Delft, Netherlands

2449 — A0334 Postoperative analysis of pediatric esotropia associated with high hyperopia. Bo Li, S. Sharan. Ophthalmology, Ivey Eye Institute, Western University, London, ON, Canada

2450 — A0335 Peripheral Refraction and Accommodation in Infants with Esotropia. Sarah E. Morel1, R. M. Jost1, D. O. Muttii2, E. E. Birch3, 4. 1Pediatric Vision Laboratory, Retina Foundation of the Southwest, Dallas, TX; 2Ohio State University, Columbus, OH; 3Ophthalmology, University of Texas Southwestern Medical Center, Dallas, TX

2451 — A0336 Comparison of rating scales in the development of patient-reported outcome measures for children with eye disorders. David A. Leske1, S. M. Wernimont2, S. R. Hatt1, E. E. Birch1, 2, J. M. Holmes1. 1Department of Ophthalmology, Mayo Clinic, Rochester, MN; 2Retina Foundation of the Southwest, Dallas, TX; 3UT Southwestern Medical Center, Dallas, TX


2453 — A0338 Identifying items for patient-reported outcome measures in pediatric eye disease. Suzanne M. Wernimont1, Y. S. Castañeda2, S. R. Hatt1, D. A. Leske1, L. Liebermann1, C. S. Cheng-Pate1, E. E. Birch2, J. M. Holmes1. 1Department of Ophthalmology, Mayo Clinic, Rochester, MN; 2Retina Foundation of the Southwest, Dallas, TX; 3UT Southwestern Medical Center, Dallas, TX

2454 — A0339 Fixational eye movements in Strabismus. Fatema F. Ghaisia1, A. Shakhii1. 1Ophthalmology, Cole Eye Institute-Cleveland Clinic, Chagrin Falls, OH; 2Neurology, Case Western Reserve University, Cleveland, OH

2455 — A0340 Effect of medial rectus attachment on postoperative drift following surgery for consecutive exotropia. Steven D. Maxfield1, J. Jung1, D. A. Leske1, J. M. Holmes1. 1Department of Ophthalmology, Mayo Clinic, Rochester, MN; 2Department of Ophthalmology, Pusan National University Children’s Hospital, Yangsan, Korea (the Republic of)

2456 — A0341 The role of stereopsis and binocular fusion in surgical treatment of intermittent exotropia. Maria Fernandez-Ruiz, J. H. Lillvis, R. S. Bahl. Ophthalmology, Wayne State University, Detroit, MI

2457 — A0342 The prevalence of strabismus: A systematic literature review. Felicia C. Adinanto, A. N. French, K. A. Rose. Discipline of Orthoptics, University of Technology Sydney, Sydney, NSW, Australia

2458 — A0343 Videographic Measurement of Binocular alignment with Analysis of the Corneal Limbus. Han Woong Lim1, Y. Shin1, S. Oh1, S. Park1. 1Hanyang University Guri Hospital, Guri, 2Samsung Seoul Hospital, Seoul, Korea (the Republic of)


2460 — A0345 Molecular and Developmental Links between Strabismus and Schizophrenia. Christophor S. von Bartheld1, A. Agarwal2, C. Feng1, A. Christensen1, D. West1, K. Cassinelli1, B. Kirkpatrick1, L. A. Johnson2, 3. 1Physiology & Cell Biology, University of Nevada School of Medicine, Reno, NV; 2Sierra Eye Associates, Reno, NV; 3Psychiatry & Behavioral Sciences, University of Nevada School of Medicine, Reno, NV; 4Ophthalmology, Central South University, Xiangya Hospital, Changsha, China CR

*CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
2464 — B0002 Prevalence of myopia, environmental factors and parental myopia in rural and urban schoolchildren in Wenzhou, China. Yang Ding1, Y. Yuan1, B. Drobec1, H. Chen1, 2 School of Optometry and Ophthalmology, Wenzhou Medical University, Wenzhou, China; 2 R&D Asia, Essilor Internationa, Wenzhou, China; *WEIRC, WMU-Essilor International Research Centre, Wenzhou, China *CR

2464 — B0003 Prevalence of Myopic Retinopathy in Rural Central India. Vinay Nangia1, J. B. Jonas2, R. Gupta, P. Nangia, K. Bhojwani1, S. Panda-Jonas2, 3 Ophthalmology, Suraj Eye Institute, Nagpur, India; 3 WEIRC, WMU-Essilor International Research Centre, Wenzhou, China *CR

2466 — B0004 Prevalence of myopia and myopia in a large multicentric cohort of French individuals. Emilie Matamoros1, P. Ingrand1, F. M. Pelen1, Y. Lefevre1, P. Pouts1, Y. Bentalbeh1, M. Weber1, J. Korobelnik1, E. H. Souied2, N. Leveziel1. Ophthalmology, Chu Poitiers, Bordeaux, France; 2 Ophhtopointvision, Paris, France; 3 Ophthalmology, Chu Nantes, Nantes, France; 4 Ophthalmology, Chu Bordeaux, Bordeaux, France; 5 Chic Creteil, Creteil, France *CR


2468 — B0006 A global generational shift in myopia. David A. Wilson1, M. Jong2, P. Sankardurgi3, T. Frick4, S. Resnikoff5, K. S. Naidoo1. 1 Department of Research, Brien Holden Vision Institute, Sydney, NSW, Australia; 2 School of Optometry and Vision Science, University of New South Wales, Sydney, NSW, Australia

2469 — B0007 Axial length and visual function in high myopia. Virginie J. Verhoeven1, M. C. Snabel2, G. A. van Rijn3, G. H. Buitendijk4, K. T. Wong5, J. E. Keunen1, C. J. Boon5, A. J. Geerards6, G. M. Luyten1, C. C. Klaver4. 1 Epidemiology, Erasmus Medical Center, Rotterdam, Netherlands; 2 Ophthalmology, University Medical Center Utrecht, Utrecht, Netherlands; 3 Ophthalmology, Leiden University Medical Center, Leiden, Netherlands; 4 Ophthalmology, Erasmus Medical Center, Rotterdam, Netherlands; 5 Ophthalmology, Radboud University Medical Center, Nijmegen, Netherlands; 6 The Rotterdam Eye Hospital, Rotterdam, Netherlands

2470 — B0008 Vision impairment in highly myopic eyes without ocular pathology: the ZOC-BHV1 High Myopia Study. Monica Jong1, P. Sankardurgi2, S. Resnikoff5, W. Li6, K. S. Naidoo1, M. He7, Brien Holden Vision, Sydney, NSW, Australia; 2 Optometry and Vision Science, UNSW, Sydney, NSW, Australia; 3 Ophthalmology, Zhongshan Ophthalmic Centre, Guangzhou, China

2471 — B0009 Physical activity in childhood is associated with myopia in adolescence - The CHAMPS Eye Study. Kristian Lundberg1, A. H. Vestergaard2, N. Jacobsen3, E. Goldschmidt4, T. Petro, N. Wedderkopp5, J. Grauslund1. 1 Department of Ophthalmology, Department of Ophthalmology, Odense University Hospital, Odense, Denmark; 2 Department of Ophthalmology, Department of Ophthalmology, Rigshospitalet-Glostrup University Hospital, Copenhagen, Denmark; 3 Danish Institute for Myopia Research, Vedbaek, Denmark; 4 National Institute for Health Research Biomedical Research Centre at Moorfields Eye Hospital NHS Foundation Trust and UCL Institute of Ophthalmology, London, United Kingdom, London, United Kingdom; 5 Centre of Research in Childhood Health, Institute of Sports Science and Clinical Biomechanics, University of Southern Denmark, Odense, Denmark; 6 Sport medicine Clinic, the Orthopedic Department, Hospital of Middelfart, Institute of Regional Health Services Research, University of Southern Denmark, Middelfart, Denmark; 7 Department of Clinical Research, Faculty of Health Sciences, University of Southern Denmark, Odense, Denmark, Odense, Denmark

2472 — B0010 Perinatal Light Exposure and the Development of Myopia and Hyperopia. Arman Zaman1, J. M. Schallhorn1, S. C. Schallhorn1. 1 USC Eye Institute, Los Angeles, CA; 2 Optical Express, London, United Kingdom *CR

2473 — B0011 Characteristics of Indoor and Outdoor Light Exposure Differ With Refractive Status in Young Adults. Elise N. Harb, M. Chan, A. Tran, C. F. Wildsoet. UC Berkeley College of Optometry, Berkeley, CA

2474 — B0012 Risk factors for myopic progression in Chinese children and young adults. Yunyan Chen1, W. Jui2, B. Drobe2, H. Liu2, H. Chen2. 1 School of Optimal and Ophthalmology, Wenzhou Medical University, Wenzhou, China; 2 WEIRC, Wenzhou Medical University-Essilor International Research Center, Wenzhou, China; 2 R&D Optics Asia, Essilor International, Wenzhou, China *CR


2476 — B0014 Astigmatism and effect on progression of myopia. Padmaja Sankardurgi2, A. Ho1, T. naduvilath1, X. Chen1, E. L. Smith1. 1 Brien Holden Vision Institute, Sydney, NSW, Australia; 2 School of Optometry and Vision Science, University of New South Wales, Sydney, NSW, Australia; 3 Zongshan Ophthalmic Centre, Guangzhou, China; 4 College of Optometry, University of Houston, Houston, TX *CR
Monday – Posters – 2477 – 2496


2478 – B0016 Refractive Error and axial length in Older Chinese Adults: the Pujiang eye study. Minjie Chen. EYE & ENT Hosp of Fudan Univ, Shanghai, China.

2479 – B0017 Risk factors, clinical characteristics and management of patients with myopic choroidal neovascularization in clinical practice: MyPathway study. Laila Gomez1, M. Lopez2, J. Ruiz-Moreno3, M. Roura3, 1. Novartis Pharma, Barcelona, Spain; 2. Universidad de Castilla La Mancha, Albacete, Spain; 3. Hospital Universitario de Valladolid, Valladolid, Spain. *CR

2480 – B0018 Feasibility of assessing population prevalence of pathological consequences of myopia in NHANES 2005-2008 data. Susan Vitale1, J. R. Willis1, 1. Division of Epidemiology and Clinical Applications, National Eye Institute, Bethesda, MD; 2. Department of Ophthalmology, University of California Davis, Sacramento, CA. *CR

2481 – B0019 Characteristics of Optic Disc Appearance in Chinese High Myopes: ZOCD-BHVI High Myopia Registry. Zhixi Li1, O. Xiao2, X. Guo3, M. He4, 1. Zhongshan Ophthalmic Center, Sun Yat-sen University, Guangzhou, China; 2. Centre for Eye Research Australia, University of Melbourne, Melbourne, VIC, Australia;

2482 – B0020 Patterns in longitudinal growth of refraction in Chinese children: cluster and principal component analysis. Mingguang He1, 1. School of Ophthalmology, Zhongshan Ophthalmic Center, Guangzhou, China; 2. Centre for Eye Research Australia, University of Melbourne, Royal Victorian Eye and Ear Hospital, Melbourne, VIC, Australia.

2483 – B0021 The effect of defocus on choroidal thickness in bright and low illuminance. Yi Ma1, J. Bao3, 1. WEIRC (Wenzhou Medical University - Essilor International Research Center), Wenzhou Medical University, Wenzhou, China, Wenzhou, China; 2. R&D Optics Asia, Essilor International, Wenzhou, China; 3. School of Ophthalmology and Optometry, Wenzhou Medical University, Wenzhou, China. *CR

2484 – B0022 Effect of photochromic spectacle lenses on visual symptoms and contrast sensitivity of myopic schoolchildren treated with low concentration atropine. Pei-Chang Wu, H. Kuo. Department of Ophthalmology, Kaohsiung Chang Gung Memorial Hospital, Kaohsiung, Taiwan.

2485 – B0023 Comparison of the correction effect to suppress the progression of myopia between two types of orthokeratology lenses. Honoka Maekawa1, 2, O. Hieda1, Y. Nakamura1, N. Koizumi1, 2, C. Sotozono1, S. Kinoshita1. 1. Department of Biomedical Engineering, Faculty of Life and Medical Sciences, Doshisha University, Kyoianabe, Japan; 2. Department of Ophthalmology, Kyoto Prefectural University of Medicine, Kyoto, Japan; 3. Department of Frontier Science and Technology for Ophthalmology, Kyoto Prefectural University of Medicine, Kyoto, Japan.

2486 – B0024 Parent Perceptions of Myopia and Myopia Control: Down Meyer1, C. Mickles2, S. Cox3, P. S. Kolfbaum1. 1. School of Optometry, Indiana University, Bloomington, IN; 2. College of Optometry, NOVA Southeastern University, Fort Lauderdale, FL; 3. School of Optometry, University of Alabama at Birmingham, Birmingham, AL.

2487 – B0025 Current trends of myopia management strategies in clinical practice. Madara Zwirgzdina, J. B. Orr, N. S. Logan, J. Wolffsohn. School of Life & Health Sciences, Aston University, Birmingham, United Kingdom.

2488 – B0026 Relationship between near phoria, fusional amplitudes and personalized addition values for myopia control. Jinhua Bao1, 2, X. Ye3, 2. B. Drobe3, 1. Z. Chang1, 2. J. Zhang2, 1. H. Chen2, 1. School of Ophthalmology and Optometry, Wenzhou Medical University (WMU), Wenzhou, China; 2. WEIRC, WMU-Essilor International Research Center, Wenzhou, China; 3. R&D Optics Asia, Essilor International, Wenzhou, China. *CR

2489 – B0027 The effect of adaptation to progressive addition lenses on reading behavior in Chinese myopic children. Zuoqao Zhou1, 2, Y. Wang1, 2, X. Yang1, 2, X. Mao1, 2, B. Drobe1, 2, H. Chen2, 1. School of Ophthalmology and Optometry, Wenzhou Medical University (WMU), Wenzhou, China; 2. WEIRC, WMU-Essilor International Research Center, Wenzhou, China; 3. R&D Optics Asia, Essilor International, Wenzhou, China. *CR

2490 – B0028 Objective Measurement of Light Exposure and Eye Growth in Children over One Year. Azeita Sajjadi, L. A. Ostrin. College of Optometry, University of Houston, Houston, TX.

2491 – B0029 A novel device to record the behavior related to myopia development—preliminary results in the lab. Longbo Wen1, W. Lan1, Y. Huang1, Y. Wei1, X. Li1, Z. Yang1. 1. Aier School Of Ophthalmology, Central South University, Changsha, China; 2. State Key Laboratory of Ophthalmology in China, Zhongshan Ophthalmic Center, Sun Yat-sen University, Guangzhou, China; 3. Glasson Technology Co. Ltd, Hangzhou, China; 4. California NanoSystems Institute, Los Angeles, CA; 5. Aier Eye Group, Changsha, China. *CR

2492 – B0030 Subjective Questionnaires Overestimate Habitual Outdoor Activity in Young Adults. Michelle V. Chan, E. N. Harb, A. Tran, C. F. Wildsoet. UC Berkeley School of Optometry, University of California Berkeley, Berkeley, CA.

2493 – B0031 The use of conjunctival ultraviolet autofluorescence (CUVAF) as an indicator of time spent outdoors. Stephanie Kearney1, K. Saunders1, L. O’Donoghue1, K. Poursaheibi1, P. Richardson1. 1. Optometry, Ulster University, Coleraine, United Kingdom; 2. Northern Ireland Centre for Food and Health, Ulster University, Coleraine, United Kingdom.

