Femtosecond laser based small incision lenticule extraction for moderate and high myopia

Hjortdal, Jesper Østergaard; Asp, Sven; Ivarsen, Anders; Vestergaard, Anders Højslet

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2012

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<td>535 Biochemistry and Molecular Biology of Glaucoma [BI] #6314-6320</td>
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<td>536 Horizontal and Amacrine Cells: Structure and Function [VN] #6321-6327</td>
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<td>502 Reshaping the Cornea: Present and Future of Refractive Surgery [CO] #5569-5575</td>
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<td>503 Gene Therapy and Delivery II [PH] #5576-5582</td>
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<td>511 Retinal Detachment III [RE] #6356-6362</td>
<td>542 Retinitis Pigmentosa II [RE] #5625-5631</td>
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### Thursday, May 10 ● Posters

#### 8:30–10:15am

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<td>513 Clinical Electrophysiology and Retinal Disease [VN]</td>
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<td>514 Visual Cortex and Brainstem Visual Centers [VN, VI]</td>
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<td>515 Visual Electrophysiology in Disease and Drug Toxicity [VN]</td>
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<td>516 Diabetic Retinopathy Epidemiology [CL]</td>
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<td>517 Vascular Mechanisms in Diabetic Retinopathy [RC, RE]</td>
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<td>518 Retinal Detachment II [RE]</td>
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<td>519 Laser/Choroidal Neovascularization/Retina-RPE Transplantation [RE]</td>
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<td>520 Retinopathy of Prematurity II [RE]</td>
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<td>521 Stem Cells In Vivo and In Vitro: Fates and Functional Outcomes [RC, NT]</td>
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<td>523 Corneal Endothelium [CO]</td>
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<td>524 Keratoplasty II (Eye Banking, Substrates, Penetrating and Lamellar Grafts, Keratoprosthesis) [CO]</td>
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<td>529 AIDS-Related Ocular Disease [IM, RE,RC]</td>
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<td>531 Inflammation and Infection [PH]</td>
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#### 11:15am–1:00pm

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<td>544 Retinal Degeneration and Neuroprotection [RC]</td>
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<td>545 Retinitis Pigmentosa III [RE]</td>
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<td>546 AMD Disease Mechanisms II [BI]</td>
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<td>547 AMD Clinical Research VII [RE]</td>
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<td>548 Retina and RPE Cell Biology [RC, VN]</td>
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<td>550 Cataract Surgery I [LE]</td>
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<td>551 Cataract Surgery II [LE]</td>
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<td>552 Cataract Complications and Drugs [LE]</td>
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<td>553 Cataract Training, Modeling, Pediatrics [LE]</td>
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<td>554 Oculoplastics III [EV]</td>
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<td>557 Blood Flow [PH]</td>
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<td>558 Tumors: New Drugs, Delivery Systems and Mechanisms of Action [PH]</td>
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Poster board numbers indicate exhibit hall location:
A= Hall A; D= Hall D

10:15–11:15am: All Posters — authors will be present at poster boards.
Thursday – Papers – 5569 – 5583


5575 — 10:00 Femtosecond Laser Based Small Incision Lenticule Extraction For Moderate And High Myopia. Jesper Hjortdal, S. Asp, A. Ivarsen, A. Vestergaard. Ophthalmology, Aarhus University Hospital, Aarhus, Denmark. *CR, 

5578 — 9:00 Adenoviral and Lentiviral Vectors for Efficient Gene Transfer to Mouse Retina. Agostina Puppo1, G. Ces1, D. Palmer3, P. Piccolo1, R.J. Parks3, P. Ng4, N. Brunetti-Pierri1, A. Auricchio5. *TIGEM- Telethon Institute of Genetics and Medicine, Naples, Italy; 1Dept. of Molecular and Human Genetics, Baylor College of Medicine, Houston, TX; 2Ottawa Hospital Research Institute, Ottawa, ON, Canada; 3Dept. of Pediatrics, Medical Genetics, Federico II University, Naples, Italy.


5580 — 9:30 A Novel Method To Transfect Retinal Pigment Epithelial Cells Without Detaching The Retina. Francine E. Behar-Cohen1,2, E. Touchard3, B. Marianne4, M. Savodelli1, M-C. Naud3, J-C. Jeanny1,2. Ophthalmology, Hotel Dieu de Paris, Universite Paris Descartes, Paris, France; 1Physiopathology ocular diseases, 2Physiopathologie des maladies de l’œil, 3Physiopathologie of ocular diseases, 4Physiopathologie of ocular diseases, 5Inserm UMR872, Paris, France. *CR


5582 — 10:00 Increased Longevity of Rescue of Light-Induced Retinal Damage in an Adult Mouse Using Peptide for Ocular Delivery (POD) as a Gene Transfer Vector. Rajendra Kumar-Singh, C. Binder, S. Cashman. Ophthalmology, Tufts University, Boston, MA. *CR

5583 — 8:30 The N-fatty Acyl Group In A Bovine Guanylyl Cyclase Activating Protein-1 Provides Intramolecular Tuning Of Its Calcium Sensitivity And Interaction With The Effector Enzyme. Igor V. Peshko1, E. V. Oshevkaya1, S. Lim2, J.B. Ames3, A.M. Dizhoor1. 1Pennsylvania College of Optometry, Salus University, Elkins Park, PA; 2Department of Chemistry, University of California, Davis, CA.
5584 — 8:45 Alzheimer Retina Pathology in a Novel Animal Model of Neuropathology in Diabetes. Peter Frederikse1, R. Kaswala2, W. Klein3, C. Kasinathan1. 1Pharmacology & Physiology, UMD New Jersey Medical School, Newark, NJ; 2Oral Biology, UMD New Jersey Dental School, Newark, NJ; 3Neurobiology & Physiology, Northwestern University, Evanston, IL. CR

5585 — 9:00 Rescue Of Photoreceptor Degeneration In Rdl Mice By Systemic Treatment With Valproic Acid. Kenneth P. Mitton, E.E. Guzman, D. Byrd, T. Tran, J. Setzen. Eye Research Institute, Oakland University, Rochester, MI.


5588 — 9:45 Cis-regulation of Lif mRNA stability in Muller cells. Cavit Aigea, G. Traber, C. Caprara, C. Beck, I.P. Menneu, C. Grimm. Ophthalmology, University of Zurich, Zurich, Switzerland.

5589 — 10:00 Tet3 is an Essential Epigenetic factor for Eye development. Stephen P. Sugrue1, G. Xu1, Y. Kato1, Y. Xu1, Y. Shi1. 1Anatomy & Cell Biology, University of Florida, Gainesville, FL; 2Institute of Biochemistry and Cell Biology, Chinese Academy of Sciences, Shanghai, China; 3Department of Biomedical Sciences, Florida State University College of Medicine, Tallahassee, FL; 4Endocrinology Division, Brigham and Women’s Hospital, Boston, MA.

5590 — 9:30 Room 315 Thursday, May 10, 2012, 8:30 AM-10:15 AM Visual Psychophysics & Physiological Optics / Multidisciplinary Ophthalmic Imaging Group / Retina


5592 — 9:00 Glutaredoxin (Grx2) Gene Knockout Suppresses Fiber Cell Differentiation and Delays De-nucleation of the Mouse Lens. Marjorie F. Lou1,2, S. Basu1, Y. Yu1, H. Wu1, A S. Menko1. 1Veterinary Medicine & Biomedical Sciences, University of Nebraska-Lincoln, Lincoln, NE; 2Department of Ophthalmology, University of Nebraska Medical Center, Omaha, NE; 3Pathology Anatomy & Cell Biology, Thomas Jefferson University, Philadelphia, PA.

5593 — 9:15 k60 Mutant Ubiquitin Activates Calpain In Lenses. Ke Liu1, A. Caceres1, J. Peng2, F. Shang1, J. Gao1, X. Sun1, R.T. Mathias3, A. Taylor4. 1Human Nutrition Research Center on Aging, Tufts University, Boston, MA; 2Structural Biology, St. Jude Children’s Research Hospital, Memphis, TN; 3Physiology & Biophysics, State Univ of NY-Stony Brook, Stony Brook, NY.

5594 — 9:30 Dig-1 and Scrib are Modulators Of Wnt/PCP in the Mouse Ocular Lens. Shalini Shatatad1,2, R. Rachel1B, A. Griep1A. 1Cell and Regenerative Biology, 2Anatomy, 1Univ of Madison-WI, Madison, WI.

5595 — 9:45 Post-translational Modifications of Bfsp1. Roy A. Quinlan1, A. Tapodi1, E.W. Tate1, W.P. Heat1, A.R. Prescott2. 1School of Biological/Biomedical Sciences, Biophysical Sciences Inst, Durham Univ, Durham, United Kingdom; 2Department of Chemistry, Imperial College, London, United Kingdom; 3School of Life Sciences, CHIPs and Division of Cell Biology and Immunology, Dundee University, Dundee, United Kingdom.

5596 — 10:00 Chromatin Remodeling Enzymes Smn2hs/smcr4 And Brg1/smcr4 Are Independently Required For Mouse Lens Morphogenesis. Shuying He1A, J. Sun1A, J. Kokavec2, T. Stopka2, A. Skoultchi1B, J. Zavadil3, A. Cvekl1A. 1Ophthalmology & Visual Sciences and Regenerative Biology, 2Anatomy, 1Univ of Wisconsin-Madison, WI.

5597 — 8:30 In Vivo Optical Recording From Mouse Retinal Ganglion Cells. La Yin1, A.H. Cetin1, Y. Geng1,2, R. Sharma1,2, K. Ahmad1,2, E.M. Callaway1, D.R. Williams1,2, W.H. Mergan1,2. 1Center for Vision Science, 2Institute of Optics, 3Flaum Eye Institute, University of Rochester, Rochester, NY; 4Systems Neurobiology Laboratories, Salk Institute for Biological Studies, La Jolla, CA. CR


5599 — 9:00 Photoreceptor and RPE Disruptions Observed Outside Clinically Visible Geographic Atrophy Lesions in the Living Eye with Fluorescence Adaptive Optics Scanning Laser Ophthalmoscopy (FAOSLO). Ethan A. Rossi1,2, I. P. Williams1,2, A. Dubra1,2, H. Song1,2, M.A. Fowlie1,2, L.R. Latchney1,2, M.M. Chang1,2. 1Center for Vision Science, 2Institute of Optics, 3Flaum Eye Institute, University of Rochester, Rochester, NY; 4Ophthalmology, 5Biophysics, 6Medical College of Wisconsin, Milwaukee, WI. CR

5600 — 9:15 In Vivo Two-Photon Imaging Of Mouse Retina. Robin Sharma1,2, Y. Geng1,2, L. Yin1, W.H. Mergan1,2, D.R. Williams1,2, J.J. Hunter1,2. 1Institute of Optics, 2Center for Vision Science, 3Flaum Eye Institute, University of Rochester, Rochester, NY. CR

5601 — 9:30 Imaging The Living Human Cone Inner Segment. Ravi S. Jonnal1, O.P. Kocaoglu1, Q. Wang1, Z. Liu1, D.T. Miller1,2. 1Program in Vision Science, 2School of Optometry, 3Indiana University, Bloomington, IN. CR

5602 — 9:45 Measuring Individual Cone Directionalities Using Scanning Laser Ophthalmoscopy. Diego Rattia Millan1, B. Voobens1. 1School of Physics, University College of Dublin, Dublin, Ireland; 2Department of Electronics and Systems, Universidade Federal de Pernambuco, Recife, Brazil; 3School of Physics, University College Dublin, Dublin, Ireland.

5603 — 10:00 Adaptive Optics-Assisted Optical Coherence Tomography For Patient Imaging. Barry Cense1, K. Sudo1, K. Kurokawa1, Y. Yasuno2. 1Ctr for Optical Resrch & Education, Utsunomiya University, Utsunomiya, Japan; 2Institute of Applied Physics, Computational Optics Group, Tsukuba, Japan; 3Computational Optics Group, University of Tsukuba, Tsukuba, Japan. CR
507 Eye Movements, Nystagmus and Amblyopia

Moderators: Benjamin Thompson and Larry A Abel

5604 — 8:30 Optic Nerve Misprojections in the Zebrafish Mutant belladora: A Disease Model for Infantile Nystagmus Syndrome. Sabina P. Huber-Reggi1, C-C. Chen2, L. Holliger3, D. Strumann3, S.C. Neuhaus3, M-Y. Huang1,2,1. 1Institute of Molecular Life Sciences, University of Zurich, Zurich, Switzerland; 2Department of Neurology, University Hospital Zurich, Zurich, Switzerland. 3Institute of Ophthalmology, University of Leicester, Leicester, UK.

5605 — 8:45 A Velocity Based Method For Measuring Optokinetic Nystagmus Using Off The Shelf Video Equipment. Jason Turuwhenua1, T-Y. Yu1, Z. Mazharullah1, B. Thompson1. 1University of Auckland, Auckland, New Zealand.

5606 — 9:00 Uncorrected Antisaccade Errors Predict Cognitive Problems After Mild Traumatic Brain Injury In Younger Children. Larry A. Abel1, A. Phillipou1, J.M. Douglas2. 1Department of Ophthalmology & Visual Sciences, University of Western Ontario, London, ON, Canada; 2Department of Pediatrics, St. Joseph’s Healthcare, Hamilton, ON, Canada.

5607 — 9:15 Fatigue and Hypoglycemia Impair Saccade Velocity and Accuracy but not Visual Perception. Benjamin Thompson1,2, S. Duncan2, G. Kuhre3, J.M. Black4, N. Gant4. 1Optometry & Vision Sciences, University of Melbourne, Carlton, Australia; 2Human Communication Sciences, La Trobe University, Bundoora, Australia.

5608 — 9:30 Saccadic Adaptation In Amblyopia. Rana Arham Raashid5, M. Chandrakumar6, A. Blakeman7, H. Goltz7, A.M. Wong5. 5Neuroscience and Mental Health, 6Department of Ophthalmology and Vision Sciences, 7The Hospital for Sick Children, Toronto, ON, Canada; 8University of Toronto, Toronto, ON, Canada.

5609 — 9:45 Effect of Compliance to Glasses Wear on the Outcome of Visual Acuity after Refractive Adaptation. Gail Macaconchle1, S. Farooq2, G. Bush3, F.A. Proudlock1, I. Gottlob1. 1Ophthalmology, University of Leicester, Leicester, United Kingdom; 2Bradford Teaching Hospitals, Bradford, United Kingdom; 3Medical Physics, University Hospitals of Leicester, Leicester, United Kingdom.

5610 — 10:00 Pre-operative Visual Acuity and Contrast Sensitivity Deficits in Children with Small, Partial, or Non-Central Cataracts. Eileen E. Birch1, Y. Subramanian1, C.S. Cheng2, D. Stager, Jr.3. 1Retina Foundation of the Southwest, Dallas, TX; 2Ophthalmology, UT Southwestern Medical Center, Dallas, TX; 3Pediatric Ophthalmology & Adult Strabismus, Plano, TX.

5611 — 8:30 Predictors Of Ocular Surface Squamous Neoplasia Recurrence After Exisional Surgery. Carol L. Karp1, A. Galor2, P. Oellers, A. Kao, A. Abdelaziz, W. Feuer1. 1University of Miami, FL; 2Ophthalmology, Bascom Palmer Eye Institute, University of Miami, FL.

5612 — 8:45 Multi-disciplinary management of Eyelid Merkel Cell Carcinoma. Qassem J. Nasser1, A. Khan1, W. Morrison1, T. El-Sawy1, S. Frank1, B. Esmaeili1. 1Section of Ophthalmology, Department of Head and Neck Surgery, 2Department of Radiation Oncology, 3The University of Texas MD Anderson Cancer Center, Houston, TX.

5613 — 9:00 Mir211 Is Dysregulated In Conjunctival Melanocytic proliferations. Alexandre P. Mounin1, M. Nicolas1, A. Schalenborg1, M. Hamedani2, Z. Leonidas2, L. Duncan2. 1Pathology, Ophthalmology, 2Jules G. Stein Eye Hospital, University of Pennsylvania, Philadelphia, PA, USA.

5614 — 9:15 Lymphoid Enhancing Factor-1 Gene Mutation and Its Differential mRNA Expression in Eyelid Sebaceous Carcinoma. Perumal Jayaraj1, S. Sen1, A. Sharma1, S. Ghose1. 1Department of Ophthalmology & Visual Sciences, 2Department of Microbiology, 3Omphaloplasty service, 4Dr. R.P. Centre, A.I.I.M.S, New Delhi, India; 5Division of Biochemistry and Biotechnology, National Centre for Disease Control, New Delhi, India.

5615 — 9:30 Primary Intraocular Lymphoma: A Twenty-year Review Of Incidence, Clinical Features, Treatment And Outcomes. Steve D. Levesque1,4, L.A. Wittenberg1, V.A. White5, 1Ophthalmology, 2Pathology, 3Medical Oncology, 4Pediatric Ophthalmology & Visual Sciences, 5Department of Pathology, University of British Columbia, Vancouver, BC, Canada.


5617 — 10:00 Molecular Histopathology Using Gold Nanorods And Optical Coherence Tomography. Jared L. Matthews1, S. Prabhukar1, A. de la Zerda1, S. Gambhi2, R. Aweke1. 1Bascom Palmer Eye Institute, Coral Gables, FL; 2Ophthalmology, Bascom Palmer Eye Institute, University of Miami, FL; 3Electrical Engineering and Radiology, 4Bioengineering & Materials Science and Engineering, 5Stanford University, Palo Alto, CA; 6Ophthalmology, Bascom Palmer Eye Institute, Miami, FL.

5618 — 8:30 Peripapillary Nerve Fiber Layer and Retinal Pigment Epithelium Reflectance Ratio for Glaucoma Diagnosis. Ou Tari1, X. Zhang1, R. Varma1, D. Huang1. 1Casey Eye Institute, Oregon Health & Science Univ, Portland, OR, USA; 2Ophthalmology, UCSF, Doheny Eye Institute, Los Angeles, CA, USA.


5622 – 9:30 Agreement Between Contrast Sensitivity Perimetry (CSP) And Clinical Measures Of Glaucomatous Damage: Validation Of A Neural Model For A Longitudinal Study. William H. Swanson, V.E. Malinovsky, M.W. Duh, J.K. Torbit, B.M. Sutton, R. Malik. 'School of Optometry, Indiana University, Bloomington, IN;
2Clinical Sciences, SUNY College of Optometry, New York, NY; 'SUNY Eye Institute, New York, NY; 'Glaucoma Research Unit, NIH Biomedical Research Center for Ophthalmal, London, United Kingdom.


5624 – 10:00 Correlation of Brain Volumes and Functional Deficits in Glaucoma. Alice L. Williams, J. Lackey, S. Wizov, S. Gatia, R. Sergott, T. Chia, S. Lai, G.L. Spaeth. 'Temple University School of Medicine, Philadelphia, PA; 'Department of Radiology, Thomas Jefferson University, Philadelphia, PA; 'William A. and Anna V. Goldberg Glaucoma Service, 'Neuro-ophthalmology, 'Wills Eye Institute, Philadelphia, PA; 'Thomas Jefferson University School of Medicine, Philadelphia, PA. *


5627 – 9:00 Rhodopsin Mutants Destabilize Rod Outer Segment Disk Membranes. Mohammad Haeri, S.E. Reks, B.E. Knox. Ophthalmology & Neurosciences & Physiology, SUNY Upstate Medical University, SUNY Eye Institute, Syracuse, NY.


Thursday – Posters – 5632 – 5650

Hall B/C  A28-A42
Thursday, May 10, 2012, 8:30 AM-10:15 AM
Clinical & Epidemiologic Research

511 Visual Impairment/Low Vision and Genetic Epidemiology

Moderator: Tracy B Hoeg

5632 — A28  Reported Decreases in Vision During and After Pregnancy in Women with Retinitis Pigmentosa. Pamela E. Jeter1, G. Dagnelie1, M. Khan2, A.K. Bittner2. 1Ophthalmology, Johns Hopkins University, Baltimore, MD; 2Civil Hospital Karachi, Karachi, Pakistan.

5633 — A29  Cataract, Visual Impairment, Blindness And Risk Of Mortality In Rural Population Of The Andhra Pradesh Eye Disease Study, India. Rohini C. Khanna1, G.V. Murthy1, S. Krishnaiah1, H.B. Pani1, P. Giridhar1, C.E. Gilbert2, G.N. Rao1. 1Allen Foster Research Centre for Community Eye Health, LV Prasad Eye Institute, Hyderabad, India; 2International Centre for Eye Health, London School of Hygiene & Tropical Medicine, London, United Kingdom; 3Indian Institute of Public Health, Hyderabad, India.

5634 — A30  Determining National Vision Health Priorities: Healthy People 2020 Vision Objectives. Axel Ryskylow1, R. Janiszewski1, R. Hines1. 1Office of Analysis and Epidemiology, National Center for Health Statistics, CDC, Hyattsville, MD; 2National Eye Institute, National Institutes of Health, Bethesda, MD.

5635 — A31  Uncorrected refractive errors and ocular pathology found in outreach clinics in Malawi and Ethiopia. Rachel V. North1,2. 1Sch of Optom & Vision Sci, Cardi University, Cardiff, United Kingdom; 2Vision Aid Overseas, Crawley, West Sussex, UK.

5636 — A32  Ophthalmology Inpatient Consultations For Patients With Acute And Chronic Leukemia At A Boston Tertiary Care Hospital. Nancy Huynh, H-Y. Chang, S. Borboli-Gerogiannis. Ophthalmology, Massachusetts Eye & Ear Infirmary, Boston, MA.

5637 — A33  Direct Comparison of Current Pediatric Pseudoisochromatic Color Vision Tests in Preschool Children. Michele E. Mercer1,4, R.J. Adams1,2. 1Psychology, 2Psychology/Pediatrics, Memorial University, St John’s, NL, Canada.

5638 — A34  Danish Rural Eye Study (DRES): Preliminary Data on Visual Impairment in Randomly Selected Adults of Denmark. Tracy B. Hoeg1, B. Moldow2, H. Buch Hesgaard1, D. Ern gaard1, K. Klamp1, M. La Cour2, C. Ellervik2. 1Ophthalmology, 2Clinical Biochemistry, 3Naestved Hospital, University of Copenhagen, Naestved, Denmark; 4Ophthalmology, Naestved Hospital, Naestved, Denmark; 5Ophthalmology, Glostrup Hospital, Glostrup, Denmark; 6Ophthalmology, Glostrup Hospital, University of Copenhagen, Glostrup, Denmark.

5639 — A35  A Comparison of Visuocortical Function in Premature Infants with Grade I/II and Grade III/IV Intraventricular Hemorrhage. William V. Good1, C. Hao2, A. Norcia1,2. 1Smith-Kettlewell Eye Research Institute, San Francisco, CA; 2Department of Psychology, Stanford University, Stanford, CA.

5640 — A36  The Prevalence and Causes of Visual Impairment and Blindness in a Multi-Ethnic Asian Population: The Singapore Epidemiology of Eye Disease (SEED) Study. Tien Y. Wong12, Y. Zheng1, W-L. Wong1, E.L. Lamoureux1,3, J-J. Wang12, P. Mitchell1, N. Cheung3, T. Au1,4, S. Saw1, C. Cheng1. 1Singapore Eye Research Institute, Singapore National Eye Centre, Singapore, Singapore; 2Centre for Eye Research Australia, University of Melbourne, Melbourne, Australia; 3Centre for Vision Research, University of Sydney, Sydney, Australia; 4Department of Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore.

5641 — A37  Epidemiology of Chinese Patients in the Ophthalmology Clinic of a New York City Public Hospital. See H. Wong1, L.G. Chen1, C.C. Teng2. 1Ophthalmology, NYU School of Medicine, New York, NY; 2Einhorn Clinical Research Center, New York Eye and Ear Infirmary, New York, NY.

5642 — A38  Genetic Determinants of Serum Lutein and Zeaxanthin Levels in the Carotenoids in Age-Related Eye Disease Study. Chitra K. Karki1, S.K. Iyengar2, S. Gerstner1, J-J. Wang2,3, P. Mitchell3, N. Cheung2, T. Au1,4, S. Saw1, C. Cheng1. 1Ophthalmology and Visual Sciences, University of Wisconsin-Madison, Madison, WI; 2Epidemiology & Biostatistics, Case Western Reserve University, Cleveland, OH; 3Jean Mayer USDA Human Nutrition Research Center on Aging, Tufts University, Boston, MA; 4Cancer Prevention Research Program, Fred Hutchinson Cancer Research Center, Seattle, WA.*CR


5646 — A42  Rare Variant Analysis of Refractive Error in the AREDS Cohort. Joan E. Bailey-Wilson1, C.L. Simpson2, R. Wojciechowski3, C. Motter1, S. Szymczak1, D. Stambolian1. 1National Human Genome Research Inst, National Institutes of Health, Baltimore, MD; 2Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD; 3Ophthalmology-Stellar Chance Lab, University of Pennsylvania, Philadelphia, PA.

Hall B/C  A43-A79
Thursday, May 10, 2012, 8:30 AM-10:15 AM
Visual Psychophysics & Physiological Optics / Multidisciplinary Ophthalmic Imaging Group / Retina

512 Novel Imaging, Photoreceptors, Vasculature and Disease

Moderator: Nancy J Coletta


5648 — A44  High Resolution Adaptive Optics Imaging Compliments Standard SD-OCT Imaging in Macular Diseases. Gibran S. Khurshid1, A. Boretsky2, P. Gupta3, C. Tung4, B.F. Godley5, M. Motamedi1, E.F. van Kuijk1. 1Ophthalmology & Visual Sciences, 2Ophthalmic & Visual Sciences, 3Ophthalmology and Visual Sciences, 4Univ of Texas Medical Branch, Galveston, TX; 5Ctr for Biomed Engineering, Univ of Texas Medical Branch, Houston, TX; 6Ophthalmology MMC 493, Univ of Minnesota, Minneapolis, MN.

5649 — A45  Spectral and Phase Analyses Of Ocular Hemodynamics using Combined STdOCT and Ultrasonic Method. Monika E. Danielewski1, D. Szlag1, D. Iskander1, M. Wojtkowski2. 1Institute of Physics, 2Institute of Biomedical Engineering and Instrumentation, Wroclaw University of Technology, Wroclaw, Poland; 3Institute of Physics, Nicolaus Copernicus University, Torun, Poland.

5650 — A46  High-resolution Imaging Of The White Dot Structure Observed In Fundus Albipunctatus. Yakiko Makiyama1, S. Ooto2, M. Hangai1, K. Takayama1, A. Oishi1, K. Ogino1, S. Nakagawa1, K. Yonezawa2, Y. Sato2, N. Yoshimura1. 1Ophthalmology and Visual Science, Kyoto University Grad School of Med, Kyoto, Japan; 2CANON INC., Tokyo, Japan.*CR

*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures — $ Refer to Program Number in the Clinical Trial (CT) Registration Index — © Travel Grant Awardee

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5651 – A47  The Nile Rat Model of Diabetes: a Cone-Rich Retina with a Nocturnal Eye Design Enables Enhanced Resolution of the Retina. Melanie C. Campbell1, M.L. Kislik1,4, K. Bunghardt1, E.L. Irving1, N. Gibson1, L. Emptage1,3, Y. Sauve2, V. Choh1.1Physics & Astronomy/Sch of Optom, 2Physics & Astronomy, School of Optometry, 3Psychology, University of Waterloo, Waterloo, ON, Canada; 4Dept of Optophthalmology, University of Alberta, Edmonton, AB, Canada.


5653 – A49  Improved Retinal Blood Flow Analysis Method Using Abnormal Frame Information Automatically Detected From AOSLO Image Sequence. Hiroshi Imamura1, P. Fletcher2, K. Nozato3, S. Ueda4, A. Uji5, N. Yoshimura1. 1Canon Inc, Tokyo, Japan; 2Canon Information Systems Research Australia, Sydney, Australia; 3Optophthalmology, Kyoto University Graduate School of Medicine, Kyoto City, Japan. *CR


5655 – A51  Structural analysis of small vessels In The Human Retina : an adaptive optics study. Michel Paques1, K. Nakahama2, F. Rossart2, J.A. Sahel1. 1Clinical Investigation Center 503, Quinze-Vingts Hospital, INSERM, Paris, France; 2INEP, Paris, France; 3UMR-S 968, Institut de la Vision, Paris, France. *CR

5656 – A52  New Features Of Diabetic Retinopathy Lesions Detected By Adaptive Optics Scanning. T. Rooy1, H. Chai2. 1Dept of Ophthalmology, Aarhus University Hospital, Aarhus C, Denmark.

5657 – A53  In Vivo Investigation of the Retinal Microscopy in Patients with Type 1 Diabetes Mellitus. Mariacristina Parravano1, M. Lombardo2, G. Lombardo2, B. Bocciassini1, S. Lioi1, M. Varano1. 1Ophthalmology, Fondazione GB Bietti-IRCCS, Rome, Italy; 2CNR-IPCF Unit of Support Cosenza, LiCryL Laboratory, University of Calabria, Rende, Italy.


5659 – A55  Adaptive Optics and SD OCT in Macular Telangiectasia Type 2. Alain Gaudric1, K. Nakashima2, V. Krivosic1, N. Chateau1, J.A. Sahel4, M. Paques2. 1Ophthalmology, Lariboisiere Hospital University Paris 7, Paris, France; 2Ophthalmology, Clinical Investigation Center 503 Quinze-Vingts Hospital, INSERM, Paris, France; 3Imagine Eyes, Orsay, France; 4Optophthalmology, UMR-S 968 Institut de la Vision, Paris, France. *CR


5661 – A57  Effectiveness In Detecting Area Of Photoreceptor Disruption By Dioptic Adaptive Optics Scanning Laser Ophthalmoscopy (d-aoslo) With Widder Field Of View. Yoshiyuki Kitaguchi1, T. Fujikado1, H. Kand1, T. Morimoto1, T. Yamaguchi1, T. Mihasi1, K. Nishida1. 1Ophthalmology, Sumitomo hospital, Osaka, Japan; 2Applied Visual Science, Osaka University, Suita, Japan; 3Topcon Research Institute, Itabashi, Japan; 4Optophthalmology, Osaka University, Osaka, Japan. *CR

5662 – A58  Foveal Microvasculature And Its Relationship To Retinal Thickness. Toco Y. Chai1, A.E. Elsner1, J.A. Sahel1. 1Optometry, Indiana University, Bloomington, IN; 2School of Optometry, Indiana University, Bloomington, IN.