2494 – B0032 Melanopsin - does it modulate the susceptibility to myopia? Frank Schaeffel1, 2, C. Kelbschi1, P. Richter2, B. Wilhelm1, H. Wilhelm1. 1. Ophthalmology, Ophthalmic Research Institute, Tuebingen, Germany; 2. Department of Ophthalmology, University of Tuebingen, Tuebingen, Germany.


 Refer to the Program Number in the Clinical Trial (CT) Registration Index. *CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.

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2497 — B0113 Lanosterol reverse protein aggregation in cataracts. Je Zhu1, L. Zhao1, X. Chen1, S. Wang1, H. Cai1, R. Hou1, W. Wang1, T. Jiang2, Y. Yan2, K. Zhang2. 1University of California San Diego, Shirley Eye Institute and Biomaterials and Tissue Engineering Center, Institute for Engineering in Medicine, La Jolla, CA; 2Zhongshan Ophthalmic Center, Sun Yat-sen University, State Key Laboratory of Ophthalmology, Guangzhou, China; 3Tsinghua University, State Key Laboratory of Membrane Biology, School of Life Sciences, Beijing, China; 4Molecular Medicine Research Center, West China Hospital, Sichuan University, Chengdu, China; 5Guangzhou KangRui Biological Pharmaceutical Technology Company Ltd., Guangzhou, China

2498 — B0114 A method for the selection of cataract disintegrating compounds and their use for reversal of crystalline lens opacification. Shiri Zayit-Soudry1, M. Minouni1, M. Chemerovski-Glikman1, Y. Dagan1, E. Haj1, D. Adler-Abramovich2, D. Segal3, E. Gazit3. 1Ophthalmology, Rambam Health Care Campus, Technion - Israel Institute of Technology, Haifa, Israel; 2Molecular Microbiology and Biotechnology, George S. Wise Faculty of Life Sciences, Tel Aviv University, Tel Aviv, Israel

2499 — B0115 Coffee (Caffeine) inhibits Cataract Formation in Humans. Shambhu D. Varma1, K. Chandrasekaran1, Ophthalmology, Univ of Maryland Sch of Med, Baltimore, MD

2500 — B0116 Age-related cataract and expression level of decorin in human eye: association with opacity severity. Shinsuke Shibata1, N. Shibata1, T. Shibata1, N. Tanimura1, H. Sasaki1, E. Kubo1. 1Department of Ophthalmology, Kanazawa Medical University Hospital, Kanazawa, Japan

2501 — B0117 MicroRNA-34a promotes mitochondria dysfunction induced apoptosis in human lens epithelial cell by targeting Notch2. Fan Fan1, L. Lu2, J. Zhuang1, X. Liu1. 1Ophthalmology, EYE & ENT Hospital of Fudan University, Shanghai, China; 2Cardiology, Shanghai Tenth People’s Hospital of Tongji University, Shanghai, China

2502 — B0118 Changes of β-amyloid in age-related cataract and its protection on lens epithelial cells. Tianyu Zheng1, J. Xu1, Y. Lu1. 1EYE and ENT Hosp of Fudan Univ, Shanghai, China

2503 — B0119 Membrane association of alpha-crystallins with cataract formation in the ICR/Rt rat. Stephen Barnes1, S. Sridhar1, M. Harris2, L. Wilson2, K. Walters2, A. Arabshahi2, J. Kabarowski2. 1Pharmacology & Toxicology, University of Alabama at Birmingham, Birmingham, AL; 2Chemistry, University of Alabama at Birmingham, Birmingham, AL; 3Microbiology, University of Alabama at Birmingham, Birmingham, AL

2504 — B0120 Microphthalma: Congenital Cataract Surgery and SOX2 Gene Evaluation. Davide Borroni1, A. Pandey1, E. Elksnis2, Z. Krumina1, I. Orube2, E. A. Sture2. 1Department of Ophthalmology, Lumbini Eye Institute, Lumbini, Nepal; 2Department of Ophthalmology, Riga Stradins University, Riga, Latvia; 3Department of Genetics, Riga Stradins University, Riga, Latvia

2505 — B0121 The association between the progression of rat sugar cataract and the levels of aldose reductase in lens epithelium. Takashi Tomomatsu1, Y. Takamura1, T. Matsumura1, S. Arimura1, M. Grozawa1, M. Inutani1, educational, Yoshida1, Japan

2506 — B0122 Distribution of γ-glutamyltranspeptidase, aldose reductase, and biomarkers of oxidative stress in STZ-induced diabetic rat lens. Marilyn P. Langford1, R. Eshaq1, T. B. Redens1, N. R. Harris1. 1Ophthalmology, Louisiana State University Health Sciences Center, Shreveport, LA; 2Molecular & Cellular Physiology, Louisiana State University Health Sciences Center, Shreveport, LA

2507 — B0123 Morphology and Organization of Anterior Fiber Ends in Lenses from Streptozotocin-Induced Diabetic Rats. Kristin J. Al-Ghoul1, D. A. Sharma1. Anatomy and Cell Biology, Rush University Medical Center, Chicago, IL

2508 — B0124 High glucose inhibits autophagy in human lens epithelial cells. Xuhua Tan1, C. Chen1, Y. Zhu4, Y. Zheng2, F. Shang2, Y. Liu2. 1cataract department, State Key Laboratory of Ophthalmology, Zhongshan Ophthalmic Center, Sun Yat-sen University, Guangzhou, China; 2State Key Laboratory of Ophthalmology, Zhongshan Ophthalmic Center, Sun Yat-sen University, Guangzhou, China; 3department of molecular and cellular pharmacology, Miller School of Medicine, University of Miami, Miami, FL

2509 — B0125 Radiation cataract in an outbred population of mice following gamma or high-LET irradiation. Norman J. Kleiman1, E. Hall2, M. M. Weil3, C. Schmidt3, E. Edmondson4, A. King5. 1Environmental Health Sciences, Columbia University, New York, NY; 2Center for Radiological Research, Columbia University, New York, NY; 3Environmental & Radiological Health Sciences, Colorado State University, Ft. Collins, CO; 4Clinical Sciences, Colorado State University, Ft. Collins, CO; 5Dept. of Microbiology and Immunology, Colorado State University, Ft. Collins, CO

2510 — B0126 UVR- B irradiation of one eye stimulates immunological cross-talk towards the unexposed contralateral eye in a mouse model. Janine Grosz1, L. M. Meyer1, C. Schönfeld2, F. G. Holz3, A. R. Wegener1. 1Ophthalmology, University Bonn, Bonn, Germany; 2Herzog Carl Theodor Eye Clinic, Munich, Germany; 3Eye clinic Ludwig-Maximilian university, Munich, Germany

2511 — B0127 Hypereexpression of fatty acid binding protein 5 in atopic cataract. Toshiki Hirakata1, K. Kobayashi-Takakawa2, T. Funaki1, N. Ebihara1, A. Matsuda1. 1Ophthalmology, Juntendo University School of Medicine, Bunko-ku, Japan; 2Ophthalmology, Juntendo Urayasu Hospital, Chiba, Japan

2512 — B0128 Differential expression of Tumoral Necrosis Factor Receptor in different types of cataract. Eduardo S. Arelano Arias1, A. Robles-Contreras1. Fundacion Hospital Nuestra Sehora de la Luz, Mexico Distrito Federal, Mexico

2513 — B0129 Abnormal anterior lens epithelium in retinitis pigmentosa-related cataract - scanning and transmission electron microscopy study. Hawlina M. MD, PhD1, Drahisl K. Phd2, Hvala A. PhD3, Andjelic S, PhD4. 1Eye Hospital, University Medical Centre, Ljubljana, Slovenia; 2Department of Biology, Biotechnological Faculty, University of Ljubljana, Ljubljana, Slovenia; 3Department of Pathology, Medical Faculty, University of Ljubljana, Ljubljana, Slovenia, 4Marko Hawlina. Eye Hospital, University Medical Centre Ljubljana, Ljubljana, Slovenia

2514 — B0130 Imaging of crystalline lens using a new anterior segment optical coherence tomography, haruhito mori. Y. Ueno, A. Terauchi1, T. Hiraoka1, T. Oshika1. University of Tsukuba, Tuskuba, Japan

2515 — B0131 Evaluation of waterleaves by anterior segment OCT. Hixanori Miyashita1, H. Osada1, E. Shibuya1, N. Tanimura1, T. Shibata1, K. Sasaki1, E. Kubo1, H. Sasaki1. Kanazawa Medical University, Kahoku, Japan

2516 — B0132 A comparative study of optical coherence tomography and slit-lamp based grading of cataract. Aman-Deep S. Mahil1, K. King4, T. Oltrup1, G. Ljubljana, Slovenia; 2Department of Pathology, Medical Faculty, University of Ljubljana, Ljubljana, Slovenia

2517 — B0133 Dual wavelength TD-PCI-system for Cataract Classification of Intraocular Lenses. Haroun Al-Mohamedi1, T. Otlrup1, G. Mieskes1, I. Kelly1, M. Litriz1, T. Bende1. Dept. of Ophthalmology, University Eye Hospital, Tuebingen, Germany


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Monday – Posters – 2519 – 2539

2519 — B0135 Influence of age on visual function of eyes with cataract. Hiroshi Sasaki1, M. Kita1, H. Miyashita2, N. Tanimura3, H. Osada4, T. Shibata5, Y. Takahashi6, S. Shibata6, E. Kubo5
1Department of Ophthalmology, Kanazawa Medical University, Kahoku, Japan; 2Ophthalmology, Anamizu General Hospital, Anamizu, Japan

2520 — B0136 A study of the dynamics of the relationship of the lens with blood glucose levels and HbA1c in patients with insulin dependent Diabetes Mellitus type 2. Lydia A. Mineeva1, I. G. Slezkina1, L. Balashevich1, L. Shubin1, A. Kabanov2, 1Department of Ophthalmology, Yaroslavl State Medical University, Yaroslavl, Russian Federation; 2Ophthalmology Section, Yaroslavl Regional Hospital, Yaroslavl, Russian Federation; 3Eye Microsurgery Complex named by S. Fyodorov, St.Petersburg, Russian Federation; 4Anatomopathology, Yaroslavl State Medical University, Yaroslavl, Russian Federation; 5Clinical Pharmacology, Yaroslavl State Medical University, Yaroslavl, Russian Federation

Exhibit/Poster Hall B0137-B0190
Monday, May 02, 2016 3:45 PM-5:30 PM

Glucoma

278 Glaucoma Neuroprotection / Neurodegeneration

Moderator: Dong F. Chen

2521 — B0137 RGC death in a mouse model of congenital glaucoma. Steffi Daniel1, M. G. Anderson2, A. F. Clark1, C. M. McDowell1, 1North Texas Eye Research Institute, University of North Texas Health Science Center, Fort Worth, TX; 2Molecular Physiology and Biophysics, University of Iowa, Iowa City, IA

2522 — B0138 Modified model of elevated intraocular pressure causes progressive retinal ganglion cell degeneration in mice. Ryo Mukai1, E. Hasegawa1, Y. Okunuki2, G. Klokman2, C. Kim1, S. Hari Jayaram1, W. O. Cepurna1, J. C. Morrison1, 1Casey Eye Institute, Oregon Health & Science University, Portland, OR; 2Public Health & Preventive Medicine, Oregon Health & Science University, Portland, OR

2523 — B0139 Development and analysis of a new rat glaucoma model. Ayumi Nakagawa1, O. Sakai2, H. Tokushige2, T. Fujishiro2, M. Aihara2, 1Research & Development Division, Senju Molecular Physiology and Biophysics, University of Iowa, Iowa City, IA; 2School of Public Health, University of Iowa, Iowa City, IA

2524 — B0140 Circumlimbal suture chronic intraocular pressure elevation in mice. Bang V. Bui1, D. Zhao1, C. T. Nguyen1, J. K. Lim1, H. R. Chinnery1, A. J. Vingrys2, Z. He1, Optometry and Vision Sciences, University of Melbourne, Parkville, VIC, Australia

2525 — B0141 Effects of Age and Ovariectomy on Visual Function in Experimental Glaucoma. Andrew Feola3, R. S. Allen1, I. C. Campbell1, R. Haider4, A. L. Ottensmeyer1, C. R. Ethier1, M. T. Pardue1, 1Biomedical Engineering, Georgia Institute of Technology and Emory University, Atlanta, GA; 2Rehabilitation Research and Development, Atlanta VA Medical Center, Atlanta, GA; 3School of Medicine, Emory University, Atlanta, GA

2526 — B0142 Initial Changes in Optic Nerve Head (ONH) MicroRNA (miR) Expression Following a Controlled Elevation of Intraocular Pressure (IOP). Hari Jayaram1, W. O. Cepurna1, T. Choe1, D. Lozano3, D. Choi1, S. Tehranri2, E. C. Johnson1, J. C. Morrison1, 1Casey Eye Institute, Oregon Health & Science University, Portland, OR; 2Public Health & Preventive Medicine, Oregon Health & Science University, Portland, OR

2527 — B0143 Age and ocular pressure influence optic nerve astrocyte remodeling during experimental glaucoma. Melissa Cooper1, J. W. Collyer2, K. W. Her3, N. J. Ward4, D. J. Calkins5, 1Vanderbilt Eye Institute and Vanderbilt Vision Research Center, Nashville, TN; 2University of Rhode Island, Providence, RI

2528 — B0144 Altered complement expression in the optic nerves of an autoimmune glaucoma model. Sabrina Reinehr1, M. Gandej2, G. Stute3, H. Jayaram1, J. C. Morrison1, 1Vanderbilt University, Nashville, TN; 2University of Iowa, Iowa City, IA; 3School of Public Health, Oregon Health & Science University, Portland, OR

2529 — B0145 HistoneH2B, a potential role of cell death ligand, induced RGC death through Toll like receptor 4 in the vitreous of acute angle closure. Yasunari Munemasa1, Y. Kitaoka1, K. Sase2, K. Kojima2, A. shiono3, J. Kogo3, N. Tokuda3, H. Takagi3, Ophthalmology, St Marianna University School of Medicine, Kawasaki, Japan

2530 — B0146 Dysfunction of TARDBP is associated with the apoptosis of RGCs in OPTN(E50K)mutant transgenic mice. Huiqing Yuan1, D. Lei1, A. Dong1, G. Xu2, Z. Zhou1, Harbin medical university, Harbin, China

2531 — B0147 Optineurin E50K mutation and mitochondrial loss in retinal ganglion cell degeneration. Wonkyu Ju1, M. Sim1, Y. Takihara2, K. Kim1, M. Inatani3, R. N. Weinreb1, G. A. Perkins1, 1Univ of California San Diego, La Jolla, CA; 2Univ. of Fukui, Fukui, Japan

2532 — B0148 Synapse-like structures on retracting end-bulbs in the optic nerve of the DBA/2J mouse model of glaucoma. Matthew A. Smith1, D. M. Inman1, C. M. Dengler-Crisli1, J. Silver2, S. D. Crish1, 1Pharmaceutical Sciences, Northeast Ohio Medical University, Rootstown, OH; 2Neurosciences, Case Western Reserve University, Cleveland, OH

2533 — B0149 Cytoskeletal and mitochondrial-related protein changes within the DBA/2J retinal projection. Gina N. Wilson1, D. M. Inman1, S. D. Crish1, 1Pharmaceutical Sciences, NEOMED, Akron, OH; 2School of Biomedical Sciences, Kent State University, Kent, OH