5663 – A59  Variations Of The Eye’S Image Optical Quality And The Sampling Limit Of Resolution Of The Cone Mosaic With Axial Length. Marco Lombardo1, S. Serra1, P. Ducoli1, G. Lombardo1. 1IRCCS Fondazione G.B. Bietti, Rome, Italy; 2CNR-IPCF Unit of Support Cosenza, LiCryL Laboratory, University of Calabria, Rende, Italy.

5664 – A60  Distribution of Outer Nuclear Layer Thickness in SD OCT Images. Joel A. Papay1, C.A. Clark1, T.Y. Chui1, L. Zhao1, A.E. Elsner. 1Optometry, Indiana University, Bloomington, IN.

5665 – A61  Perifoveal Retinal Thickness and Temporal Contrast Sensitivity in Axial Myopia. Nancy J. Coletta1, Y. Piliz1, A. Ciepiel1. 1Vision Science, New England College of Optometry, Boston, MA; 2School of Optometry, University of California, Berkeley, CA.

5666 – A62  In vivo Imaging of Photoreceptor Loss Associated with Dry Age-Related Macular Degeneration Using Adaptive Optics Scanning Laser Ophthalmoscopy. Adam Boretsky1, F. Khan1, G. Burnett1, R. Harris1, M. Stephens1, J.A. Sahel2. 1Ophthalmology, Lariboisiere Hospital University Paris 7, Paris, France; 2Ophthalmology, Clinical Investigation Center 503 Quinze-Vingts Hospital, INSERM, Paris, France. *CR

5667 – A63  Adaptive Optics Scanning Laser Ophthalmoscopy With Amplitude Pupil Apodization. Yusufu N. Sulai1, A. Dubra2. 1The Institute of Optics, 2Flaum Eye Institute, 3University of Rochester, Rochester, NY; 4Ophthalmology, Biophysics, Medical College of Wisconsin, Milwaukee, WI. *CR

5668 – A64  Limitations To Adaptive Optics Imaging Quality In Highly Powered Eyes. Xiaolin Zhou, P. Bedgood, A. Metha. Department of Optometry and Vision Sciences, University of Melbourne, Melbourne, Australia.

5669 – A65  The Repeatability of Photoreceptor Reflectance Changes in the Living Human Retina. Robert F. Cooper1, J. Rha2, A.M. Dubis2, A. Dubra2. 1The University of Rochester, Rochester, NY; 2Biomedical Engineering, Marquette University, Milwaukee, WI; 3Ophthalmology, Cell Biology, Neurobiology & Anatomy, Biophysics, Medical College of Wisconsin, Milwaukee, WI. *CR


5671 – A67  Retinal Structure and Visual Function in Patients with Blue Cone Monochromatism. Xinda Lou1, A.V. Cideciyan1, A. Samarako2, S.B. Schwartz2, A.J. Romani1, J.B. Goldberg3, B. Baurain3, B. Wissinger2, S. Koh2, S.G. Jacobson1. 1Department of Ophthalmology, Scheie Eye Institute, Philadelphia, PA; 2Center for Retinal Research, Institute for Ophthalmic Research, Molecular Genetics Laboratory, Tuubingen, Germany.

5672 – A68  Assessing the Relationship Between Cone Density and Foveal Morphology. Adam M. Dubis1, S.O. Hansen1, R.F. Cooper2, B.R. Hansen2, J. Carroll1,2, J. Chung1,2,4. 1Cell Biology, Neurobiology and Anatomy, 2Ophthalmology, 3Medical College of Wisconsin, Wauwatosa, WI; 4Biomedical Engineering, Marquette University, Milwaukee, WI.

5673 – A69  Disrupted RPE and intact photoreceptors observed in vivo with Fluorescence Adaptive Optics Scanning Laser Ophthalmoscopy years following accidental laser exposures in humans. Jennifer J. Hunter1,2, J.A. Ross1, W. Fischer1, A. Dubra1,2, M.M. Chung1,2. 1Flaum Eye Institute, 2Center for Visual Science, University of Rochester, Rochester, NY; 3Ophthalmology, Biophysics, Medical College of Wisconsin, Milwaukee, WI.

5674 – A70  Measuring the Performance of an Adaptive Optics Fund Illuminated Camera for Imaging the Cone Mosaic in the Clinical Setting. Jonathan D. Fay1, A. Faridi, A. Garg, M.E. Pennesi. Casey Eye Institute, Oregon Health and Science University, Portland, OR.

5675 – A71  Fluorescence Adaptive Optics Scanning Laser Ophthalmoscopy Demonstrates Intraretinal Spots and Low Cone Density in Fundus Albinus. Hongbin Song1, D.R. Williams1, L. Latchney1, A. Dubra1, M.M. Chung1,2. 1Center for Visual Science, 2Institute of Optics, 3Flaum Eye Institute, 4University of Rochester, Rochester, NY; 5Ophthalmology, Medical College of Wisconsin, Milwaukee, WI. *CR
Hall B/C  A99-A125
Thursday, May 10, 2012, 8:30 AM-10:15 AM

Visual Neurophysiology

513 Clinical Electrophysiology and Retinal Disease

Moderator: Stefanie B Varghese

5684 — A99 Oscillatory Potential Contribution to the ERG: A New Mean to Identify Disease Onset. Nataly Tranq1, M. Gauvin1, R. Koenenkoop1, J. Little1, J-M. Lina1, P. Lachapelle1. 1Department of Ophthalmology, Neurology and Neurosurgery, McGill University-Montreal Children’s Hospital Research Institute, Montreal, QC, Canada; 2École de technologie supérieure, Montreal, QC, Canada.

5685 — A100 Topographic Mapping Of Functioning Cone And Rod System In Inherited Retinal Degenerations With Confirmed Gene Mutations. Jeya Sliessoraytie1, E. Troeger1, S. Kohf1, B. Wissinger1, E. Zrenner18. 1Institute for Ophthalmic Research, University of Tuebingen, Tuebingen, Germany; 2Institute for Ophthalmic Research, Molecular Genetics Laboratory, Tuebingen, Germany; 3Molecular Genetics Laboratory, 4Institute for Ophthalmic Research, 5Centre for Ophthalmic Research, Tuebingen, Germany, 6University of Tuebingen, Germany; 7Department of Ophthalmology, Université de Medicine-Université d’Auvergne, Clermont-Ferrand, France.

5686 — A101 Molecular Modeling of RS1 Structure Indicates Two Classes of Missense Variants With Mild and Severe XLRS Phenotypes. Yuri V. Sergeev1A, P.A. Sieving1, A. Vincent1, A.G. Rohson1, A.T. Moore1, A.R. Webster1, G.E. Holder1. 1OGYFB, 2National Eye Institute, Bethesda, MD; 3Electrophysiology, Moorfields Eye Hospital, London, United Kingdom; 4Institute of Ophthalmology, University College London, London, United Kingdom.

5687 — A102 Retinal Function Assessed By Full-field ERG In Ranibizumab Treated Neovascular AMD Patients. Karen B. Pedersen1, F. Moller1, A. Sjølie2, S. Andreasson3. 1Department of Ophthalmology, Odense University Hospital, Odense, Denmark; 2Department of Ophthalmology, Lund University Hospital, Lund, Sweden.


5689 — A105 Discrete Wavelet Transform (DWT) Of The ERG More Accurately Predicts The End Stage Of Retinal Degenerative Disorders. Mathieu Gauvin1, J Racine1, J. Daloze1, R. Koenenkoop1, J. Little1, M. Hebert1, J. Lina1, P. Lachapelle1. 1Department of Ophthalmology, Neurology and Neurosurgery, McGill University-Montreal Children’s Hospital Research Institute, Montreal, QC, Canada; 2École de technologie supérieure, Montreal, QC, Canada; 3Ophthalmology, Laval University - Centre de recherche Université Laval Robert-Giffard, Quebec, QC, Canada.


5691 — A107 Two New Mutations in RP11. Gene in Occult Macular Dystrophy Patients Associated with a Dopolaminergic Pattern of Focal Macular ERG. Shuhei Kameya1, T. Kabuto1, H. Takahashi1, Y. Goto-Fukaura1, T. Igarashi1, K. Yamaki1, A. Mizota1, M. Otsuki1, H. Takahashi1. 1Ophthalmology, Chiba Hokusoh Hosp Nippon Med Sch, Inzai, Japan; 2Ophthalmology, Nippon Medical School, Bunkyo-Ku, Japan; 3Ophthalmology, Teikyo University, Itabashi-ku, Japan; 4Ophthalmology, National Institute of Sensory Organs, National Hospital Organization Tokyo Medical Center, Tokyo, Japan; 5Aichi Medical University, Aichi, Japan.

5692 — A108 Cortical Impact of Genetic Retinal Degeneration of Ganglion Cell Origin and With Early Visual Loss. Catarina A. Mateus1, A.A. Reis1A, J. Castelhano1, E. Silva1, M. Castelo-Branco1. 1Visual Neuroscience, IBIL-Faculty of Med-Univ of Coimbra, Coimbra, Portugal; 2Ophthalmology, University Hospital of Coimbra, Coimbra, Portugal.

5693 — A109 Phenotypic Characterization in Two Patients with Identified Rhodopsin Gene Mutation: Impact of Retinal Degeneration on Cortical Structure. Andreas C. Pereira1, C. Mateus1, A. Reis1A, B. Quendera1, S. Ferreira1, M. Almeida1, E. Silva1, M. Castelo-Branco1. 1Visual Neuroscience Laboratory, IBIL-Faculty of Medicine-University of Coimbra, Coimbra, Portugal; 2Ophthalmology, University Hospital of Coimbra, Coimbra, Portugal; 3Center for Neuroscience and Cell Biology, University of Coimbra, Coimbra, Portugal.

5694 — A100 Environmental and Therapeutic Approaches to Limit the Consequences of Postnatal Hyperopia. Allison L. Dorfman4, B. Campanaro4, K. Uy3, A. Polosa4, M. Djavari4, P. Wintermark4, S. Chemtob4, P. Lachapelle4. 1Ophthalmology, 2Neonatology, 3McGill University/Montreal Children’s Hospital, Montreal, QC, Canada; 4Département de Sciences Biomédicales, Université de Montréal, Montreal, QC, Canada; 5Pediatrics & Pharmacology, Research Centre/St. Justine Hospital, Montreal, QC, Canada.

*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures — travel Grant Awardee

5697 — A112 Focal Macular Electoretinogram Elicited By Hemicircular Stimuli In Eyes With Branch Retinal Vein Occlusion. Shinsoke Yasuda1, S. Ueno1, C-H. Piao1, M. Kondo1, 2, H. Terasaki1. 1Ophthalmology, Nagoya Univ Graduate Sch of Med, Nagoya, Japan; 2Ophthalmology, Mie Univ Graduate Sch of Med, Tsu, Japan.


5699 — A114 Visual Impairment in Leber Hereditary Optic Neuropathy Carriers of the Same Pedigree. Aldina A. Reis1, 2, C. Mateus1, E. Silva1, 2, M. Castelo-Branco1. 1Visual Neuroscience Laboratory, IBILI-Faculty of Med-Univ of Coimbra, Coimbra, Portugal; 2Ophthalmology, University Hospital of Coimbra, Coimbra, Portugal.


5702 — A117 Effects of Nicotine on Flicker ERGs: Application of DFT and T-Circ2. Bo Lei1, H. Peng1, J. Yin1, Q. Xu1, P. Tam1, K. Dang1, D. Cameron1,2, Ian Fisher1,2. 1Department of Medical Physics & Clin Eng, Royal London Univ Hospital, Liverpool, United Kingdom; 2Clinical Eye Research Centre, Royal Liverpool University Hospital, Liverpool, United Kingdom.

5703 — A118 The Characteristics Of Cone-driven Oscillatory Potentials In Human Electoretinogram. Bo Lei1, H. Peng1, J. Yin1, Q. Li1. 1Ophthalmology, The First Affiliated Hospital of Chongqing Medical University, Chongqing, China; 2Ophthalmology, University of Florida, Gainesville, FL.


5705 — A120 Trichromatic And Dichromatic Electoretinograms Using A Chromatic-Achromatic Temporal Compound Stimulus. Neil R. Parry1, I.J. Murray1, A. Panourgas2, D.J. McKeefry3, B.B. Lee4, J.J. Kremers2. 1Vision Science Centre, Manchester Royal Eye Hospital, Manchester, United Kingdom; 2Optometry & Vis Sci, FLS, Univ of Manchester, Manchester, United Kingdom; 3School of Optometry and Vision Science, University of Bradford, Bradford, United Kingdom; 4Biological Sciences, SUNY College of Optometry, New York, NY; 5Dept of Ophthalmology, University of Erlangen, Erlangen, Germany.

5706 — A121 Seleral Depression Depresses the Photopic ERG. Scott E. Brodie1, J.H. Francis2, B. Murr2, D.H. Abrahamson1. 1Ophthalmology, Mount Sinai School of Medicine, New York, NY; 2Ophthalmic Oncology, Memorial Sloan-Kettering Cancer Center, New York, NY.

5707 — A122 Reproducibility Of Visual Electrophysiology Recordings Between Laboratories: The Importance Of Regular Calibration. Richard P. Hagan1, 2, K.J. Quinn1, L. Milner1, 2, R.L. Robinson1, 2, A.F. Takat1, A.C. Fisher1, 2. 1Department of Medical Physics & Clin Eng, Royal London Univ Hospital, Liverpool, United Kingdom; 2Clinical Eye Research Centre, Royal Liverpool University Hospital, Liverpool, United Kingdom.

5708 — A123 Generation of Steady State Pattern Electoretinograms Explained by Convolution of Transient Responses. Jonathan A. Toft-Nielsen1, J. Bohorquez1, V. Porciatti2, O. Ozdamar1. 1Biomedical Engineering, University of Miami, Miami, FL; 2Bascom Palmer Eye Inst, Univ of Miami Miller Sch Med, Miami, FL.

5709 — A124 Temporal Interactions Between the b-wave and d-wave of the Human Electroretinogram. pan Shi1, K.A. Godwin1, P.J. DeMarco. Psychological and Brain Sciences, University of Louisville, Louisville, KY.

5710 — A125 Characterising Human L- and M-cone ERGs Using a Four Primary System. Declan J. McKeefry1, N.K. Challal1, I.J. Murray1, J.J. Kremers1, N.R. Parry1. 1Optometry, Bradford School of Optometry & Vision Science, Bradford, United Kingdom; 2Electrophysiology, L.V.Prasad Eye Institute, Hyderabad, India; 3Optometry & Vis Sci, FLS, Univ of Manchester, Manchester, United Kingdom; 4Dept of Ophthalmology, University of Erlangen, Erlangen, Germany; 5Vision Science Centre, Manchester Royal Eye Hospital, Manchester, United Kingdom.

5711 — A126 Clinical Verification of Input-Lag Correction for Comparison of pVEP signals acquired using CRT and TFT displays. Balazs L. Varsanyi1, 2, B.V. Nagy1, A. Magyar1, A. Farkas1, J. Nemeth4. 1Department of Ophthalmology, 2Dept of Ophthalmology, Semmelweis University, Budapest, Hungary; 4Experimental Psychology, University of Sao Paulo, Sao Paulo, Brazil.

5712 — A127 The Limited Ability Of Neurons In Visual Area 2 (v2) To Integrate Contour Elements Over Extended Space In Infant Macaque Monkeys. Bin Zhang1, 2, G. Shef1, K. Lee1, J. Smith3, 4, Y.M. Chino1. 1College of Optometry, Nova Southeastern University, Plantation, FL; 2College of Optometry, University of Houston, Houston, TX.

5713 — A128 The Use of Optokinetic Response to Quantitatively Measure Visual Acuity in Adult Zebrafish. Peony C. Tam1, P. Russamdana, K. Dang2, D. Cameron1. Opmotery, Western University of Health Sciences, Pomona, CA.


5715 — A130 Mapping The Spatiotemporal (S-T) Domain And Gain Of Putative M- And P-dominated Limbs Of The Human Cortical Contrast Response Function (CRF) Using The Sweep Vep (svep). Russell D. Hamer1, 2, G.S. Souza1, T.L. Cost1, B.D. Gomes1, L.C. Silveira1, D.F. Ventura1. 1Departamento de Psicologia Experimental, Instituto de Psicologia, Sao Paulo, Brazil; 2Smith-Kettlewell Eye Research Institute, San Francisco, CA; 3Instituto de Ciencias Biologicas, Universidad Federal do Pará, Belém, Brazil; 4Nucleo de Medicina Tropical, Universidade Federal do Pará, Belém, Brazil.

5716 — A131 Topographic maps of VEP Elicited By Pseudorandom Stimulation With The Swept Parameter Technique. Keiko Momose. Faculty of Human Sciences, Waseda University, Tokyo, Japan.


5720 — A135 The Step VEP has a Consistent VA Relationship with Psychophysics for all VA, Age, and Aetiology and Increases the Completion Rate of Paediatric VA Assessment to 96%. Alison M. Mackay1–2. 1Medical Physics, Leeds Teaching Hospitals, Leeds, United Kingdom; 2Clinical Physics, Royal Hospital for Sick Children, Glasgow, United Kingdom.

5721 — A136 Corneal Dry-responsive Neurons in the Trigeminal Nucleus Respond to Innocuous Cooling in the Rat. Ian D. Meng1, M. Karuso1. 1Biomedical Sciences, University of New England, Biddeford, ME; 2Oral Biological Sciences, Niigata University School of Dentistry, Niigata, Japan.


5723 — A138 Stimulus Timing-Dependent Synaptic Modification in Rat Visual Cortex Induced by Training Stimuli Paired with Postsynaptic Subthreshold Depolarizations. Xuefeng Shi1, K. Zhao1–2. 1Ped Ophthalm & Strabismus, Tianjin Eye Institute and Hospital, Tianjin, China; 2Tianjin Key Laboratory of Ophthalmology and Visual Science, Tianjin, China. ©

5724 — A139 Measuring the Spatial and Temporal Dynamics of Frontal Eye Field Receptive Fields. Matthew A. Smith1–2, J. Mayo3, M.A. Sommer1, A. DiTomasso1. 1Ophthalmology, 2Center for Neuroscience, 3University of Pittsburgh, Pittsburgh, PA; 4Neurobiology, Harvard Medical School, Boston, MA; 5Dept of Biomedical Engineering and Center for Cog. Neurosci., Duke University, Durham, NC.

Hall B/C A140-A152

Thursday, May 10, 2012, 8:30 AM-10:15 AM

Visual Neurophysiology

515 Visual Electrophysiology in Disease and Drug Toxicity

Moderator: Carol A Westall, III

5725 — A140 Monitoring Of Patients On Hydroxychloroquine For At Least Five Years: A follow-up Of 21 Patients. Danielle Ama2, I. Ingster-Moati1, E. Albuission1, C. Girard1, B. Delbosc1. 1Department of Ophthalmology, Orleans Hospital, Orleans, France; 2Ophthalmology, University Paris 7 Diderot, Necker Hospital, Paris, France; 3Biostatistics Department, University of Medicine, Vandoeuvre-les-Nancy, France; 4Department of Ophthalmology, University Hospital, Besancon, France.

5726 — A141 Full-field Electoretinogram Changes In Patients In Therapy With Chloroquine And Hydroxychloroquine: Time And Dose Effect. Giulio Ruberto1, C. Tinelli1, P. Piccinni1, L. Bossoles1, M. Raimondi1. 1Clinica Oculistica, 2Biometric Service, 1IRCCS Policlinico San Matteo, Pavia, Italy.

5727 — A142 Correlations Between Visual Acuity (VA), Humphrey Visual Fields (HVF), And Multifocal Electroretinogram (mfERG) In Patients With Retinal Toxicity Secondary To Hydroxychloroquine (Plaquenil) Therapy (PT). Inna V. Glybina. Ophthalmology, Wayne State Univ Kresge Eye Inst, Detroit, MI.


5729 — A144 Electrophysiology And Fluorescein Indocyanine Green Angiography In Susac Syndrome. Julia M. Promesberger1, A.F. Alex1, I. Kleffner1, J-M. Dörr2, N. Eter1A. 1Ophthalmology, 2University Hospital of Muenster, Muenster, Germany; 3Neurology, 4University hospital of Berlin, Berlin, Germany.

5730 — A145 Flash Electroretinogram In Children With Mitochondrial Diseases. Frederic Nicolas1, A. Brion1, C. Creuzot-Garcher1, F. Renaud1. 1Ophthalmology, 2Neurology, CHU Dijon, Dijon, France; 3Neurology Unit, Hôpital Armand Trousseau, Paris, France.

5731 — A146 Flicker Electroretinogram - Temporal Response Function In Children On Vigabatrin (VGB). Aparna Raghuram1, O. Kolawole1, R.M. Hansen2, A.B. Fulton1. 1Department of Ophthalmology, Childrens Hospital Boston, Boston, MA; 2Harvard Medical School, Boston, MA; 3Northeastern University, Boston, MA.

5732 — A147 Seizure Related Retinal Dysfunction Is Not Associated With Increased Risk Of Retinal Toxicity With Vigabatrin. Ananthavalli Kumarappah1, M.T. McFarlane2, T. Wright1, C. Westall1. 1Institute of Medical Sciences, University of Toronto, Toronto, ON, Canada; 2Ophthalmology and Vision Sciences, Hospital for Sick Children, Toronto, ON, Canada. ©CR

5733 — A148 Electoretinogram Anomalies In Psychiatric Disorders: The Possible Implication Of GSK3. Joelle Lavoie1, J-M. Beaulieu1, M. Hebert1, C.RULRG, Quebec, QC, Canada; 2Ophthalmology, Laval University, Quebec, QC, Canada.

5734 — A149 Habituation of the Ganglion Cell Response to Sustained Pattern Stimulation: Reduced by Multiple Sclerosis. Antoello Fadda1, A. Di Renzo1, F. Martelli1, D. Marangoni1, A. Batocchi1, D. Giannini1, B. Falsini1. 1Technologies and Health, Istituto Superiore di Sanita, Roma, Italy; 2Ophthalmology, GB Bietti Eye Foundation-IRCCS, Roma, Italy; 3Ophthalmology, 4Neurology, 5Catholic University, Rome, Italy.

5735 — A150 Effects of Nicotine on Processing in the Visual Pathways. Naser T. Naser1,2, V.M. Zemón1, S.B. Varghese1, I.T. Keyser3, E. Hartmann4. 1Vision Science, 2Department of Optometry, 3University of Alabama at Birmingham, Birmingham, AL; 4Ferkau Grad School of Psychology, Yeshiva University, Bronx, NY. ©CR

5736 — A151 Evaluation of visual function in patients with Clinical Isolated Syndrome using multifocal visual evoked potentials and optic coherence tomography. Roman Blanco1, C. Perez-Rico1, L. Rubio1, M. Roldan1, L. Ayuso1. 1Departamento de Oftalmologia, HUGU, Sescam /UAH, Spain; 2Departamento de Oftalmologia, Universidad Alcalá, UAH, Spain; 3Departamento de Neurologia, Hospital Principe de Asturias, Alcala de Henares (Madrid), Spain; 4Departamento de Oftalmología, Universidad de Alcalá, Alcalá de Henares (Madrid), Spain.


*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures – © Refer to Program Number in the Clinical Trial (CT) Registration Index – ©CR Travel Grant Awardee
5738 – 5757 – Thursday – Posters

**Clinical & Epidemiologic Research**

**516 Diabetic Retinopathy Epidemiology**

**Moderator: Robin D Hamilton**

**Thursday, May 10, 2012, 8:30 AM-10:15 AM**

**5738 – 5757 Thursday Posters**

**5738**  
**Efficacy of Diabetic Retinopathy Screening for Patients Who Were at High-Risk for Sight-Threatening Retinopathy in a County Healthcare System.**  
Glen Y. Ozawa1, T. Litvin2, J.A. Cuadros3, S. Ramaswamy4, M.S. Muller5, A.E. Elsner5, T.J. Gast5.  
1UC Berkeley School of Optometry, Berkeley, CA; 2School of Optometry, Indiana University, Bloomington, IN; 3AEO Imaging, LLC, Bloomington, IN. [CR]

**5739**  
**Cases of Legal Blindness and Visual Impairment Avoided Using Ranibizumab for Diabetic Macular Edema in the United States.**  
Rohit Varma1, N.M. Bressler2, Q. Doan2, P.P. Lee1, L.J. Suner1, M. Danese3, C.M. Dolan4, A. Turpeu4, J. Ward5, J.S. Ehrlich5.  
1Ophthalmology, USC, Doheny Eye Institute, Los Angeles, CA; 2Ophthalmology, Wilmer Eye Institute, Baltimore, MD; 3Outcomes Insights, Westlake Village, CA; 4Ophthalmology, Duke University Eye Center, Durham, NC; 5Retina Associates of Florida, Tampa, FL; 6Genentech Inc., South San Francisco, CA. [CR]

**5740**  
**Cognitive impairment (CI) does not correlate with severity of diabetic retinopathy (DR) in people with Type 2 Diabetes (T2D).**  
Roxanne R. Crosby-Nwaobi1, A. Forbes1, T. Karnowski2, S. Sivaprasad2.  
1Ophthalmology, UPMC Eye Center, Eye & Ear Institute, University of Pittsburgh School of Medicine, Pittsburgh, PA; 2Medicine, UPMC Mercy Hospital, Pittsburgh, PA; 3Cardiology, Westmead Hospital, Sydney, Australia. [CR]

**5741**  
**Diabetic Retinopathy Inpatient Study.**  
1Ophthalmology, UPMC Eye Center, Eye and Ear Institute, University of Pittsburgh School of Medicine, Pittsburgh, PA; 2Medicine, UPMC Mercy Hospital, Pittsburgh, PA. [CR]

**5742**  
**How much does glycated hemoglobin A1c explain the risk of diabetic retinopathy in persons with type 2 diabetes?**  
1Department of Ophthalmology, Centre for Eye Research Australia, East Melbourne, Australia; 2Department of Ophthalmology, Centre for Vision Research, Sydney, Australia; 3National University of Singapore, Singapore Eye Research Institute, Singapore, Singapore. [CR]

**5743**  
**Telemedicine-based Digital Retinal Imaging Improves Diabetic Retinopathy Screening Compliance.**  
Seema Garg1, B. King2, P. Jani1, S. Weir2, T. Karnowski3, S. Li4, E. Chaum1.  
1Dept of Ophthalmology, University of North Carolina, Chapel Hill, NC; 2Oak Ridge National Laboratory, Memphis, TN; 3Hamilton Eye Institute, University of Memphis, Memphis, TN. [CR]

**5744**  
**Access To Eye Care By Patients With Diabetes: A Retrospective Analysis.**  
1Research, Wills Eye Institute, Philadelphia, PA; 2Biostatistics, Jefferson Medical College, Philadelphia, PA; 3Pharmacy, Jefferson School of Pharmacy, Philadelphia, PA. [CR]

**5745**  
**Risk Factors for Proliferative Diabetic Retinopathy in a Latino American Population.**  
Muneeswar Gupta Nittala, S.R. Sadda.  
Ophthalmology, Doheny Eye Institute, Los Angeles, CA. [CR]

**5746**  
**An Edutainment Tool for Increased Compliance with DR Screening and Management, Part 2: Efficacy Study.**  
Anne M. Edwards1, G. Zamora1, A. Matiella2, P. Soliz1.  
1VisionQuest Biomedical LLC, Albuquerque, NM; 2The Fotonovela Production Company, Santa Fe, NM. [CR]

**5747**  
**Efficient Early Diagnosis of Diabetic Retinopathy using zero-dilation Scanning Laser Ophthalmoscopy.**  
Dirk De Brossere1, P. van Etten2, J. Martinez2, M. Mensink3.  
i-Optics bv, The Hague, The Netherlands; 2Rotterdam Eye Institute, Rotterdam, The Netherlands; 3Rotterdam Eye Hospital, Rotterdam, The Netherlands. [CR]

**5748**  
**Diabetes and Diabetic Retinopathy in an Australian Cardiac Population: the Australian Heart Eye Study.**  
Adam J. Plant1,2, G. Burlutsky1, J. Chiha3.  
1Ophthalmology, London, United Kingdom; 2UCL NHS Foundation Trust and UCL Institute of Ophthalmology, at Moorfields Eye Hospital, London, United Kingdom; 3Medicine, Westmead Hospital, Sydney, Australia. [CR]

**5749**  
**Associations Between Diabetic Retinopathy and Plasma Levels of High-Sensitive C-Reactive Protein or Von Willebrand Factor in Long-term Type 1 Diabetic Patients.**  
Jakob Grauslund1A, J.V. Laursen1A, S.S. Hoffmann1A, A. Thiagalingam1, P. Kovoor1, P. Mitchell1B.  
1Ophthalmology, Centre for Vision Research, Sydney, Australia; 2University of Sydney, Sydney, Australia; 3Cardiology, Westmead Hospital, Sydney, Australia. [CR]

**5750**  
**Retinal Cell Biology / Retina**

**5751**  
**Risk Factors for Prevalence, Incidence and Progression of Diabetic Retinopathy Among Non-insulin Dependent Diabetics in Taiwan.**  
Shiau-Juan Sheu1,2, W-L. Ho1, J-Y. Lin1, N-C. Liu1, S-C. Chen1, Y-H. Hong1, H-C. Lam1,2.  
1Department of Ophthalmology, 2Department of Endocrinology, Kaohsiung Veterans Gen Hospital, Kaohsiung, Taiwan; 3Ophthalmology, National Yang Ming University, Taipei, Taiwan. [CR]

**5752**  
**The Incidence Of Vitrectomy For The Complications Of Proliferative Diabetic Retinopathy.**  
David H. Steel1, D. Vaideanu1, S.S. Sandhu1.  
1Sunderland Eye Infirmary, Sunderland, United Kingdom; 2Institute of Genetic Medicine, University of Newcastle, Newcastle Upon Tyne, United Kingdom; 3Medical Retina Unit, Centre for Eye Research Australia, Melbourne, Australia. [CR]

**5753**  
**Risk factors Associated with Progression from Nonproliferative to Proliferative Diabetic Retinopathy.**  
Kristen H. Nwanyanwu1, N. Taiwar1,2, T.W. Gardner1, S.J. Wrobel3, J.D. Stein4.  
1Ophthalmology and Visual Sciences; 2Department of Biology, University of Arizona, Tucson, AZ. [CR]

**5754**  
**Fractural-Based Oscillation of Venous Density Within the Macula During Progression of Diabetic Retinopathy.**  
Patricia A. Parsons-Wingerter1, K. Radhakrishnan1.  
1Research & Technology Directorate, John Glenn NASA Research Center, Cleveland, OH; 2Dept. of Pathology/Cancer Center, SOM, University of New Mexico, Albuquerque, NM. [CR]

**5755**  
**(Pro)renin Receptor Is Associated With Angiogenic Activity In Proliferative Diabetic Retinopathy.**  
Atsuko Kanda1A,1B, K. Noda1A,2, W. Saito1A, S. Ishida1A,2,  
1Department of Ophthalmology, Laboratory of Ocular Cell Biology & Visual Science, Hokkaido Univ Grad Sch of Med, Sapporo, Japan; 2Laboratory of Ocular Cell Biology & Visual Science, Hokkaido Univ Grad Sch of Med, Sapporo, Japan. [CR]

**5756**  
**Angiogenic and Vasculogenic Factors in the Vitreous from Patients with Proliferative Diabetic Retinopathy.**  
Mold I. Nawaz1, M.S. Ola1, M.M. Siddique2, K. Gheo2, A.A. El-Arsl1.  
1Ophthalmology, Kind Saud University, Riyadh, Saudi Arabia; 2Laboratory of Histochemistry and Cytochemistry, University of Leuven, Leuven, Belgium. [CR]

**5757**  
**Influence of Diabetic Vitreous on the Endothelial Cells Activity, the Role of Anti-VEGF and Matrix Components.**  
Eye Hospital, University of Leipzig, Leipzig, Germany. [CR]
5762 — A280 Thiorodoxin Interacting Protein Is Required For S-glutathionylation And Redox Regulation Of VEGF Angiogenic Signal. Mohammed A. Abdelsaid1, A.B. El-Remyssy1. 1Clin & Experimental Therapeutics, University of Georgia, Augusta, GA; 2Georgia Health Science University, Augusta, GA; 3Vision Discovery Institute, Georgia Health Science University, GA. 4Vision Discovery Institute, Georgia Health Science University, GA.