2534 — B0150 Correlations between nuclear size and selective ganglion cell loss in mouse models of glaucoma. Michael G. Anderson1, A. Hedberg-Buenz2, C. Lewis1, K. J. Meyer2, 1Molecular Physiology and Biophysics, University of Iowa, Iowa City, IA; 2VA Center for the Prevention and Treatment ofVisual Loss, Iowa City VA Healthcare System, Iowa City, IA

2535 — B0151 Selective mitochondrial autophagy in retinal ganglion cells following short-term reduction in cerebrospinal fluid pressure. Il xiaosi1, 2, Z. Zhang3, Q. Liu1, N. Wang1, 1ophthalmology, Beijing Institute of Ophthalmology, Beijing, China; 2Beijing Tongren Eye Center, Beijing Tongren Hospital, Capital Medical University, Beijing Ophthalmology and Visual Sciences Key Laboratory, Beijing, China

2536 — B0152 Utilizing Rnaseq To Determine Initial Optic Nerve Head (ONH) Gene Expression Responses To Elevated Intraocular Pressure (IOP). Elaine Johnson1, D. Choi2, W. O. Cepurna1, T. Choe1, D. Lozano3, S. Tehranri2, H. Jayaram1, J. C. Morrison1, 1ophthalmology, Oregon Health & Science University, Portland, OR; 2School of Public Health, Oregon Health & Science University, Portland, OR

2537 — B0153 Identification and Quantitation of Anterior and Transition Region Optic Nerve Head (ONH) Cell Proliferation in an Experimental Rat Glaucoma Model. Dina C. Lozano1, T. Choe1, W. O. Cepurna1, J. C. Morrison1, 1ophthalmology, Oregon Health & Science University, Portland, OR

2538 — B0154 Redox Status of Wallerian Degeneration Slow (WldS) and Wild-Type (WT) Axons Following Single Cell Laser Ablation of Cultured Retinal Ganglion Cells (RGCs). Mohammadali Almasiehi1, 2, M. Catrinescu1, 2, L. Bina1, S. Costantino1, L. A. Levin1, 2, 1Centre de recherche de l’Hôpital Maisonneuve-Rosemont (CRHLM) & Department of Ophthalmology, Université de Montréal, Montreal, QC, Canada; 2Ophthalmology, McGill University, Montreal, QC, Canada

2539 — B0155 Retinal ganglion cell (RGC) somas persist after loss of axons in a spontaneous feline glaucoma model. Gillian J. McCellan1, 2, S. Adelman1, 2, L. B. Teixeira4, K. Oikawa1, 2, M. Ellinwood1, 1ophthalmology & Visual Sciences, University of Wisconsin-Madison, Madison, WI; 2Surgical Sciences, University of Wisconsin-Madison, Madison, WI; 3Pathobiological Sciences, University of Wisconsin-Madison, Madison, WI; 4McPherson Eye Research Institute, University of Wisconsin-Madison, Madison, WI; 5Animal Sciences, Iowa State University, Ames, IA

* Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
2540 — B0156 Inner Retina Dysfunction in Microfibrol Deficient Mice with Low Tension Glaucoma. Hang-Jing Wu, S. Paria, G. Naradadam, J. Kuchtey, R. W. Kuchtey. Vanderbilt Eye Institute, Nashville, TN

2541 — B0157 Regional and temporal patterns of retinal α-crystallins expression during secondary retinal ganglion cell degeneration. Jacky Man Kwong Kwong1, T. Lanti, K. Li2, C. Do3, H. H. Chan4, C. To5, J. Caprioli. 1Ophthalmology, Jules Stein Eye Institute, UCLA, Los Angeles, CA; 2Optometry, Hong Kong Polytechnic University, Hong Kong, Hong Kong

2542 — B0158 Is the relationship between retinal nerve fibre layer thickness and cognitive performance explained by genetic or environmental factors? A twin study. Eenel Jones-Odeh1, E. H. Yonov1, E. Bloch1, K. Williams2, C. Steves3, C. J. Hammond4. 1Twin research and genetic epidemiology, King’s College London, London, United Kingdom; 2Ophthalmology, King’s College London, London, United Kingdom

2543 — B0159 Primary Open Angle Glaucoma And Alzheimer’s Disease: Is There An Association In 5XFAD Mice? J Cameron Millar, H. C. Webber, T. Phan, S. Neubauer, A. F. Clark. North Texas Eye Research Institute, University of North Texas Health Science Center, Fort Worth, TX

2544 — B0160 Toll-like receptor 3 (TLR3) promotes IOP-mediated degeneration of retinal ganglion cells in a mouse model of glaucoma. Shravan K. Chintala. Eye Research Institute, Oakland University, Rochester, MI


2546 — B0162 Abundance of CD163+ macrophages/microglia in the optic nerves of human post-mortem eyes with glaucoma. Milica Margeta1, E. M. Lad, A. D. Proia2. 1Ophthalmology, Duke University Medical Center, Durham, NC; 2Pathology, Duke University Medical Center, Durham, NC

2547 — B0163 Astrogliosis-Targeted Inhibition of Caspase-8 for Immunomodulation in Glaucoma. Xiangjun Yang1, G. Honurd1, S. Krajewski2, R. Hakem1, G. Tezel1. 1Ophthalmology, Columbia University, New York, NY; 2Sanford Burnham Prebys Medical Discovery Institute, La Jolla, CA; 3University of Toronto, Toronto, ON, Canada

2548 — B0164 Voluntary Exercise for Neuroprotection in Glaucoma. Ian C. Campbell1,2, R. S. Allen1, A. J. Feola1, R. Haider1, J. Crove1, A. T. Read1, B. Hanson1, C. R. Ether1,1. 1Biomedical Engineering, Georgia Institute of Technology and Emory University, Atlanta, GA; 2Medical College of Georgia, Augusta University, Augusta, GA

2549 — B0165 Novel anti-platelet compounds to protect collagen activated platelets via GPVI: Implications for microvascular disease in POAG. Indre Bielskus1, M. Patel2, S. Fonte2, W. Norkett3, P. Kuprys4, K. Carey1, P. A. Kneppe2,3. 1Ophthalmology and Visual Sciences, University of Illinois at Chicago, Chicago, IL; 2Ophthalmology, Northwestern University, Chicago, IL

2550 — B0166 Eye-drop formulation and Evaluation of Micellar Curcumin for the treatment of glaucoma. Shriana I. Balendra1, B. Davies1, L. Guo1, M. Cordeiro1,2. 1Institute of Ophthalmology, University College London, London, United Kingdom; 2Western Eye Hospital, Imperial Healthcare Trust, London, United Kingdom; 3Queen Alexandra Hospital, Portsmouth Hospitals NHS Trust, Portsmouth, United Kingdom

2551 — B0167 Rapid clinical trials with more accurate visual field progression outcomes: structure guided ANSWERS. Haogang Zhu1,2, D. Crabb1, D. F. Garway-Heath.1 School of Computer Science and Engineering, Beijing University of Aeronautics and Astronautics, Beijing, China; 2NIHR Biomedical Research Centre at Moorfields Eye Hospital NHS Foundation Trust and UCL Institute of Ophthalmology, London, United Kingdom; 3School of Health Sciences, City University London, London, United Kingdom

2552 — B0168 Association between self-reported bupropion use and glaucoma: A population-based study. Mari esse Matis1, C. Kakigi1, L. R. Pasquale1, K. Singh1, S. C. Lin1. 1Glaucoma, UCSF, San Francisco, CA; 2Harvard Medical School and Massachusetts Eye and Ear Infirmary, Boston, MA; 3Standford University, Standford, CA

2553 — B0169 Transcorneal electrical stimulation in patients with primary open-angle glaucoma: A prospective long-term, case-series study. Yuka Ota1, N. Ozeki1, K. Yuki1, D. Shibai1, I. Kimura1, K. Tsunoda1, K. Shimoda1, H. Odaka1, K. Tsutoda1. 1Ophthalmology, Keio University, Tokyo, Japan; 2Saitama Medical University, Saitama, Japan; 3National Institute of Sensory organ, Tokyo, Japan; 4Teikyo University, Tokyo, Japan


2557 — B0173 Altered Expression of Sirt-1, Sirt-2 and Sirt-5 Linked With RGC Protective Effect of Resveratrol Following Optic Nerve Injury. James D. Lindsey, K. X. Duong-Polk, R. N. Weinreb. University of California San Diego, La Jolla, CA


2559 — B0175 Neuro-protective effect of physical exercise on retinal ganglion cells in acute intraocular pressure elevation models in rats. Mingming Zhu, N. Choy, J. S. Lai. Ophthalmology, The University of Hong Kong, Hong Kong, Hong Kong

2560 — B0176 Endothelial progenitor cell culture as a potential autologous transplant treatment for POAG. Mit Patel1, K. Carey1, I. Bielskus1, K. Green1, A. Lelis1, C. Wanderling1, P. Kuprys4, P. A. Kneppe2,3. 1Ophthalmology and Visual Sciences, University of Illinois at Chicago, Chicago, IL; 2Ophthalmology, Northwestern University, Chicago, IL

2561 — B0177 A new look at platelet inhibition and neuroprotection. Kevin Carey1, I. Bielskus1, M. Patel1, K. Green1, A. Lelis1, C. Wanderling1, P. Kuprys4, P. A. Kneppe2,3. 1Ophthalmology and Visual Sciences, University of Illinois at Chicago, Chicago, IL; 2Ophthalmology, Northwestern University, Chicago, IL

2562 — B0178 Protective effects of quercetin on retinal ganglion cell in experimental model of glaucoma by enhancing mitochondrial biogenesis. Shenghai Zhang, F. Gao, Y. Zhang, F. Gao, S. Sun, X. Sun. Eye and ENT hospital of Fudan University, Shanghai, China


2564 — B0180 Calorie restriction protects against retinal degeneration in acute glaucoma model through altering the metabolic profile. Yasuke Iuta, I. Toshihiro, R. Hisamura, S. Nakamura, K. Tsuibota. Ophthalmology, School of Medicine, Keio University, Tokyo, Japan

2565 — B0181 A method for the production of rabbit retinal explants to be utilised for neuronal apoptotic models. Usharree Puttagatt1,2, K. Garbutchev Singh1, K. Tanum1, D. kine1, A. J. White1. Medical Retina, Westmead Millennium Institute, Westmead, NSW, Australia; 2Sydney Medical School, Sydney, NSW, Australia
2566 — B0182 Alterations of crystallins in experimental model of glaucoma and their neuroprotective properties. Fabian Anders1, J. Teister1, F. H. Grus2, N. Pfeiffer2, N. Funke1, N. Perumal3, S. Thano1, P. Prokosch4, 5Department of Ophthalmology, Experimental Ophthalmology, Mainz, Germany; 6Experimental Ophthalmology, Münster, Germany

2567 — B0183 Glutamine synthetase shift involved in protective effects of GFAP antibody on retinal ganglion cells. Katharina Bell, C. Wilding, J. Holz-Müller, S. Funke, N. Pfeiffer. F. H. Grus. Department of Ophthalmology, Experimental Ophthalmology, Mainz, Germany

2568 — B0184 FK962 may ameliorate hypoxia/reoxygenation-induced neuronal cell death in rat retina by promoting neuronal cell maturation. Kana Orihara7, C. Yabuta1, R. T. Shearer2, M. Azuma2, 7Senju Pharmaceutical Co., Ltd, Kobe, Japan; 8Oregon Health & Science University, Portland, OR *CR

2569 — B0185 Ablation of neuronal gap junctions prevents the changes in bipolar cell structure and function seen in a mouse model of glaucoma. Abram Akopian, S. Kumar, H. Ramakrishnan, S. Viswanathan, S. A. Bloomfield. SUNY College of Optometry, New York, NY

2570 — B0186 Signaling factors secretion by 2D mesenchymal stem cells (MSCs) and spheroid MSCs and microvesicles derived from them cocultured with retinal ganglion cell line. Lili Xie*, B. Jiang, M. Mao. Ophthalmology, The 2nd Xiangya Hospital, Central South University, Changsha, China; 9Univ of California, SF Sch of Med, San Francisco, CA

2571 — B0187 Blockade of neuronal gap junctions preserves the structural and functional integrity of the retina and optic nerve in a mouse model of glaucoma. Abram Akopian, S. Kumar, H. Ramakrishnan, S. Viswanathan, A. Akopian, S. A. Bloomfield. SUNY College of Optometry, New York, NY

2572 — B0188 TSPO modulates retinal axon swelling in a rat ex vivo glaucoma model. Makoto Ishikawa1, T. Yoshitomi1, D. Covey2, C. Zoromski3, Y. Izumi4, 1Ophthalmology, Akita Univ School of Medicine, Akita, Japan; 3Developmental Biology, Washington University School of Medicine, St. Louis, MO; 4the Taylor Family Institute for Innovative Psychiatric Research, Washington University School of Medicine, St. Louis, MO; 5Psychiatry, Washington University School of Medicine, St. Louis, MO

2573 — B0189 Upregulation of Retinal Glutamate in Chronic Experimental Glaucoma. T Michael Nork1, 2, H. Nguyen1, A. Katz1, Y. Ge3, C. B. Kim4, 5, V. Raghu Nathan4, P. Russell4, P. Miller4, 5, C. J. Murphy5, 6, B. J. Christian1. Ophthalmology and Visual Sciences, University of Wisconsin–Madison, Madison, WI; 6OSOD (Ocular Services On Demand), LLC, Madison, WI; 7Surgical and Radiological Sciences, University of California, Davis, Davis, CA; 8Surgical Sciences, University of Wisconsin–Madison, Madison, WI; 9Toxicology, Covance, Madison, WI; 10Cell and Regenerative Biology, University of Wisconsin–Madison, Madison, WI; 11Ophthalmology and Vision Science, School of Medicine, University of California, Davis, Davis, CA

2574 — B0190 Neurotrophic deficiency preconditioning improves the natural history of disease in DBA/2J glaucoma. Tsung-Han Chou, V. Porciatti. Bascom Palmer Eye Institute, Miller School of Medicine, University of Miami, Miami, FL

Exhibit/Poster Hall B0191-B0237
Monday, May 02, 2016 3:45 PM-5:30 PM
Clinical/Epidemiologic Research

279 Glaucoma

Moderator: Andrew J. White


2576 — B0192 Cigarette smoking increases intraocular pressure and risk of primary open-angle glaucoma: a systematic review and meta-analysis. Shi Song Rong, L. Tsui, L. Ma, J. Li, C. C. Pang, L. Chen. Ophthalmology & Visual Sciences, University of California, Davis, Davis, CA

2577 — B0193 The Association Between Glaucoma and Atopic Diseases and Common Allergy Triggers. Janet Lee*, O. Sirsy*, V. L. Tseng*, X. Lu*, F. Yu*, A. L. Coleman*. 1Royal College of Surgeons in Ireland, Dublin, Ireland; 2UCLA Stein Eye Institute, Los Angeles, CA


2579 — B0195 Three Toxic Heavy Metals in Low-teen and High-teen Normal-Tension Glaucoma: A Cross-sectional Study from South Korea. Si Hyung Lee, E. Kang, G. Kim, H. Bae, Ge. Seong, C. Kim. Department of Ophthalmology, Severance Hospital, Yonsei University, College of Medicine, Seoul, Korea (the Republic of)

2580 — B0196 Sleep disturbances in Patients with Primary Glaucoma. Jacob Yukhong Chin1, Z. Tobh1, Y. Loh2, T. Wang3, O. Hee4, B. Lim5, A. Laude6, H. Wong7, E. Wong8, L. Tip9. 1The Eye Institute, National Healthcare Group, Singapore, Singapore; 2Yong Loo Lin School Of Medicine, Singapore, Singapore; 3School Of Medicine, Monash University, Bendigo, VIC, Australia

2581 — B0197 Insomnia Severity Index and sleeping disorders. Comparison in OHT, Glaucoma and Control patients. First results. Jean-Marie Giraud1, J. Fenolland1, D. Sendon1, B. Valero1, C. Dot1, J. Renard2, H. El Chehab2. 1Ophthalmology, Val de Grâce Military Hospital, Paris, France; 2Ophthalmology, Desgenettes Military Hospital, Lyon, France

2582 — B0198 Prospective Study Comparing Frequency of Obstructive Sleep Apnea in Open-Angle Glaucoma versus Controls. Ana Maria Benavides-Vargas, M. Cabrera, N. Hallaji, C. Shapiro, S. Chang, G. E. Troupe, Y. M. Buys. Ophthalmology and Vision Science, University of Toronto, Toronto, ON, Canada

2583 — B0199 Ocular Screening Study. Zachary Kroeger, K. Somohano, M. Feldman, J. Verriotto, A. Alldan, P. Staropoli, R. Lee, W. J. Feuer, J. Lee, B. L. Lam. Bascom Palmer Eye Institute, University of Miami Miller School of Medicine, Miami, FL

2584 — B0200 Effectiveness of health screening for early detection of glaucoma. Yong Ju Song, K. Park, D. Kim, Y. Kim, J. Jeoung. Department of Ophthalmology, Seoul National University Hospital, Seoul, Korea (the Republic of)

2585 — B0201 Characteristics of Patients from Two Types of Glaucoma Screening Events to Identify African Americans for the Primary Open-Angle African American Glaucoma Genetics Study. Victoria M. Addis1, L. O’Keefe1, M. G. Maguire2, E. G. Miller-Ellisis2, P. Sankar2, A. Lehman4, W. Murphy5, J. D. Henderson6, R. Salove7, J. M. O’Brien7. 1Scheie Eye Institute, Philadelphia, PA; 2Windell Murphy MD, Darby, PA; 3Ophthalmology, Temple University, Philadelphia, PA

2586 — B0202 Compliance and barriers for follow-up care in community eye screening: the SToP Glaucoma Study. Di Zhao1, 2, E. Guallar3, 2, B. K. Sovenor1, P. Gajwani1, L. Mude1, D. S. Friedman1. 1Ophthalmology, Johns Hopkins University, Baltimore, MD; 2Epidemiology, Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD

2587 — B0203 Understanding the Reasons and Factors for Loss to Follow-Up in Glaucoma Patients at a Tertiary-Referral Teaching Hospital in Seoul, Korea. Young Kook Kim, J. Jeoung, K. Park. Department of Ophthalmology, Seoul National University Hospital, Seoul National University College of Medicine, Seoul, Korea (the Republic of)

* Refer to the Program Number in the Clinical Trial (CT) Registration Index. *CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
1 Wills Eye Hospital, Philadelphia, PA; 2 Thomas Jefferson University, Philadelphia, PA

Glaucoma Research Center, Wills Eye Hospital, Philadelphia, PA

**B0206** Self-monitoring visual symptoms in glaucoma: a feasibility study of a web-based diary tool. Leanne McDonald, F. Glen, D. Crabb
Optometry and Visual Sciences, City University London, London, United Kingdom

**B0207** Assessment of the quality of within-hospital glaucoma referral in a tertiary hospital in Portugal. David C. Sousa, I. Carvalho Leal, C. Marques-Neves, M. Monteiro-Grillo, L. Abegao Pinto
1 Ophthalmology, Hospital Santa Maria - Lisbon Academic Medical Center, Lisbon, Portugal; 2 Faculty of Medicine - University of Lisbon, Lisbon, Portugal; 3 Centro de Estudos Ciencias Visao, Faculty of Medicine, Lisbon, Portugal

1 Ophthalmology, Erasmus MC, Rotterdam, Netherlands; 2 Epidemiology, Erasmus MC, Rotterdam, Netherlands; 3 Ophthalmology, CCBRT Hospital, Dar es Salaam, United Republic of Tanzania; 4 KCMC, Moshi, United Republic of Tanzania; 5 Ophthalmology, Muhimbili University of Health and Allied Sciences, Dar es Salaam, United Republic of Tanzania; 6 Ophthalmology, Groote Schuur Hospital, Cape Town, South Africa; 7 Rotterdam Eye Hospital, Rotterdam, Netherlands

1 Ophthalmology, University of Sydney, Sydney, New South Wales, Australia; 2 Menzies Research Institute Tasmania, University of Tasmania, Hobart, TAS, Australia; 3 Department of Ophthalmology, Flinders University, Adelaide, SA, Australia

1 Ophthalmology, Queen’s University, Victoria, BC, Canada; 2 Notre-Dame Hospital, Department of Ophthalmology, University of Montreal, Montreal, QC, Canada

**B0211** Profiling Primary Glaucoma in West Bengal: State & NGO Hospitals’ Data. Tutil Chakravarti, Glauca Eye & Glaucoma Care, Kolkata, India; Glaucoma, Vivekananda Institute of Medical Sciences (VIMS), Kolkata, India

Medicina, Unievangelica, Anapolis, Brazil

**B0213** Comparison of glaucoma care and conformance with Preferred Practice Patterns in a resident clinic setting prior to and after the development of electronic medical records. Ramsuda Narala, A. Hasan, A. Shukairy, A. B. Hughes, M. Jazych
Ophthalmology, Kresge Eye Institute, Royal Oak, MI

**B0214** Gonioscopy Practice Patterns. Brett Malbin, A. Shukairy, B. A. Hughes, J. Tannir, A. Goyal, C. Kim
1 Wayne State University School of Medicine, Wolverine Lake, MI; 2 Kresge Eye Institute, Detroit, MI

**B0215** Natural Progression of Optic Nerve and Visual Field Parameters in Young Myopes. Kristin Hribayashi, J. Bhosai, Y. C. Hsi, M. Qiu, S. C. Lin
1 Ophthalmology, University of California, San Francisco, San Francisco, CA; 2 Duke University, Durham, NC; 3 Wilmer Eye Institute, Baltimore, MD

1 Harkness Eye Institute, Columbia University Medical Center, New York, NY; 2 Hamilton Glaucoma Center, Department of Ophthalmology, University of California, San Diego, San Diego, CA; 3 School of Medicine, University of Alabama, Birmingham, AL

**B0217** Clinical efficacy of generic versus branded latanoprost for primary open angle glaucoma. Diana H. Kim, J. A. Shaffer, B. L. VanderBeek
1 Drexel University College of Medicine, Philadelphia, PA; 2 Scheie Eye Institute, Department of Ophthalmology, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA; 3 Center for Clinical Epidemiology and Biostatistics, Department of Biostatistics & Epidemiology, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA

**B0218** The impact of intraocular pressure fluctuations and other risk factors on progression in patients with ocular hypertension and normal tension glaucoma. Jasmin Rezapour, S. Hofp, N. Pfeiffer, D. Schwantusche, V. Proksa, J. Lamparter, E. Hoffmann
Department of Ophthalmology, University Medical Center Mainz, Mainz, Germany

**B0219** Factors Having Association with Self-Reported Family History of Glaucoma. Daniel K. Roberts1,2, M. F. Roberts, T. Newman, B. Teitelbaum, J. Winters
1 Clinical Education, Illinois College of Optometry, Chicago, IL; 2 Epidemiology and Biostatistics, University of Illinois at Chicago, Chicago, IL

**B0220** Central cornea thickness (CCT) discrepancies in Kazakh healthy and POAG patients. Assel Talaspayeva1, A. S. Khouri2, N. A. Aldasheva
1 Anatomy & Cell Biology, Kazakh Research Institute of eye diseases, Almaty, Kazakhstan; 2 Ophthalmology, Rutgers New Jersey Medical School, Newark, NJ

**B0221** Relationship Between Asymmetric Pachymetry and Progression to Surgery in Patients with Primary Open Angle Glaucoma. Matthew S. Wieder, R. Fargione, W. Yao
1 Ophthalmology, Albert Einstein College of Medicine, Scarsdale, NY; 2 Ophthalmology, Montefiore Medical Center, Bronx, NY

**B0222** Comparison of Burden of Care and Visual Field Progression between Newly Diagnosed Glaucoma Patients Managed on Topical Monotherapy and Those Who Switch or Add On Therapies. Donald S. Fong, M. Batechi, S. M. Hudson, T. Luong, J. Jimenez, H. Chandwani
1 Ophthalmology, Kaiser Permanente Southern California, Baldwin Park, CA; 2 Research & Evaluation, Southern California Permanente Medical Group, Pasadena, CA; 3 Global Health Economics and Outcomes Research, Allergan plc, Irvine, CA

**B0223** Analysis of Risk Factors for Visual Field Progression in Open Angle Glaucoma. Koji Nitta1, W. Wajima2, G. Tachibana3, S. Inoue4, R. Fujiiwara5, K. Sugiyama6, Fukuken Saiseikai Hospital, Fukui, Japan; 2 Crecon Medical Assessment Inc., Tokyo, Japan; 3 Santen Pharmaceutical Co., Ltd., Osaka, Japan; 4 Kanazawa University Graduate School of Medical Science, Kanazawa, Japan

**B0224** A Growth Mixture Model for Progression of Glaucoma based on Visual Field. Yun Ling, R. A. Bilonick, D. Narendra, G. Wollstein, H. Ishikawa, L. Kagemann, J. S. Schuman
1 UPMC Eye Center, Eye and Ear Institute, Ophthalmology and Visual Science Research Center, Department of Ophthalmology, University of Pittsburgh School of Medicine, Pittsburgh, PA; 2 Department of Biostatistics, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA; 3 Department of Bioengineering, Swanson School of Engineering, University of Pittsburgh, Pittsburgh, PA

The Commercial Relationships (CR) Index for Disclosures and the Clinical Trial (CT) Registration Index are at arvo.org/amindices.

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2609 — B0225  Retinal nerve fiber layer thinning associated with poor cognitive function among a large cohort, UK Biobank, Fang Ko1, Z. A. Mathy1, G. John1, K. Khaw1, C. A. Reisman1, Q. Yang2, C. Bunce3, P. T. Khaw4, N. G. Strouthidis5, P. J. Foster, P. J. Futel. 1NIHR Biomedical Research Centre, Moorfields Eye Hospital and UCL Institute of Ophthalmology, London, United Kingdom; 2Department of Public Health and Primary Care, University of Cambridge, Cambridge, United Kingdom; 3Topcon Advanced Biomedical Imaging Laboratory, Oakland, NJ; 4Singapore Eye Research Institute, Singapore, Singapore *CR

2610 — B0226  Personality and Total Health (PATH) Through Life Project: Collaborative Eye Study Methodology, Mohamed Dirani1, S. Keel1, K. M. Kiely2, K. Koh3, P. Campbell2, K. Aiahmad3, D. K. Kumara1, P. Van Wijngaarden1, K. J. Anstey1, K. M. Kiely2, K. Koh3, C. Paim3, B. Aliahmad3, D. K. Kumara1, P. Van Wijngaarden1, K. J. Anstey1. Centre for Eye Research Australia, East Melbourne, VIC, Australia; 2Australian National University, Canberra, ACT, Australia; 3RMIT University, Melbourne, VIC, Australia

2611 — B0227  Cognitive function in older adults with and without normal tension glaucoma. Todd Driver1, 2, Q. Cu1, D. Green2, A. Sugiyama, N. Tanabe, E. Uchio. Fukuoka Univ Sch of Medicine, Jyonan-ku, Japan

2612 — B0228  Association Of Advanced Glycation End Products With Open Angle Glaucoma: The Alienor Study, Cedric Schweitzer1, 2, A. Cougnard-Gregoire1, V. Rigel1, M. Delyfer1, M. B. Rougier1, J. Dargiues2, J. K. Korobelnik1, 2, C. DelCourt2. Ophthalmology, Chu Bordeaux, Bordeaux, France; 3Univ. Bordeaux, Inserm, U1219-Bordeaux Population Health Center, Bordeaux, France; 4Endocrinology, Chu Bordeaux, Bordeaux, France *CR

2613 — B0229  Relationship between intraocular pressure and carotid intima-media thickness: the Beaver Dam Offspring Study (BOSS), Jennifer C. Larson1, D. M. Nondahl1, C. W. Acher2, Y. Chen1, B. E. Klein1, R. Klein1, J. Nieto1, J. Pankow1, K. J. Cruickshanks1, 4. Department of Ophthalmology and Visual Sciences, University of Wisconsin School of Medicine and Public Health, Madison, WI; 2Department of Surgery, University of Wisconsin School of Medicine and Public Health, Madison, WI; 3Department of Population Health Sciences, University of Wisconsin School of Medicine and Public Health, Madison, WI; 4Department of Epidemiology & Community Health, University of Minnesota School of Public Health, Minneapolis, MN


2615 — B0231  Increased Stroke Risk among Patients with Open-Angle Glaucoma: A 10-Year Follow-up Cohort Study. Sang Yeop Lee1, T. Rim1, H. Kwon1, H. Bae1, C. Kim1. 1Department of Ophthalmology, Severance Hospital, Institute of Vision Research, Yonsei University College of Medicine, Seoul, Korea (the Republic of); 2Department of Ophthalmology, CHA Bundang Medical Center, CHA University, Seongnam, Korea (the Republic of)

2616 — B0232  Inter-Relationships between Retinal Vascular Caliber, Retinal Nerve Fibre Layer Thickness and Glaucoma: A Mediation Analysis Approach. Yih Chung Tham1, 2, R. G. Siantar1, 2, C. Y. Cheung1, 3, S. Tan1, V. T. Koh1, 2, T. Aung1, 2, T. Y. Wong1, 2, C. Cheng1, 2. Singapore Eye Research Institute, Singapore, Singapore; 3Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore and National University Health System, Singapore, Singapore; 4Ophthalmology and Visual Sciences, The Chinese University of Hong Kong, Hong Kong, Hong Kong

2617 — B0233  Prevalence of glaucoma in retinal vein occlusion. Hiroaki Ozaki, J. Huang, K. Marata, I. Nata, E. Uchio. Fukuoka Univ Sch of Medicine, Jyonan-ku, Japan

2618 — B0234  Prevalence of Pseudoexfoliation in Nuevo Progreso, Guatemala. Rebecca Sorenson1, A. L. Sorenson1, I. U. Scott1. Ophthalmology, Penn State Hershey Eye Center, Hershey, PA; 2Ophthalmology, California Pacific Medical Center, San Francisco, CA

2619 — B0235  Association of Pelvic Organ Prolapse (POP) and Exfoliation Syndrome in Utah Medicare Beneficiaries. Samuel C. Thomas1, K. Curtis1, B. M. Besch1, R. R. Allingham3, R. Ritch1, G. S. Hageman2, B. M. Wirostko6. 1University of Utah Medicare Beneficiaries. 2University of Utah School of Medicine, Salt Lake City, UT; 3Moran Eye Center, Sharon Eccles Steele Center for Translational Medicine University of Utah, Salt Lake City, UT; 4Department of Ophthalmology, Duke University, Durham, NC; 5Einhorn Clinical Research Center, New York Eye and Ear Infirmary of Mount Sinai, New York, NY; 6Department of Medicine and Huntsman Cancer Institute, University of Utah, Salt Lake City, UT; 7Moran Eye Center, University of Utah, Salt Lake City, UT