5763 — A281 Polymamines Contribute To Diabetic Retinal Edema. Bruce A. Berkowitz1, L. Hawel, III1, C. Byus1, D.P. Bissig1, R. Roberts2,3. 1Anatomy/Cell Biol & Ophthal, 2Anatomy & Cell Biol, Wayne State Univ Sch of Med, Detroit, MI; 3University of California, Riverside, Riverside, CA; 4Anatomy and Cell Biology, Wayne State Univ School of Med, Detroit, MI.

5764 — A282 Overexpression of IL-1 Receptor Antagonist in the Rat Retina by Retinoic acid-mediated Gene Transfer Prevents Capillary Loss in Experimental Diabetess. Chiara Gerhardinger1, Y. Liu1, Z. Dagher3. 1Scheeps Eye Research Institute Massachusetts Eye and Ear, Boston, MA; 2Harvard Medical School, Boston, MA.

5765 — A283 Lipoprotein-associated Phospholipase Inhibition Regulates Retinal Vasopermeability During Experimental Diabetes. Alan W. Stitt1, P. Canning1, P.J. Luthert2, J.V. Glenn1. 1Clin & Experimental Therapeutics, University of Utah, Salt Lake City, UT; 2Georgia Health Science University, Augusta, GA; 3Vision Discovery Institute, Georgia Health Science University, GA. 4Vision Discovery Institute, Georgia Health Science University, GA.

5766 — A284 HFD-induced Retinal Microvascular Degeneration: Suggested Role Of Thiorodoxin Interacting Protein (TXNIP). Islam N. Mohamed1,2, S. Hafez1, M. Abdelsaid1,2, S. Matraong2,3, B. Pillai1, A. Erdal1, J.D. Imlig1, A.B. El-Remyssy2,3. 1Clinical and Experimental Therapeutics, University of Georgia, Augusta, GA; 2Vision Discovery Institute, Physiology, 3Georgia Health Sciences University, Augusta, GA; 4Pharmacology and Toxicology, Medical College of Wisconsin, Milwaukee, WI.

5767 — A285 Comparison of the Effect of Streptozotocin (STZ)-Induced Diabetic Retinopathy on the Early Electroretinogram (ERG) of Sprague Dawley and Long Evans Rats. Mark Vejima. Ocular And Neuroscience, Charles River Laboratories - Preclinical Services, Senneville, QC, Canada. #CR

5768 — A286 Chemokine Mediated Monocyte Trafficking into the Retina: Role of Inflammation in Diabetic Retinopathy, Arup Das1, S. Rangasamy1, P. McGuire1. 1MSC10-5160 Surgery, 2Cell Biology & Physiology, 3Univ of New Mexico Sch of Med, Albuquerque, NM.

5769 — A287 Neural And Vascular Gene Expression Changes In The Diabetic Rat Retina. Jennifer C. Lai1, R.A. Linsenmeier1, J.R. Moskal1. 1Clin & Experimental Therapeutics, University of Utah, Salt Lake City, UT; 2Georgia Health Science University, Augusta, GA; 3Vision Discovery Institute, Georgia Health Science University, GA.

5770 — A288 Overexpression of ProNGF Induces Apoptosis and Acellular Capillary Formation Via Activation of P75NTR. Azza B. El-Remyssy1, M.M. Al-Gayyar1, S. Matraong1, H. Saragovi1. 1Clin & Experimental Therapeutics, University of Georgia, Augusta, GA; 2Pharmacology, McGill Univ - Jewish General Hosp, Montreal, QC, Canada.


5772 — A290 Intravitreal Anti-vegf Therapy Blocks Inflammatory Cell Infiltration And Re-entry Into The Circulation In Retinal Angiogenesis. Shintaro Nakao1, M. Arima1, K. Ishikawa1, R. Kohn1, S. Kawahara1, M. Miyazaki2, S. Yoshida1, H. Enaida1, T. Kono1, T. Ishibashi1. 1Department of Ophthalmology, Kyushu University, Fukuoka, Japan; 2Ophthalmology, Fukuoka University Chikusho Hospital, Chikushino, Japan.

5773 — A291 Vascular Alteration And Lipids Accumulation In The Retina And Choroid Of Non-insulin-dependent Diabetic Goto-Kakizaki Rats. Elvire Vaucher1, M. Pouliot1, T.M. Boutin1, O. Fontaine1, R. Couture1. 1Optometry, 2Physiology, 3University of Montreal, Montreal, QC, Canada.

5774 — A292 Endothelial Mesenchymal Transition In Human Diabetic Epiretinal Fibrosis. Ray Gariano1, L.L. Zheng2. 1Ophthalmology, Scripps Clinic, La Jolla, CA; 2Ophthalmology, Stanford University School of Medicine, Palo Alto, CA.

5775 — A293 Similarities and differences of Bevacizumab and Ranibizumab in microvascular retinal endothelial cells. Gabriele E. Lang, H.L. Deissler. Department of Ophthalmology, University of Ulm, Ulm, Germany. #CR

5776 — A294 Proliferation Of The Retinal Microvasculature To Oxidative Stress: Ion Channel-dependent Mechanisms. Atsuko Nakazumi1, M. Fukumoto1, D.G. Puro1,2. 1Ophthalmology & Visual Sciences, 2Molecular & Integrative Physiology, University of Michigan, Ann Arbor, MI.


5778 — A296 VEGF-B Prevents Tight Junctional Re-organisation In Retinal Pigmented Epithelial Cells Induced by VEGFα. Nikita Ved1, J.W. Bainbridge1, D.O. Bates1. 1School of Physiology and Pharmacology, University of Bristol, Bristol, United Kingdom; 2UCL Institute of Ophthalmology, London, United Kingdom.

5779 — A297 VEGF-A But Not PGF Impairs Barrier Function Of Retinal Endothelial Cells. Heidrun L. Deissler, E.G. Lang. Department of Ophthalmology, University of Ulm Medical School, Ulm, Germany. #CR


5781 — A299 Adult Endothelial Progenitor Cell Populations: Functional Differences in Diabetic Retinopathy. Sergio Caballero, Jr1, S. Hazrd1, A. Bhawadekar1, S. Li Calzi1, L.J. Paradisio1, L. Miller1, T.S. Korn1, M.B. Grant1. 1Pharmacology/Theapeutics, University of Florida, Gainesville, FL; 2America Stem Cell, Inc., Hello, TX; 3Department of Medicine, Case Western Reserve University, Cleveland, OH. #CR
5782 — A300  Loss of Neuronal Support to the Bone Marrow BM Promotes Increased Generation Of (C-C Motif) Receptor 2 (CCR2) Monocytes And Reduced Endothelial Progenitors (EPC): Implications For Diabetic Retinopathy (DR) Pathogenesis. Maria B. Grant1, A. Bhutwadkekar2, P. Hu3, S. Haza3, S. Caballero1, S. Mohr1, S.F. Abycweur1, D.R. Saban2, T. Channing2. 1Pharmacology and Therapeutics, University of Florida, Gainesville, FL; 2Department of Ophthalmology, University of Sydney, Camperdown, Australia; 3Department of Physiology, 1Physiology, 1Michigan State University, East Lansing, MI; 2Ophthalmology & Visual Science, Univ of Michigan Kellogg Eye Ctr, Ann Arbor, MI; 3Scheepens Eye Research Institute, Harvard Medical School, Boston, MA; 4Anatomy, University of Sydney, Sydney, Australia.

5783 — A301 Caspase-14: A Novel Caspase with Potential Role in Diabetic Retinopathy. Sylvia Megherbi1, S. Ahmad1, S. Hsu1, Z. Gurel1, E.S. Shin2, N. Sheibani3, M. Al-Shahbrawy4,5,6. 1Oral Biology and Anatomy, 2Ophthalmology, 3Georgia Health Sciences University, Augusta, GA; 4Ophthalmology and Visual Sciences, University of Wisconsin, Madison, WI.

5784 — A338 Primary Repair of Rhegmatogenous Retinal Detachment with 23-Gauge Transconjunctival Vitrectomy. Ricardo Valdes1, O. Ramirez2, F. Ochoa2, J. Trujillo2. 1Clinica Ver Bien, Pereira, Risaralda, Colombia; 2Clinica Ver Bien, Armenia, Quindio, Colombia.


5786 — A340 The Outcome of vitrectomy for chronic diabetic tractional retinal detachment. Muneeza A. Abunajma1, H.N. Al-Shamsi2, H. Al-Dhibi2, N.G. Ghazzi1. 1Ophthalmology Residency Program, King Saud University, Riyadh, Saudi Arabia; 2Vitreoretina, King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia.

5787 — A341 Evaluation of Retinectomy in the Treatment of Severe Retinal Detachment. Thais S. Mender1, A.M. Gomez2, H.V. Passos3, A. Baptista1. 1Ophthalmology, Suel Abujamra Institute, Sao Paulo, Brazil; 2Ophthalmology, University of Sao Paulo, Sao Paulo, Brazil.


5791 — A345 Triamcinolone-Assisted Intraocular Limiting Membrane Peeling During Primary Rhegmatogenous Retinal Detachment Repair Reduces Postoperative Macular Pucker Formation. Rajesh C. Rao1, K.J. Blinder2, G.K. Shah1. 1Ophthalmology and Visual Sciences, Washington University School of Medicine, The Retina Institute, Saint Louis, MO; 2The Retina Institute, Saint Louis, MO.

5792 — A346 Siluron 2000 Novel-Generation Silicone Oil: Proof of Concept and One Year Clinical Results. Theodor Stapler1, L. Konstantinidis2, D.S. Wong1. 1St Paul’s Eye Unit, Royal Liverpool University Hospital, Liverpool, United Kingdom; 2The Eye Institute, The University of Hong Kong, Hong Kong.

5793 — A347 Air as Tamponade for Retinal Detachments. Arranzu Mateo Montoya1, M.D. de Sener1. 1Clinique de Montchoisi (Lausanne, Switzerland), Lausanne, Switzerland; 2Ophthalmology, Centre de Montchoisi, Lausanne, Switzerland.


5795 — A349 Hole Position In Rhegmatogenous Retinal Detachment: A Analysis Of Mustard, A Retrospective Interventional Case Series Of 4325 Participants In Relation To The Lincoff-rules1, Ulrich Thelen2, H. Gerding1. 1Private Practice, Munster, Germany; 2Clinic Pallas, Osten, Germany.

5796 — A350 Retinal Detachment from Guttering also a Problem after Vitrectomy. Milad Hakimbash2, P. Amini1, A. Khadib1, M.H. Goldbaum3. 1Ophthalmology, Univ of California, San Diego, La Jolla, CA; 2Ophthalmology, Univ of California-San Diego, La Jolla, CA.

5797 — A351 Significant Compliance Improvement For Patients Lying Postoperatively In “Face-down-position” After Vitrectomy And Gas Tamponade. Henrik F. Schaefer, P. Singh, M. Koss, F. Frank. Retina department, Johann Wolfgang Goethe-University, Frankfurt am Main, Germany. 1CR

5798 — A352 The Effect Of Retinal Detachment On Retinal Oxygenation. Alexander Kynhel1, I.P. S. Traustason1, J. Hajari1, J. Kiltgaard1, E. Stefansson1, M. La courte1. 1Ophthalmology, Glostrup University Hospital, Glostrup, Denmark; 2Department of Ophthalmology, Landskaps University Hospital, Reykjavik, Iceland.

5799 — A353 Pockets of Subretinal Fluid after Retinal Reattachment Surgery: New Insights with SD-OCT. John B. Miller1, R.C. Rao2, N. Choudhri1, D.M. Wu1, G.K. Shah1, D. Vavvas3, S. Mukai1, D. Eliott1. 1Harvard Department of Ophthalmology, Massachusetts Eye and Ear Infirmary, Boston, MA; 2Department of Ophthalmology and Visual Sciences, Washington University School of Medicine/The Retina Institute, St. Louis, MO; 3Doheny Eye Institute, University of Southern California, Los Angeles, CA; 4Barnes Retina Institute, Town and Country, MO.

5800 — A354 Macular Effects of Silicone Oil Tamponade: Optical Coherence Tomography Findings During and After Silicone Oil Removal. Danielle M. Lo, L. Olmos, A.A. Fawzi. Ophthalmology, Doheny Eye Institute, Keck School of Medicine, University of Southern Ca, CA.


5804 — A358 Autofluorescence Image Intensity Segmentation And Analysis Of Macular Geometry Indices Against Microperimetry And SD-OCT Ultra Structural Findings In Patients With Successfully Repaired Rhegmatogenous Retinal Detachments. Marco F. Vieira1, M. Falcao1, P. Brito1, A. Sousa1, P. Faria1, N. Gomès1, E. Brandão1, F. Falcao-Reis1. 1Ophthalmology, Hospital S Joao Porto, Porto, Portugal; 2Ophthalmology, Hospital S Joao Porto, Porto, Portugal.

Hall B/C  A338-A370

Thursday, May 10, 2012, 8:30 AM-10:15 AM

Retina

518 Retinal Detachment II

Moderator: Cesare Mariotti

5784 — A338 Primary Repair of Rhegmatogenous Retinal Detachment with 23-Gauge Transconjunctival Vitrectomy. Ricardo Valdes1, O. Ramirez2, F. Ochoa2, J. Trujillo2. 1Clinica Ver Bien, Pereira, Risaralda, Colombia; 2Clinica Ver Bien, Armenia, Quindio, Colombia.


5786 — A340 The Outcome of vitrectomy for chronic diabetic tractional retinal detachment. Muneeza A. Abunajma1, H.N. Al-Shamsi2, H. Al-Dhibi2, N.G. Ghazzi1. 1Ophthalmology Residency Program, King Saud University, Riyadh, Saudi Arabia; 2Vitreoretina, King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia.

5787 — A341 Evaluation of Retinectomy in the Treatment of Severe Retinal Detachment. Thais S. Mender1, A.M. Gomez2, H.V. Passos3, A. Baptista1. 1Ophthalmology, Suel Abujamra Institute, Sao Paulo, Brazil; 2Ophthalmology, University of Sao Paulo, Sao Paulo, Brazil.

5806 — A360 Retinal Cell Layer Measurements in Patients After Successful Macula-off Retinal Detachment Repair and in Healthy Controls using a new OCT Sub-segmentation Algorithm. Marcel N. Menke1, J.H. Koval1, P. Dufour2, U.E. Wolf-Schnurrbusch1, L. Ceklic1, S. Wolf1. 1Dept of Ophthalmology, University of Bern, Bern, Switzerland; 2Ophthalmic Technologies, ARTORG Center, Bern, Switzerland.

5807 — A361 Foveal Thickness After Surgery In Eyes With Retinal Detachment, gaku teraufchi1, C.S. Matsutomo1, E. Watanabe2, K. Shinoda3, H. Matsumoto1, T. Kondo1, A. Mizota2. 1Ophthalmology, Teikyo University School of Medicine, Tokyo, Japan; 2Ophthalmology, Teikyo University, Ichikawa-ku, Japan; 3Matsutomo Eye Clinic, Tokushima, Japan; 4Ophthalmology, University Of West Virginia, Morgantown, WV.


5809 — A363 Prognosis Factors Of Rhegmatogenous Retinal Detachments Associated With Giant Tear. Moonir Benzerrouq1, B. Chanaoui2, O. Genevois3, G. Brassier2, S. Milazzo1, M. Maruine1. 1Ophthalmology, Amiens University Hospital, Amiens, France; 2Ophthalmology, Rouen University Hospital, Rouen, France.


5811 — A365 Characteristics and Outcomes of Rhegmatogenous Retinal Detachment in Stickler Syndrome at a Tertiary Eye Care Center in Saudi Arabia. Saeed T. Alshahrani1A, S. Alrashaed1B, N.G. Watson2, D. Sun3, R. Schmidt-Ullrich5, A. Schering1, F. Hafezi2, A. Hafezi-Moghadam1. 1Radiology, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA; 2Ophthalmology, Geneva University Hospitals, Geneva, Switzerland; 3Ophthalmology, Kyushu University, Fukuoka, Japan; 4Ophthalmology, The Second Hosp of Harbin Med Univ, Harbin, China; 5Signal Transduction in Tumor Cells, Max-Delbrück-Center for Molecular Medicine, Berlin, Germany.


5813 — A367 Use of Silicone Oil for Complex Retinal Detachment in Pediatric Population. Krishnapriya kalyam1, P. Emami1, D. Shah1, K. Gorokanti1, M.A. Zarbin1, N. Bhagat1. 1Ophthalmology, Robert Wood Johnson Medical School, Piscataway, NJ; 2Ophthalmology, New Jersey Medical School, Newark, NJ; 3Ophthalmology & Visual Science, UMDNJ-New Jersey Medical School, Newark, NJ; 4Ophthalmology, IOVS-New Jersey Med School, Newark, NJ.


5816 — A370 Coats disease in Saudi Arabia. Abdullah A. Alqahtani, N.G. Ghazi1, 2. 1Ophthalmology, Damman University, Dhahran, Saudi Arabia; 2Retina, KIKES, Riyadh, Saudi Arabia.


5818 — A438 In vivo Retinal Laser Lesion Formation with Simultaneous Adaptive Optics Enhanced Confocal Scanning Laser Ophthalmoscope (AOcSLO) and Spectral Domain Optical Coherence Imaging (AO-SDOCT). Ginger M. Pocock1, J.W. Oliver1, C.A. Harbert1, G.D. Noonij1, K.J. Schuster1, A. Shingleslecker1, D.J. Stolar1. 1Air Force Research Laboratory, Fort Sam Houston, TX; 2Biomedical Engineering, The University of Texas at Austin, Austin, TX.


5821 — A441 Development Of A Simulated Model For Battlefield Retinal Laser Injury. Sher A. Aslam1, M. Singh1, P. Charbel Issa1, W. Davies1, M. McClements2, R. Scott1, R.E. MacLaren2. 1Nuffield Laboratory of Ophthalmology, University of Oxford, Oxford, United Kingdom; 2Royal Centre for Defence Medicine Institute of Research & Development, Birmingham, United Kingdom.


5823 — A443 Image Guided Navigated Retinal Laser Treatments Using Multiple Image Modalities. Igor Kozak1, J. Chhablani1, G. Bartesselli1, D-U.G. Bartels1, W.R. Freeman1. 1Ophthalmology, University of California San Diego, La Jolla, CA; 2Ophthalmology, Shiley Eye Center, UCSD, La Jolla, CA; 3Ophthalmology, Univ of California-San Diego, La Jolla, CA; 4Ophthalmology, UCSD Jacobs Retina Center, La Jolla, CA.*CR

5824 — A444 Nd-yag Laser Arteriotomy For Central Retinal Artery Occlusion (crao). Clayton Scanlon1, M. Currie1, A. Grant1, E.N. Cetin2, L. Akdaman1. 1Ophthalmology, Saint Louis University Eye Institute, Saint Louis, MO; 2Ophthalmology, Washington University, Saint Louis, MO.*CR

5825 — A445 Effects of LMP7 Subunit Knockout Immunoproteasome on the Laser-Induced Chorioretinal Neovascular Model in Mice. Justin C. Kohl1, A.A. Ragek1, D.A. Ferrington1, S.R. Montezuma1. 1Ophthalmology, University of Minnesota, Minneapolis, MN.

5826 — A446 Impact of Endothelial-specific Nf-kb Signaling on Choroidal Neovascularization. Soosak Zandi1,2, S. Nakao1, D. Sun1, R. Schmidt-Ulrich1, A. Schering1, F. Hafezi2, A. Hafezi-Moghadam1. 1Radiology, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA; 2Ophthalmology, Geneva University Hospitals, Geneva, Switzerland; 3Ophthalmology, Kyushu University, Fukuoka, Japan; 4Ophthalmology, The Second Hosp of Harbin Med Univ, Harbin, China; 5Signal Transduction in Tumor Cells, Max-Delbrück-Center for Molecular Medicine, Berlin, Germany.

5827 — A447 An Angiogenic Role Of Adrenomedullin In Choroidal Neovascularization. Susumu Sakimoto1, M. Kamei1, H. Kidoya2, H. Naito1, N. Matsunara1, M. Suzuki1, H. Sakaguchi1, N. Takakura2, K. Nishida1. 1Ophthalmology, Osaka University Graduate School of Medicine, Suita, Japan; 2Signal Transduction, Research Institute for Microbial Diseases, Osaka University, Suita, Japan.
5828 — A448  Implication of GPx4 in Choroidal Neovascularization. Murilo F. Roggja1, T. Ueta1, I. Hirota1, T. Inoue1, Y. Tanaka1, Y. Yanagi1.
1Ophthalmology, University of Tokyo, Tokyo, Japan; 2Pharmaceutical Sciences, Kitasato University, Tokyo, Japan.

5829 — A449  Different Mechanisms in Regulation of Laser Induced CNV by Arresten. Sudhakar A. Yakkanti1, V. Gunda2, R.K. Verma2, C.S. Boosani1. 1Genetics Retinal Cell Signaling, Boys Town Natl Res Hospital, Omaha, NE; 2Genetics, Boys Town Nth Research Hosp, Omaha, NE.

5830 — A450  Topical NPD1 Promotes Microglia Ramification in Experimental CNV. Kristopher G. Sheets1, A. W.C. Gordon1B, N.G. Mandeep1B. 1LSU Health Sciences Center, New Orleans, LA.

5831 — A451  Selective Cre/lox Fli-1 Ablation In RPE Induces CNV: A Novel Transgenic Murine CNV Model. Ling Lu1, T. Olsen1, X. Zhang, S. Das1, H. Uehara1, N. Singh1, T. Miyasaka, B. Archer1, Y.Z. Le1, B.K. Ambati1. 1Moran Eye Center, Salt Lake City, UT; 2Department of Ophthalmology, The 306th Hospital of PLA, Beijing, China; 3Department of Medicine and Harold Hamm Oklahoma Diabetes Center, Oklahoma University of Oklahoma Health Sciences Center, Oklahoma City, OK.


5835 — A455  Long Term Results of Photodynamic Therapy in Patients with Choroidal Neovascularization Secondary to Age Related Macular Degeneration. Amy Chawla1, J.T. Thompson1, R.J. Sjaarda1. 1Ophthalmology, University of Maryland, Baltimore, MD; 2Ophthalmology, Retina Specialist, Baltimore, MD. *CR

5836 — A456  Functional Recovery After Experimental RPE Debridement, mERG Studies in a Porcine Model. Jens F. Kilgaard2, N. Sorensen2, M.V. Kyhn2, N. Lassot2, J.U. Prause2, M.D. de la Cour2. 1Dept of Ophthalmology, Rigshospitalet, Copenhagen, Denmark; 2Dept. of Ophthalmology, Glorup Copenhagen Univ. Hospital, Glorup, Denmark; 3Eye Pathology Inst, Copenhagen University, Copenhagen, Denmark.

5837 — A457  RPE Tears: An in silico Perspective. Garth G. Whelan, A. Shirinifard, J.A. Glazier. Physics, Biochemistry Institute, Bloomington, IN.

5838 — A458  Transplantation of Human ESC-derived Retinal Cells into Rodent Models of Retinal Degeneration. Madalena Caridi1, Y. Zhu2, T. Benkenner1, T. Kurth1, T. Munch1, E. Tanaka1, M. Ader1. 1Center for Regenerative Therapies Dresden, Dresden, Germany; 2Werner Reichardt Center for Integrative Neurosciences, Tubingen, Germany.

5839 — A459  Transplantation of Human Embryonic Stem Cell-Derived Retinal Cells into the Subretinal Space of a Non-Human Primate. Jennifer R. Chao1, D.A. Lamba2, T. Klesert1, K. Sternhagen1, R. Taylor1, A. Yanagida1, M. Neitz1, J. Neitz1, R.K. Wang1, T.A. Boh1. 1Ophthalmology, Bioengineering, 2Dept of Biological Structure, University of Washington, Seattle, WA; 3Buck Institute for Research on Aging, Novato, CA; 4Ophthalmology, Univ of Washington, Medical School, Seattle, WA. *CR

5840 — A460  Characteristics Of Rat Iris Pigment Epithelial Cells Cultured On Modified Expanded-polytetrafluoroethylene (ePTFE) Substrates. Shen Nian1A, C.M. Sheridan2, V. Kearns2, R. Williams2, D. Wong2, K. Vasiliev1, A. Bachula1, A.C. Lo1A, W.W. Lai1A. 1A-C Eye Institute, Research Drug Screening, 2Research Institute, 3Research Centre of Heart, Brain, Hormone and Healthy Aging, 4The University of Hong Kong, Hong Kong, Hong Kong; 5Eye and Vision Science, University of Liverpool, Liverpool, United Kingdom; 6Mawson Institute and School of Advanced Manufacturing, University of South Australia, Mawson Lakes, Australia.

5841 — A461  Cell-based Therapy In A Mouse Model Of Leber Congenital Amaurosis. Yi-Sheng Chang1, W. McIntosh Ambrose1, C. Lin1, H. Qian1, T. Li1, T. Cogliatti1, A. Swaroop1. 1National Eye Institute, National Institutes of Health, Bethesda, MD; 2Department of Ophthalmology, National Cheng Kung University, Tainan, Taiwan.


5843 — A463  Adipose derived Mesenchymal stem cells partially rescue the Mitomycin C treated ARPE19 from cell death in co-culture. Jose-Carlos Pastor, A.K. Singh, G.K. Srivastava, D. Rodríguez, M. García-Gutierrez. IOBA-Campus Miguel Delibes, University of Valladolid, Valladolid, Spain.

5844 — A464  Repeated Ab-Externo Catheterization of the Sub-retinal Space Using a Microcatheter for Targeted Delivery of a Cell Therapy Product in a Pig Model. Marc D. de Smet1, S. Wyse2, M. Vezina2, S. Conston1, C. Sachs3, S.H. Popma1. 1Ophthalmology, Clinic of Montchoisi, Lausanne, Switzerland; 2Preclinical Services, Charles River Laboratories, Montreal, QC, Canada; 3Science Interventional, Menlo Park, CA; 4Janssen Pharmaceuticals Companies of Johnson & Johnson, Radnor, PA. *CR

5845 — A465  Correlation Of The Detection Of Blood Flow In An RPE-choroidal Graft With Phase-resolved Doppler OFDI, With The Revascularization Steps Found On SD-OCT. Elsbeth J. Van Zeeburg1, B. Braaf, M.G. Cereda1, J.C. van Meurs1, J.F. de Boer1. 1The Rotterdam Eye Hospital, Rotterdam, The Netherlands; 2Rotterdam Ophthalmic Institute, Rotterdam, The Netherlands; 3Erasmus MC, University Medical Center, Rotterdam, The Netherlands; 4Institute for Lasers, Life and Biophotonics Amsterdam, Department of Physics and Astronomy, VU University, Amsterdam, The Netherlands. *CR

5846 — A466  Case Series of Central Serous Chorioretinopathy (CSR) Treated with the Novel Navilas Navigated Laser System. Ravi Menghani, S. Lu. Ophthalmology, UCI Gavin Herbert Eye Institute, Orange, CA.

5847 — A467  Efficient Transfection and Genomic Integration of the PEDF Gene into a Limited Number of Primary IPE Cells. Gabriele Thumman, N. Harmering, A. Dobias, S. Johnen. Department of Ophthalmology, RWTH Aachen University, Aachen, Germany.

5848 — A468  Autologous Bruch’s Membrane Rotation As A Potential Adjunct To Retinal Pigment Epithelium Cell Replacement Therapy For Age Related Macular Degeneration. Mandeepr S. Singh1, E.J. Lee, H.E. Jones2, B. Ahmed3, I.M. Andolina1, P.M. Munro4, K.L. Griewe, G.W. Aylward, A.M. Sillitoe, R.E. MacLaren2. 1University of Oxford & Oxford Eye Hospital NHIR Biomedical Research Centre, Oxford, United Kingdom; 2Rotterdam Institute of Ophthalmology & Moorfields Eye Hospital NHIR Biomedical Research Centre, London, United Kingdom; 3Faculty of Life Sciences, University of Manchester, Manchester, United Kingdom.
Hall B/C A470-A512
Thursday, May 10, 2012, 8:30 AM-10:15 AM
Retina

520 Retinopathy of Prematurity II

Moderator: Robison V Chan

5850 — A470 The Utility of Large Spot Binocular Indirect Laser Delivery for Peripheral Photocoagulation Therapy in Children. Saranya C. Balasubramanian, B.G. Mohney, G.M. Bang, T.P. Link, J.S. Pulido. Mayo Clinic, Rochester, MN.