2620 — B0236  Prevalence and clinical implications of anatomically narrow angles in exfoliation glaucoma. Jung M. Lee1, R. Mogil1, A. Tirsch1, C. Tello1, S. C. Park1. 1Department of Ophthalmology, Manhattan Eye, Ear and Throat Hospital, New York, NY; 2Department of Ophthalmology, Hofstra North Shore-LIJ School of Medicine, Hempstead, NY *CR

2621 — B0237  Relationship between various anthropometric measurement and intraocular pressure and development of normal tension glaucoma: The Korea National Health and Nutrition Examination Survey (2010-2011). Hyuntae Kim1, D. Kim1, M. Lee1, S. Shin1, J. Kang1, K. Park1, J. Kim1. Ophthalmology, Kangbuk Samsung Hospital, Seoul, Korea (the Republic of); 2Ophthalmology, Kyung Hee University Hospital at Gangdong, Seoul, Korea (the Republic of); 3Ophthalmology, Seoul National University Hospital, Seoul, Korea (the Republic of)

Exhibit/Poster Hall B0353-B0380
Monday, May 02, 2016 3:45 PM-5:30 PM
Genetics Group / Clinical/Epidemiologic Research

280 AMD Genetics

Moderator: Subhabrata Chakrabarti

2622 — B0353  In silico identification of miRNAs associated with AMD. Magda A. Meester1, 2, M. Ghanbari1, J. Caliji2, S. Erkeland1, A. Dehghan1, C. K. Claver1, 2. Dept of Ophthalmology, Erasmus MC, Rotterdam, Netherlands; 3Dept. of Epidemiology, Erasmus MC, Rotterdam, Netherlands; 4Dept of Immunology, Erasmus MC, Rotterdam, Netherlands

2623 — B0354  Phenome-wide association study provides biologic insights into the etiology of age-related macular degeneration. Scott Hebrbing1, 2, J. Mayer1, Z. Ye1, J. Liu1, W. Lee1, B. Hoch1, S. Schrod1, J. Joyce1, A. Ikeda1, M. Brilliant1. marshfield clinic, Marshfield, WI; 1University of Wisconsin Madison, Madison, WI

2624 — B0355  Genome-Wide Interaction Study of Nuclear and Mitochondrial (mt) Variants in Age-Related Macular Degeneration (AMD) Identifies Novel Locus TRPM1. Patrice Persad, W. K. Scott. Hussman Institute for Human Genomics, University of Miami Miller School of Medicine, Miami, FL


*CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures. 

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2626 — B0357 Roles of genes in phenotypic diversity and intraocular amyotrophy in patients with familial exudative vitreoretinopathy. Hiyori Kondo1, 2, E. Uchiro1, T. Hayashi1, S. Nishina1, N. Azuma1, S. Kusaka1, 3. 1Ophthalmic & Visual Science, Univ of Occupant1 & Environment1; 2Kitakyushu University, Japan; 3Ophthalmology, Fukuoka University, Fukuoka, Japan; 4Ophthalmology, The Jikei University, Tokyo, Japan; 5Ophthalmology, Kinki University Sakai Hospital, Sakai, Japan; 6Ophthalmology, National Center for Child Health and Development, Tokyo, Japan


2628 — B0359 Genetic variants in ARMS2/HTRA1 and APOE loci are associated with hyperreflective foci present in early forms of age-related macular degeneration. Lebriz Ersøy1, 2, P. Scholé1, C. C. Høyng1, A. T. Den Hollander1, T. Langmann1, S. Fauser1. 1Department of Ophthalmology, University Hospital of Cologne, Cologne, Germany; 2Department of Ophthalmology, Experimental Immunology of the Eye, Cologne, Germany; 3Department of Ophthalmology, Radboud University, Nijmegen, Netherlands


2630 — B0361 Genetic and environmental risk factors for extramacular drusen. Xavier Subirats Rodriguez1, 2, T. Schick1, 2, A. Borghold, B. Kirchhof, A. den Hollander1, S. Fauser1, S. Liakopoulos1, 2, 3Cologne Image Reading Center, Cologne, Germany; 4Department of Ophthalmology, University of Cologne, Cologne, Germany; 5Radboud University Nijmegen Medical Center, Nijmegen, Netherlands

2631 — B0362 ABCG1 as a new susceptibility gene for neovascular age-related macular degeneration and polypoidal choroidal vasculopathy in Chinese and Japanese. Chi Pui C. Pang1, L. Ma1, M. Tsujikawa2, H. Chen1, M. E. Brelen1, P. Tam1, K. Nishida1, L. Chen1. 1Ophthalmology & Visual Sciences, Chinese University of Hong Kong, Kowloon, Hong Kong; 2Department of Ophthalmology, Osaka University Graduate School of Medicine, Osaka, Japan; 3Joint Shantou International Eye Center, Shantou, China

2632 — B0363 Identification of PGF as a new gene for Neovascular Age-related Macular Degeneration. Li Jia Cher1, 2, L. Ma1, H. Chen1, M. E. Brelen1, P. Tam1, A. Young1, C. C. Pang1, 3. 1Ophthalmology and Visual Sciences, The Chinese University of Hong Kong, Hong Kong, Hong Kong; 2Joint Shantou International Eye Centre, Shantou, China, Shantou, China; 3Ophthalmology and Visual Sciences, Prince of Wales Hospital, Hong Kong, Hong Kong

2633 — B0364 Protective effects of a HTRA1 insertion-deletion variant against age-related macular degeneration. Tsz Kin Ng1, X. Liang1, D. T. Liu1, G. Yam1, F. Lu1, L. Ma1, P. Tam1, L. Chen1, Z. Yang1, C. C. Pang1, 3. 1Ophthalmology and Visual Sciences, The Chinese University of Hong Kong, Kowloon, Hong Kong; 3Sichuan Academy of Medical Sciences, Chengdu, China

2634 — B0365 HLA-G gene polymorphisms in patients with age-related macular degeneration. Signe G. Swendsen1, 2, L. L. Nilsson1, S. Djurisić1, 2, T. Funck1, C. Faber1, 3, M. K. Falke4, A. Singh5, T. L. Sørensen1, T. V. Hvid5, M. H. Nissen6. 1Department of Clinical Biochemistry, Copenhagen University Hospital Roskilde, Roskilde, Denmark; 2Department of Ophthalmology and Microbiology, University of Copenhagen, Copenhagen, Denmark; 3Department of Ophthalmology, Glostrup Hospital, Denmark, Glostrup, Denmark; 4Department of Ophthalmology, Copenhagen University Hospital, Roskilde, Roskilde, Denmark

2635 — B0366 Age-Related Macular Degeneration Genetic Variation in Armenian Population. Jessica Avetisjan1, 2, E. Wagner2, K. W. Smalt3, F. Shay3, E. Tran4, J. M. Seddon1, 5. 1Macula and Retina Institute, Glendale, CA; 2Ophthalmic Epidemiology and Genetics Service, Tufts Medical Center, Boston, MA; 3Ophthalmology, Tufts University School of Medicine, Boston, MA; 4Molecular Insight Research Foundation, Glendale, CA

2636 — B0367 A forward genetics approach to discovering new genes essential to retinal development and function. Yi Ding1, X. Zhong1, B. Aredo1, C. X. Wang1, B. Beutler2, R. Ufret-Vincenty1. 1Ophthalmology, UT Southwestern Medical Center, Dallas, TX; 2Center for the Genetics of Host Defense, University of Texas Southwestern Medical Center, Dallas, TX

2637 — B0368 Using protein-protein interaction analysis to understand genetics of heritable ocular disease. Elizabeth Rossin1, 2, K. Lage3, 4, L. Sobrin1, 2, T. Li3, M. Daly2, 5, H. Horn5. 1Massachusetts Eye and Ear, Boston, MA; 2Massachusetts General Hospital, Boston, MA; 3The Broad Institute, Boston, MA

2638 — B0369 The expression of complement genes by retinal pigment epithelial cells from donors with and without AMD. Selina McHarg1, N. Bracey1, R. Pervine2, G. C. Black3, 4, R. Unwin3, G. S. Hageman1, 2, A. J. Day3, S. J. Clark3, P. N. Bishop4. 1Centre for Ophthalmology & Vision Sciences, Institute of Human Development, University of Manchester, Manchester, United Kingdom; 2Institute of Human Development, Centre for Genomic Medicine, University of Manchester, Manchester, United Kingdom; 3Centre for Genomic Medicine, Saint Mary’s Hospital, Central Manchester University Hospitals, Manchester, United Kingdom; 4Centre for Advanced Discovery and Experimental Therapeutics (CADET), Central Manchester University Hospitals NHS Foundation Trust, Institute of Human Development, University of Manchester, Manchester, United Kingdom; 5Moran Center for Translational Medicine, Department of Ophthalmology & Visual Sciences, University of Utah, Salt Lake City, UT; 6Wellcome Trust Centre for Cell-Matrix Research, Faculty of Life Sciences, University of Manchester, Manchester, United Kingdom *CR

2639 — B0370 Identification of Genetic Variants Associated with Anti-VEGF Drug Response in Neovascular AMD Patients in the VIEW Trial. Lorah T. Perlee1, 3, N. Holekamp1. 1Regeneron Pharmaceuticals, LLC, Tarrytown, NY; 2Prepose Vision Institute, Chesterfield, MO *CR, x

2640 — B0371 Pooled GWAS identifies a novel gene: OR52B4 influencing anti-VEGF treatment response in Age related macular degeneration. Moeen Riaz1, 2, L. Lorés de Motta1, A. J. Richardson1, 2, Y. Li1, G. Montgomery1, E. de Jong1, C. C. Høyng2, T. Macgregor2, R. H. Guymer2, 3, 4. 1AI. Den Hollander1, 4, 5, 6. 1Centre for Eye Research Australia, Royal Victorian Eye and Ear Hospital, Melbourne, VIC, Australia; 2Department of Surgery, Ophthalmology, University of Melbourne, Melbourne, VIC, Australia; 3Department of Ophthalmology, Radboud University medical center, Nijmegen, Netherlands; 4Statistical Genetics Laboratory, QIMR Berghofer Medical Research Institute, Brisbane, QLD, Australia; 5Molecular Epidemiology, QIMR Berghofer Medical Research Institute, Brisbane, QLD, Australia; 6Department of Human Genetics, Radboud University medical center, Nijmegen, Netherlands *CR

2641 — B0372 Association between complement factor H polymorphism and response to antiangiogenic therapy in age-related macular degeneration. Lorena Ramirez1, F. Grawe1, J. C. Zenteno1, A. Bolotitos2, B. Buentello2. 1Retina, Instituto Conde de Valenciana, Mexico, Mexico; 2Genetics, Conde de Valenciana, Mexico, Mexico
2642 — B0373  A genetic risk prediction model for progression of age-related macular degeneration. Wenqiu Wang1, K. Gawlik1, C. Wen2, J. Zhu2, H. Ferreyra3, S. Chang4, K. Zhang5, ‘Shiley Eye Center, San Diego, CA; 6UCSD, San Diego, CA; 7R&D Chemistry, AutoGenomics Inc., Vista, CA *CR

2643 — B0374  Whole Exome Sequencing in the Amish identifies candidate rare variants for AMD. Mariusz Butkiewicz1, R. J. Sardelli1, P. Whitehead2, W. K. Scott3, D. Stambolian4, M. A. Pericak-Vance5, J. Haines5. ‘Epidemiology and Biostatistics, Case Western Reserve University, Cleveland, OH; 2Genetics, University of Miami, Hussman Institute for Human Genomics, Miami, FL; 3University of Pennsylvania, Philadelphia, PA

2644 — B0375  The heritability of choroidal thickness in the Amish. Margaret A. Pericak-Vance1, R. J. Sardelli1, M. G. Nittala1, L. D. Adams1, R. Lauz1, D. Dana1, W. K. Scott2, S. R. Saddek2, D. Stambolian2, J. J. Haines2. ‘Univ of Miami Miller Sch of Med, Miami, FL; 1Doheny Eye Institute, Los Angeles, CA; 2Case Western Reserve University, Cleveland, OH; 3University of Pennsylvania, Philadelphia, PA

2645 — B0376  The role of rare CFH variants in age-related macular degeneration. Erin Wagner1, 2, S. Raychaudhuri3, M. Villalonga1, M. Triebwasser1, M. Daly4, J. Atkinson1, J. M. Seddon1, 5, 6. ‘Ophthalmic Epidemiology and Genetics Service, Tufts Medical Center, Boston, MA; 2Program in Medical and Population Genetics, Broad Institute, Cambridge, MA; 3Partners HealthCare Center for Personalized Genetic Medicine, Boston, MA; 4Ophthalmology, Tufts University School of Medicine, Boston, MA; 5Medicine, Washington University School of Medicine, St. Louis, MO; 6Analytical and Translational Genetics Unit, Massachusetts General Hospital, Boston, MA

2646 — B0377  Novel associations with age-related macular degeneration: a common variant near CTRB1 and a protective rare variant in PEL13. Johanna M. Seddon1, 2, E. Wagner1, 2, Y. Yu1, 2, E. H. Souied1, 2, I. J. Immomen1, S. Raychaudhuri1, M. Daly6. ‘Ophthalmology, Tufts University School of Medicine, Boston, MA; 2Ophthalmic Epidemiology and Genetics Service, Tufts Medical Center, Boston, MA; 3Hôpital Intercommunal, Hôpital Henri Mondor, Créteil Université Paris Est, Paris, France; 4Helsinki University Eye Clinic, Helsinki, Finland; 5Division of Genetics, Brigham and Women’s Hospital, Boston, MA; 6Analytic and Translational Genetics Unit, Massachusetts General Hospital, Boston, MA

2647 — B0378  Association between genetically determined plasma lipid levels and risk of diabetic retinopathy in East Asians. Yong He Chong1, A. Gan2, W. Zhao1, Q. Fan1, G. S. Tan1, X. Sim1, E. Tai1, T. Y. Wong1, 5, C. Cheng2. ‘Duke-NUS Medical School, Singapore, Singapore; 2Singapore Eye Research Institute, Singapore, Singapore; 3Singapore National Eye Centre, Singapore, Singapore; 4Saw Swee Hock School of Public Health, NUS, Singapore, Singapore; 5Department of Medicine, NUS, Singapore, Singapore

2648 — B0379  Analysis of Genetic and Environmental risk factors associated with diabetic retinopathy, diabetic macular edema and neurodegeneration in Korean diabetes. Kiyoung Kim1, S. Rhee1, H. Kwak1, S. Chon1, J. Woo1, S. Yu1. ‘ophthalmology, Kyung Hee University Hospital, Seoul; 2Endocrinology and Metabolism, Kyung Hee University Hospital, Seoul, Korea (the Republic of) *CR

2649 — B0380  Mitochondrial haplogroups and the presence of diabetic retinopathy. David Herren1, J. Bregman1, C. Estopinal1, I. Chocron1, D. C. Samuels1, M. A. Brandon1. ‘Ophthalmology, Vanderbilt University Medical Center, Nashville, TN; 2Vanderbilt Genetics Institute, Nashville, TN