5851 — A471 Earlier Laser Treatment Of Retinopathy of Prematurity Could Reduce Need For Vitrectomy. Joo Eun Lee1, S. Jeai1, I. Yun1. Ophthalmology, Haenuea Paik Hospital, Inje University, Busan, Republic of Korea; 2Ophthalmology, GM St. Mary’s Eye Center, Busan, Republic of Korea; 3Ophthalmology, Busan Paik Hospital, Inje University College of Medicine, Busan, Republic of Korea.

5852 — A472 Late Occurrence of Narrow Angles and Angle Closure Glaucoma in Patients with Treated Retinopathy of Prematurity. Paul Baciu, T.N. Smyrak2, C.S. Teitelbaum1, W.W. Merriam3, S.W. Merriam4, J.S. Weizer2, J.D. Stein1, S.M. Archer2, S.E. Moroi. 1University of Michigan Medical School, Ann Arbor, MI; 2Ophthalmology & Visual Sciences, Univ of Michigan-Kellogg Eye Ctr, Ann Arbor, MI; 3Department of Ophthalmology, SUNY Upstate Medical University, Syracuse, NY; 4Crouse Hospital, Syracuse, NY.

5853 — A473 Long-term Follow-Up Of The Adults With Retinopathy of Prematurity Who Received Photocoagulation And Cryopexy Treatments. Hiroki Kaneko1, C. Fujikota1, R. Furushashi2. Ophthalmology, Yokkaichi Municipal Hospital, Yokkaichi, Japan; 2Ophthalmology, Nagoya University Graduate School of Medicine, Nagoya, Japan.

5854 — A474 Refractive Error and Ocular Biometry in Patients with a History of Retinopathy of Prematurity. Susan E. Yanni1, J.N. Leffler2, E.E. Birch2. 1Retina Foundation of the Southwest, Dallas, TX; 2Children’s Eye Care of North Texas, Plano, TX; 3Ophthalmology, University of Texas Southwestern Medical Center, Dallas, TX.

5855 — A475 Anti-vegf InROP Treatment - 5.5 Years Of Experience. Susana M. teixeira1,2, C.M. Santos2, F.C. Silva2, G. Pires1, R. Barros2, 1Ophthalmology, 2Ophthalmology Department, Hospital Professor Doutor Fernando Fonseca, Lisbon, Portugal.


5857 — A477 Comparison of Short Term Outcomes After Intravitreal Bevacizumab Versus Ranibizumab in the Treatment of Stage 3 Retinopathy of Prematurity. Jose Luis Guerrero-Naranjo1, F. Schooneveldt, J.F. Fromow-Guerra1, V. Morales-Canton1, G. Garcia-Aguirre1, H. Quiroz-Mercado1, M.A. Martinez-Castellanos2. 1Retina, Asoc Para Evitar la Ceguera en Mexico, Mexico City, Mexico; 2Retina, Asoc Para Evitar la Ceguera en Mexico, Mexico, Mexico; 3Retina, Association Para Evitar la Ceguera, Mexico City, Mexico; 4Retina, Asoc Para Evitar la Ceguera, Mexico City, Mexico; 5Retina, Asoc Para Evitar la Ceguera, Mexico City, Mexico; 6Ophthalmology, Denver Health Medical Center, Denver, CO; 7Retina and Vitreous, Asociacion Para Evitar la Ceguera, Mexico, Mexico.

5858 — A478 Structural Outcome Of Intravitreal Injection Of Bevacizumab For Type I Rop Compared To Conventional Laser Treatment. Antonio Baldascino1,2, F. Molle2, P. Papacci2, C. Giannantonio1,3, V. Purcaro1,2, L. Orazi1,2, P. Perrini1,2, A. Molisso1,2, C. Romagnoli1,2, 3Pediatrics, 4Catholic University of the Sacred Heart, Rome, Italy.

5859 — A479 Evaluation of the Effects of Intravitreal Injection of Bevacizumab on Controlateral Eye Treated with Conventional Laser Photocoagulation. Fernando Molle1, D. Lepore2, A. Baldascino2, P. Perrini2, L. Orazi2,3, M.M. Pagliara1,3, V. Purcaro1,2, C. Giannantonio1,3, P. Papacci1,2, C. Romagnoli2,3, 1Pediatrics, 4Catholic University of the Sacred Heart, Rome, Italy.


5861 — A481 Fluorescein angiographic findings in spontaneously-regressing stage 1 or 2 retinopathy of prematurity. Andrea Portilla Demicheli1, F. Schooneveldt1, M.F. Chiang1, R. Bollens1, H. Winninghoff2, J. Hernandez-Vargas3, V. Morales-Canton1, M. Martinez Castellanos1, A.I. Ortiz1. 1Asociacion Para Evitar la Ceguera en Mexico, IAP, Col. Barrio San Lucas, Coyoacan, Mexico; 2Retina, Asoc Para Evitar la Ceguera en Mexico, Mexico, Mexico; 3Ophthalmology and Medical Informatics, Casey Eye Institute, Oregon Health & Science University, Portland, OR; 4Pomona College, Claremont, CA; 5Retina, Asoc Para Evitar la Ceguera, Mexico, Mexico; 6Retina-Col San Lucas Coyoacan, APEC, Mexico City, Mexico. *CR

5862 — A482 Lack of peripheral retinal vascularization after infancy in Retinopathy of Prematurity (ROP) and Incontinentia Pigmenti (IP). William S. Tauman. Ophthalmology, Wills Eye Institute, Philadelphia, PA.

5863 — A483 Fluorescein Angiography Macular Abnormalities Assessed by Optical Coherence Tomography in Retinopathy of Prematurity. Fernando Schooneveld1, V.E. Giordano1, V. Morales-Canton1, R.V. Chant1, H. Quiroz-Mercado1, M.A. Martinez-Castellanos2. 1Retina, Asociacion Para Evitar la Ceguera en Mexico, Mexico, Mexico; 2Retina, Assoc Para Evitar la Ceguera en Mexico, Mexico, Mexico; 3Retina, Asoc Para Evitar la Ceguera en Mexico, Mexico, Mexico; 4Ophthalmology, Wills Eye Institute, Philadelphia, PA; 5Ophthalmology, Weill Cornell Medical College, New York, NY; 6Ophthalmology, Denver Health Medical Center, Denver, CO; 7Retina and Vitreous, Asociacion Para Evitar la Ceguera, Mexico, Mexico.

5864 — A484 New method of analysis of tortuosity of retinal vessels in Retinopathy of Prematurity. Alfredo reibaldi1, A. Scuderii, A. Longo1, I.M. Franco2, A. Russo2, F. Munno2, V. Villari1, A. Cantavenera1, M. Reibaldi1. 1Ophthalmology, University of Catania, Catania, Italy; 2Institute for Physical and Chemical Processes, CNR-IPCF, Messina, Italy.

5865 — A485 Plus Disease Diagnosis In Retinopathy Of Prematurity: Vascular Tortuosity As A Function Of Distance From Optic Disc Center. Katie M. Keck1, J. Kalpathy-Cramer2, E. Atae-Cansigou1, S. You1, D. Erdogmus3, M.F. Chiang4,5. 1Ophthalmology, 2Medical Informatics, Oregon Health & Science University, Portland, OR; 3Radiology, Massachusetts General Hospital, Boston, MA; 4Electrical and Computer Engineering, Northeastern University, Boston, MA. *CR

5866 — A486 Aggressive posterior retinopathy of prematurity: Quantitative analysis of vascular features. Rony Woo1, R.V. Chant2, M. Martinez-Perez3, M.F. Chiang1. 1Yale School of Medicine, New Haven, CT; 2Ophthalmology, Well Cornell Medical College, New York, NY; 3Department of Computer Science, Institute of Research in Applied Mathematics and Systems, UNAM, Mexico City, Mexico; 4Ophthalmology and Medical Informatics, Casey Eye Institute, Oregon Health & Science University, Portland, OR. *CR

*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures. ‡ Refer to Program Number in the Clinical Trial (CT) Registration Index. © Travel Grant Awardee.
5879 — A497 Comparison of Neurodevelopmental Outcomes In Two Retinopathy of Prematurity (ROP) Cohorts: Standard vs. Revised Oxygen Saturation Protocol Groups. Tomara J. Lee1, J. Bernardo1, C. Sonnie1, G. Hoppe2, J.E. Sears1. Ophthalmology, Cleveland Clinic Lerner College of Medicine, Cleveland, OH; 2Cole Eye Institute, Cleveland Clinic, Cleveland, OH. *CR


5880 — A500 Screening for ROP:16 years experience. Lorenzo Orazzi1, D. Lepore1, A. Baldascino1, S. Luceri1, P. Perrini1, G. D’Amico1, M.M. Pagliara1, F. Molle. Ophthalmology, Catholic University of the Sacred Heart, Rome, Italy.


5882 — A502 Arginase 2 Deficiency Limits Microglia/Macrophage Activation and Prevents Hypoxia-induced Vascular Injury in the Mouse Retina. Junamas Suvanpradit4, Z. Xiu1, S.P. Narayanan1, R.W. Caldwell2, R.B. Caldwell1,2. 1Vascular Biology Center, 2Department of Pharmacology and Toxicology, 3Georgia Health Sciences University, Augusta, GA; 4VA Medical Center, Augusta, GA.

5883 — A503 Genetic Deletion or Pharmacological Inhibition of Aldose Reductase Protects the Retina in a Mouse Model of Ischemia-induced Retinopathy. Zhongjie Fu4, S-Y. Li4, S. Chung1,2, C. Hong2, A.C. Lo1,2,4, 1Eye Institute, 2Anatomy, 3Research Center of Heart, Brain, Hormone and Healthy Aging, 4The University of Hong Kong, Hong Kong, Hong Kong.

5884 — A504 Systemic Safety After Intravitreal Bevacizumab Injection In Newborn Rabbit Eyes. Wei-Chi Wu1, C-C. Lai1. Ophthalmology, Chang Gung Memorial Hosp, Taoyuan, Taiwan.


5886 — A506 Dark Rearing (DR) as a means of mimicking ‘Physiological Hypoxia’: A rationale for non-invasive treatment of Retinopathy of Prematurity. Samuel J. Adamson1, P. Kozulin1, R. Maccaroni1, S. Yun1, P. Hu1, S. Bisti1, J. Provits1, M.C. Madigan1, J. McColm1, T. Chan-Ling1. 1Department of Anatomy & Histology, The University of Sydney, Sydney, Australia; 2ARC Centre of Excellence In Vision Science, Australian National University, Canberra, Australia; 3Biomedical & Science Technology, University of L’Aquila, L’Aquila, Italy; 4School of Optometry & Vision Science, University of NSW, Sydney, Australia.

5887 — A507 Role of the Krebs Cycle Metabolites in Retinal Angiogenesis: Implication of α-KG and its Receptor GPR99. Francois Duchame1, S. Tremblay1, K. Zanoli1, P. Sapieha2, S. Chemtob3. 1Pharmacology, Ste-Justine Hospital Research Center, Montreal, QC, Canada; 2Ophthalmology, University of Montreal, Montreal, QC, Canada; 3Pediatrics & Pharmacology, Research Ctr/Hosp Ste Justine, Montreal, QC, Canada.
5888 — A508 Decreased IGF1 Expression Associated with Avascular Retina in Model of Retinopathy of Prematurity. Yanchao Jiang2, B. Numpang2, B. Yu1, H. Wang1, G. Smith1, M. McCluskey1, S. Patel1, R. DiGeromino1, M. Hartnett2, R. Lane2. 1Ophthalmology, John Moran Eye Center, The University of Utah, Salt Lake City, UT; 2Division of Neonatology, The University of Utah, Salt Lake City, UT.

5889 — A509 A Novel AllostERIC Modulator of the IL-1 Receptor Prevents the Development of Oxygen-Induced Retinopathy. Jose C. Rivera1,2, N. Sitara1, D. Hamel1, A. Madaan1, J-C. Honore1, B. Noueihed1, M. Blais2, C. Quiniou1, P. Sapieha1, S. Chemtob1,2. 1Pediatrics, Ophthalmalgy, John Moran Eye Center, The University of Utah, Salt Lake City, UT; 2Division of Neonatology, The University of Utah, Salt Lake City, UT.


5891 — A511 Nitric Oxide and Signal Loss in the “ROP Rat” Retina. Tala L. Favaazza1,2, G. DeWalt2, N. Zhang2,3, R.M. Hansen1,2, A.B. Fulton1,2, W.D. Eldred2, J.D. Akula2. 1Ophthalmology, Children’s Hospital Boston, Boston, MA; 2Biology, Boston University, Boston, MA; 3Ophthalmology, Harvard Medical School, Boston, MA.

5892 — A512 The Retina and Retractive Outcome in the Rat Model of ROP. Nan Zhang1,2, T.L. Favaazza1, A. Bagli2, A.B. Fulton1,2, R.M. Hansen1,2, P.M. Ivone2, J.D. Akula2. 1Ophthalmology, Children’s Hospital Boston, Boston, MA; 2Biology, Harvard Medical School, Boston, MA; 3Ophthalmology and Pharmacology, Emory University School of Medicine, Atlanta, GA.

Hall B/C A572-A606

Thursday, May 10, 2012, 8:30 AM-10:15 AM

Retinal Cell Biology / Nanotechnology and Regenerative Medicine Group

521 Stem Cells In Vivo and In Vitro: Fates and Functional Outcomes

Moderators: Deborah C Otteson and Valeria Canto Soler

5893 — A572 Gene Expression and Immunogenicity of induced Pluripotent Stem Cell-Derived Retinal Pigment Epithelial Cells. Hiroshi Kamao1,2, M. Mandai1, A. Suga1, J. Kiyura1, M. Takahashi1. 1Laboratory for Retinal Regeneration, RIKEN Ctr for Dev Biol, Kobe, Japan; 2Ophthalmology, Kawasaki medical school, Okayama, Japan.

5894 — A573 Manipulation Of Gene Expression In Orbital Adipose-derived Mesenchymal Stem Cells From Retinoblastoma Patients Using Lentiviral Vectors. David M. Wu1, J. Aparicio1, A. DiCinti2, T.C. Lee1. 1Doheny Eye Institute, University of Southern California, Los Angeles, CA; 2Ophthalmology, Children’s Hospital Los Angeles, Los Angeles, CA; 3Ophthalmology, Children’s Hospital Of Los Angeles, Los Angeles, CA; 4Ophthalmology, Children Hospital Los Angeles, Los Angeles, CA.

5895 — A574 VEGF Induces Neural and Astrocytic Differentiation and Angiogenesis in Bone Marrow-derived Stem Cells and Promotes Microglia Conversion Following Mobilization With GM-CSF. Revital B. Avraham Lubin1, T. Sadikov2, N. Askenasy2, N. Goldenberg Cohen2. 1The Krieger Eye Research Institute, Sackler Faculty of Medicine, Tel Aviv University, Petch Tikva, Israel; 2Department of Pediatric Ophthalmology, Schneider Children’s Medical Center of Israel, Petch Tikva, Israel.


5897 — A576 Optimizing Retinal Progenitor Differentiation of hESC - Effect of RPE Co-Culture. Magdalene J. Seiler1, D. Ferguson1, G. Smith1, M. Ruchira1, H. Hongisto1,2, H. Vaajasaari1,2, S. Narkilahti1,2, S. Hirvonen1,2, J. Ottoson1,2. 1Laboratory for Retinal Regeneration, Sackler Faculty of Medicine, BDepts. of Ophthalmology and Visual Sciences and Eye Research Institute, 1University of Wisconsin, Madison, WI, 2Department of Ophthalmology and Visual Sciences and Pediatrics, Eye Research Institute, 3Dept. of Ophthalmology and Visual Sciences and Eye Research Institute, 1University of Wisconsin, Madison, WI.

5898 — A577 Growth and Organization of Human iPSC-Cell-Derived Retinal Cell Types on a Biocompatible Membrane. Jessica M. Martin1, W. Shen1A, X. Guo1A, E.T. Perez1A, D. Kuai1A, J. Phillips1, L.S. Wright1, B. Pattnaik1B, D.M. Gamm1C. 1Anatomy & Neurobiology/Reeve-Irvine Res Ctr, Univ of California, Irvine, Irvine, CA; 2Biology, Indiana Univ Purdue Univ Indianapolis, Indianapolis, IN; 3Center for Regenerative Biology and Medicine, Department of Medical and Molecular Genetics, Indiana University Stark Neurosciences Research Institute, Indianapolis, IN.

5899 — A578 Enhanced Progenitor Cell Integration and Differentiation Following Transplantation on to PLGA Polymer Constructions. Brandon M. Menke1, V.B. Joshi1, A. Wonggrakapanich1, K.R. Anfinson1, M.R. Streby1, M.E. Eyeston1, A.K. Salem1, B.A. Tucker1. 1Ophthalmology, 2Pharmacy, 1University of Iowa, Iowa City, IA.


5901 — A580 Characterization Of Human Retinal Progenitor Cells. Petr Y. Baranov1, G.B. Melo1, M.J. Young2,1. 1Schepps Eye Research Institute, Boston, MA; 2Ophthalmology, Federal Univ of Sao Paulo/UNIFESP, Aracaju, Brazil; 3Schepp Eye Research Inst, Harvard Medical School, Boston, MA.

5902 — A581 Transdifferentiation And Molecular Characterization Of Bone Marrow-derived Progenitors In A Coculture System. Stephanie G. Lecaude, I. Mathivanan, S. Wolf, V. Ennmann. Department of Ophthalmology, University of Bern, Bern, Switzerland.

5903 — A582 Visual Cycle Machinery in Human Induced Pluripotent Stem Cell-Derived RPE. Alberto Muniz1, M.L. Plamper2, B.S. Betts1, A.J. Johnson2, H-C.H. Wang3. 1Ocular Trauma, National Research Council / USAISR, Fort Sam Houston, TX; 2Ocular Trauma, US Army Inst of Surgical Research, Fort Sam Houston, TX; 3Biology, University of Texas at San Antonio, San Antonio, TX.

5904 — A583 Transcriptional Regulation of Retinal Fate Determination from Human Induced Pluripotent Stem Cells. Akshayalakshmi Sridhar1, M.M. Stewart1, M. Gupta1, J.S. Meyer2. 1Biology, Indiana Univ Purdue Univ Indianapolis, Indianapolis, IN; 2Center for Regenerative Biology and Medicine, Department of Medical and Molecular Genetics, Indiana University Stark Neurosciences Research Institute, Indianapolis, IN.

5905 — A584 In Vitro Differentiation of Human Induced Pluripotent Stem Cells Towards Retinal Photoreceptors. Carla B. Mellough1, E. Sernagor2, D.H. Steel3, M. Lako4. 1Institute of Genetic Medicine, 2School of Neurology, Neurobiology and Psychiatry, University of Newcastle Upon Tyne, Newcastle, United Kingdom; 3Sunderland Eye Infirmary, Sunderland, United Kingdom.

5906 — A585 Functional Comparison Of RPE Cultures Expanded From Differentiated Human iPSC Cells And Prenatal Eye Tissue. Vuchira Singh1, W. Shen1, X. Guo1, E.T. Perez1, D. Kuai1, L.S. Wright1, B. Pattnaik1, D.M. Gamm1. 1Waismann Center, 2Depts. of Ophthalmology and Visual Sciences and Pediatrics, Eye Research Institute, 3Dept. of Ophthalmology and Visual Sciences and Eye Research Institute, 1University of Wisconsin, Madison, WI.

5907 — A586 Soluble Factors Secrete By Fibroblast Feeder Cells Induce Retinal Pigment Epithelium Differentiation from Human Pluripotent Stem Cells. Alexandra Mikhailova1, H. Hongisto2, H. Vaajasaari2, S. Narkilahti2, R. Suuronen3, T. Ilmarinen3, H. Skottman2. 1University of Tampere, Institute of Biomedical Technology, Tampere, Finland; 2Institute of Biosciences and Medical Technology, Tampere, Finland; 3Tampere University Hospital, Department of Eye, Ear and Oral Diseases, Tampere, Finland.

*Refer to Program Number in the Clinical Trial (CT) Registration Index — †Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures — ‡Travel Grant Awardee

Thursday – Posters – 5888 – 5907

8:30 am – 10:15 am
5908 — A587 Engraft Of Hyaluronic Acid-based Hydrogel Loaded Mesenchymal Stem Cell Into The Vitreous Body Of The Ischemic Rat Retina. Su-Ju Oh<sup>1</sup>, J. Lee<sup>1</sup>, J. Shin<sup>2</sup>, C. Yeum<sup>3</sup>, G. Chae<sup>4</sup>, M-H. Chun<sup>5</sup>. 1Department of Ophthalmology, 2Institute of Korean Medicine, 3College of Medicine, Sogang University, Seoul, Republic of Korea.

5909 — A588 Characterization Of Human Induced Pluripotent Stem Cells Derived Neural Progenitor Cells. Wei Kong<sup>1</sup>, N. Yang<sup>2</sup>, X. Li<sup>3</sup>. 1Ophthalmology, the Fourth People’s Hospital of Shenyang City, Shenyang, China; 2Ophthalmology, the 4th Affiliated Hospital of China Medical University, Shenyang, China.

5910 — A589 Directing Virus-free Human Induced Pluripotent Stem Cells To Differentiate Into Retinal Cells. Xufeng Zhong<sup>1</sup>, C. Hampton<sup>1</sup>, T. Park<sup>1</sup>, D.M. Gamm<sup>2</sup>, E. Zambidis<sup>1</sup>, V. Canto-Soler<sup>1</sup>. 1Wilmer Eye Inst, Johns Hopkins Univ Sch, Baltimore, MD; 2Institute for Stem Cell Engineering, Johns Hopkins Univ Sch, Baltimore, MD; 3Stem Cell Research Program at Waisman Center and Ophthalmology and Visual Sciences, University of Wisconsin-Madison, Madison, WI.

5911 — A590 BDNF and DNA Demethylation Increase Expression of Pluripotency and Retinal Neuronal Genes in ImM10 Müller Glia-Derived Retinal Stem Cells. Deborah C. Otteson<sup>1</sup>, J. Martin<sup>2</sup>, Z. Hou<sup>3</sup>, D.M. Gamm<sup>2</sup>, E. Zambidis<sup>1</sup>, V. Canto-Soler<sup>1</sup>. 1Optometry, University of Houston, Houston, TX; 2University of Wisconsin, Madison, WI.

5912 — A591 Transcriptomic Comparison of RPE Derived From Two Human Embryonic Stem Cell Lines with Human Fetal RPE. Lawrence J. Rizzolo<sup>4</sup>, G. Gan<sup>4</sup>, S. Peng<sup>4</sup>, T.A. Van Zyl<sup>1</sup>, L.S. Edirwikkrema<sup>2</sup>, H. An<sup>3</sup>, M. Zhong<sup>4</sup>, C. Qiu<sup>4</sup>, R.A. Adelman<sup>4</sup>. 1Surgery/Ophthalmology, 2Cell Biology, 3Ophthalmology, 4Yale Univ Sch of Med, New Haven, CT; 4Ophthalmology, 2Hospital of Harbor Medical University, Harbor, China.

5913 — A592 Retinal Differentiation Of Human Es Cells Maintained In Chemically Defined, Xeno-free E8 Culture Medium. Kyle Wallace<sup>1</sup>, A. Gerner<sup>1</sup>, J. Martin<sup>2</sup>, Z. Hou<sup>3</sup>, D.M. Gamm<sup>2</sup>. 1Waisman Center, University of Wisconsin, Madison, WI; 2Waisman Center, Department of Ophthalmology, Eye Research Institute, 3University of Wisconsin Madison, Madison, WI; 4Morgridge Institute for Research, Madison, WI.

5914 — A593 Microparticles in Differentiation of Retinal Pigment Epithelial Cells from Human Pluripotent Stem Cells. Anni E. Sarkio<sup>1</sup>, T.H. Ilmarinen<sup>2</sup>, J.S. Loo<sup>1</sup>, H.T. Skottman<sup>2</sup>. 1Institute of Biomedical Technology, University of Tampere, Tampere, Finland; 2Institute of Biosciences and Medical Technology, Tampere, Finland; 3School of Materials Science and Engineering, Nanyang Technological University, Singapore, Singapore.

5915 — A594 Transfection of IGF-1 and IGFBP1-1 in Neuronal Progenitor Cells from Human Persistent Fetal Vascular for Neuroprotection. Jie Ma<sup>1</sup>, C. Guo<sup>1</sup>, G. Chen<sup>1</sup>, D. Cyr<sup>2</sup>, K. Lashkari<sup>2</sup>, 1Schepens Eye Research Institute, Boston, MA; 2The Second Xiangya Hospital, Central South University, Changsha, China; 3Massachusetts Eye & Ear Infirmary, Boston, MA.


5917 — A596 Surface Substrates Affect The Behavior And Survival Of Müller Glia Derived Stem Cells. Gisela Velez, A. Roy. Ophthalmology, University of Massachusetts Medical School, West, MA.

5918 — A597 Effects Of Clinically Relevant Agents On Human Retinal Progenitor Cells (hrpcs) In Culture: A Pre-clinical Cytotoxicity Study. Jing Yang, H. Klassen. Gavin Herbert Eye Institute, Department of Ophthalmology, University of Irvine, Irvine, CA.


5920 — A599 Evaluation of hESC-Derived Retinal Pigment Epithelial Cells Cultured as a Monolayer on Polymer Substrate Transplanted in RCS Rats. Padmaja B. Thomas<sup>1</sup>, B.B. Thomas<sup>2</sup>, L. Liu<sup>3</sup>, Y. Hu<sup>4</sup>, D. Zhu<sup>5</sup>, E. Barron<sup>6</sup>, D.O. Clegg<sup>7</sup>, D.R. Hinton<sup>8</sup>, M.S. Humayun<sup>9</sup>. 1Ophthalmology, 2Doheny Eye Institute-USC, Los Angeles, CA; 3Cell and Neurobiology, University of Southern California, Los Angeles, CA; 4Ophthalmology, Chang Gung Memorial Hospital, Taoyuan, Taiwan; 5Ophthalmology, Peking University Third Hospital, Beijing, China; 6Pathology/Doheny Eye Inst, Univ of Southern California, Los Angeles, CA; 7Bioscience II, Center for Stem Cell Biology and Engineering- UCSB, Santa Barbara, CA; 8Pathology, Keck School of Medicine USC, Los Angeles, CA.

5921 — A600 Activated Omental Stromal Cells Protect Against Light-Induced Retinal Injury. Evan B. Price<sup>1,2</sup>, P. Bu<sup>2</sup>, P. Sethupathi<sup>2</sup>. 1Optometry, University of Michigan, Ann Arbor, MI; 2Bioscience II, Center for Stem Cell Biology and Engineering- UCSB, Santa Barbara, CA.

5922 — A601 Embryonic Stem Cell Derived Retinal Pigment Epithelium Stem Cell Transplant: Survival And Lack Of Tumor Formation In Athyamic Nude Rats. Bruno Diniz, Sr<sup>1</sup>, R. Ribeiro<sup>1</sup>, R. Brant<sup>1</sup>, Y. Hu<sup>2</sup>, L. Liu<sup>1</sup>, P. Thomas<sup>1</sup>, B. Thomas<sup>1</sup>, D. Hinton<sup>3</sup>, M. Humayun<sup>4</sup>. 1Doheny Eye Institute, University of Southern California, Los Angeles, CA; 2Ophthalmology, Universidade Federal de Sao Paulo, Sao Paulo, Brazil; 3Department of Ophthalmology, Peking University Third Hospital, Beijing, China; 4Keck School of Medicine, Los Angeles, CA.

5923 — A602 Comparison of Barrier Properties of RPE Derived from Two Human Embryonic Stem Cell Lines to the Properties of Human Fetal RPE. Shaoni Peng<sup>1,2</sup>, G. Gan<sup>4</sup>, C. Qiu<sup>4</sup>, L. Li<sup>5</sup>, R.A. Adelman<sup>6</sup>, L.J. Rizzolo<sup>7</sup>. 1Surgery/ Ophthalmology, 2Cell biology, 3Ophthalmology, 4Yale University, New Haven, CT; 5Ophthalmology, 2nd Hospital of Harbin Medical University, Harbin, China.

5924 — A603 Polarized Human Embryonic Stem Cell-Derived RPE Maintains its Monolayer Integrity and Function after Long-term in vitro Culture. Danhong Zhu<sup>1</sup>, D.O. Clegg<sup>2</sup>, D.R. Hinton<sup>2</sup>. 1Doheny Eye Institute/Pathology, Univ of Southern California, Los Angeles, CA; 2Bioscience II, Univ of California-Santa Barbara, Santa Barbara, CA; 3Pathology, Keck School of Medicine USC, Los Angeles, CA.


5926 — A605 Injury of the Adult Zebrafish Retina Induces Expression of Purinergic Receptors and Endocytodases that Control In Vivo Cell Proliferation. Ariadna G. Battista, M.P. Faillace<sup>1</sup>. 1Laboratorio de Neurociencias, Piso 7, Universidad de Buenos Aires Facultad de Medicina, Buenos Aires, Argentina; 2Instituto de Quimica y Fisicoquimica Biologicas (IQUIFIB), Buenos Aires, Argentina.

5927 — A606 HB-EGF is a Master Regulator of Müller Glia Dedifferentiation and Retina Regeneration. Jin Wan, D.J. Goldman. Molecular & Behav Neurosc Inst, University of Michigan, Ann Arbor, MI.
Thursday – Posters – 5928 – 5952

Hall B/C A153-A207

Thursday, May 10, 2012, 8:30 AM - 10:15 AM

Glucoma / Clinical & Epidemiologic Research

522 Surgery and Lasers

Moderators: Robert D Fechtner and Colm J O’Brien

5928 – A153 Long-term Efficacy of Endoscopic Cyclophotocoagulation Combined with Cataract Surgery. Carter N. Kirk1, T.Q. Kirk2, S.H. Kirk1. 1Georgetown University School of Medicine, Washington, DC; 2Ophthalmology, Allegheny General Hospital, Pittsburgh, PA; 3Ophthalmology, Kirk Eye Center, River Forest, IL.


5931 – A156 Trabecome Results In Eyes With Low Preoperative IOP. Xuejing Chen, K. Kaplowitz, N. Loewen. Ophthalmology, Yale School of Medicine, New Haven, CT.

5932 – A157 Characteristics and Outcomes of Eyes with Neovascular Glaucoma (NVG) that Underwent Combined Pars Plana Vitrectomy (PPV) and Baerveldt Glaucoma Shunt Procedure. Christopher W. Seery1, C. Seery2, P. Emami-Naeimi3, A. Kolomeyer1, M. Zarbin1, R. Fetchner2, N. Bhagat4. 1UMDNJ/ Bucknell University, Florham Park, NJ; 2UMDNJ, Newark, NJ.


5935 – A160 A Prospective Study of Phakic vs Pseudophakic Eyes After Phacoemulsification in Trabeculectomy for Open-Angle Glaucoma. Yuji Takihara1, M. Inatani1, M. Iwao2, M. Kawai1, T. Inoue1, K. Iwao2, H. Tanihara1. 1Ophthalm & Vis Science, Kumamoto Univ Sch Med, Kumamoto, Japan; 2Department of Ophthalmology, University of Fukui, Fukui, Japan; 3Ophthalmology, Asahikawa Medical College, Asahikawa, Japan; 4Ophthalmology, Saga University, Saga City, Japan.

5936 – A161 Time Course Of Induced Astigmatism After Canaloplasty. Anselm G. Junemann1, J. Schlimberg1, F.K. Horn1, R. Rejdak2, F.E. Kruse1, M.C. Moelle1. 1Ophthalmology, University of Erlangen Nurnberg, Erlangen, Germany; 2General Ophthalmology, Medical University of Lublin, Lublin, Poland.


5939 – A164 A Comparison Of Intraocular Pressure Reduction After Selective Laser Trabeculoplasty With The Co-administration Of Lopetredon Versus None. Ronald L. Rebentsch1, N.R. Binder2, A. Jani1, K. Pikey2. 1Ophthalmology, University of Missouri-Kansas City, Kansas City, MO.


5941 – A166 Efficacy Of Glaucoma Surgical Procedures: A Systematic Review And Metaanalysis. Luciano Quarta1, I. Floriani1, I. Riva1, G. Gambirasio1, I. De Simone2, E. Rulli1, E. Biagioli1, S. Credidio2. 1Ophthalmology-Glaucoma Unit, University of Brescia, Brescia, Italy; 2Laboratory of Clinical Trials, Istituto di ricerche farmacologiche «Mario Negri», Milan, Italy.

5942 – A167 Faster Visual Recovery Following Ep-ress Than Trabeculectomy: Results Of A Prospective Ret. Delan Jinjapriya1, L. Beltran-Aguilo2, Y.P. Jin2,28, L.D. Wogschall1, G.E. Trope3, A.M. Bays2. 1Ophthalmology, Queen’s University, Kingston, ON, Canada; 2Ophthalmology and Vision Sciences, Dalhousie University, Halifax, NS, Canada; 3Ophthalmology, University of Ottawa, Ottawa, ON, Canada.


5944 – A169 Progression Rate Before and After Trabeculectomy. Jimena Schmidt1, S. Araneda1, E. Abusleme1, C. Perez1, E. Mau1, A. Gerhard1, C. Triger1. 1Ophthalmology Department, Catholic University of Chile, Santiago, Chile; 2Ophthalmology Department, Sotero del Rio Hospital, Santiago, Chile.

5945 – A170 Success Rates And Risk Factors For Failure Of Bleb Needling Post Trabeculectomy. Andrew Toren1, S. Kulkarni2, L. Shaba1, M. Nicolei1. 1Ophthalmology & Visual Sciences, Dalhousie University, Halifax, NS, Canada; 2Ophthalmology, University of Ottawa, Ottawa, ON, Canada.


5948 – A173 Outcome And Structural Evolution Of Mytomycin Assisted Trabeculectomy In Inflammatory Glaucoma. Friederike Mackensen1, B.C. Dobner1, A.B. Knoll1, A.F. Scheuerle1, K. Rohrschneider1. 1Department of Ophthalmology, Interdisciplinary Uveitis Center, University of Heidelberg, Heidelberg, Germany; 2Department of Ophthalmology, University of Heidelberg, Heidelberg, Germany.


5950 – A175 Impact of Trabeculectomy Surgery on Global Visual Field Indices Using Data from Advanced Glaucoma Intervention Study (AGIS), Linda Zhang, D.C. Masch, L.M. Niziol, J.D. Stein. Ophthalmology, University of Michigan, Ann Arbor, MI.

5951 – A176 Single Digit Intraocular Pressure In Post Trabeculectomy Patients And Its Effects On Visual Field Progression. Ana C. Toro1, C. Fernandez2, G. Hernandez2. 1Ophthalmology, University of Puerto Rico, San Juan, PR; 2Ophthalmology, Hospital Metropolitano, San Juan, PR.

5953 — A178  The Influence Of Sceral Flap Thickness, Shape, Suture Number And Position On Pressure Change And Aqueous Flow Direction In A New Trabeculectomy Model. Amir Samsudin, S. Brosschetti, P.T. Khaw, I. Eames. 1University of Malaya, Kuala Lumpur, Malaysia; 2NIHR Biomedical Research Centre, Moorfields Eye Hospital and UCL Institute of Ophthalmology, London, United Kingdom; 3UCL School of Pharmacy, London, United Kingdom; 4UCL Department of Mechanical Engineering, London, United Kingdom.


5957 — A182  Excimer Laser trabeculoplasty (ELT) combined with Phacoequilibration and Lens Implantation: 5 Year Post-OP Observations. Ulrich F. Giers, L. Kleineberg, R.P. Stodmeister, M.S. Berlin, L.E. Pilliathan. 1Detmold Eye Clinic, Detmold, Germany; 2Ophthalmology, University Hospital Carl Gustav Carus, Rodalben, Germany; 3Ophthalmology, Glaucoma Inst University Hospital Zurich, Zurich, Switzerland; 4Department of Ophthalmology, UMDNJ-New Jersey Medical School, Newark, NJ; 5Ophthalmology, University of Chicago, Chicago, IL.


5962 — A187  Transscleral Micropulse Diode Laser Cyclophotocoagulation as Effective Adjunctive Treatment prior to Glaucoma Surgery. Maria Cecilia D. Aquino, A. Tani, S. Loon, P.T. Chew. 1Ophthalmology, National University Hospital, National University Health System, Singapore, Singapore; 2Ophthalmology, National University of Singapore, Singapore, Singapore.


5964 — A189  Predictive Factors of Selective Laser Trabeculoplasty (SLT) Outcome in Open-Angle Glaucoma Patients. Mamtah Shah, B. Eliaissi-Rad. Department of Ophthalmology, Boston University School of Medicine, Boston, MA.


5966 — A191  The Cost Effectiveness And Duration Of Effectiveness Of SLT As Primary And Secondary Therapy Relative To Medications In The Treatment Of Primary Open Angle Glaucoma. Ernesto D. Golez, III, T.A. Shazly, A. Porta, E. Ferentini, M.A. Latina. 1Ophthalmology, Massachusetts Eye and Ear Infirmary, Reading, MA; 2Ophthalmology, MEME / HMS, Reading, MA; 3Ophthalmology, Eye Unit, Ospedale “C. Cantu”, Abbiagrazioso, Italy; 4Reading Health Center, Reading, MA.*CR


5969 — A194  Baseline Intraocular Pressure Strongly Predicts Response to Selective Laser Trabeculoplasty for Open Angle Glaucoma. J.D. Niessdorf, A.C. Janot, D.W. Hanson, P.J. DeMarco. 1Department of Ophthalmology, Ochsner Clinic Foundation, New Orleans, LA; 2Psychological and Brain Sciences, University of Louisville, Louisville, KY.

5970 — A195  Laser Surgery in the United Kingdom. Gordon Bowler, H. Saedon, R. Thomas, W. Chan. 1Ophthalmology, Princess Royal University Hospital, Orpington, United Kingdom; 2Ophthalmology, University Hospitals Coventry Warwickshire & Warwick Medical School, Coventry, United Kingdom; 3Ophthalmology, Croydon University Hospital, Croydon, United Kingdom; 4Ophthalmology, Great Ormond Street Hospital, London, United Kingdom.


5972 — A197  Quantification of Short-Term Endothelial Cell Loss and Intraocular Pressure Reduction Following Laser Peripheral Iridotomy. Gabriela C. Barretto, L. Trancoso, M. Cota, L. Bitelli, T.S Prata. 1Glaucoma, Hospital Medicina dos Olhos, Sao Paulo, Brazil; 2Glaucoma, Complexo Hospital Padre Bento, Sao Paulo, Brazil.


5977 — A202 A Qualitative and Quantitative Analysis of Filtering Blebs with Optical Coherence Tomography in Patients after Primary Trabeculectomy. Pietro E. Napoli, I. Zucca, M. Fossarelo. Eye Clinic, University of Cagliari, Cagliari, Italy.


5979 — A204 Analysis of Bleb Morphology after Trabeculectomy with Anterior Segment Module Spectralis Ocular Coherence Tomography (SD-OCT). Sara Bouchicchio, L. de Polo, M. Blini, G. Staurenghi. Dpt of Clinical Science, Eye Clinic Sacco Hospital, Milano, Italy.*CR


5981 — A206 Scanning Electron Microscopy Findings In Rabbit Eyes Undergoing Ultrasonic Cyclocoagulation. Florent Apel1,2, A. Bégé1, T. Charrel1,2, C. Lafon1, J-Y. Chapelon1, P. Denis1, F. Romano1. ‘Grenoble University Hospital, Grenoble, France; ‘Inserm U1032, Lyon, France; ‘EyeTechCare, Rillieux la Pape, France; ‘Croc'h Roussey University Hospital, Lyon, France.*CR

5982 — A207 The Effects Of Combined Endoscopic Cyclophotocoagulation (ECP) And Phacoemulsification In The Treatment Of Mild to Moderate Glaucoma. Michael J. Siegel1, W-S. Shieh2, O.S. Faridi3, C.K. Gupta4, M.S. Juzek5, M.E. Citron6, M.J. Siegel7, L.I. Siegel8. ‘Ophthalmology, Kresge Eye Institute, Detroit, MI; ‘School of Medicine, Wayne State University, Detroit, MI; ‘Ophthalmology, William Beaumont Hospital, Royal Oak, MI; ‘Ophthalmology, Beaumont, Bloomfield Hills, MI; ‘Gliaoma Center of Michigan, Southfield, MI.

Hall B/C   D804-D848 Thursday, May 10, 2012, 8:30 AM-10:15 AM Cornea

523 Corneal Endothelium

Moderator: Ula V Jurkunas


5988 — D809 Successful Culture Of Human Corneal Endothelial Cells Isolated From Patients With Fuchs Endothelial Corneal Dystrophy. Marie-Claude Perron1, K. Zaninolo1, C. Bostan1, O. Rochette Drouin1, A. Deschambault1, I. Brunette2, S. Poulin2. ‘Maisonneuve-Rosemont Hospital Research Center, Montreal, QC, Canada; ‘Centre LOEX de l’Universite Laval, Gene tissulaire et regeneration; Centre de recherche FRSQ du CHA universitaire de Quebe and Department of ophthalmology and ORL, Laval University, Quebec, QC, Canada; ‘Department of ophthalmology, University of Montreal, Montreal, QC, Canada.


5990 — D811 Regional variability in endothelial cell density in Fuchs Endothelial Corneal Dystrophy; An HRT3 Study. Christina R. Prescott, P. Hamrahi, U. Jurkunas. Ophthalmology, Massachusetts Eye and Ear Infirmary, Boston, MA.


5992 — D813 Reconstruction of a Corneal Endothelium Using Cells From Patients With Fuchs Endothelial Corneal Dystrophy. Stephanie Proule1, M. Haydari2, B. Goyer2, O. Roy1, S. Laprise1, O. Rochette Drouin1, I. Brunette1. ‘Centre LOEX of the Universite Laval, Gene tissulaire et regeneration; Centre de recherche FRSQ du CHA universitaire de Quebe and Departement d’ophthalmologie, Universite Laval, Quebec, QC, Canada; ‘Departement d’ophthalmologie, Universite de Montréal and Centre de Recherche de l’Hopital Maisonneuve-Rosemont, Montréal, QC, Canada.


5994 — D815 Fabricating Bioengineered Corneal Endothelial Cell Sheet Through Chitosan-polycaprolactone-blended Membranes. Tsung-Jen Wang1,2, I-J. Wang3,4, T-H. Young2. ‘Department of Ophthalmology, Taipei Medical University Hospital, Taipei, Taiwan; ‘Department of Ophthalmology, College of Medicine and College of Engineering, National Taiwan University, Taipei, Taiwan; ‘Department of Ophthalmology, National Taiwan University Hospital, Taipei, Taiwan; ‘Department of Ophthalmology, National Taiwan University College of Medicine, Taipei, Taiwan.

5996 — D817 Kinetics of Intracellular Pro-apoptotic Bax Protein Inducing Cell Death in Corneal Endothelial Cells. MarkoPastak1A, B.B. Singer1A, A. Kovtun2, M. Czugała2, B. Seitz1, M. Epple2, K-P. Stuhl1A, S. Ergin3, T.A. Fuchsberger4, 5Institute of Anatomy, 1Department of Ophthalmology, ‘Eessen University Hospital, Essen, Germany; 2Institute of Inorganic Chemistry, University of Duisburg Essen, Essen, Germany; 3Department of Ophthalmology, Saarland University Hospital, Homburg/Saar, Germany; 4Department of Ophthalmology, Düsseldorf University Hospital, Düsseldorf, Germany.

5997 — D818 Cell cycle CDK1 expression profile of Human Corneal Endothelial Cells (HCECs). Aboulghassem Shahdaifar1, J. Navaratnam2, J.K. Slettedal1, L. Lillevold1, S. Boye1C, M.C. Moe2, L.K. Drolsum1, B. Nikolaisen1. Center for Eye Research, Department of Ophthalmology, Oslo University Hospital and University of Oslo, Norway.


5999 — D820 Rock Inhibitor Eye Drops Accelerate Corneal Endothelium Wound Healing In A Primate Model. Naoki Okumura1, K. Koizumi1, M. Ueno1, Y. Sakamoto1, H. Takahashi1, K. Yasamaki1, R. Torii1, J. Hamuro2, S. Kinoshita1. 1Biomedical Engineering, Doshisha University, Kyotanabe, Japan; 2Ophthalmology, Kyoto Prefectural Univ of Med, Kyoto, Japan; 3Research Center for Animal Life Science, Shiga University, Otsu, Japan.

6000 — D821 Culture of Human Corneal Endothelial Cells (HCECs) for therapeutic purposes. Jesinta Navaratnam1A, J.K. Slettedal1B, E. Guliksen1C, S. Boye1C, M.C. Moe1C, L. Drolsum1C, B. Nikolaisen1C. 1Center for Eye Research, ‘Oso University Hospital, Oslo, Norway.

6001 — D822 Increased Proliferation and Replicative Lifespan of Isolated Human Corneal Endothelial Cells with L-Ascorbic acid 2-phosphate. Satoru Yamagami1, N. Shina1, M. Kimoto1, M. Yamaguchi1. 1University of Tokyo Graduate School of Medicine, Bunkyo-ku, Japan; 2Foundation for Biomedical Research and Innovation, Kobe, Japan.

6002 — D823 Evaluation Of Cytotoxicity Of Bevacizumab On VEGF-enriched Corneal Endothelial Cells. Carolee M. Cutter Peck1, R. Rusovici1, S. Grover1, K V. Chalam1. Ophthalmology, University of Florida College of Medicine, Jacksonville, FL.

6003 — D824 In Vitro Expansion Of Corneal Endothelial Cells On Biomimetic Substrates. Rachelle Palchesko1, J.L. Funderburgh1, A. Feinberg2. 1Ophthalmology, University of Pittsburgh School of Medicine, Pittsburgh, PA; 2Biomedical Engineering, Carnegie Mellon University, Pittsburgh, PA.

6004 — D825 Lentivirus Mediated Interference With the ZO-1/ZONAB Pathway Induces Cell Cycle Progression in Human Corneal Endothelial Cells. Daniel Kampik1, M. Basche1, A. Georgiadis1, U.F. Luhmann1, A.J. Smith1, F. Larkin1, R.R. Ali2. 1Department of Genetics, UCL Institute of Ophthalmology, London, United Kingdom; 2Moorfields Eye Hospital, London, United Kingdom.

6005 — D826 Functional Study of SLC4A11 in HEK293 cells. Diego G. Ogando1, S.S. Jalimarada1, E.N. Vithana2, J.A. Bonanno1. 1School of Optometry, Indiana University, Bloomington, IN; 2Singapore Eye Research Institute, Singapore, Singapore.

6006 — D827 Functional Characterization of the Zebrafish Corneal Endothelium. J. M. Heur1, S. Jiao1A, G. Crump1B. 1Department of Ophthalmology, University of Southern California, Los Angeles, CA.

6007 — D828 Notch Inhibitor DAPT Blocks Fibroblastic Transformation of Corneal Endothelium. Cheng Li1, F. Dong1, W. Li1, Z. Liu1. Eye Inst & Affiliated Xiamen Eye Ctr, Xiamen, China.

6008 — D829 Over-representation Preliminary Analysis Between Expressed Genes In Corneal Endothelium And Mesenchymal Stem Cells. Jorge E. Valdez1, J. Zavalal, V. Treviño1, E. Martinez1. 1Dean’s Office, Tecnologico de Monterrey School of Medicine, Monterrey, Mexico; 2Cátedra de Oftalmologia - Tecnologico de Monterrey, Monterrey, Mexico; 3Cátedra de Bioinformatica - Tecnologico de Monterrey, Monterrey, Mexico.

6009 — D830 CD147 Expression Required for Lactate Transporters MCT1 and MCT4 in Rabbit Corneal Endothelium. Shinmin Li1, T.T. Nguyen1A. School of Optometry, Indiana University, Bloomington, IN.

6010 — D831 Cultivation of Human Corneal Endothelial Cells on a Pericellular Matrix Prepared from Human Decidua-Derived Mesenchymal Cells. Ryohi Numata1, N. Okumura1, M. Nakahara1, M. Ueno1, S. Kinoshita1, Y. Kanemura1, T. Sasa1, N. Koizumi1. 1Biomedical Engineering, Faculty of Life and Medical Sciences, Doshisha University, Kyotanabe, Japan; 2Ophthalmology, Kyoto Prefectural Univ of Med, Kyoto, Japan; 3Division of Regenerative Medicine, Institute for Clinical Research Osaka National Hospital, National Hospital Organization, Osaka, Japan; 4Center for Developmental Biology, Riken, Kobe, Japan.

6011 — D832 The Role Of DJ-1 In Nrf2-regulated Antioxidant Defense In Human Corneal Endothelial Cells. Cailing Liu1, T. Schmidt1, U. Jurkunas1. Schepens / Massachusetts Eye and Ear, Harvard Medical School, Boston, MA.

6012 — D833 NF-xB is the Transcription Factor of FGF-2 that Causes Endothelial Mesenchymal Transformation in Cornea. JeongGoo Lee1, J.M. Heur2, E.P. Kay1. 1Ophthalmology, University of Southern California, Los Angeles, CA; 2Doheny Eye Institute, Los Angeles, CA.

6013 — D834 Isolation and Propagation of Human Corneal Endothelial Cells Using a Dual Media Culture System. Gary S. Peh1, K-P. Toh1, B. Balsehos1, H-P Ang1, M-X. Lee1, D.T. Tan1, J. Mehta1, 2, 3Singapore Eye Research Institute, Singapore, Singapore; 4Singapore National Eye Centre, Singapore, Singapore; 5Department of Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore; 6Department of Clinical Sciences, Duke-NUS Graduate Medical School, Singapore, Singapore.

6014 — D835 Apoptosis And Viability Of Human Corneal Endothelial Cell Cultures Following Photodynamic Therapy (pdt). Tanja Stachon1, J. Wung1, T. Eppig2, A. Langenbucher2, B. Seitz1, N. Szentmáry1. 1Department of Ophthalmology, 2Experimental Ophthalmology, 3Saarland University Hospital, Homburg/Saar, Germany; 4Department of Ophthalmology, Renmin Hospital of Wuhan University, Wuhan, China.

6015 — D836 Transient Receptor Potential Melastatin 8 (TRPM8) Channels Mediate Complex Calcium Responses in Human Corneal Endothelial Cells. Stefan Mergler1, M. Valtink1, M. Sahlmuller1, P.S. Reinacl1, K. Engelmann1, U. Peyer1. 1Department of Ophthalmology, University Medicine Charite Berlin, Berlin, Germany; 2Anatomy, TU Dresden, Dresden, Germany; 3Biological Sciences, SUNY College of Optometry, New York, NY; 4Ophthalmology, Klinikum Chemnitz, Chemnitz, Germany. *CR

6016 — D837 System to High-Throughput Drug Screening with Corneal Endothelial Survival Effect against ER and Oxidative Stress. Eun Chul Kim1, H. Meng1, M. Matthaei1, G. Bonfadini1, A.S. Jun1. Ophthalmology, Wilmer Eye Institute, Baltimore, MD.

6017 — D838 Corneal Endothelial Cell Migration and Proliferation Enhanced by Rho Kinase (ROCK) Inhibitors and Statins. Landon C. Meekins1, N. Rosazo-Adames1, R. Maddula1, D.L. Epstein1, V. Rao1, N.A. Afshari1. 1Ophthalmology, Duke University Eye Center, Durham, NC.

6018 — D839 Study of Effect of Donor Age and Death Nucleation Time on in-vitro Culture of Human Corneal Endothelial Cells. Hini Singh1, R. Tandon1, S. Mohanty1, A. Kumar1. 1Ophthalmology, Dr.R.P. Centre for Ophthalmic Sciences, 2Stem Cell Facility, 3All India Institute of Medical Sciences, New Delhi, India.

*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures - Refer to Program Number in the Clinical Trial (CT) Registration Index - Travel Grant Awardee
6019 — D840  Enhanced Survival and Expansion of Bovine Corneal Endothelial Progenitors using Accutase. Wing Yan Yu1, C.M. Sheridan2, I. Grierson3, A.C. Lo1, D. Wong1,2. 1Eye Institute, 2Research Centre of Heart, Brain, Hormone and Healthy Aging, 3The University of Hong Kong, Hong Kong, Hong Kong; 2Department of Eye and Vision Science, University of Liverpool, Liverpool, United Kingdom.  

6020 — D841  Cytotoxicity of Ganciclovir on Cultured Human Corneal Endothelial Cells. Young Joo Shin1, J. Koh2, T. Chung3, J. Hyon4, T. H. van Essen1, C. B. Adán1, E. H. Tsuji1, N. Kojima2. 1Department of Ophthalmology, Hallym University School of Medicine, Seoul, Republic of Korea; 2Department of Ophthalmology, Chosun University School of Medicine, Kwangju, Republic of Korea; 3Department of Ophthalmology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Republic of Korea; 4Department of Ophthalmology, Seoul National University College of Medicine, Seoul, Republic of Korea.  

6021 — D842  Cytoplasmic Localization Of P120ctn And N-cadherin In Ex Vivo Expansion Of Human Corneal Endothelial Cells On Amniotic Membrane. Ray J. Tsai1, R.Y. Tsai2. 1Ophthalmology, Taipei Eye Center/Taipei Medical University, Taipei, Taiwan; 2Ophthalmology, Taipei Eye Center, Taipei, Taiwan.  


6023 — D844  Endothelial Keratoplasty: The Relationship Between Six Month Postoperative Endothelial Cell Density And Graft Survival. Aseem A. Alqaoud1, M.A.erry1, M. Strakol1, M. Greiner1, D. Davis-Bozzer1. 1Cornea, 2Conna Services, 3Devers Eye Institute, Portland, OR; 4Lions Eye Bank of Oregon, Portland, OR.  


6025 — D846  Corneal Endothelial Reserve and Corneal Endothelial Reserve Factor for Intracorneal Surgeries. Fernando C. Abih1, D.S. Abih1,2. 1Anatomy, 2Anesthesiology, Federal University of Paraña, Curitiba, Brazil.  

6026 — D847  Long-Term Endothelial Cell Density With Phakic Foldable Iris-Claw Intraocular Lens (Veriflex®). Natalie Kaplan1, H. Dick1, W. Sekundo1, N. Pfeiffer1, U. Vossmerbaeumer1. 1Department of Ophthalmology, Mainz University Medical Center, Mainz, Germany; 2Department of Ophthalmology, Ruhr University Bochum, Bochum, Germany; 3Department of Ophthalmology, Marburg University Medical Center, Marburg, Germany.  

6027 — D848  Improvement Of Endothelial Keratoplasty Lamellar Dissection By Combined Use Of Femtosecond And Eximer Lasers. Liem Trinh1,2, B. Sauvanet3,4, F. Auclain1,2,4, N. Denoyer1,2, R. Lai-Kuen1, M. El Handaoui1,2,4, A. Labbé1,2,4, M-C. Despiau1,2, F. Brignole-Baudouin1,2, C. Baudouin3,4. 1Ophthalmology III, 2Clinical Investigation Center (CIC) 503, 3Pharmacy, 4INSERM U705, UMR CNRS 8206, Paris, France; 5Plaque Technique d’Imagerie Cellulaire et Moléculaire; 6Toxicology, 7Faculty of Biological and Pharmacological Sciences, University of Paris 5 René Descartes, Paris, France; 8Vision Institute, UMRS 968, University Pierre et Marie Curie Paris 6, Paris, France.  

Hall B/C  D849-D896  Thursday, May 10, 2012, 8:30 AM-10:15 AM  

6028 — D849  Main indications for admission to a corneal transplant program in Mexico: Analysis of the National Transplant Registry. Jose A. Claros1, A. J. Ramirez-Miranda1, R. Vargas2, A. Navas2, A. Gomez2, A. Jimenez-Corona2, E.O. Grane2. 1Cornea And Refractive Surgery, Instituto de Oftalmologia Conde de Valencia, Mexico City, Mexico; 2Instituto Nacional de Salud Publica, Cuernavaca, Mexico.  

6029 — D850  Evolution of Corneal Transplantation in the Province of Quebec from 2000 to 2011. Louis-Pierre Gavin Meunier1, J. Lapointe1, M. Choronze2, S. Dubuc1, M. Germain1, M. Mabon1, I. Brunette1. 1Ophthalmology, University of Montreal, Montreal, QC, Canada; 2Maisononneuve-Rosemont Hospital Research Center, Montreal, QC, Canada; 3Héma-Québec, Québec, QC, Canada; 4Quebec Eye Bank, Montreal, QC, Canada.  

6030 — D851  Average Waiting Time before Keratoplasty and Possible Variation of this Deadline According to the Seasons: Retrospective Study about 318 cases and 10 Years of Follow-up. Jean-Marc Perone, A. Agapie, O. Guechi, O. Gheorghe, I. Botez, P. J. Bertaux, A. Ferte. 1Ophthalmology, Regional Hospital Center of Metz Bon Secours, Metz, France.  


6032 — D853  European Study On Reliability Assessment Of Endothelial Cell Count In Eye Banks: The Eurokeratostest Study. Gilles Thuret1, Z. He2, N. Campolmi3, B. Ha Thi4, J. Dumollard4, M. Pecq5, N. Delesalle1, A. Bernard3, P. Gain1,2. 1Ophthalmology, 2Pathology, 3University Hospital of St-Etienne, Saint-Etienne, France; 4Corneal Graft Biology, Engineering and Imaging Laboratory, EA2521, Federative Institute of Research, Faculty of Medicine, Jean Monnet University, Saint-Etienne, France; 5The French Health Products Agency (Afssaps), Saint-Denis, France.  


6035 — D856  Downs Syndrome Donor Tissue: Suitability and Outcomes of Stromal Replacement Corneal Transplantation. Syed Mahmood A. Shah1, M. Moshirfar2, M. Mifflij2, Y. Khalji2. 1Floaem Eye Institute, University of Rochester Medical Center, Rochester, NY; 2Moran Eye Center, University of Utah, Salt Lake City, UT.  


6037 — D858  Cross-linked Variants Of A Novel Semi-synthetic Collagen Substitute For The Reconstruction Of The Surface. Corrina Petsch1, U. Schlotzer-Schrehardt1, M. Frey1, F.E. Kruse2, B. Bachmann1. 1Ophthalmology, University Hospital Erlangen, Erlangen, Germany; 2Department of Ophthalmology, University of Erlangen-Nurnberg, Erlangen, Germany; 3RESORBA Wundversorgung GmbH & Co. KG, Nuremberg, Germany; 4Department of Ophthalmology, University of Erlangen Nurnberg, Erlangen, Germany.  

6038 — D859  A Biocornea Of Fish Scales - First Results Of A Research Model. T. H. Van Essen1, C. Lin1, H.J. Lai1, A.K. Hussain1, M.J. Jager1, G.P. Luyten1. 1Department of Ophthalmology, Leiden University Medical Center, Leiden, The Netherlands; 2Department of Research, Aeon Astron Europe B.V., Leiden, The Netherlands.  

6039 — D860  Investigation for the Possibility of Using Polymer Hydrogels as a Device for Cultivation and Transplantation of Corneal Epithelial Cells. Toru Matsunaga1, Y. Watanabe2, T. Sato1, T. Funaki1, A. Matsuda1, N. Ebihara1, A. Murakami1. 1Dept of Ophthalmology, Juntendo Univ School of Med, Bunkyo-Ku, Japan; 2Research and Development, SEED Co., Ltd., Kounosu-Shi, Japan.