Exhibit/Poster Hall C0001-C0027
Monday, May 02, 2016 3:45 PM-5:30 PM
Retina
281 AMD Clinical Research 1

Moderator: David M. Brown

2650 — C0001  Treatment Responses to the Intravitreal Aflibercept in Polypoidal Choroidal Vasculopathy at 1 year. Sakiko Minami1, 5, N. Nagai1, M. Suzuki1, T. Kurihara1, H. Shinoda1, K. Tsuotsu1, Y. Oyama1. ‘Department of Ophthalmology, Keio University, School of Medicine, Tokyo, Japan; 2Department of Ophthalmology, Inagi Municipal Hospital, Tokyo, Japan


2652 — C0003  Characteristics of geographic atrophy in polypoidal choroidal vasculopathy patients treated with aflibercept for one year. Shinichiro Doi, Y. Morizane, A. Fujiwara, M. Hosokawa, S. Kimura, M. Hosogi, F. Shigara. Okayama University, Okayama, Japan

2653 — C0004  Hard Exudates and Treatment Outcomes in the Comparison of Age-Related Macular Degeneration Treatments Trials (CATT). Ebenezer Daniel1, J. E. Gruenwald2, B. J. Kim1, M. G. Maguire1, J. A. Shaffer1, G. J. Jaffe2, C. A. Toth1, D. F. Martin1, F. L. Ferris1, G. Ying1. ‘Ophthalmology, University of Pennsylvania, Philadelphia, PA; 2Duke University, Durham, NC; 3Cleveland Clinic, Cleveland, OH; 4National Eye Institute, Bethesda, MD *CR

2654 — C0005  Longitudinal Study of Dark Adaptation as a Functional Outcome Measure for Age-Related Macular Degeneration. Jason A. Alvarez1, M. Yazdanie1, W. T. Wong2, D. Thompson3, R. Lipson1, H. Wiley1, E. Y. Chew1, F. Ferris1, C. Cukras1. ‘National Eye Institute, National Institutes of Health (NIH), Bethesda, MD; 2EMMES Canada, Barnaby, BC, Canada

2655 — C0006  Functional biomarkers of hypoxia in Age-related macular degeneration. Tansin Callaghan1, 2, A. Bious1, T. Margrain1. ‘Optometry and Visual Science, City University, London, United Kingdom; 2School of Optometry and Vision Sciences, Cardiff University, Cardiff, United Kingdom

2656 — C0007  Segmented SD-OCT imaging and micropimetry outcomes in age-related macular degeneration. Nicola Cassels1, J. Wild1, T. Margrain1, L. Pearce1, C. Blyth1, S. Sivaprasad1, V. Chong2, J. Acton1. ‘Cardiff School of Optometry and Vision Sciences, Cardiff University, Cardiff, United Kingdom; 2Oxford Eye Hospital, Oxford, United Kingdom; 3Ophthalmology, King’s College Hospital, London, United Kingdom; 4Ophthalmology, University Hospital Wales, Cardiff, United Kingdom; 5Moorfields Eye Hospital, London, United Kingdom

2657 — C0008  Flicker Response of Venous Oxygen Saturation Significantly Reduced in Both Early and Late Stages of Age-Related Macular Degeneration. Emilia Donicova, L. Ramm, M. Hamner, R. Augsten. Experimental Ophthalmology, Jena University Hospital, Jena, Germany

2658 — C0009  Factors influencing patient reported visual function in patients with bilateral age-related macular degeneration. Miin Roh1, A. Selivanova1, J. W. Miller1, M. Jackson2. ‘Ophthalmology, Massachusetts Eye and Ear Infirmary, Boston, MA; 2Ophthalmology, 3VGH/UBC Eye Care Centre, Vancouver, BC, Canada *CR


2660 — C0011  Metamorphopsia and vision-related quality of life among patients with age-related macular degeneration (AMD). Kunyong Xu, V. Gupta, S. Bae, S. Sharma. Ophthalmology, Queen’s University, Kingston, ON, Canada

*CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
2661 — C0012 Functional and structural progression in early AMD; dark adaptation best predicts morphology. Elena Rodrigo Díez4, H. Tahiri4, J. M. Kelly1, N. R. Parry4, T. Aslam4, D. Carden1, I. J. Murray7. 1Faculty of Life Sciences, University of Manchester, Manchester, United Kingdom; 2Vision Science Centre, Manchester Royal Eye Hospital, Manchester, United Kingdom

2662 — C0013 Charles Bonnet Syndrome in Participants of the Age-Related Eye Disease Study 2 (AREDS2). Elvira Agron5, T. E. Clemmons3, E. Y. Chew1. 1National Eye Institute, Bethesda, MD; 2EMMES Corporation, Rockville, MD

2663 — C0014 Detection of new neovascular AMD in at-risk eyes using a handheld radial shape discrimination test in a clinical population. Paul C. Knox4, N. Pitrelli Vazquez1, S. P. Harding7, H. Heimann8. 1Eye & Vision Science, University of Liverpool, Liverpool, United Kingdom; 2St Pauls Eye Unit, Royal Liverpool University Hospital, Liverpool, United Kingdom

2664 — C0015 Lipidomic study: Relevance and interest for screening, follow-up and etiopathology of AMD. Corinne Gonzalez. Futurophata Cabinet Medical, Toulouse, France

2665 — C0016 When and How Should Extrafoveal Choroidal Neovascular Lesions (EF-CNV) Be Treated? An Analysis of Data from the Macular Photocoagulation Study (MPS). Jithin Thomas7, Y. Yonekawa4, J. E. Kim1, D. V. Weinberg1, R. S. Singh2. 1Department of Ophthalmology, Michigan State University, East Lansing, MI; 2Retina/ Vitreous, Associated Retinal Consultants, Royal Oak, MI

2666 — C0017 Variability of disease activity in patients treated with ranibizumab for neovascular age-related macular degeneration. Philip Enders, P. Scholz, P. Muether, S. Fauser. Center of Ophthalmology, University Hospital of Cologne, Cologne, Germany

2667 — C0018 Two-year Results of “Treat and Extend” Intravitreal Alffercept Injection for Exudative Age-related Macular Degeneration. Kyo Akika, M. Yamamoto, A. Yasui, K. Hiyayama, T. Kohno, K. Shiraki. Ophthalmology, Osaka City University, Osaka-shi, Japan

2668 — C0019 Anti-VEGF-treatment for wet-AMD According to a Treat-and-Extend Protocol at a Swedish County Hospital: clinical outcomes at 12 Months. Elisabet Grunstam1, K. Sjövalf1, A. Paul1, Å. Moren1. 1Center for Clinical Research, Uppsala University/County Council of Västmanland, Västerås, Sweden; 2Ophthalmology, Västmanland County Hospital, Västerås, Sweden

2669 — C0020 One year outcomes of intravitreal alffercept for wet AMD using modified treat and extend regimen. Tomohiro Nizawa, M. Kitahashi, H. Yokouchi, M. Kubota, T. Baba, S. Yamamoto. Ophthalmology, Chiba University, Chiba, Japan

2670 — C0021 Long-term Outcomes of Neovascular Age-related Macular Degeneration Treated with As Needed Anti-Vascular Endothelial Growth Factor Agents. Qisheng You1, N. Mendoza1, M. Espina1, M. Alam1, R. Gabel1, I. Kilic1, W. R. Freeman1. 1Jacobs Retina Center, Shiley Eye Institute, University of California San Diego, San Diego, CA; 2Beijing Institute of Ophthalmology, Beijing Tongren Hospital, Capital Medical University, Beijing, China

2671 — C0022 Massive choroidal neovascular membranes: a severe bilateral phenotype of refractory neovascular age-related macular degeneration. Aparna Shah1, A. Cheung1, J. C. Thomas1, Y. Yonekawa1, B. Garretson1, A. Capone1, T. S. Hassard1. 1Ophthalmology, William Beaumont Hospital, Troy, MI; 2Retina/ Vitreous, Associated Retinal Consultants, Royal Oak, MI

2672 — C0023 A first in human study of Intravitreal (IVT) CLG561 in Subjects with Advanced Age-Related Macular Degeneration (AMD). Louis C. Glazer5, J. G. Williams5, C. M. Gordon5, P. U. Dugel1, M. Milton5, T. Valencia5, U. Klein5, S. Kretz5, K. Gedjil5, C. L. Grosskreutz5, P. Zamiri4. 1Vitrleo-Retinal Associates, Grand Rapids, MI; 2Retinal Consultants of Southern Colorado, Colorado Springs, CO; 3TLC Eye Care & Laser Centers, Jackson, MI; 4Retinal Consultants of Arizona, Phoenix, AZ; 5Keck School of Medicine, University of Southern California, USC Eye Institute, Los Angeles, CA; 6Novartis Institutes for BioMedical Research, Cambridge, MA; 7Alcon Laboratories, Fort Worth, TX; 8Novartis Institutes for BioMedical Research, Basel, Switzerland


2674 — C0025 Comparison post injection IOP Elevations using a 30 G and 32 G needle. Alexander M. Eaton1, H. Waafapoor1, R. L. Avery2, R. K. Mauteri1, G. M. Gordon1, S. Chaoventhontrakul1. 1Retina Health Center, Fort Myers, FL; 2California Retina Consultants, Santa Barbara, CA; 3Midwest Eye Institute, Indianapolis, IN

2675 — C0026 A Comparison of Pain Scores and Severity of Subconjunctival Hemorrhage Following Intravitreal Injection in Patients Receiving Subconjunctival Aesthesia with 2% Lidocaine versus 2% Lidocaine with Epinephrine. Javed Sayed, M. Ohr, B. Mihalik. Department of Ophthalmology and Visual Science, The Ohio State University Wexner Medical Center, Columbus, OH


Exhibit/Poster Hall C0128-C0155
Monday, May 02, 2016 3:45 PM-5:30 PM
Retina

282 Macular diseases/dystrophy

2677 — C0128 Comparison of Microperimetry and Humphrey Perimetry for Hydroxychloroquine Toxicity Screening. Sophia Wang, E. Chin, S. S. Park. University of California Davis, Sacramento, CA

2678 — C0129 Exacerbation of Macular Edema Associated with Hyperbaric Oxygen Therapy. Stephen M. Hynes7, A. Abbey1, Y. Yonekawa4, J. D. Wolfe4. 1Neurology & Ophthalmology, Michigan State University COM, Dearborn, MI; 2Ophthalmology, Beaumont Health - Southshore Campus, Trenton, MI; 3Associated Retina Consultants, Royal Oak, MI; 4Ophthalmology, William Beaumont Hospital, Royal Oak, MI

2679 — C0130 Drusen-like deposits in young adults affected by Systemic Lupus Erythematosus. Alessandro Invernizzi2, L. Dell’Arti1, E. Caroli, G. Leone1, D. Galimberti1, A. Santaniello1, G. Moroni4, F. Viola1. 1Department of Clinical Sciences and Community Health, University of Milan, Ophthalmological Unit, IRCCS-Cà Granda Foundation - Ospedale Maggiore Policlinico, Milan, Italy; 2Department of Biomedical and Clinical Science - University of Milan, Eye Clinic - Luigi Sacco Hospital, Milan, Italy; 3Department of Clinical Sciences and Community Health, University of Milan, Immunology Unit, IRCCS-Cà Granda Foundation - Ospedale Maggiore Policlinico, Milan, Italy; 4Department of Clinical Sciences and Community Health, University of Milan, Nephrology Unit, IRCCS-Cà Granda Foundation - Ospedale Maggiore Policlinico, Milan, Italy

2680 — C0131 Macular function assessment with microperimetry in patients with macular dystrophy. Jungho Lo, J. Lee, W. Chiang, H. Kuo, P. Wu. Ophthalmology, Kaohsiung Chang Gung Memorial Hospital, Taiwan, Kaohsiung, Taiwan
2681 — C0132 Risk factors of the antimalarial drug's maculopathy: retrospective study in 3580 patients' cohort. Clementine David1, C. Farelane2, C. Simon1, B. Bodaghi3, P. Lehmaq4, J. Knorr5, B. Lebrun-vignesc6, 1Fédération Electrophysiologie, Hôpital Pitié-Salpêtrière, Université Paris VI, Paris, Paris, France; 2Service d’Ophthalmologie, Centre de Référence en Maladies Rares, Hôpital Pitié-Salpêtrière, Université Paris VI, DHU Vision et Handicap, Paris, France; 3Department Pharmacovigilance, Hôpital Pitié-Salpêtrière, University Paris VI, Paris, Paris, France

2682 — C0132 Comparing macula thickness between sickle cell patients of HBSS and HBSC genotype using spectral domain optical coherence tomography. Wei Sing Lim1, J. Helou2, P. Mogan1, M. Mohamed1. 1Ophthalmology, Princess Royal University Hospital, London, United Kingdom; 2St Thomas Hospital, London, United Kingdom

2683 — C0134 Mapping metamorphopsia and central visual field loss in macular disease patients. Niall C. Strang1, D. B. Yorston1, M. Gerard1, D. Thomson1, M. Mihaylova1. 1Life Sciences, Glasgow Caledonian University, Glasgow, United Kingdom; 2Gartnavel Hospital, Glasgow, United Kingdom; 3Sensory Neurobiology, Institute of Neurobiology, Sofia, Bulgaria; 4City University, London, United Kingdom; 5Ophthalmology, University Hospital Ayr, Ayr, United Kingdom *CR

2684 — C0135 Clinical and genetic study of late onset Stargardt disease. Ada Orrico, P. Melillo, V. Di Iorio, S. Rossi, M. Della Corte, F. Testa, F. Simonelli. Eye Clinic, Multidisciplinary Department of Medical, Surgical and Dental Sciences, Second University of Naples, Naples, Italy

2685 — C0136 TEASE: a phase 2 clinical trial assessing the tolerability and effects of oral one-day AXL-001 on Stargardt disease. Hendrik P. Scholl1, S. M. Shah1, C. N. Kay1, S. H. Tsang2, K. E. Stephey3, P. S. Bernstein4, B. L. Lam5, M. B. Gorin2, I. Washington6, L. Saad7. 1Ophthalmology, Johns Hopkins University, Baltimore, MD; 2Vitreoretinal Associates, Gainesville, FL; 3Eye Institute, Medical College of Wisconsin, Milwaukee, WI; 4Moran Eye Center, University of Utah, Salt Lake City, UT; 5Bascam Palmer Eye Institute, University of Miami, Miami, FL; 6Jules Stein Eye Institute, University of California Los Angeles, Los Angeles, CA; 7Harkness Eye Institute, Columbia University Medical Center, New York, NY; 8Alkeus Pharmaceuticals, Boston, MA *CR, *


2687 — C0138 Progression of visual acuity and fundus autofluorescence in recent onset Stargardt disease: ProgStar study. Sheila K. West1, X. Kong2, B. E. Munoz3, A. V. Cideciyan4, M. Michaelides3, A. Ervin5, S. R. Sadda6, H. P. Scholl7. 1Medicine, Johns Hopkins Wilmer Eye Inst, Baltimore, MD; 2Ophthalmology, Scheie Eye Institute, U Penn, Philadelphia, PA; 3Moorfields Eye Hospital, University of London, London, United Kingdom; 4Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD; 5Doheny Eye Institute, Los Angeles, CA; 6David Geffen School of Medicine, UCLA, Los Angeles, CA *CR