6042 — D863 The Fate Of Collagen-based Hydrogels As Corneal Substitutes In “High Risk” Graft Recipients. Lucia Kuffova', R. Fordyce', M. Robertson', M. Griffith', J-I. Ahn', K. Merritt', R.L. Hendricks', J.V. Forrester'. 1Department of Ophthalmology, University of Aberdeen, Aberdeen, United Kingdom; 2Integrative Regenerative Medicine Centre, Linköping University, Linköping, Sweden; 3Department of Ophthalmology, University of Ottawa Eye Institute, Ottawa, ON, Canada; 4GMP Laboratories, Linköping University Hospital, Linköping, Sweden; 5Department of Ophthalmology, University of Pittsburgh School of Medicine, Pittsburgh, PA. *CR

6043 — D864 Therapeutic Keratoplasty Using Cryo-preserved Human Cornea For The Urgent Treatment Of Perforated Cornea Due To Infectious Keratitis. Hyung-Joon Kim, J-H. Lee. Department of Ophthalmology, Daegu Catholic Univ Hospital, Daegu, Republic of Korea.


6049 — D870 Graft Failure And Intraocular Pressure Control After Keratoplasty In Iridocorneal Endothelial Syndrome. Desmond T. Quek', S. Han', T. Wong', D. Tan', J. Mehta'. 1Singapore National Eye Center, Singapore, Singapore; 2Singapore Eye Research Institute, Singapore, Singapore; 3Ophthalmology, Samsung Medical Centre, Sungkyunkwan University, Korea, Republic of Korea.


6058 — D879 Femtosecond Laser-Assisted Mushroom Configuration Penetrating Keratoplasty And Deep Anterior Lamellar Keratoplasty In Advanced Keratoconus. Simon S. Fung', F. Aiello', A. Iovieno', C. Nicelli', V. Maurino'. 1Cornea and External Disease Service, Moorfields Eye Hospital, London, United Kingdom; 2Department of Biophatology, Ophthalmology Unit, University of Rome Tor Vergata, Rome, Italy.


6062 — D883 Field of View of Modified Osteo-odontokeratoprosthesis. Victor M. Hernandez', C. de Freitas', G.C. Falcinelli', Y. Sawatari', V. Perez', D. Sathia', F. Manz', E.C. Alfonso', J-M.A. Pare', 1Ophthalmologic Biophysics Center, 2Department of Ophthalmology, Bascom Palmer Eye Institute, Miami, FL; 3Department of Biomedical Engineering, Biomedical Optics and Laser Laboratory, University of Miami, Coral Gables, FL; 4Department of Maxillofacial Surgery, University of Miami Miller School of Medicine, Miami, FL.

6063 — D884 Poly(ethylene glycol diacrylate) – Poly(2-hydroxyethyl methacrylate) (PEGDA-HEMA) Based Keratoprosthesis. Amelia L. Zellander', M. Maksious', M. Cho'. 1Bioengineering, University of Illinois at Chicago, Chicago, IL; 2Physical Therapy and Human Movement Sciences, Orthopaedic Surgery and Physical Medicine, Northwestern University, Chicago, IL. *CR

6064 — D885 Boston Type I Keratoprosthesis: Microbial Colonization and Antibacterial Resistance. Eli P. Eid', M-C. Robert', P. Saint-Antoine', M. Harissi-Dagher'. 1Ophthalmology, 2Microbiology, Centre Hospitalier de l’Université de Montréal (CHUM), Hôpital Notre-Dame, Montréal, QC, Canada.
6074 — D895 Monitoring Of Glaucoma After The Implantation Of A Keratoprosthesis. Riccardo Scotto2, M. Papaditri2, A. Bagnisi2, A. Macrì2, C.E. Traverso2. 1Ophthalmology, DiNOG, University of Genoa, Genova, Italy; 2Ophthalmology, University of Genova, Genova, Italy.


Hall B/C D897-D947 Thursday, May 10, 2012, 8:30 AM-10:15 AM Cornea

525 Contact Lens II (Basic Research)

Moderators: Nicole A Carnt and Nancy J Keir

6076 — D897 Effect of Contact Lens Solutions on the Antimicrobial Efficacy of Human Tear Proteins during Lens Disinfection. Bianca L. Price4, P.B. Morgan5, C. Maldonado-Codina5, C.B. Dobson4. 1Faculty of Life Sciences, 2EuroLens Research, Faculty of Life Sciences, 3University of Manchester, Manchester, United Kingdom.

6077 — D898 Effects Of Multi-purpose Solutions On The Viability And Encystment Of Clinical Isolates Of Acanthamoeba Determined By Flow Cytometry. Masaki Imagasy1, K.T. Tchetedre2, H.D. Cavanagh3. 1R&D Center, Menicon Co Ltd, Kasugai, Japan; 2Ophthalmology, Univ Texas Southwestern Med Ctr, Dallas, TX; 3Ophthalmology, Tulane University.

6078 — D899 Evaluation Of Commercially Available Novel Multi-purpose Contact Lens Care Solutions Effect Upon Membrane-associated Mucin Expression In The Rat Cornea. Kissou T. Tchetedre1, M. Imagasy1, Y. Horii1, H.D. Cavanagh3. 1R&D and Innovation Center, Menicon LTD, Kasugai, Japan; 2Ophthalmology, Toho University Sakura Medical Center, Sakura, Japan; 3Ophthalmology, Univ Texas Southwestern Med Ctr, Dallas, TX.

6079 — D900 Comparison of Disinfection Efficacies of Four Contact Lens Care Regimens Against Pseudomonas aeruginosa on Orthokeratology Lenses. Yoshtie Ito4, N. Miyata4, T. Kawagoe1, M. Nobuhisa1, E. Okada1. 1Okada Eye Clinic, 2Okada Eye Clinic, Yokohama, Japan; 3Department of Ophthalmology and Visual Science, Yokohama City University, Yokohama, Japan.


Thursday — Posters — 6065 – 6089


6085 — D906 Antimicrobial Efficacy of Melamine Covalently Bound to Contact Lenses. Debarun Dutta1, N. Cole4, M. Willcox2. 1Brien Holden Vision Institute, Sydney, Australia; 2School of Optometry and Vision Science, University of New South Wales, Sydney, Australia.

6086 — D907 Organo-Selenium Coated Contact Lenses: Effect Upon Bacterial Biofilm Attachment. Phai Tran4, A. Hamoud5, C. Jarvis5, J. Thomas5, B. Lackey5, T. Mosley5, T. Reid5. 1Ophthalmology and Visual Sciences, 2Microbiology, 3Ophthalmology, 4Texas Tech University Health Sciences Center, Lubbock, TX; 5Selenium Ltd., Lubbock, TX.

6087 — D908 Non-Cultivable Bacterial Biofilm Communities in Used Contact Lens Cases. Judith L. Flanagan1, M. Allgeier1, M.D. Willcox, P. Hugenholz1. 1Brien Holden Vision Institute, Sydney, Australia; 2Joint Genome Institute, Walnut Creek, CA; 3Brien Holden Vision Institute, Univ of New South Wales, Sydney, Australia; 4Australian Centre for Ecogenomics, School of Chemistry and Molecular Biosciences & Institute for Mol, University of Queensland, Queensland, Australia.


6089 — D910 Membrane Permeability Of Staphylococcus Aureus Aggregates Exposed To Contact Lens Care Solutions. David J. McCanna, L.W. Jones. CCLR-School of Optometry, University of Waterloo, Waterloo, ON, Canada.

*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures — ▲ Refer to Program Number in the Clinical Trial (CT) Registration Index — Ⓟ Travel Grant Awardee

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6090 — D911 Comparison Of Two Dual-Disinfection Systems For Ocular Comfort, Corneal Staining And Corneal Infiltrative Events. Daniel Tilia1, P. Lazon De La Jara2, N. Peng1, H. Zhu1, M.D. Willcox1, B.A. Holden1,
1Brien Holden Vision Institute, Sydney, Australia; 2School of Optometry and Vision Science, University of NSW, Sydney, Australia; 3Brien Holden Vision Institute, Vision Cooperative Research Centre, Sydney, Australia. *CR, 📍

6091 — D912 Ocular Cytotoxic Potential Assessment Of Contact Lens Care Solutions And Evidence For A Useful Rinse Step With Unpreserved Solution. Melody Dutout1, J. Vincent2, I. Fabre3, C. Grasmick2, R. Fagon1, P. Rat2,
1Toxicology, *Research&Development, YSLAB, Paris, France; 2Direction des Laboratoires et des Contrôles, Agence Française de Sécurité Sanitaire des Produits de Santé, Vendargues, France; 3Chimie-Toxicologie Analytique et Cellulaire (EA 4463), Université Paris Descartes, Sorbonne Paris Cité, Toxicologie Analytique et Cellulaire (EA 4463), Université Paris Descartes, Sorbonne Paris Cité, Paris, France; 4Holden Vision Institute, Vision Cooperative Research Centre, Sydney, Australia. *CR, 📍

6092 — D913 Morning Cleaning or Replacement of Contact Lenses Reduces Complications with Extended Wear of Contact Lenses. Jerome Ozzou1, M.D. Willcox1, P. Lazon De La Jara1, T.M. Rathi1, B.A. Holden1,
1Clinical Research & Trials Centre, 2Brien Holden Vision Institute, Sydney, Australia; 3Brien Holden Vision Institute, Univ of New South Wales, Sydney, Australia; 4Cornea, Contact lens, Refractive Surgery, LV Prasad Eye Institute, Banjara Hills, Hyderabad, India; 5Brien Holden Vision Institute, Vision Cooperative Research Centre, Sydney, Australia. *CR, 📍

6093 — D914 Qualitative and Quantitative Lubricity of Experimental Contact Lenses. Robert C. Tucker1, B. Quinter1, D. Patel1, J. Pruitt2, J. Nelson1,
1R&D, Alcon, Johns Creek, GA; 2Biomedical Engineering, University of Florida, Gainesville, FL; 3Biomedical Engineering, 4Applied Thermodynamics, Universidad Politécnica de Madrid, Madrid, Spain. *CR, 📍

6094 — D915 Effect of Soft Contact Lens Storage Solutions on Lens Wettability In-Vitro. Raisedi Fagehi1, A. Tomlinson1, Y. Manahilov1,
1School of Optometry, Sch of Optometry/Vision Sci, Univ of New South Wales, Sydney, Australia; 2Contact Lens Materials and Applications, Sch of Optometry, Univ of New South Wales, Sydney, Australia. *CR, 📍

6095 — D916 Robust Contact Lens Lubricity using Surface Gels. W. G. Sawyer1, A.C. Dunn1, J.M. Uruena1, H.A. Ketelson1,
1Chemical Engineering, Microwave Engineering and Chemical Applications, 2Optometry, University of Florida, Gainesville, FL; 3R & D, Alcon Research Ltd, Fort Worth, TX. *CR

6096 — D917 Improving The Wettability Of Silicone Hydrogel Contact Lenses. Alonso Cook1, M. Skinner2, J. Li3, C. Loose4, K. Schultz5, Z. Zhang4,
1Semprus BioSciences, Cambridge, MA. *CR

6097 — D918 Proteoglycan 4 (lubricin) Enhances the Wettability Of Model Conventional And Silicone Hydrogel Contact Lenses. Lakshman N. Subbaraman1, T.A. Schmidt1, H. Sheardown1,
1Chemical Engineering, McMaster University, Hamilton, ON, Canada; 2Biomedical Engineering, University of Calgary, Calgary, AB, Canada.

6098 — D919 Estimating in-vivo Contact Lens Wettability Through Tear Film Hydrodynamics. Jalalal P Varkioku1, N.J. Keir1, T.L. Simpson2,
1CCLR, School of Optometry, 2School of Optometry, University of Waterloo, Waterloo, ON, Canada.

6099 — D920 Hyaluronan Release from Contact Lenses in vitro and in vivo. Krista M. Fridman1, C.A. Scheuer1, S. Su1, L. Zhang2, S.E. Burke1, Bausch + Lomb, Rochester, NY. *CR, 📍

6100 — D921 Solute Release From Soft-contact-lens Hydrogels. Csaba Kotsman1, T. Nadolski1, N. Taylor1, K. Yeh1, C.J. Radke2, Chemical & Biomolecular Engr, Univ of California at Berkeley, Berkeley, CA. *CR

6101 — D922 Ocular Delivery Of Ketotifen Fumarate By Silicone Hydrogel And Conventional Hydrogel Contact Lens Materials. Anthony Soluri1, A. Hui2, L. Jones1,
1Centre for Contact Lens Research, University of Waterloo, Waterloo, ON, Canada; 2Travel Grant Awardee, James W. Davis, R & D, Alcon Research Ltd, Fort Worth, TX. *CR

6102 — D923 Development of a Drug released Soft Contact Lens that Releases Antibiotics in a Sustained Manner. Shinichiro Kobayakawa1, T. Matsunaga1, K. Kakisui1, T. Yamazaki1, T. Sato2, T. Tochikubo1,
11st Dept of Ophthalmology, Toho University, Tokyo, Japan; 2SEED Co Ltd, Kousoushi, Japan. *CR

6103 — D924 Surface versus Bulk Absorption of a Diblock Copolymer on/in Silicone Hydrogels. Yuchen Huo1, S.S. Perry1, H.A. Ketelson1,
1Materials Science and Engineering, University of Florida, Gainesville, FL; 2R & D, Alcon Research Ltd, Fort Worth, TX. *CR

6104 — D925 Understanding Lens Shape Dynamics During Off-Eye Dehydration of Contact Lens Materials with Varying Water Content. Ian G. Cox1, R.H. Lee2,
1Vision Care, Bausch + Lomb, Rochester, NY. *CR

6105 — D926 Oxygen Diffusion Behind Modern Scleral Rigid Gas Permeable Contact Lenses. Sofia C. Peixoto-de-Matos1, V. Compaï1, S. Moya1, J. Jorgé1, J.M. Gonzalez-Meijome2,
1Center of Physics, University of Minho, Braga, Portugal; 2Applied Thermodynamics, Universidad Politécnica de Valencia, Valencia, Spain. *CR

6106 — D927 Rapid Measurement of Tear Oxygen Tension Underneath Soft Contact Lenses by Frequency-Domain Phosphorimetry. Sangpy S. Srinivas1, G. Guidoboni1, L. Carichino2, Y. Jiang2, J.A. Bonanno1,
1Optometry, Indiana University, Bloomington, IN; 2Mathematics, IUPUI, Indianapolis, IN.

6107 — D928 Surface Characterization of a Water Gradient Silicone Hydrogel Contact Lens (delefilcon A), John Pruitt1, Y. Qiu1, S. Thekveli1, R. Hart1, Alcon, Johns Creek, GA. *CR

6108 — D929 Corneal Nerve Morphology In Soft And Orthokeratology Contact Lens Wear. Edward Lum1, B. Golebiowski1, H.A. Swarbrick2,
1Sch of Optometry/Vision Sci, Univ of New South Wales, Sydney, Australia; 2Materials Science and Engineering, University of Florida, Gainesville, FL; 3R & D, Alcon Research Ltd, Fort Worth, TX. *CR

6109 — D930 Design and Development of an In Vitro Tear Replenishment System. Saman Mohammadi1, M. Gorbet2,
1Systems Design Engineering, University of Waterloo, Waterloo, ON, Canada; 2Chemical & Biomolecular Engr, University of Waterloo, Waterloo, ON, Canada. *CR

6110 — D931 Evaluation of Contact Lens Image Stability and Predicted logMAR Image Resolution as Lenses Dehydrate. Rosa H. Lee1, A.C. Kingston2, G. Richardson2,
1Product Design Group, Bausch + Lomb, Rochester, NY. *CR

6111 — D932 Interfacial Interactions Of Cationic And Anionic Artificial Tears With Ionic Hydrogel Contact Lens Surface. Muhammad Abdulnazif1, S. Benita2,
1Ophthalmology/Innovative Interventions, East Jerusalem Biomedical Institute, East Jerusalem, Palestine; 2Institute of Drug Research, Hebrew University of Jerusalem, Jerusalem, Israel. *CR

6112 — D933 Contact Lens/Contact Lens solution Combinations Determine the Inflammatory Changes On the Ocular Surface: A Laser In Vivo Confocal Microscopy Study. Bernardo M. Cavalcanti1, A. Cruzat2, Y. Qazi2, N. Baniasadi3, N. Trinidad3, A. Watts3, D. Cisneros4, C. Leaby4, C.W. Mills4, P. Hamrah4,
1Cornea/Ophthalmology, Harvard Medical School/ MEEI, Boston, MA; 2Cornea / Ophthalmology, Harvard Medical School, Boston, MA; 3Ophthalmology, Cornea Research, Massachusetts Eye and Ear Infirmary, Boston, MA; 4Cornea/Ophthalmology, MA Eye & Ear Infirmary/ Harvard Med Sch, Boston, MA; 5Contact Lens, Ophthalmology, University of Iowa, Iowa City, IA. *CR, 📍

6113 — D934 Stress Induced Frictional Transitions in Cross-Linked Surface Gels. Thomas E. Angelini1, A.C. Dunn1, J.M. Uruena1, H.A. Ketelson1, W.G. Sawyer1,
1Mechanical and Aerospace Eng, University of Florida, Gainesville, FL; 2R & D, Alcon Research Ltd, Fort Worth, TX. *CR

6114 — D935 Surface Mechanical and Tribological Properties of Silicone Hydrogels Measured by Atomic Force Microscopy. Alexander Rudy1, Y. Huo1, S.S. Perry1, H.A. Ketelson1,
1Materials Science and Engineering, University of Florida, Gainesville, FL; 2R & D, Alcon Research Ltd, Fort Worth, TX. *CR

6115 — D936 Surface Segregation of Chemical Moieties in Silicone Hydrogels. Scott S. Perry1, C. Argenbright1, Y. Huo1, H.A. Ketelson1,
1Materials Science and Engineering, University of Florida, Gainesville, FL; 2R & D, Alcon Research Ltd, Fort Worth, TX. *CR

6116 — D937 Surface Characterization of Dailies Contact Lens Material. James W. Davis1, H.A. Ketelson1, R & D, Alcon Research Ltd, Fort Worth, TX. *CR

*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures. 📍 Refer to Program Number in the Clinical Trial (CT) Registration Index. 📍 Travel Grant Awardee
6117 — D938 Evaluation of In Vitro Cytotoxicity Assays for Contact Lens Multipurpose Solutions. Mercedes Salvador-Silva1, L.C. Huang2, C.H. Powell3, L. Hoong4, R.M. Vetemani1. 1R&D - Biological Sciences, 2Corneal R&D, 3Abbott Medical Optics (AMO), Santa Ana, CA. *CR

6118 — D939 Cytotoxic and Inflammatory Effects of Contact Lens Multipurpose Solutions on Human Corneal Epithelial Cells. Nir Erdinest1, Y. Grosman1, R. Harari1, H. Ovdia1, A. Solomon1. 1Hadassah Hebrew University Medical Center, Jerusalem, Israel.

6119 — D940 The Impact of Intermittent Air Exposure on the Deposition of Lipids on Silicone Hydrogel and Conventional Hydrogel Contact Lens Materials. Holly I. Lorentz, M. Heynen, W. Khan, D. Trieu, L. Jones. Centre for Contact Lens Research, University of Waterloo, Waterloo, ON, Canada. *CR


6121 — D942 In Vitro Dehydration of Daily Disposable and Silicone Hydrogel Contact Lens Materials. Hendrik Walther, L. Subbaraman, L.W. Jones. CCLR, University of Waterloo, ON, Canada. *CR


6124 — D945 Study Of Novel Chitosan-coated Contact Lens As An Equivalent Substrate For The Therapeutic Delivery Of Rabbit Limbal Epithelium. Xiao-Wei Tan, D. Tan, R.W. Beuerman, J.S. Mehta. Singapore Eye Research Institute, Singapore Eye Research Institute, Singapore, Singapore.

6125 — D946 Measuring The Kinetics and Activity of Adsorbed Proteins: In Vitro Lysozyme Deposited Onto Contact Lenses Over Short Time Periods. Brad Hall1, L. Jones1, J.A. Forrest2. 1School of Optometry, 2Department of Physics & Astronomy, University of Waterloo, Waterloo, ON, Canada.

6126 — D947 Regenerated Cellulose Hydrogels with High Optical Transparency and Mechanical Strength for Corneal Applications. Marcia W. Patchan1, J. Graham2,3, Z. Xia2, J. Maranchi1, J. Elisseeff1, O.D. Schein2, M. Trexler1. 1Milton Eisenhower Research Center, Johns Hopkins University Applied Physics Lab, Laurel, MD; 2Biomedical Engineering, Johns Hopkins University, Baltimore, MD; 3Ophthalmology, Johns Hopkins Wilmer Eye Inst, Baltimore, MD. *CR

Hall B/C D987-D1021 Thursday, May 10, 2012, 8:30 AM-10:15 AM

Immunology & Microbiology / Cornea

526 Cornea/Anterior Segment Infection and Inflammation I

Moderator: Ashok Kumar


6129 — D989 Cxcl Contributions To Host Resistance Following Pseudomonas Aeruginosa Corneal Infection But Not To Herpes Simplex Virus Type 1. Katie M. Hudson1,4, D.J. Carr1,2,3,8. 1Ophthalmology, 2Microbiology and Immunology, 3University of Oklahoma Health Sciences Center, Oklahoma City, OK.

6130 — D990 Vasoactive Intestinal Peptide Regulates Toll-like Receptors in the Inicted Cornea. Xiaoyu Jiang, S.A. McClellan, R.P. Barrett, E.A. Berger, Y. Zhang, L.D. Hazlett, Department of Anatomy and Cell Biology, Wayne State University School of Medicine, Detroit, MI.

6131 — D991 mTOR Inhibition has Similar Effects to Treatment with Substance P in the Cornea of Pseudomonas aeruginosa-Infected BALB/c Mice. Megan E. Foldenauer, S. McClellan, R. Barrett, L. Hazlett. Anatomy & Cell Biology, Wayne State University - School of Medicine, Detroit, MI.

6132 — D992 Pseudomonas aeruginosa Keratitis: Pathogen Genotype Impacts Clinical Presentation and Outcomes. Durga S. Borkar1, S.M. Fleiszig1, D.J. Evans2, C. Leong2, P. Lalitha1, M. Srinivasan1, T.M. Lietman1, N.R. Acharya1. 1F. I. Proctor Foundation, University of California, San Francisco, San Francisco, CA; 2School of Optometry, University of California, Berkeley, Berkeley, CA; 3Aravind Eye Hospital, Madurai, India.

6133 — D993 Virulence factors in Pseudomonas aeruginosa keratitis. Henri Sueke1, J. Shankar1, T. Neal2, S. Aldwinkle3, C. Winstanley2, S. Tuft3, S.B. Kaye4, Microbiology Ophthalmic Group. 1Ophthalmology, 2Microbiology, 3Royal Liverpool University Hospital, Liverpool, United Kingdom; 4Microbiology, University of Liverpool, Liverpool, United Kingdom; Ophthalmology, Moorfields Eye Hospital, London, United Kingdom. ©

6134 — D994 The Role Of Dendritic Cells In Flagellin-induced Protection Against Pseudomonas Aeruginosa Keratitis. Nan Gao, F-S. Yu. Ophthalmology, Wayne State Univ/Kresge Eye Inst, Detroit, MI.

6135 — D995 Characterization Of Pseudomonas Aeruginosa Type Three Secretory System (TTSS) Effector Molecules (Exo U/S/T) From Human Corneal Ulcer. Jeganathan lakshmi priya1, R. Sivaganesa Karthikeyan1, N. Venkatesh Prajna1, E. Pearlman1, A. Rietsch1, P. Lalitha1. 1Microbiology, Aravind Medical Research Foundation, Madurai, India; 2Ophthalmology and Visual Sciences, Case Western Reserve University, Cleveland, OH; 3Dept. of Molecular Biology and Microbiology, Case western Reserve University, Cleveland, OH.

6136 — D996 Interactions of Pseudomonas aeruginosa with human corneal fibroblasts in vitro., Ahmad Elsayhi1,2, C. Heath1, M. Christodoulides1, P. Hossain1,2. 1Infection, Inflammation & Immunity, University of Southampton, Southampton, United Kingdom; 2Eye Unit, University Hospital Southampton NHS Foundation Trust, Southampton, United Kingdom.


6139 — D999 Genotypic Characterization of Staphylococcus aureus isolates from Eyes with Keratitis. Takashi Sizuki, S. Hayashi, Y. Ohashi. Department of Ophthalmology, Ehime University,Graduate School of Medicine, Toon-shi, Japan. *CR

6140 — D1000 Molecular Characterization of Virulence Genes Associated with MRSA Keratitis isolates. Jorge Maestre1, E. Perez2, M. Diaz2, E. Alfonso2, D. Miller1, 1Ophthalmology, 2Bascom Palmer Eye Institute, 3University of Miami, Miami, FL.

*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures. – © Refer to Program Number in the Clinical Trial (CT) Registration Index. – Travel Grant Awardee
6141 — D1001 Involvement of Corneal Epithelial Cells in the TLR7 Response in an In Vitro Bacterial Inflammation Model. Isabel Arranz-Valsero1,2, U. Schulte1, L. Contreras-Ruiz2, L. Garcia-Piñada3, A. Lopez-Garcia4, F. Pausen4,5, Y. Diebold4.  


6143 — D1003 Reprogramming Induced by TLR2/4 Agonists Regulates Corneal Immune Responses to Fungal Infection. Xinyi Wu, J. Wang, L. Wang, Y. Li. Ophthal QHu Hosp/Ophthal, Shandong University, Jinan, Shandong, China.  

6144 — D1004 Analysis of Acanthamoeba cysts isolated from contact lenses with the Raman spectroscopy microscope. Pablo L. Goldschmidt1, D. Di Cave1, S. Degorge1, D. Benallaoua1, E. Borsali1, A. Le Bouter1, L. Batellier1, V. Borderie1.  

6145 — D1005 Acanthamoeba Associated Microbial Communities. Darlene Miller1, J. Maestre-Mesa2, M. Diaz3, E. Perez1, V. Shestopolov1, R. Van Gelder1, E.C. Alfonso1. Bascom Palmer Eye Institute, Univ of Miami Miller Sch of Med, Miami, FL.  


6148 — D1008 Gene Transfer Of Hsv1-specific Mucaneeucase To The Murine Cornea Using Electroporation. Antoine Rousseau1,2, A. Ergani3, E.E. Gabisson1, M. Corral1, N. Huot1, M. Gailedrad1, C. Desseaux1, B. Chapellier1, J.r. P. Roy1, M. Labetoulle1,2.  


6150 — D1010 HSV-1 Specific Mucaneeucase May Reduce Ocular Infection In A Mouse Model Of Herpes Keratitis. Marc Labetoulle1,2, E.E. Gabisson1,4, N. Huot1, A. Rousseau1, S. Bardin3, C. Mahier1, M. Gailedrad1, C. Desseaux1, B. Chapellier1, A. Ergani1. Ophthalmology, Hospital Bicetre, South Paris University, Le Kremlin Bicetre, France; Cars, upr 3296, Laboratoire de Virologie moleculaire et Structurale, Gif sur Yvette, France.  

6151 — D1011 CD8 T Cells Inhibit Viral Replication but Become a Source of VEGF Expression During Corneal Herpes Simplex Type I Infection. Christopher D. Conrady1, M. Zheng2, D.U. Stone3, D.J. Carr4,5. Ophthalmology and Immunology, Univ of Oklahoma Hlth Sci Ctr, Oklahoma City, OK.  


6153 — D1013 Non-Muscle Myosin IIa Mediates HSV-1 Entry Into The Cells of the Human and Pig Corneas. Thissicar E. Antoine1,4,5, D. Shukla3,4,5. Ophthalmology and Visual Sciences,  

6154 — D1014 Corneal Dendritic Cells Suppress Local Corneal Damage and Mediate Systemic Viral Dissemination in Herpes Simplex Keratitis. Kai Hu1, H. Ghiasi2, C.M. Biddle3, J. Chodosh2. Ophthalmology, Massachusetts Eye & Ear Infirmary, Boston, MA.  


6160 — D1020 Neutralizing Kc (excl) Ameliorates Recurrent Hsk. Patrick M. Stuart, D. West. Ophthalmology, St Louis University, St Louis, MO.  

6161 — D1021 Non-professional Phagocytosis Can Play A Role In Herpesvirus Entry Into Ocular Cells. Deepak Shukla, V. Tiwari. Ophthalmal/Visual Sciences, University of Illinois at Chicago, Chicago, IL.
**Thursday – Posters – 6162 – 6184**

**Hall B/C   D1022-D1051**

Thursday, May 10, 2012, 8:30 AM-10:15 AM

**Immunology & Microbiology / Cornea**

**527 Cornea/Anterior Segment Infection and Inflammation II**

**Moderator: Curtis R Brandt**

**6162 — D1022**

Association between Atopy and Herpetic Eye Disease in a Hawaiian population.

John A. Gonzales¹, D. Borkar¹, V. Tham², A. Vinova³, E. Esterberg¹, O. Acharya¹.

1Department of Ophthalmology, Interdisciplinary Uveitis Center, Penn State University Medical Center, Scranton, PA; ²Ophthalmology, EYE & ENT Hospital of Fudan University, Shanghai, China; ³Ophthalmology, Eye & ENT Hospital of Fudan University, Shanghai, China.

**6163 — D1023**

Pattern of Herpetic Eye Disease In A Referral Centre In Milan, Northern Italy.

Gianluca Moresori, I. Bianchi, A. Colucci, F. Bandello. Dept of Ophthalmology, Univ Hospital San Raffaele, Milan, Italy.

**6164 — D1024**

Herpetic Eye Disease: Spectrum Of Disease At A City Hospital For The Underserved.


**6165 — D1025**

Practice Patterns in the Management of Anterior Herpes Simplex Virus Eye Disease Compared to Herpetic Eye Disease Study Group Findings.

Tabassum F. Ali, I. U. Scott. Department of Ophthalmology, Penn State Milton S. Hershey Medical Center, Hershey, PA.

**6166 — D1026**

Findings In Detection Of Herpesviridae By Real-time Polymerase Chain Reaction And Intraocular Antibody Production In A Case-series Of Anterior Uveitis.

Marie-Helene Errera¹, F. Goldschmidt¹B, L. Batellier¹B, S. Shovlin², M. Nikolic¹. ¹Department of Ophthalmology, UC Irvine, Irvine, CA; ²Department of Ophthalmology, UT Southwestern Medical Center, Dallas, TX.

**6167 — D1027**

The Immune Response To 3 Different Therapies In Herpetic Stromal Keratitis.

Maurocio Cedillo Sarabia, Sr¹, R. Velasco Ramos, II¹, S. Perez Tapia, III¹, A. Babayan Sosa, IV¹, O. Baca Lozada, V¹, O. Fernandez Vacaya, V¹, R. Suarez, Vlo, G. Cortes Sanchez, V¹, M. Navarro Pena, V¹. ¹Cornea, Fundacion Hospital de Nuestra Senora de la Luz, MEXICO DF, Mexico; ²Department of Immunology, National School of Biological Sciences ENCB-IPN, MEXICO DF, Mexico.

**6168 — D1028**

Diagnosis of Herpetic Uveitis is Aided by Confocal Microscopy with the HRT RCM. Alexandra B. Knoll, J. Metzger, F. Mackensen. Ophthalmology, Interdisciplinary Uveitis Center, University Hospital Heidelberg, Heidelberg, Germany.

**6169 — D1029**

Clinical and epidemiological characteristics of infectious keratitis at Fundacion Banco de Ojos “Fernando Oca del Valle” in Paraguay.

Martin M. Mentwich¹, M. Bordon³, D. Sanchez di Martino¹, A. Ruiz Cazpamano¹, W. Martinez Torres¹, S. Libch¹, M. Samudio¹, N. Fariña¹, F. Laspiña¹, H. Mino de Kaspar¹. ¹Department of Ophthalmology, Ludwig-Maximilians-University, Munich, Germany; ²Fundacion Banco de Ojos “Fernando Oca del Valle”, Instituto de Investigaciones en Ciencias de la Salud, Asuncion, Paraguay.

**6170 — D1030**

10 year experience of fungal keratitis at the University of Iowa.


**6171 — D1031**


**6172 — D1032**

Growth Of Acanthamoeba On Contact Lens Storage Case Bacteria And Their Survival Within The Cyst Stage.

Anthony Lam, S. Kivlingston. Corneal R&D Microbiology, Abbott Medical Optics, Santa Ana, CA.

**6173 — D1033**

Characterization Of Bacteria From Contact Lens Storage Cases Of Corneal Infiltrative Event Patients.

Simon Kivlington¹, J. P. Shirivar¹, M. Nikolic¹. ¹Corneal R&D Microbiology, Abbott Medical Optics, Santa Ana, CA; ²Northeastern Eye Institute, Scranton, PA.

**6174 — D1034**

Prevalence of Positive Microbiological Results from Donor Cornea Tissue In Cononal Transplantation from 2006-2010 and Subsequent Clinical Outcomes.


**6175 — D1035**

Rapid Identification of Microorganisms Using the Two-Photon Ophthalmoscope.

Yinhong Qu¹², K. E. Thomas², I. U. Scott. ¹Ophthalmology, UTSouthwestern Medical Center, Dallas, TX; ²Department of Ophthalmology, UT Southwestern Medical Center, Dallas, TX.

**6176 — D1036**

Reduced Corneal Inflammation By Birch Leave Extract In Combination With Sub-therapeutic Cyclosporin A.

Katrin Wacker¹, C. Grünendam¹, R. Huber¹, T. Reinhard¹, J. Schwartzkopff¹. ¹University Eye Hospital, Freiburg, Germany; ²Department of Environmental Health Sciences, University Medicine Freiburg, Germany.

**6177 — D1037**

Topical sCD83 Induces Graft Tolerance In High-risk Corneal Transplantation.

Felix Bock¹, A. Steinkasserer¹, C. Cursiefen², E. Zinser¹. ¹Department of Ophthalmology, University of Cologne, Cologne, Germany; ²Department of Dermatology, University of Erlangen, Erlangen, Germany.

**6178 — D1038**

Effect Of Rapamycin And IL-2 On Regulatory CD4⁺CD25⁺Foxp₃⁺ Cells In Mice After Allogenic Penetrating Keratoplasty.

Qihua Le¹, X. Wang¹, W. Wang¹, J. Xu¹. Ophthalmology, Eye & ENT Hospital of Fudan University, Shanghai, China; ²Ophthalmology, Eye & ENT Hospital of Fudan University, Shanghai, China.

**6179 — D1039**

Clinical Similarities among Meibomitis-Related Keratoconjunctivitis, Phlyctenular Keratitis and Ocular Rosacea in Childhood.

Tomo Suzuki¹², Y. Sano¹, N. Yokoi¹, S. Kinoshita¹. ¹Department of Ophthalmology, Kyoto Prefectural University of Medicine, Kyoto, Japan; ²Kyoto City Hospital, Kyoto, Japan.

**6180 — D1040**

ICAM-1 is Necessary for Efficient Accumulation of CD11c⁺ Cells in Healing Corneal Epithelium.

Yuan Gao¹², Z. Li³, C.W. Smith³, A. Lueckyte Biology, ²Ped-Children’s Nutrition Rsrch Ctr, ³Baylor College of Medicine, Houston, TX.

**6181 — D1041**

Expression Of Adhesion Molecules During Development Of Conjunctiva-Associated Lymphoid Tissue.

Uta Gehlsen¹, S. Siebelmann¹, M.E. Stern¹, J.Y. Niederkorn¹, P. Steiner¹. ¹Ophthalmology, University Hospital of Cologne, Cologne, Germany; ²Biological Sciences, Allergan, Inc, Irvine, CA; ³Department of Ophthalmology, UT Southwestern Medical Center, Dallas, TX.

**6182 — D1042**

Estrogen And Lipoxin A4 Have Opposing Bioactions In Driving Macrophage Polarization And Function.


**6183 — D1043**

Peripheral Antigen Presenting Cells Are Differentially Distributed in Normal and Inflamed Murine Corneas.

Albert H. Alhatem¹, U.H. van Andrian¹, P. Hamrakh¹. ¹Cornea Service and Department of Ophthalmology, Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston, MA; ²Immune Disease Institute, Program in Cellular and Molecular Medicine at Children’s Hospital Boston, Harvard Medical School, Boston, MA.

**6184 — D1044**

IL-17 Deletion Accelerates Onset and Severity of Dacryoadenitis in CD25KO mice.

6185 — D1045 In Vivo Confocal Microscopy Of Corneal Langerhans Cells In Systemic Lypus Erythematosus (SLE) Without Ocular Surface Manifestation. Miklos D. Resch1, L. Marosovsky2, E. Medgyessyi3, A. Balog1, L. Kovacs1, J. Nemeth1. 1Dept Ophthalmology, Semmelweis University, Budapest, Hungary; 2Rheumatology Department, University of Szeged, Albert Szent-Györgyi Clinical Center, Faculty of Medicine, Szeged, Szeged, Hungary.

6186 — D1046 Microarray Based Ige Detection In Tears Of Vernal Keratoconjunctivitis Patients. Andrea Leonardi1A, D. Faggian1B, A. La Gloria1C. 1Department of Biology, Retinal Cell Biology / Biochemistry & Molecular Immunology & Microbiology / Cornea / Retina / Pathology, 1University of Padova, Padova, Italy.

6187 — D1047 Inhibitory Role of ICOS in Antigen-specific T cell-mediated Ocular Tissue Damage. Misao Terada1A, H. Taniguchi1B, R. Abe1, J. Hori1A. 1Division of Lab Animal Science, 2Ophthalmology, Nippon Medical School, Bunkyo-ku, Japan; 3Research Institute for Biological Science, Tokyo University of Science, Noda, Japan.

6188 — D1048 Bone Marrow Derived Dendritic Cells Prevent Corneal Allograft Rejection In The Rat. Thomas Ritter1, M. Nosov1, A. Ryan1, O. Treacy1. 1Ophthalmology, Hopital la Pitié Salpêtrière, Paris, France; 2Microbiology laboratory, Miami, FL; 3Universidade Federal de São Paulo, São Paulo, Brazil.


6190 — D1050 Etiology Diversity Of Atypical And Severe Anterior Uveitis. Audrey Fel1, M. Bojanova1, V. Touitou1, P. Le Hoang1, F. Rozenberg3, B. Bodaghi2. 1Ophthalmology, Hospital la Pitié Salpêtrière, Paris, France; 2Virology, Hospital Cochin, Paris, France.

6191 — D1051 The Role of Toll-like Receptors in Corneal Angiogenesis. Lei Liu1, J. Liu2, A. Dick3. Dept of Ophthalmology, School of Clinical Sciences, University of Bristol, Bristol, United Kingdom.

Hall B/C D1052-D1077

Thursday, May 10, 2012, 8:30 AM-10:15 AM

Immunology & Microbiology / Cornea / Retina / Retinal Cell Biology / Biochemistry & Molecular Biology 528 Anti-Infectives and Ocular Disease

Moderator: Ellen J Lee

6192 — D1052 In Vivo Antiviral Activity Of A Novel Peptide Inhibitor Of Herpes Simplex Virus (TAT-Cd4) And The Effect Of Formulation On Efficacy. Curtis R. Brandt1, G. G. Jose1, J. V. Larson1, J. Gausa1, E. Carballo1, R. Stern1, R. Brunnel1. Ophthalm & Visual Sci, Univ of Wisconsin-Madison, Madison, WI.


6194 — D1054 Emergence Of Pan-drug Resistant Pseudomonas Aeruginosa As A Cause Of Microbial Keratitis. Merle Fernandez1A, A. Pathengay2, N. Kumar1A, 1CoRea and Anterior Segment, 2Ocular Microbiology Service, ‘L V Prasad Eye Institute, Visakhapatnam, India; ‘Retina, Bascom Palmer Eye Institute, Miami, FL.


6198 — D1058 Microbiological Eradication Rates with BID or TID Dosing of Besifloxacin Ophthalmic Suspension, 0.6% in Bacterial Conjunctivitis Clinical Trials from 2004 - 2010. Kirk Bateman1, T.L. Comstock1, L.S. Gearinger1, J. Hesje2, C.M. Sanfilippo1, T.W. Morris1. 1Ophthalmology, Schlossman Syndrome.

6199 — D1059 Moxifloxacin Superior To Ceftoxime In Reducing Early-phase Adherence Of Staphylococcus Epidermidis To Hydrophobic Intracorneal Lenses. Fathulah Benbouzid, S.A. Bailiff1, F. Renaud2A, D. Hartmann1A, P. Denis1A. 1Ophthalmology, Lyon Croix-Rousse Hospital, Lyon, France; ‘Ophthalmology, Saint Roch Hospital, Nice, France; ‘Microbiology laboratory, ‘Department of biomatiers and biological interactions, ‘Claude Bernard University, Lyon I, Lyon, France.


6205 — D1065 Treatment of Numular Keratitis with Intracorneal Ganciclovir. Eduardo Arenas1, A. Mielhi. 1ophthalmology, Santa Fe Foundation, BOGOTA, Colombia; ‘Asocornea, Bogota, Colombia.

6206 — D1066 In Vitro Effectiveness Of Photodynamic Therapy Against Multi-resistant Pathogens. Katrin Winkler1, M. Finke1. 1W. Wang1A, N. Szentmáry1B, T. Eppig1C, H-J. Foth1B, D. Hüttenberger3, A. Langenbucher4. 1Experimental Ophthalmology, 3Saarland University, Homburg/Saar, Germany; ‘Physics Department, University of Kaiserslautern, Kaiserslautern, Germany; ‘Apocrine Pharma GmbH, Bielefeld, Germany.


6210 — D1070 In Vitro Investigation of Riboflavin/UVA-mediated Elimination of Acanthamoeba Castellanii. Karim Mokdoui1-3, A. Backman1-2, J. Mortensen1A, S. Crafoord1A, R. Hanes1, C. Jarvis1A, H. Hanevold1A, L. Dominguez1A, T. Bourcier1, S. Yeh2, J. Tu3, R. Nieves1. Ophthalmology, 1Emory Eye Center, Atlanta, GA; 2Ophthalmology, Emory University School of Medicine, Atlanta, GA; 3Laboratoire de Parasitologie et de Mycologie Medicale, Hopitaux Universitaires de Strasbourg, Strasbourg, France.


6214 — D1074 The Effect of Low Concentrations of Benzalkonium Chloride on Acanthamoeba survival. Elmer Y. Tu1, M.E. Shoff2, C.E. Joslin1. 1Ophthalmology, University of Illinois at Chicago, Glenview, IL; 2CDRH/OSEL/DB, FDA, Silver Spring, MD. *Ophthalmology/Vision Sciences, University Illinois at Chicago, Chicago, IL.


6216 — D1076 Systemic vs. Combination Antiviral Therapy and Retinal Outcomes in Acute Retinal Necrosis. Stephanie K. crane1, C. Flaxel1, S. Yeh2. 1Ophthalmology, Casey Eye Institute, Portland, OR; 2Ophthalmology, Emory Eye Center, Decatur, GA.

6217 — D1077 Organo-selenium Coatings Inhibit Multiple Species Of Biofilm Formation On Different Types Of Ophthalmic Device Material. Kelly T. Mitchell1, P. Tran1, A. Arnett1, T. Mosley2, R. Hanes1, C. Jarvis1A, H. Hanevold1A, L. Dominguez1A, T. Reid1A. 1Ophthalmology, 2Microbiology and Immunology, Texas Tech University HSC, Lubbock, TX; 3Selenium Ltd., Austin, TX.

Hall B/C D1078-D1087 Tuesday, May 10, 2012, 8:30 AM-10:15 AM Immunology & Microbiology / Retina / Retinal Cell Biology

529 AIDS-Related Ocular Disease

Moderator: Gary N Holland

6218 — D1078 Risk Of Cataract In Persons With Acquired Immune Deficiency Syndrome And Cytomegalovirus Retinitis. Elizabeth A. Sugar1-3, A.T. Lyon1, R.A. Lewis1, D.A. Jabs2, M-H. Heinemann1, J.P. Dunn3, J.H. Kemper1. Studies of Ocular Complications of AIDS Research Group. *Biostatistics, Epidemiology, Bloomberg School of Public Health, The Johns Hopkins University, Baltimore, MD; 2The Sidney Kimmel Comprehensive Cancer Center, 3Ophthalmology, The Johns Hopkins University School of Medicine, Baltimore, MD; 4Ophthalmology, Northwestern University, Chicago, IL; 5Ophthalmology, Medicine, Pediatrics, Molecular and Human Genetics, Baylor College of Medicine, Houston, TX; 6Ophthalmology, Internal Medicine, Mount Sinai School of Medicine, New York, NY; 7Ophthalmology, Weill Cornell Medical College, New York, NY; 8Ophthalmic Oncology Service, Department of Surgery, Memorial Sloan Kettering Cancer Center, New York, NY; 9Ophthalmology, Epidemiology, Biostatistics, The University of Pennsylvania School of Medicine, Philadelphia, PA. *CR

6219 — D1079 The Best Functional Predictor of HIV Status in Relation to the Retinal Damage. Afsana Karim1, I. Kozak2, D-U.G. Bartschi; H. Lemus1, L. Dusnt1, J. Chhablani2, G. Barteselli2, H. Wang6, S.P. Azell6, W.R. Freeman6. 1UCSD Jacobs Retina Center, 2Ophthalmology, University of California San Diego, La Jolla, CA; 3OPHTALMOLOGY-Shiley Eye Ctr, Univ of California-San Diego, La Jolla, CA; 4Graduate School of Public Health, San Diego State University, san diego, CA; 5Biosstatistic, University of Southern California, Los Angeles, CA; 6Viterco-Retina, Shiley Eye Center, UCSD, La Jolla, CA; 7Preventive Medicine, USC Keck School of Medicine, Los Angeles, CA; 8Ophthalmology, UCSD Jacobs Retina Center, La Jolla, CA.

6220 — D1080 Non-Cytomegalovirus Related Ocular Opportunistic Infections in Patients With AIDS. Alice T. Lyon1, S. Gangaputra1, J.E. Thorne1, V. Vaidya1, L.T. Drye1. Longitudinal Study of Ocular Complications of AIDS(LSOCA) Research Group. 1Ophthalmology, Northwestern University, Chicago, IL; 2Ophthalmal & Visual Sciences, Fundus Photograph Reading Ctr; Madison, WI; 3Ophthalmology, Johns Hopkins Wilmer Eye Inst, Baltimore, MD; 4Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD.

6221 — D1081 Association between HIV Microangiopathy and Systemic Complications in Patients with AIDS. Yoko Iwasaki1, N. Yamamoto1, T. Kagawuchi1, N. Ozaki1, M. Mochizuki1, K. Murakami1. Ophthalmology, Tokyo Metropolitan Cancer and Infectious diseases Center Komagome Hospital, Tokyo, Japan; 2Ophthalmology & Visual Science, Tokyo Medical and Dental University, Tokyo, Japan.


6223 — D1083 Ocular Manifestations in HIV/AIDS Patients with Concurrent Cryptococcal Meningitis, Ninani E. Coyne Kombo1, O. NKomazana1, S.H. Forster1, R.A. Adelman1. 1Ophthalmology and Visual Science, Yale University School of Medicine, New Haven, CT; 2University of Botswana School of Medicine, Gaborone, Botswana.


6225 — D1085 The Caspase-1-induced Pyroptotic Cell Death Pathway (Pyroptosis) Is Upregulated During Progression Of Experimental Murine Cytomegalovirus (MCMV) Retinitis in Mice With Retrovirus-induced Immunosuppression (MAIDS). Hsin Chien1, E.L. Blalock1, L.R. Bush1, C.I. Alston1, R.D. Dix2. 1Department of Biology, Viral Immunology Center, Georgia State University, Atlanta, GA; 2Department of Ophthalmology, Emory University School of Medicine, Atlanta, GA.

6226 — D1086 Murine Cytomegalovirus (MCMV) Downregulates interleukin-17 via Increased interleukin-10 Expression in Mice with Retrovirus-induced Immunosuppression (MAIDS) that are Susceptible to Experimental Cytomegalovirus Retinitis. Emily L. Blalock1, H. Chien1, R.D. Dix2. 1Department of Biology, Viral Immunology Center, Georgia State University, Atlanta, GA; 2Department of Ophthalmology, Emory University School of Medicine, Atlanta, GA.

*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures – ¤ Refer to Program Number in the Clinical Trial (CT) Registration Index – @ Travel Grant Awardee

Thursday – Posters – 6209 – 6226

Thursday Posters 8:30 am – 10:15 am
Thursday Posters
8:30 am – 10:15 am

Hall B/C  D1088-D1116
Thursday, May 10, 2012, 8:30 AM-10:15 AM
Immunology & Microbiology / Cornea / Retina / Retinal Cell Biology

530 Autoimmune Ocular Disease

Moderator: Dale Gregerson


6229 — D1089  Cd4+ Foxp3+ Cd25Bright T Regulatory Cells Population In Ocular Sarcoidosis. Alexis Pinel1, A. Mathian2.1,2. Miyara3, C. Chapelon-Abric4, C. Parizot5, D. Boatin6, Z. Amoura7,8, G. Gorochov9, P. Lehoang2. Ophthalmology, University of Aberdeen, Aberdeen, United Kingdom; 1Department for Ophthalmology, University of Western Australia, Nedlands, Western Australia, Australia; 2Rockefeller University, New York, NY.


6232 — D1092  Clinical Course of Patients with Behcet’s Uveoretinitis that Discontinued Infliximab Therapy. Tatsushi Kiwaguchi1, Y. Iwasaki2, S. Kanda2, S. Sagitai2, M. Mochizuki2. 1Ophthalmology, Tokyo Metropolitan Komagome Hospital, Tokyo, Japan; 2Ophthalmology & Visual Science, Tokyo Medical and Dental University, Tokyo, Japan.

6233 — D1093  Anti-DEC205 Mediated Delivery of Self-Antigen to Dendritic Cell Restores Tolerance in Spontaneous EAU. Koju Kano1, C. Martin-Granados2, C. Bobul1, M.E. Wikstrom3, M.A. Degli-Esposti4, R.M. Steinman5, J.V. Forrest5. 1Ophthalmology, University of Aberdeen, Aberdeen, United Kingdom; 2Lion Eye Institute, University of Western Australia, Nedlands, Western Australia, Australia; 3Rockefeller University, New York, NY.

6234 — D1094  Monocyte-derived Macrophages in EAU Resolution. Inbal Benhar1, A. London1, R.R. Caspi3, M. Schwartz3. 1Neurology, Weizmann Institute of Science, Rehovot, Israel; 2Laboratory of Immunology, National Eye Inst/NIH, Bethesda, MD.

6235 — D1095  Alpha-1 Adrenergic Stimulation Exacerbates Acute Ocular Inflammation Through A Mechanism Mediated By Transforming Growth Factor Beta (TGFβ). Paola A. Durand1, Y. Tani2, D. Fatm1, X. Xia1, E. Suarez1, V.L. Perez3, J.L. Vega1. 1Neurology, Herbert Wertheim College of Medicine-Florida International University, Miami, FL; 2Ophthalmology, Bascom Palmer Eye Institute, Miller School of Medicine, Miami, FL.


6238 — D1098  Temporal Expression of mir-155 correlates with the initiation and Development of Experimental Autoimmune Uveitis (EAU). Bernadette Marrero, Y. Chen-Rong, C. Nagineeni, C. Egwaugwu. Immunology, NEI, Bethesda, MD.

6239 — D1099  DAP-12, a Major Immunomodulator, Either Promotes or Suppresses EAU Development. Barbara P. Vistica1, V. Montalvo-Reddin1, G. Shi1, L. Nugent1, L. Quigley2. 1Lab of Immunology, Ocular Immunology, NEI, Bethesda, MD; 2Ophthalmology, Doheny Eye Institute, Los Angeles, CA.

6240 — D1100  Inhibition of CdK5 Attenuates Experimental Autoimmune Uveitis. Zili Zhang1, W. Wu1, J. Duan1, J.T. Rosenbaum2. 1Pediatrics, Oregon City, OR; 2Ophthalmology, Casey Eye Institute-OHSU, Portland, OR.

6241 — D1101  Immunological Inhibition of Pigment Epithelium-Derived Factor (PEDF)? Charles E. Thirkill. Ocular Immunology Research Lab 1220 Surge III, UC Davis, Davis 95616, CA.
6250 — D1110 Posterior Scleritis and Orbital Mass Associated to Positive Antineutrophil Cytoplasmic Autoantibodies Without Systemic Involvement. Marína de los Angeles Ramos Cadena1, G. Aguilar Montes2, M. Ruiz Cruz2. *Ophthalmology, Hospital General Dr. Manuel Gea Gonzalez, Mexico City, Mexico; *Ophthalmology, Centro de Investigación de Enfermedades Infecciosas del Instituto Nacional de Enfermedades Respiratorias, Mexico City, Mexico.

6251 — D1111 Uveitis In Patients With Diabetes Mellitus. Martha C. Fuentes, C.G. Sánchez-Balleza, M. Pedroza-Seres. Ocular Inflammation and Immunology, Conval, Mexico, Mexico.

6252 — D1112 Risk Factors Associated with the Relapse of Uveitis in Patients with Juvenile Idiopathic Arthritis. Ujwala H. Baheti1, A. Radwan2, C. Arcinue1, R. Parikh1, A. Mohamed1; C. Foster1. *Ophthalmology, Massachusetts Eye Research and Surgery Institute, Cambridge, MA; *Hyderabad Eye Research Foundation, L V Prasad Eye Institute, Hyderabad, India.


6254 — D1114 In Search Of Intracellular Biomarkers In Uveitis Associated With Juvenile Idiopathic Arthritis (jia). Viera Kalinina Ayuso1A, Viera Viera Kalinina Ayuso1B, A. Kowalski1, E. Regis2, A. Kroczek2; J. Dekkers1; L. de Visser1B; J. Dekkers1B, L. de Visser1A; 1Ophthalmology, CHU Bordeaux, Bordeaux, France; 2Ophthalmology, CHU Strasbourg, Strasbourg, France; 4Ophthalmology, CHU Strasbourg, Strasbourg, France; 5Ophthalmology/Saint Victor Center, CHU Amiens, Picardie University, Clermont Ferrand, Clermont Ferrand, France; 6Ophthalmology, The Research and Surgery Institution, Cambridge, MA; 7Research Unit / Microbiology and Proteomics, 7BComerica service, 7BInstitute of Ophthalmology, Mexico, D.F., Mexico; *Laboratory of Medical Mycology, Department of Microbiology, National School of Biological Sciences (IPN), Mexico, D.F., Mexico.


6256 — D1116 Inhibition Of The Acid Sphingomyelinase/ceramide System Prevents Hallmarks Of Graves Ophthalmopathy. Melissa Meyer zu Hyste1, E. Streicher2, Y. Zhang3, K. Roec3, J. Fischer4, U. Bercher-Pfannschmidt4, A.K. Eckstein1, E. Gulbins5. *Department of Ophthalmology, University Hospital Duisburg-Essen, Essen, Germany; *Department of Molecular Biology, University of Duisburg-Essen, Essen, Germany; *Institute of Pharmacology and Clinical Pharmacology, University of Dueseldorf, Dueseldorf, Germany.

**Hall B/C D1117-D1152**

Thursday, May 10, 2012, 8:30 AM-10:15 AM

**Physiology & Pharmacology**

**531 Inflammation and Infection**

**Moderators:** Regis P Kowalski and Franz H Grus


6260 — D1120 A Novel Antiviral Protein RC28. Naibong Yan1, F. Piraino2, X. Liu1. *Ophthalmic Laboratories, Chengdu, China; *Department of Ophthalmology and Visual Sciences, University of Wisconsin Medical School, WI.

6261 — D1121 Clinical utility of Ophthalmic Antimicrobial Susceptibility Measurement Plate. Norihiko Tou1, R. Nejima1, Y. Ibeda1, Y. Horii1, K. Sasako1, M. Sakamoto1, K. Miyata1, Y. Inoue1, A. Tawara1, H. Fujivara1. *Ophthalmology, Univ of Occip & Environ Health, Kitakyushu, Japan; *Miyata Eye Hospital, Miyazaki, Japan; 2Miyata Eye Hospital, Miyazaki, Japan; *Department of Ophthalmology, Tottori Univ Faculty of Medicine, Yonago, Japan; 3Ophthalmology, Toho University Sakura Medical Center, Sakura, Japan; 4Ideta Eye Hospital, Kumanoto, Japan; 5Ophthalmology, The Research Foundation for Microbial Diseases of Osaka University, Osaka, Japan; *Department of Clinical Laboratory, Tottori University Hospital, Yonago, Japan.


6263 — D1123 A Comparative Study in the Clinical and Microbial Efficacy of Topical Bexiloxacin Ophthalmic Suspension 0.6% with Erythromycin Ophthalmic Ointment 0.5% for Management of Acute Blepharitis. George John. VA Medical Center, Louisville, KY. *CR


6265 — D1125 Effect of Simultaneous Treatment of Quinolones and Antifungal Drugs on Fungal-Bacterial Cocculture. Diana Gabriela Ponce-Angulo, Jr1, M. Martinez-Rivera, Sr2; V. Bautista-de Lucio, Sr3, A. Rodriguez-Tovar, Sr3; C. Santacruz-Valdez, Sr4, A. Climent-Flores, Sr5, A. Robles-Contreras, Jr2, C. Diaz-Godinez, Jr2, E. Felix Diaz-Parga, Jr5, H. Mejia-Lopez, Sr6. *Research Unit / Microbiology and Proteomics, *Comerica service, 1Institute of Ophthalmology, Mexico, D.F., Mexico; *Laboratory of Medical Mycology, Department of Microbiology, National School of Biological Sciences (IPN), Mexico, D.F., Mexico.

6266 — D1126 Lacritin, a Novel Tear Glycoprotein, is an Effective Topical Antimicrobial Agent in an Animal Model. Alireza Hosseini1, F.A. Lattanzio, Jr1, S.S. Samudre1, J.D. Sheppard, Jr2, G.W. Laurie3, R.L. McKown4, P.B. Williams1. *Physiological Sciences, Eastern Virginia Medical School, Norfolk, VA; *Virginia Eye Consultants, Norfolk, VA; *Cell Biology, University of Virginia, Charlottesville, VA; *Integrated Science & Technology, James Madison University, Harrisonburg, VA.


6268 — D1128 Clinical Efficacy and Safety of Azithromycin 1.5% versus Tobramycin 0.3% Eye Drops in the Treatment of Children Bacterial Conjunctivitis. Dominique Bremond-Gignac1, F. Chiambaretta2, H. Nezzar2, B. Mortemousse3, C. Speeg-Schatz4, S. Milazzo5. *Ophthalmomy Study Group, *Ophthalmology, St Victor Center, CHU Amiens, Picardie University, Amiens, France; *Ophthalmology, CHU Clermont Ferrand, Clermont Ferrand, France; *Ophthalmology, CHU Bordeaux, Bordeaux, France; *Ophthalmology, CHU Strasbourg, Strasbourg, France; *Ophthalmology/Saint Victor Center, CHU Amiens, University Jules Verne, Amiens, France. *CR
6269 — DI129  Increased Antibiotic Resistance Of Ocular Surface Flora After Repeated Use Of Prophylactic Topical Fluoroquinolone Post-intravitreal Injection For Neovascular Age-related Macular Degeneration (amd). (amd). Vivian T. Yiu*, D. Weisbord1, E. Mandelcorn1, C. Schwartz2, R. Kohly1, K. Eng1, W-C. Lam1, F. P. Kertes1. 1Department of Ophthalmology, University of Toronto, Toronto, ON, Canada; 2Sunnybrook Health Sciences Center, Toronto, ON, Canada. *CR, P

6270 — DI130  Multicenter Comparison Of Loteprednol 0.5% vs Prednisolone Acetate 1% in Patients Post-Phacoemulsification With IOL implants. Carlos Buznego1, G. Perez2, W. Trattler2, J.A. Khell1, B. Henderson1. 1General & Surgical Ophthal, Center for Excellence in EyeCare, Miami, FL; 2Ctr for Excellence in Eye Care, Miami, FL; 3Cornea, Center For Excellence in Eye Care, Miami, FL; 4Ophthalmology/Cornea, Center for Excellence in Eyecare, Miami, FL; 5Boston Eye Surgery and Laser Center, Boston, MA. *CR, P


6272 — DI132  Retinal Damage in Severe Chemical Burn and the Use of Influnxim Therapy. Fabiano Cad1, E. Paschalí1, C.V. Regattieri1, R. Dana2, C.H. Dohlmann1. 1Cornea and Refractive Surgery, Massachusetts Eye & Ear Infirmary, Harvard Medical School, Boston, MA; 2Research Services, Federal Sao Paulo University, Sao Paulo, Brazil; 3Scheepens Eye Research Institute, Harvard Medical School, Boston, MA.