2688 — C0139 Biofeedback Rehabilitation in Patients with Stargardt disease: a randomized controlled trial. Francesco Maria D’Alterio1, P. Melillo1, V. Di Iorio1, G. Olivo1, A. Prinster1, A. Bruni2, M. Quarantelli, F. Testa1, F. Simonelli1. 1Eye Clinic, Multidisciplinary Department of Medical, Surgical and Dental Sciences, Second University of Naples, Naples, Italy; 2Department of Advanced Biomedical Sciences, University of Naples “Federico II”, Naples, Italy; 3Institute of Biostucture and Bioimaging, National Research Council, Naples, Italy

2689 — C0140 Stargardt Disease Expression on a Background of Low Lipofuscin: The Impact of the p.G196E1 Mutation of ABCA4. Winston Lee1, K. Nouchi1, J. Zernant1, K. Schuech1, P. Gouras1, S. H. Tsang2, J. R. Sparrow2, 1, 2R. Allikmets3. 1Ophthalmology, Columbia University, New York, NY; 2Pathology & Cell Biology, Columbia University, New York, NY; 3Ophthalmology, Tartu University, Tartu, Estonia

2690 — C0140 Comparison of en-face Optical Coherence Tomography and Fundus Autofluorescence for assessment of macular lesion area in Stargardt disease. Paolo Melillo, A. Orrico, V. Di Iorio, A. Nesti, S. Rossi, M. Della Corte, F. Testa, F. Simonelli. Eye Clinic, Multidisciplinary Department of Medical, Surgical and Dental Sciences, Second University of Naples, Naples, Italy

2691 — C0140 Impact of segmentation density on spectral domain optical coherence tomography (SD-OCT) assessments in Stargardt disease. Anamika Jha1, A. Ho1, M. G. Nittala1, R. W. Strauss2, H. P. Scholl1. 1Ophthalmology, Johns Hopkins University, Baltimore, MD; 2David Geffen School of Medicine, UCLA, Los Angeles, CA *CR, *


2693 — C0144 Progression of late-onset Stargardt disease. Stanley Lambert1a, M. Lindner1, B. Ax1, M. M. Mausich1, M. Schmidt2, S. Schmitz-Valkenburg3, B. H. Weber4, F. G. Holz1, G. van der Will1, M. Fleckenstein1, C. C. Hoyn1. 1Department of Ophthalmology, Radboud university medical center, Nijmegen, Netherlands; 2Department of Ophthalmology and GIARADE Reading Center, University of Bonn, Bonn, Germany; 3Informatics and Epidemiology, Institute for Medical Biometry, Bonn, Germany; 4Institute of Human Genetics, University of Regensburg, Regensburg, Germany; 5Department for Health Evidence, Radboud university medical center, Nijmegen, Netherlands *CR

2694 — C0145 Cross-sectional evaluation of microporimeter fixation location and stability in Stargardt disease in the ProgStar study. Ettiene M. Schonbanch1, M. A. Ibrahim1, R. W. Strauss2, X. Kong2, A. Ho1, P. S. Bernstein1, J. S. Sunness3, E. Zrenner1, S. R. Sadda3, S. K. West1, H. P. Scholl1. 1Wilmer Eye Institute, Johns Hopkins School of Medicine, Baltimore, MD; 2Moorfields Eye Hospital, London, United Kingdom; 3Doheny Eye Institute, Los Angeles, CA; 4Moran Eye Center, University of Utah School of Medicine, Salt Lake City, UT; 5Greater Baltimore Medical Center, Baltimore, MD; 6Center for Ophthalmology, Institute for Ophthalmic Research, Eberhard Karls Universität, Tübingen, Germany; 7David Geffen School of Medicine, Los Angeles, CA *CR, *

2695 — C0146 The natural history of the progression of atrophy secondary to Stargardt disease type 4 (Progstar-4 Study): Baseline demographics and ocular characteristics of patients with PROM-1 related retinal dystrophy. Syed Mahmood A. Shah1, 2, M. Ahmed1, 2, N. Junaid1, S. Bagheri1, 2, B. E. Munoz1, 2, R. W. Strauss1, E. M. Schonbanch1, 2, M. Michaelides1, A. Ervin1, H. P. Scholl1. 1Quantum Vision Reading Center, Baltimore, MD; 2Wilmer Eye Institute, Johns Hopkins University, Baltimore, MD; 3Moorfields Eye Hospital, London, United Kingdom

2696 — C0147 Scotopic and photopic macular functions as assessed with microporimeter (MP1) in patients with Stargardt disease type 1 - The SMART Study. Mohamed A. Ibrahim1, R. W. Strauss2, X. Kong2, A. Ervin1, A. Ho2, J. S. Sunness1, 2, 3. D. G. Birch3, S. R. Sadda4, 6, M. G. Bittencourt4, H. P. Scholl6, 1Moorfields Eye Hospital and UCL Institute of Ophthalmology, London, United Kingdom; 2Doheny Eye Institute, Los Angeles, CA; 3Greater Baltimore Medical Center, Baltimore, MD; 4CHINO des Quinze-Vingts, DHU Sight Restore, INSERM-DHOS CIC 1423, Sorbonne Universités, UPMC Univ Paris 06, INSERM, CNRS, Institut de la Vision, Paris, France; 5Retina Foundation of the Southwest, Dallas, TX; 6Wilmer Eye Institute at the Johns Hopkins University, Baltimore, MD; 7David Geffen School of Medicine, UCLA, Los Angeles, CA *CR, *

*CR Refer to the Program Number in the Clinical Trial (CT) Registration Index. *CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
2709 — D0218 Mrp4 deficiency has no apparent effect on age-related changes of the retina. Sentaro Kusuhara, S. Nobuyoshi, K. Kojima, W. Matsunami, M. Nakamura. Ophthalmology, Kobe Children’s Hospital, Kobe, Japan

2710 — D0219 Characterization of early retinal degeneration in ZDF rats, a genetic model of type 2 diabetes. Ivan Fernandez-Bueno1, R. Jones1, A. Lopez-Garcia1, S. Cheetham1, Y. Diebold1. 1Instituto Universitario de Oftalmología, Dentistry & Biomedical Sciences, Bremen Medical School, Hannover, Germany

2711 — D0220 ATR1 blockage ameliorates neuronal but not vascular degeneration in diabetic retinopathy in TetO rats. Sergio Crespo-García1, N. Reichhart1, S. Skosyrski1, M. Golie1, N. Haase2, A. Ribbens1, N. Kociok1, O. Strauss1, R. Dechend1, A. M. Joussen1. 1Experimental Ophthalmology, Charité - Universitätsmedizin Berlin, Germany; 2Charité and Max-Delbrück Center for Molecular Medicine, Berlin, Germany

2712 — D0221 Beneficial effects of combined AT1 receptor/nephrilysin inhibition (ARNI) versus AT1 receptor blockade alone in the diabetic eye. Quinhong Li1, E. Roksoner1, T. Prasad1, P. Zhu1, A. Frena1, W. Batenburg1, R. de Vries1, A. Dansor2. 1External, University of Florida, Gainesville, FL; 2Department of Internal Medicine, Erasmus MC, Rotterdam, Netherlands

2713 — D0222 attenuating diabetic vascular degeneration by targeting the P2X7 receptor. Mei Chen, S. Pavlou, R. Cunning, H. Xu. Centre for Experimental Medicine, Queen’s University Belfast, Belfast, United Kingdom

2714 — D0223 A novel model of type 1 diabetes shows neuronal, glial and vascular pathology. Erica L. Fletcher1, M. Dixon1, S. A. Mills2, J. Phipps3, K. Vessey3, D. Wedekind1, A. I. Jobling1. 1Anatomy and Neuroscience, University of Melbourne, Parkville, VIC, Australia; 2Institute of Laboratory Animal Science, Hannover Medical School, Hannover, Germany

2715 — D0224 Intraretinal oxygen measurements in rats with six to twelve months of diabetes. Robert A. Linsenmeier1, D. Henderson1, A. V. Dmitriev1. 1Biomedical Engineering, Northwestern University, Evanston, IL; 2Neurobiology, Northwestern University, Evanston, IL

2716 — D0225 Vascular Dysfunction in Per2−/− mice is Mediated via the Upregulation Of Connective Tissue Growth Factor. Maria B. Grant1, V. JadHAV1, J. Al-Sabah1, B. Charaou2, A. D. Bhutwadekar3. 1Ophthalmology, Indiana University, Indianapolis, IN; 2Cell Biology, SUNY, Brooklyn, NY

2717 — D0226 Characterization of early retinal degeneration in ZDF rats, a genetic model of type 2 diabetes. Ivan Fernandez-Bueno1, R. Jones1, A. Lopez-García1, S. Cheetham1, Y. Diebold1. 1Instituto Universitario de Oftalmología, Dentistry & Biomedical Sciences, Bremen Medical School, Hannover, Germany

2718 — D0227 Evidence of Increased Neuronal Glycogen Storage in Short-term Diabetes. Tom A. Gardiner, P. Canning, N. Tipping, A. W. Stitt, Medicine, Dentistry & Biomedical Sciences, Queen’s University Belfast, Belfast, United Kingdom

2719 — D0228 Percytosis loss evaluation in VEGF induced blood-retinal barrier breakdown in rabbit model. Pierre-Paul Elena, V. Mauro, S. Antonelli, N. Cimolini, K. Vaud, L. Feraillé. Iris Pharma, La Gaudie, France

Exhibit/Poster Hall D0214-D0238

Monday, May 02, 2016 3:45 PM-5:30 PM
Retinal Cell Biology

283 Models of Retinal Diseases

Moderators: Erica L. Fletcher and Daniela Bacherini

2705 — D0214 The Effect of BH4 Supplementation in Retinal Ischemia. Ciara Cunning, K. Edgar, T. A. Gardiner, D. McDonald. Queen’s University Belfast, Ballymena, United Kingdom

2706 — D0215 Media from Hypoxic-Preconditioned Bone Marrow Stem Cells Rescues Ischemic Retina. Steven Roth, J. C. Dreixler, B. Mathew. Anesthesiology, Univ of Illinois, Chicago, IL

2707 — D0216 Modulation of P75NTR receptor protects against ischemic retinopathy: possible contribution of mesenchymal stem cells (MSCs). Sally Elshaer1, A. B. El-Romessy2, W. Hill1. 1Clinical and Experimental Therapeutics, University of Georgia, Augusta, GA; 2Georgia Regents University, Augusta, GA

2708 — D0217 Partial Bystander Effect Elicited by single cell photo-oxidative blue light stimulation and apoptotic cell death radiation mediated by ROS and Calcium Signaling. Massaki Ishii1, B. Rohrer1, 2. 1Ophthalmology, Medical University of South Carolina, Charleston, SC; 2Division of Research, Ralph H. Johnson VA Medical Center, Charleston, SC

2709 — D0218 Characterization of early retinal degeneration in ZDF rats, a genetic model of type 2 diabetes. Ivan Fernandez-Bueno1, R. Jones1, A. Lopez-García1, S. Cheetham1, Y. Diebold1. 1Instituto Universitario de Oftalmología, Dentistry & Biomedical Sciences, Bremen Medical School, Hannover, Germany

2710 — D0219 Characterization of early retinal degeneration in ZDF rats, a genetic model of type 2 diabetes. Ivan Fernandez-Bueno1, R. Jones1, A. Lopez-García1, S. Cheetham1, Y. Diebold1. 1Instituto Universitario de Oftalmología, Dentistry & Biomedical Sciences, Bremen Medical School, Hannover, Germany

2711 — D0220 ATR1 blockage ameliorates neuronal but not vascular degeneration in diabetic retinopathy in TetO rats. Sergio Crespo-García1, N. Reichhart1, S. Skosyrski1, M. Golie1, N. Haase2, A. Ribbens1, N. Kociok1, O. Strauss1, R. Dechend1, A. M. Joussen1. 1Experimental Ophthalmology, Charité - Universitätsmedizin Berlin, Germany; 2Charité and Max-Delbrück Center for Molecular Medicine, Berlin, Germany

2712 — D0221 Beneficial effects of combined AT1 receptor/nephrilysin inhibition (ARNI) versus AT1 receptor blockade alone in the diabetic eye. Quinhong Li1, E. Roksoner1, T. Prasad1, P. Zhu1, A. Frena1, W. Batenburg1, R. de Vries1, A. Dansor2. 1External, University of Florida, Gainesville, FL; 2Department of Internal Medicine, Erasmus MC, Rotterdam, Netherlands

2713 — D0222 attenuating diabetic vascular degeneration by targeting the P2X7 receptor. Mei Chen, S. Pavlou, R. Cunning, H. Xu. Centre for Experimental Medicine, Queen’s University Belfast, Belfast, United Kingdom

2714 — D0223 A novel model of type 1 diabetes shows neuronal, glial and vascular pathology. Erica L. Fletcher1, M. Dixon1, S. A. Mills2, J. Phipps3, K. Vessey3, D. Wedekind1, A. I. Jobling1. 1Anatomy and Neuroscience, University of Melbourne, Parkville, VIC, Australia; 2Institute of Laboratory Animal Science, Hannover Medical School, Hannover, Germany

2715 — D0224 Intraretinal oxygen measurements in rats with six to twelve months of diabetes. Robert A. Linsenmeier1, D. Henderson1, A. V. Dmitriev1. 1Biomedical Engineering, Northwestern University, Evanston, IL; 2Neurobiology, Northwestern University, Evanston, IL

2716 — D0225 Vascular Dysfunction in Per2−/− mice is Mediated via the Upregulation Of Connective Tissue Growth Factor. Maria B. Grant1, V. JadHAV1, J. Al-Sabah1, B. Charaou2, A. D. Bhutwadekar3. 1Ophthalmology, Indiana University, Indianapolis, IN; 2Cell Biology, SUNY, Brooklyn, NY

2717 — D0226 Characterization of early retinal degeneration in ZDF rats, a genetic model of type 2 diabetes. Ivan Fernandez-Bueno1, R. Jones1, A. Lopez-García1, S. Cheetham1, Y. Diebold1. 1Instituto Universitario de Oftalmología, Dentistry & Biomedical Sciences, Bremen Medical School, Hannover, Germany

2718 — D0227 Evidence of Increased Neuronal Glycogen Storage in Short-term Diabetes. Tom A. Gardiner, P. Canning, N. Tipping, A. W. Stitt, Medicine, Dentistry & Biomedical Sciences, Queen’s University Belfast, Belfast, United Kingdom

2719 — D0228 Percytosis loss evaluation in VEGF induced blood-retinal barrier breakdown in rabbit model. Pierre-Paul Elena, V. Mauro, S. Antonelli, N. Cimolini, K. Vaud, L. Feraillé. Iris Pharma, La Gaudie, France

The Commercial Relationships (CR) Index for Disclosures and the Clinical Trial (CT) Registration Index are at arvo.org/amendices.

2721 — D0230 Impact of The Protective Renin-Angiotensin System (RAS) on The Vasoregulative Function of CD34+ CACs in Diabetic Retinopathy. Yaqian Duan1, 2, R.C. Miller1, L. Moldovan1, E. Beli1, T. Salazar1, S. Hazrak1, K. Chalam1, S. Raghunandan1, R.J. Vyas1, P.A. Parsons-Wingerter1, M.B. Grant1, Ophthalmology, IUPUI, Indianapolis, IN; 2Internal Medicine, University of Utah, Salt Lake City, UT; 3Space Life Sciences Research Branch, NASA Ames Research Center, Moffett Field, CA; 4Integrative and Cellular Physiology, IUPUI, Indianapolis, IN; 5Ophthalmology, University of Florida, Jacksonville, FL

2722 — D0231 Placental Gestational Diabetes Mellitus Endothelial Cell- Pericyte Cross talk: A novel approach to examine human Adult Type 2 Diabetic Retinopathy. Rekha Samuel1, C. Premkumara1, S. Rajendra1, K. Ramanathan1, S. Benjamin1, J. Mathews1, M. Seshadri2, Centre for Stem Cell Research, Christian Medical College, Vellore, Vellore, India; 2Biostatistics, Christian Medical College, Vellore, Vellore, India; 3Obstetrics and Gynecology, Unit V, Christian Medical College, Vellore, Vellore, India; 4Endocrinology, Thirumalai Mission Hospital, Ranipet, Ranipet, India

2723 — D0232 Targeting Acid Sphingomyelinase and Vascular Endothelial Growth Factor by miR-15a to Treat Diabetic Retinopathy. Julia V. Busi1, S. N. Navitskaya1, H. Chakravarthy1, C. Huang1, N. Kady2, T. V. Lydic3, W. V. Esselman4, M. B. Grant1, Q. Wang1, Michigan State University, East Lansing, MI; 2Ophthalmology, Indiana University, Indianapolis, IN

2724 — D0233 Modulation Of ProNGF/p75NTR Pathway Prevents Microvascular Degeneration In Diabetic Retinopathy. Riyaz Mohamed1, 2, A.Y. Shanab1, 2, S. Elshaeer2, 3, H. Saragovi4, A.B. El-Reemessy1, 2, 3Clinical and Experimental Therapeutics, University of Georgia, Augusta, GA; 4Vision Discovery institute, Augusta University, Augusta, GA; 5McGill University, Montreal, QC, Canada

2725 — D0234 Analysis of Sirt6 molecular networks in mouse retina. Lu Li1, J. Baker2, E. E. Geiser1, W. Zhang2, UnitedHealthcare, Memphis, TN; 2Emory Eye Center, Emory University, Atlanta, GA; 3Ophthalmology & Visual Sciences, University of Texas Health Science Center, Galveston, TX

2726 — D0235 Loss of Ikkkap Leads to Slow, Progressive Degeneration of Retinal Ganglion Cells in a Mouse Model of Familial Dysautonomia. H. Ueki1, G. Ramirez2, M.E. Stabio3, F. Lefort3, Cell Biology and Neuroscience, Montana State University, Bozeman, MT; 2Department of Cell and Developmental Biology, University of Colorado School of Medicine, Aurora, CO

2727 — D0236 IRE1 Signaling Associated With Retinal Vascular Lesions Caused By Mutant COL4A1. Marcel V. Alavi1, D. B. Gould1, Department of Ophthalmology, University of California, San Francisco, San Francisco, CA

2728 — D0237 Histopathological Resource for AMD, Glaucoma and Diabetes - application to study of interphotoreceptor matrix. Federico Gonzalez-Fernandez1, 2, S. Shah1, G. Kopeln1, T. Zou1, Ophthalmology and Pathology, University of Mississippi Medical Center, Jackson, MS; 3Research & Development, G.V. (Sonny) Montgomery Veterans Affairs Med Ctr, Jackson, MS; 4Fulfilment, National Disease Research Interchange, Philadelphia, PA; 5Ophthalmology and Pathology, SUNY at Buffalo, Buffalo, NY; 6Operations, National Disease Research Interchange, Philadelphia, PA

2729 — D0238 Deimination is important for vision restoration in demyelinating diseases. Di Ding1, M. E. Algeciras1, J. Torres1, V. Porciatti1, S. Udin2, S. K. Bhattacharya1, Ophthalmology, University of Miami, Miami, FL; 2Department of Physiology and Biophysics, State University of New York, Buffalo, NY

Exhibit/Poster Hall D0264-D0284

Monday, May 02, 2016 3:45 PM-5:30 PM

Retinal Cell Biology

2730 — D0264 Inflammassome activation in the photoreceptor cells. Ronan Cuning, S. Pavlou, A.W. Stitt, H. Xu, M. Chen, School of Medicine, Dentistry and Biomedical Sciences, Queen’s University Belfast, Belfast, United Kingdom

2731 — D0265 Degenerating photoreceptors in Retinitis pigmentosa models release cGMP. A way of self protection? Patricia Véga-Crespo1, H. Abdshill2, B. Sandström1, V. Kaever1, V. Marigo1, F. Pasquet-Durand1, F. Schwebel1, A. Rentsch1, P.A. Ekstrom1, Clinical Sciences Lund, Ophthalmology, Lund University, Lund, Sweden; 2Research Core Unit Metabolomics, Hannover Medical School, Hannover, Germany; 3Centre for Ophthalmology, Institute for Ophthalmic Research, University of Tübingen, Tübingen, Germany; 4Biolog Life Science Institute, Bremen, Germany; 5Università degli studi di Modena e Reggio Emilia, Modena, Italy *CR

2732 — D0266 Absence of Sigma 1 Receptor (e1R) accelerates photoreceptor cell (PRC) loss in Pde6b-/-/J (rd10) mice. Sylvia B. Smith1, 2, J. Wang1, 2, A. Saur1, 2, X. Cui1, 2, P. Roos1, Cellular Biology and Anatomy, Medical College of Georgia at Augusta University, Augusta, GA; 3James and Jean Culver Vision Discovery Institute, Medical College of Georgia at Augusta University, Augusta, GA; 4Ophthalmology, Medical College of Georgia at Augusta University, Augusta, GA

2733 — D0267 Transpalpebral electrical stimulation protects against progressive degeneration of photoreceptors in Rhodopsin knockout mice. Kin-Sang Cho1, H. Ye1, C. Ullmer2, D. F. Chen1, 3, Department of Ophthalmology, Schepens Eye Research Institute and Massachusetts Eye and Ear, Boston, MA; 2Department of Ophthalmology, General Hospital of Guangzhou Military Command of PLA, Guangzhou, China; 3VA Boston Healthcare System, Boston, MA

2734 — D0268 AMPK activation protects photoreceptors from light-induced degeneration. Hirohiko Kawashima, H. Osada, E. Todo, T. Okamoto, M. Kamoshita, N. Nagai, K. Tsukuba, Y. Ozawa, Public Health/Ophthalmology, Keio University Hospital, Shiinjuku-ku, Japan

2735 — D0269 Slowing and prevention of vision loss in Retinitis Pigmentosa of the 'Protein Logistics Disease' type. Mathias W. Seeliger1, S. C. Beck1, M. Garcia Garrido1, V. Sothilingam1, R. Muehlfriedl1, M. Samardzija1, C. Grimm1, P. Humphries1, G. Farrar1, P. Carmeliert1, N. Tanimoto1, Centre for Ophthalmology, Institute for Ophthalmic Research, Eberhard Karls University, Tuebingen, Germany; 2Lab for Retinal Cell Biol, Ophthalmology, University of Zurich, Zurich, Switzerland; 3Trinity College, Dublin, Ireland; 4VIB Vesalius Research Center, KU Leuven, Leuven, Belgium

2736 — D0270 HIF inhibitor topotecan suppresses light-induced retinal degeneration in mice. Yukihiro Miwa1, 2, M. Miyashita2, Y. Katauda1, 2, X. Jiang1, 2, K. Mori3, 2, K. Torii1, 2, K. Tsukuba2, T. Kurihara1, 2, 3Laboratory of Photobiology, Keio University School of Medicine, Tokyo, Japan; 2Department of Ophthalmology, Keio University School of Medicine, Tokyo, Japan

* Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
2738 — D0272 Protection of renal function by nucleoside reverse transcriptase inhibitors following retinal ischemic-reperfusion injury. Paul J. Park1, W. S. Gange1, M. Flood1, J. I. Perlman1, 2, J. F. McDonnell1, L. Qiao1, Z. Tan1, P. Bu1, 2. Ophthalmology, Loyola University Medical Center, Maywood, IL; 3Surgery Service, Edward Hines, Jr. VA Hospital, Hines, IL; 4Microbiology & Immunology, Loyola University Medical Center, Maywood, IL; 5Institute for Memory Impairments and Neurological Disorders, University of California Irvine, Irvine, CA; 6Research Service, Edward Hines, Jr. VA Hospital, Hines, IL


2740 — D0274 Synergistic effects of melatonin and epigallocatechin gallate improve visual function in an animal model of Retinitis Pigmentosa. Isabel Pinilla Lozano1, 2, L. Fuentes-Brotos1, 2, L. Perdices1, F. J. Segura1, G. Insa Sánchez1, E. Orduna1, A. Sanchez-Cano1, 2, N. Cuencas1. 1Universitary Hospital Lozano Blesa, Zaragoza, Spain; 2Institute for Health Research of Aragón (IIS Aragón), Zaragoza, Spain; 3Department of Pharmacology and Physiology, University of Zaragoza, Zaragoza, Spain; 4Department of Surgery, University of Zaragoza, Zaragoza, Spain; 5Department of Applied Physics, Zaragoza University, Zaragoza, Spain; 6Department of Physiology Genetics and Microbiology, Alicante University, Alicante, Spain


2742 — D0276 Anthocyanin-rich Rhyynchosis natalulis extracts protect photoreceptor cell against MNU-induced retinal degeneration. Tae-Jin Kim1, K. Kim2, S. Kang3, K. Kang4, S. Kim5, M. Kwon5, J. Sung1, 2. 1Korea Institute of Science and Technology, Ganganung, Korea (the Republic of); 2Department of Ophthalmology, SahmYook Medical Center, Seoul, Korea (the Republic of); 3Department of Biological Chemistry, University of Science and Technology, Daejeon, Korea (the Republic of); 4Department of Ophthalmology, St. Mary’s Hospital, The Catholic University of Korea, Incheon, Korea (the Republic of)
2756 — D0290 Separating ON and OFF Bipolar Cell Contributions to the Retinal Ganglion Cell Receptive Field. Robert L. Seilheimer3, Wang, J. Subarwal1, S. Cowan1. Ophthalmology, Baylor College of Medicine, Houston, TX; 2Medical Scientist Training Program, Baylor College of Medicine, Houston, TX; 3Neurobiology, Friedrich Miescher Institute for Biomedical Research, Basel, Switzerland

2757 — D0291 Identification of neuronal populations that express calcium-permeable AMPA receptors in mouse and macaque retina. Roupen A. Khanjian, T. Patherss. Casey Eye Institute, Oregon Health and Science University, Portland, OR


2759 — D0293 Dynamics of ribbon synapse assembly in the developing inner retina. Haruhisa Okawa1, B. Odermatt2, H. Zhong1, L. Lagadon1, F. Schmitz1, R. O. Wong2, U. Matti1. 1Biological Structure, University of Washington, Seattle, WA; 2MRC Laboratory of Molecular Biology, Cambridge, United Kingdom; 3Oregon Health & Science University, Portland, OR; 4University of Sussex, Brighton, United Kingdom; 5Saarland University, Saarbrucken, Germany; 6EMBL, Heidelberg, Germany

2760 — D0294 From the retina to the brain: retinal ganglion cell subtype specific visual circuits. Brent Young2, 3, P. Wang1, C. Ramakrishnan1, K. Deisseroth1, N. Tian1, 2. 1Ophthalmology and Visual Sciences, University of Utah, Salt Lake City, UT; 2Neuroscience, University of Utah, Salt Lake City, UT; 3Department of Bioengineering, Psychiatry and behavioral sciences, Stanford University, Stanford, CA

2761 — D0295 Characterization of CaBP1/calbindin and CaBP2 knockout mice retina. Francoise J. Haeseleer1, S. Sinha1, A. Lee2, F. Rieke1. 1Physiology & Biophysics, University of Washington, Seattle, WA; 2Molecular Physiology and Biophysics, University of Iowa, Iowa City, IA

2762 — D0296 β-catenin in retinal interneurons is important for maintaining stability of the retinal microvasculature. Yoshihiko Usui1, 2, P. D. Westenensk2, T. Kurihara3, E. Aguilar3, L. P. Paris3, S. Sakimoto4, S. Marinello4, F. Bucher3, D. Feitelberg2, M. Friedlander2. 1Ophthalmology, Tokyo Medical Univ Hospital, Shinjuku-ku, Japan; 2Cell Biology, The Scripps Research Institute, La Jolla, CA

2763 — D0297 Impacts of heavy metal exposure on visual behavior and anatomy in zebrafish (Danio rerio). Matthew LeFauve, V. P. Connaughton. Biology, American University, Washington, DC, DC

2764 — D0298 Virtual reality behavior testing for visual perception. Jayden Brennan, B. Young, N. Tian. Ophthalmology, University of Utah, Salt Lake City, UT

2765 — D0299 Eye Shall Return: Investigation on Double Take During Free-saccade Visual Search Task. Makoto Miyakoshi1, S. Makeig1, A. Diniz-Filho2, F. A. Medeiros2. 1Institute for Neural Computation, University of California San Diego, La Jolla, CA; 2Laboratory of Performance and Visual Function, Department of Ophthalmology, University of California San Diego, La Jolla, CA

2766 — D0300 Spatial and temporal contrast sensitivity of rats under varying light level. Christopher L. Passaglia1, S. Davis1, J. Bergon1, M. Gombert1. 1Chemical and Biomedical Engineering, University of South Florida, Tampa, FL; 2Biomedical Sciences, University of South Florida, Tampa, FL

2767 — D0301 Touchscreen-based visual temporal discrimination task in the behaving mouse by the constant method. Tsuchie Nomura1, J. Mita1, S. Takizawa1, T. Arimura2, S. Suzuki1, S. Ikuta1, A. Amano3, Y. Tsuho1, K. Shimonomura1, Y. Saya1, C. Koike2, 3. 1College of Information Science and Engineering, Ritsumeikan University, Kusatsu, Japan; 2College of Pharmaceutical Sciences, Ritsumeikan University, Kusatsu, Japan; 3College of Life Sciences, Ritsumeikan University, Kusatsu, Japan; 4Graduate School of Life science, Ritsumeikan University, Kusatsu, Japan; 5College of Science and Engineering, Ritsumeikan University, Kusatsu, Japan

2768 — D0302 Light Avoidance in Mice May Be Not Related to Photoreceptor-Driven Input. Arkady Lyubarsky, J. Bennett. Ophthalmology, F.M. Kirby Center for Molecular Ophthalmology and Center for Advanced Retinal and Ophthalmic Therapeutics, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA

2769 — D0303 Novel method for evaluating functional vision in a canine model of C1122 neuronal ceroid lipofuscinosis. Lauren E. Gillespie, R. E. Whiting, H. N. Lewis, L. J. Casta, M. L. Katz. Ophthalmology, University of Missouri School of Medicine, Columbia, MO

*CR Refer to the Program Number in the Commercial Relationships (CR) Index for Disclosures.
2770 – 2771 – Monday – Award Lectures

Room 6B
Monday, May 02, 2016 5:45 PM-6:30 PM

286 Proctor Award and Lecture

This award honors outstanding research in the basic or clinical sciences as applied to ophthalmology.


Room 6B
Monday, May 02, 2016 6:45 PM-7:30 PM

287 Weisenfeld Award and Lecture

This award is presented to an individual in recognition of distinguished scholarly contributions to the clinical practice of ophthalmology.