6273 — DI133  Topical Treatment With A Selective COX-2 Inhibitor Promotes Retinal Ganglion Cell Survival After Optic Nerve Crush. Oliver W. Gramlich4, H.D. von Pein5, A. Ziegler6, K. Bätz6, N. Pfeiffer4, H.F. Grut1. 1Experimental Ophthalmology, 2Department of Neuropathology, 3University Medical Center, Mainz, Mainz, Germany.

6274 — DI134  Twenty-Eight Day Microbial Preservative Efficacy of Loteprednol Etabonate Ophthalmic Ointment, 0.5%; an Unpreserved Ointment with Low Water Activity. Brian C. David, L.S. Gearinger, J. Klingensmith, II. Decory. R&D Microbiology, Bausch & Lomb, Rochester, NY. *CR

6275 — DI135  A Novel Peptide from Adiponectin Suppresses LPS-induced Pro-inflammatory Signaling in Macrophages by Inducing Interleukin-10 Expression. Huiyu Jin, X. Yang, X. Xu, K. Liu. Shanghai First People’s Hospital, Shanghai, China.

6276 — DI136  Amelioration of Endotoxin-induced Uveitis Treated With An Ikb Kinase Inhibitor, Imd-0354 In Rats. Anton Lennikov4, N. kitaichi1, K. Noda1, R. Ando1, Z. Dong4, K. Namba1, K. Namba1, S. Ohno1, S. Ishida1. 1Laboratory of Ocular Cell Biology and Visual Science, Department of Ophthalmology, 2Department of Ocular Inflammation and Immunology, 3Hokkaido University, Sapporo, Japan; 4Department of Ophthalmology, Shanghai First People’s Hospital, Shanghai, China.

6277 — DI137  Lutein-rich Marigold Extract Induces Gene Expression Of Phase II Antioxidants In The Pc12D Neuronal Cells. Seiji Miyake1, N. Takahashi1, M. Sasaki1, S. Kobayashi1, K. Tsutoba1, Y. Otsawa1. 1Laboratory of Retinal Cell Biology, 2Department of Ophthalmology, Keio University School of Medicine, Tokyo, Japan; 3Wakasa Seikatsu Co., Ltd., Kyoto, Japan. *CR

6278 — DI138  Ocular and Systemic Pharmacokinetics of Loteprednol Etabonate Gel (0.5%) following Topical Ocular Administration to Rabbits. Shellise Glogowski, J.W. Proksch. Drug Metabolism & Pharmacokinetics, Global R&D Microbiology, Bausch & Lomb, Rochester, NY. *CR

6279 — DI139  Topical Application Of Inflimix (Remicade®) In The Treatment Of Corneal Caustication. Fabio Bignami1, G. Ferrari1, C. Giacomini1, S. Franchini1, P. Rama1. 1Cornea and Ocular Surface Unit, 2San Raffaele Scientific Institute, Milan, Italy; 3Bietti Eye Foundation, Rome, Italy.

6280 — DI140  Identification of The Anti-Inflammatory Annexin-A1 Protein in Tears of Normal Subjects and Association of its Cleaved-Inactive Form with Active Vernal Keratoconjunctivitis Patients. Samia Yazid1, A. Leonard1, V. Calder1, R. Flower1. 1Molecular Therapy, UCL, Institute of Ophthalmology, London, United Kingdom; 2Medical School, University of Padua, Padua, Italy; 3Biochemical Pharmacology, QMUL, William Harvey Research Institute, London, United Kingdom.

6281 — DI141  HC-BA but not High Molecular Weight HA Polarizes LPS-Activated Macrophages toward M2 Phenotype via CD44-Mediated Suppression of TLR4 Signaling. Hua He1, S.C. Tseng2. 1TissueTech and Ocular Surface Center, Miami, FL; 2Ocular Surface Center, Ocular Surface Res & Edu Fdn, Miami, FL. *CR

6282 — DI142  Genetically Engineered IL-30 (IL27p28) Suppresses Experimental Autoimmune Uveitis. Ren-Xi Wang, C-Y. Yu, R. Mahdi, C. Ewguagu. Laboratory of Immunology, NEI, Bethesda, MD.

6283 — DI143  Viscoelastic And Sedimentation Characterization Of Loteprednol Etabonate Ophthalmic Gel, 0.5%. Martin J. Coffey, S.R. Davio. Pharmaceutical Product Development, Bausch and Lomb, Rochester, NY. *CR

6284 — DI144  A Novel Peptide Inhibits Inflammation in Endotoxin-induced Uveitis by Suppressing NF-kappaB and MAPK Signaling Pathway. Xiao liu Yang, H. Jin. X. Xu. Ophthalmology, Shanghai First People’s Hospital, Shanghai, China.


6286 — DI146  Clinical Experience With Sustained-Release Intravitreal Corticosteroid Implants: A Comparison Between The Fluocinolone Acetone (Retisert) And Dexamethasone (Ozurdex) Implants In Uveitis. A. Arcinue1, C. Foster1, O. Ceroni1, L. Almulki1. 1Uveitis and Ocular Immunology, Massachusetts Eye Research & Surgery Institution, Cambridge, MA; 2Ophthalmology, Massachusetts Eye and Ear, Inst Cambridge, MA.

6287 — DI147  Cytokine Levels In The Vitreous Fluid Of Patients With Ocular Sarcoidosis And Patients With Diabetic Retinopathy. Kenji Nagata1, K. Maruyama1, K. Nodeda, T. Yoshimura1, K-H. Sonoda1, S. Kinoshita1. Ophthalmology, Kyoto Prefectural Univ of Med, Kyoto, Japan; 2Ophthalmology, Kyoto University, Fukuoka, Japan; 3Ophthalmology, Yamaguchi University, Ube, Japan; 4Ophthalmology, Kyoto Prefectural Univ of Med, Kamigyo-Ku, Japan.

6288 — DI148  Human Tears Reveal Insights Into Corneal Neovascularization. Nadia Zakaria1, S. Van Grassoord1, J. Wouters1, J. Rozema1, N. Cools1, V. Van Tendeloo1, Z. Berneman1, M-J. Tassignon1. 1Uveitis and Ocular Immunology, 2Center for Cell Therapy and Regenerative Medicine, 3University Hospital Antwerp, Antwerp, Belgium; 4Center for Cell Therapy and Regenerative Medicine, Antwerp University Hospital, Antwerp, Belgium.

6289 — DI149  Errors In Measuring VEGF Concentrations In The Presence Of Anti-VEGF Antibodies By Using ELISA. Hidenori Takahashi1, Y. Fuyino1, Y. Yang1. Ophthalmology, Tokyo KoseiNenkin Hospital, Tokyo, Japan; 2Ophthalmology, University of Tokyo, Tokyo, Japan.


Cytokine Profile In Active Ocular Toxoplasmosis. Amanda Rey Torrente, B. Molins, V. Llorens, L. Pelegrín, M. Mesquida, M. Figueras, A. Adán Civera. Ophthalmology, Hospital Clinic Barcelona, Barcelona, Spain.

6294 — 11:30 Tyrosinase Function Determines Bone Marrow and Blood Endothelial Progenitor Cell Numbers in Infant Mice in Normal Conditions and After Exposure to the Oxygen Induced Retinopathy Model. Bliss H. O’Bryhim1, R. White1, A. Symons2. 1Molecular & Integrative Physiology, Univ of Kansas Medical Center, Kansas City, KS; 2Ophthalmology, Univ of Kansas Medical Center, Kansas City, KS.


6296 — 12:00Activation of the Endothelin System in Models of Ischemic Retinopathy. Chintan Patel1, W. Zhang2, Z. Xu2, S.P. Narayanan3, N-T. Tsai4, W. Caldwell4, R.B. Caldwell5. 1Vascular Biology Center, 2Pharmacology & Toxicology, Georgia Health Sciences University, Augusta, GA; 3Ophthalmology, The University of Texas Medical Branch, Galveston, TX.

6297 — 12:15Progressive Central Photoreceptor Damages and Retinal Pigment Epithelium Abnormalities in Oxygen Induced Retinopathy. Zhou Shao1, J. Rivera2, T.E. Zhou2, P. Sapieha1, P. Lachapelle1, S. Chentob1. 1Pharmacology and Therapeutics, McGill University, Montreal, QC, Canada; 2Departments of Pediatrics and Pharmacology, Hôpital Ste Justine, Research Center, Montreal, QC, Canada; 3Ophthalmology, University of Montreal, Montreal, QC, Canada; 4Ophthalmology, McGill U-Montreal Childrens Hosp, Montreal, QC, Canada; 5Pediatrics & Pharmacology, Research Ctr/Hosp Ste Justine, Montreal, QC, Canada.

6298 — 12:30 Nectrin-1 Promotes Vascular Regeneration in a Mouse Model of Ischemic Retinopathy. Francois Binet1, G-S. Mawambo-Tagne2, S. Favret2, N. Sitara2, N. Téréault2, A. Cerani1, E. Lapalme1, F. Rezende1, T. Kennedy2, P. Sapieha1. 1Research Center, Maisonneuve Rosemont Hospital, Montreal, QC, Canada; 2Montreal Neurological Institute, McGill University Montreal, QC, Canada.

6300 — 11:15 Decreasing Peripheral Hypoexia With Distance-centre Relatively-plus Powered Periphery Contact Lenses Reduced The Rate Of Progression Of Myopia: A 5 Year Vision Crc Study. Brien A. Holden1,2,3, P.R. Sankaridurg1,3. 1Pediatrics & Ophthalmology, 3College of Optometry, University of California, Irvine, Irvine, CA; 2National Eye Institute - NIH, Bethesda, MD. *CR

6301 — 11:30 Impact of a Novel Silicone Hydrogel Material on Meibomian Gland Structure. Jason J. Nichols1, K.E. Osborn1, T. Henderson2. 1College of Optometry, University of Houston, Houston, TX; 2Vistakon, Columbus, OH, *CR.

6302 — 11:45 A Novel Method Of Measuring Tear Evaporation Rates Using Infrared Thermography. Andrea Petznick1, S. Lee1, J. Tan2, U. Acharya2,3, E. Ng4, L. Tong5,1. 1Ocular Surface Research Group, Singapore Eye Research Institute, Singapore; 2Singapore Eye Research Institute, Singapore; 3University of Science and Technology of Malaysia, Genting Highlands; 4Vistakon, Columbus, OH; 5Vistakon, Jacksonville, FL, *CR.

6303 — 11:30 Effect of an Anti-inflammatory Drug on the Development of Vascular Anomalies in Corneas In Vitro. Francisco Porada1,2, J. Di Renzo1, B. Lisch2, J. Yocum2, J. Kirsch2, N. Sitaras2,1. 1Gordon & Weiss Eye Institute at Johns Hopkins, Baltimore, MD; 2Montreal/St. Joseph’s Health Care, Lethbridge, AB, Canada.

6304 — 12:15 Vitrified Collagen Gels with Optimized Material Properties for Repair of Ocular Injuries. Xiaoming Calderon-Colon1, Z. Xiu1, Q. Guo1, J.E. Tiffany2, J.P. Maranchi2, R.L. McClary1, O. Schein1, J.H. Eliasseff3, M.M. Trexler1. 1Research and Exploratory Development, Johns Hopkins Univ - APL, Laurel, MD; 2Department of Biomedical Engineering, Johns Hopkins University, Baltimore, MD; 3The Wilmer Eye Institute at Johns Hopkins, Baltimore, MD. *CR

6305 — 12:30 Mechanical Corneal Sculpting As New Technique For Refractive Surgery. Wolfgang Herrmann1, S. Gebauer2, A. Danullis2, J. Schroeder2, H. Maas2, H. Helbig2, O. Strauss2. 1Ophthalmology, Pathology, University of Regensburg, Regensburg, Germany; 2Gebauer Medizintechnik GmbH, Neuhauen, Germany. *CR

6306 — 12:45 A Novel Method to Generate Precut Tissue for Descemet Membrane Endothelial Keratoplasty (DMEK). Bjorn O. Bachmann1, U. Schlötzer-Schrehardt2, M. Börgel2, F.E. Kruse1. 1Ophthalmology, University Hospital Erlangen, Erlangen, Germany; 2Deutsche Gesellschaft für Gewebetransplantation (DGFG), Hannover, Germany.

Room 114

Florian BCD

Thursday, May 10, 2012, 11:15 AM-1:00 PM

533 New Technologies in Corneal Disease

Moderator: Thomas J Millar

6307 — 11:15 The Role of Interleukin-17A in a Spontaneous Model of Autoimmune Uveitis Elicited by Retina-specific T Cells. Benjamin C. Chao1,2, R. Horai1,3, J. Chen1,3, C. Zárate-Blades4, R. Villasmil1, C-C. Chan1, R.R. Caspi1. 1Laboratory of Immunology, 2Flow Cytometry Core, 3National Eye Institute - NIH, Bethesda, MD; 4Howard Hughes Medical Institute, Bethesda, MD.

6308 — 11:30 Abundant ii-17 T Cells Induced In Immunized C57b/L6 Mice Are Not Autoreactive. Deming Sun1, D. Liang2, A. Zuo2, H. Shao2, H.J. Kaplan1, H. Nian1. 1DVRC-411, Doheny Eye Institute, Los Angeles, CA; 2Opthal & Visual Sciences, University of Louisville, Louisville, KY; 3Opthal & Vis Science, University of Louisville, Louisville, KY.


Moderators: Holly L Rosenzweig and Paul G McMenamin

6300 — 11:15 The Role of Interleukin-17A in a Spontaneous Model of Autoimmune Uveitis Elicited by Retina-specific T Cells. Benjamin C. Chao1,2, R. Horai1,3, J. Chen1,3, C. Zárate-Blades4, R. Villasmil1, C-C. Chan1, R.R. Caspi1. 1Laboratory of Immunology, 2Flow Cytometry Core, 3National Eye Institute - NIH, Bethesda, MD; 4Howard Hughes Medical Institute, Bethesda, MD.

6308 — 11:30 Abundant ii-17 T Cells Induced In Immunized C57b/L6 Mice Are Not Autoreactive. Deming Sun1, D. Liang2, A. Zuo2, H. Shao2, H.J. Kaplan1, H. Nian1. 1DVRC-411, Doheny Eye Institute, Los Angeles, CA; 2Opthal & Visual Sciences, University of Louisville, Louisville, KY; 3Opthal & Vis Science, University of Louisville, Louisville, KY.


* Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures 
* CR Refer to Program Number in the Clinical Trial (CT) Registration Index 
* Travel Grant Awardee
Thursday – Papers – 6310 – 6331

6310 — 12:00 Thrombospondin Receptor CD47

6311 — 12:15 Aced Tolerogenic APC Induce Two Types Of CD4+ Treg Cells By Two Different Mechanisms. Rose Mathew, J. Stein-Streilein. Immunology, Schepens Eye Research Institute/MEEI, Boston, MA.

6312 — 12:30 In vivo Imaging of Experimental Autoimmune Uveitis disease progression in Cx3cr1-GFP and CD11c-YFP mice. Xiongting Chen1, H.R. Chinnery2, J. Kezic3, M. Sidhu4, C. Bernardi5, J.V. Forrester6, P.G. McMenamin7. A. Anatomy and Developmental Biology, Monash University, Clayton, Australia; B. Anatomy and Developmental Biology, University of Tennessee Health Science Center, Memphis, TN; C. Ophthalmology, University of Hawaii, Honolulu, HI; D. Clinical Biochemistry, University of California, Santa Barbara, CA.

Room 305

Thursday, May 10, 2012, 11:15 AM-1:00 PM

Biochemistry & Molecular Biology

535 Biochemistry and Molecular Biology of Glaucoma

Moderators: Michael A. Walter and Tonio S. Rex


6315 — 11:30 Hmgb-1 Induces Apoptosis In Retinal Ganglion Cells And Intraocular Inflammation By Activation Of Tlr4 And Cytokine Release. Maurice Schallenberg1, H. Melkonyan2, S. Thanos3. A. Department of Ophthalmology, University Hospital Essen, Essen, Germany; B. Institute of Experimental Ophthalmology, University of Muenster, Muenster, Germany.

6316 — 11:45 Lipidomics of glaucomatous optic nerve tissue via MALDI Imaging. Franz H. Gras, N. Boehm, O.W. Gramlich, N. Pfeiffer. Experimental Ophthalmology, University Medical Center, Mainz, Germany.

6317 — 12:00 Amyloid Fibril Formation By The Olfactomedin Domain Of Myocilin. Raquel L. Lieberman1, S.D. Orwig2, C.W. Perry3, L.Y. Kim4, K.C. Turnage5, R. Zhang6, D. Vollrath7, I. Schmidt-Krey8. A. School of Chemistry & Biochemistry, B. School of Biology, Georgia Institute of Technology, Atlanta, GA; C. Department of Genetics, Stanford University School of Medicine, Palo Alto, CA.

6318 — 12:15 Clusterin in Age-Related Ocular Exfoliation Syndrome. Jorge Ghioto1, I. Doudeskii2, M. Cowman3, J. Liebmann4, C. Tello5, R. Ritch6. A. Pathology, New York University School of Medicine, New York, NY; B. Chemical and Biological Sciences, Polytechnic Institute of New York University, New York, NY; C. Einhorn Clinical Research Center, New York Eye and Ear Infirmary, New York, NY.

6319 — 12:30 LOXL-1-Associated Pathomechanisms in Exfoliation Syndrome. Katalin Csiszar1, R. Laczko1, K. Molnarne Szauter1, R. Ritch1. A. John A. Burns School of Medicine, University of Hawaii, Honolulu, HI; B. Einhorn Clinical Research Center, New York Eye and Ear Infirmary, New York, NY.

6320 — 12:45 Analysis Of HSP70B As A Potential Direct Target Gene Of The FOXC1 Transcription Factor. Yoko Ito1, F. Berry1, A. Walter1. A. Medical Genetics, Surgery, Univ of Alberta, Edmonton, AB, Canada.

Room 315

Thursday, May 10, 2012, 11:15 AM-1:00 PM

Visual Neurophysiology

536 Horizontal and Amacrine Cells: Structure and Function

Moderators: Z. Jimmy Zhou and Bryan W. Jones

6321 — 11:15 Retinal Circadian Clock Enhances GABA, Receptor-Mediated Horizontal Cell Feedback to Cones at Night, Compared to the Day. Hee Joo Choi, M. Ishii, Y. Cao, A. Adelaja, C. Ribelayga, S.C. Mangel. A. Neuroscience, Ohio State Univ Coll of Medicine, Columbus, OH.

6322 — 11:30 Optogenetic Detection of the pH Change Underlying Horizontal Cell-Mediated Lateral Inhibition. Tzu-Ming Wang, R.H. Kramer. A. Molecular and Cell Biology, UC Berkeley, Berkeley, CA.


6326 — 12:30 Dopaminergic Amacrine Cells Are Inhibited by Melatonin through Activation of MT1 and MT2 Receptors In The Mammalian Retina. Jie Feng1, C.L. Atkinson2, D-Q. Zhang3. A. Eye Research Institute, Oakland University, Rochester, MI; B. Department of Physiology and Pathophysicsiology, Xi’an Jiaotong University School of Medicine, Xi’an, China.

6327 — 12:45 Genetic Modulation of the Ratio of Cholinergic Amacrine Cells in the GCL and INL of the Mouse Retina. Irene E. Whitney1, B. Wagner2, M. R. Rea1, B.E. Reese3,4, A. Molecular, Cellular, and Developmental Biology, Neuroscience Research Institute, P. Psychological and Brain Sciences, Univ of California, Santa Barbara, CA.

Palm A

Thursday, May 10, 2012, 11:15 AM-1:00 PM

Visual Psychophysics & Psychological Optics

537 New Directions for Bipolicality, Multifocality and Restoration of Accommodation

Moderators: Jim Schwiegerling and Sanjeev Kashuthirangan


6329 — 11:30 Depth Of Focus With Induced Coma At Different Orientations. Christina Schwarz1, C. Canovas2, S. Manzanera3. A. Psychological and Brain Sciences, Univ of Arizona, Tucson, AZ.

6330 — 11:45 Visual Outcomes Following Bilateral Implantation of a Trifocal Intraocular Lens. Sunil Shah1, A.L. Sheppard2, U. Bhatt1, J.S. Wolfssohn3. A. Midland Eye Institute, Birmingham, United Kingdom; B. School of Life and Health Sciences, Aston University, Birmingham, United Kingdom.

6331 — 12:00 Curvature Changing Accommodating IOl. Jim Schwiegerling, N. Savidis, S. McCaffrey. A. Optical Sciences, University of Arizona, Tucson, AZ.
6332 — 12:15 Improving Through-Focus Visual Performance Using Primary And Secondary Spherical Aberrations. Myoung Joon Kim, L. Zheleznyak1, R. Sabesan2, S. MacRae2. 1Department of Ophthalmology, Asan Medical Center, Seoul, Republic of Korea; 2The Institute of Optics, 3Flaum Eye Institute, University of Rochester, Rochester, NY. *CR


6334 — 12:45 Range of Vision Provided by Dual-Optic Accommodating Intraocular Lens. Sanjeev Kasthurirangan1, L.G. Vergass, V. Bohorquez1, R. Alarcon1. 1R&D, Abbott Medical Optics, Milpitas, CA; 2R&D, Abbott Medical Optics, Santa Ana, CA; 3Department of Ophthalmology, ServiOftalmos, Bogota, Colombia. *CR, P

### Grand A

#### Thursday, May 10, 2012, 11:15 AM-1:00 PM

#### Eye Movements, Strabismus, Amblyopia & Neuro-Ophthalmology

#### 538 Strabismus II

**Moderators:** Vallabh E Das and Linda K McLoon


6337 — 11:45 Muscle Inotrop Inactivation Of The Cerebellar Fastigial Oculomotor Region In Strabismic Monkeys Changes Strabismus Angle. Anand C. Joshi, E. Baskin, V.E. Das. College of Optometry, University of Houston, Houston, TX.

6338 — 12:00 Bilateral 8-mm Medial Rectus Muscle Resection As Primary Surgery For Large Angle Exotropia. Nikhil N. Batra, N.N. Batra, M.J. Greenwald. Pediatric Ophthalmology, University of Chicago, Chicago, IL.


6340 — 12:30 Posterior Fixation Sutures Expand Binocularity In Patients With Persistent Paretic Or Restrictive Pathology. Steven A. Newman. Ophthalmology, University of Virginia, Charlottesville, VA.

6341 — 12:45 Sustained IGF-I Treatment Improves Eye Alignment in Adult Strabismic Monkeys. Linda K. McLoon1, C.L. Willoughby1, S.P. Christiansen1, V.E. Das2, M.J. Mustard3. 1Ophthalmology, University of Minnesota, Minneapolis, MN; 2Ophthalmology, Boston University School of Medicine, Boston, MA; 3College of Optometry, University of Houston, Houston, TX; 4Ophthalmology, University of Washington, Seattle, WA.

**Grand B**

Thursday, May 10, 2012, 11:15 AM-1:00 PM

#### Clinical & Epidemiologic Research

#### 539 Diabetes and Retinal Disease

**Moderators:** Tunde Peto and Gavin S Tan

6342 — 11:15 Retinal Microvascular Signs and 5-year Incidence of Stroke: The Singapore Malay Eye Study. Carol Y. Cheung1,2, W. Tay1, M. Ikram1,2, E. Tai3, T.Y. Wong4,5. 1Singapore Eye Research Institute, Singapore, Singapore; 2Department of Ophthalmology, 3Department of Medicine, 4Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore.


6345 — 12:00 RAAB+DR - Rapid Assessment of Blindness Including Diabetes: Results of a New Population-based Survey Method in Chiapas (Mexico), Cape Town (South Africa), and Taif (Saudi Arabia). David B. Yorston1,2, S. Polack1, H. Kuper1, N. Cockburn1, P. Gomez2, M. Rabiu3. 1Tennent Institute of Ophthalmology, Gartnavel Hospital, Glasgow, United Kingdom; 2London School of Hygiene & Tropical Medicine, International Centre for Eye Health, London, United Kingdom; 3University of Cape Town, Cape Town, South Africa; 4Instituto de la Vision Universidad de Montemorelos, Montemorelos, N.L., Mexico; 5Prevention of Blindness Union, Riyadh, Saudi Arabia.

6346 — 12:15 The Responsiveness of the National Eye Institute Visual Function Questionnaire-25 (NEI VFQ-25) to Visual Acuity Gains in Diabetic Macular Edema. Adam Turpin1, S. Colman1, J.J. Saner1, N.M. Bressler1, R. Varma1, P. Lee1, C. Dollart1, L. Ward1, L. Yau1. 1Genentech, South San Francisco, CA; 2Retina Associates of Florida, Tampa, FL; 3Ophthalmology, Wilmer Eye Institute, Baltimore, MD; 4Ophthalmology, USC, Doheny Eye Institute, Los Angeles, CA; 5Duke University Eye Center, Durham, NC; 6CMD Consulting, Palo Alto, CA. *CR, P

6347 — 12:30 Longitudinal Changes In Retinal Vascular Caliber Measurements In Children And Its Relationship With Cardiovascular Risk Factors. Emil D. Kurniawan1, N. Cheung1, W. Tay1, C.Y. Cheung1, P. Mitchell2, S-M. Saw3, T.Y. Wong4. 1Centre for Eye Research Australia, Royal Victorian Eye and Ear Hospital, Melbourne, Australia; 2Singapore Eye Research Institute, Singapore, Singapore; 3Department of Ophthalmology, University of Sydney, Sydney, Australia; 4Department of Epidemiology and Public Health, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore.


**Grand D**

Thursday, May 10, 2012, 11:15 AM-1:00 PM

#### Glaucoma / Clinical & Epidemiologic Research

#### 540 Advances in Glaucoma Surgery

**Moderators:** Gustavo V De Moraes and Remo Susanna, Jr.

6349 — 11:15 Regional Variations In The Rate Of Laser Trabeucloplasty In The Medicare Population. Henry D. Jampel1, S.D. Cassard2, D.S. Friedman3, H.A. Quigley3, E.W. Gower4. 1Glaucoma Center of Excellence, 2Dana Center for Preventive Ophthalmology, 3Johns Hopkins Wilmer Eye Inst, Baltimore, MD; 4Epidemiology and Prevention, Wake Forest School of Medicine, Winston-Salem, North Carolina, MD.

6351 — 11:45 A Prospective Randomized Clinical Trial of Selective Laser Trabeculectomy versus Argon Laser Trabeculectomy in Open Angle Glaucoma and Ocular Hypertension Secondary to Pseudoexfoliation. Francie F. Si1, S. Kent1, C.M. Hutnik1, K. Damji2, P. Harasymowycz3, W.G. Hodg3, Y. I. Pow4, A. Crichton5. 1Ophthalmology, University of Western Ontario, London, ON, Canada; 2Ophthalmology & Vis Sciences, University of Toronto, Toronto, ON, Canada; 3Ophthalmology, University of Alberta, Edmonton, AB, Canada; 4Ophthalmology, University of Calgary, Calgary, AB, Canada.


6355 — 12:45 Three Year Results of the Ahmed Baerveldt Comparison (ABC) Study. Donald L. Budenz1, K. Barton2, W.J. Feuer3, J.C. Schiffman4, V.P. Costa5, D. Godfrey2, Y.M. Buys6, Ahmed Baerveldt Comparison Study Group. 1Ophthalmology, University of North Carolina, Chapel Hill, NC; 2Glaucoma Service, Moorfields Eye Hospital, London, United Kingdom; 3Biostatistics, Univ of Miami- Bascom Palmer, Miami, FL; 4Ophthalmology, Bascom Palmer Eye Institute, Miami, FL; 5Ophthalmology, University of Campinas, Sao Paulo, Brazil; 6Glaucoma Associates of Texas, Dallas, TX; 7Ophthalmology & Vision Sciences, University of Toronto, Toronto, ON, Canada. *CR, #

Grand H
Thursday, May 10, 2012, 11:15 AM-1:00 PM

541 Retinal Detachment III

Moderators: Stanislao Rizzo and Howard F. Fine


6359 — 12:00 Postoperative Retinal Function After Recent-onset Retinal Detachment In Relation To The Topography Of The Affected Quadrants. Marcos J. Rubio Caso1, M. Martin-Baranera2, N. Vila Grane3, L. Arias Barquet1, J. Caminal Mitjana4, J. Catala Mor4, P. Garcia Bru5, O. Pujol Goyta6, J. Arruga Ginebreda7, J. Garcia-Arun8. 1Ophthalmology, Hospital Universitario de Bellvitge, Barcelona, Spain; 2Epidemiology, Consorci Sanitari Integral, Barcelona, Spain; 3Ophthalmology, Hospital Vall d’Hebron, Barcelona, Spain.
6363 – 6381 Thursday – Posters

Hall B/C  A1-A27
Thursday, May 10, 2012, 11:15 AM-1:00 PM
Clinical & Epidemiologic Research

542 Glaucoma III

Moderator: Nathan G Congdon

6363 — A1 Intracocular pressure and ocular perfusion pressure among 10-year incident glaucoma cases in the Age-Related Eye Disease Study (AREDS). Thassarat S. Vajaranant1, A.J. Hallak1,2, C.E. Joslin1,2,3, 4Ophthalmology and Visual Sciences, 3Epidemiology and Biostatistics, 1University of Illinois at Chicago, Chicago, IL.

6364 — A2 Evaluation of a Novel Optic Disc Grading Software for use in Population-based Studies. Yih Chung Tham1,2, C-L. Cheung1,2, T. Wong1,2, M. Baskaran1, J. Liu1, B-H. Lee1, J. Wang1, P. Mitchell1, T. Aung2, C-Y. Cheng1,2. Singapore Eye Research Institute (SERI), Singapore National Eye Centre, Singapore, Singapore; 1Department of Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore; 2Centre for Quantitative Medicine, Office of Clinical Sciences, Duke-NUS Graduate Medical School, Singapore, Singapore; 3Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*Star), Singapore, Singapore; 4Department of Ophthalmology (Centre for Vision Research), Westmead Hospital, University of Sydney, Sydney, Australia.

6365 — A3 Evaluation of Depression in Newly Diagnosed Patients of Glaucoma Before and After Starting Ocular Hypotensive Therapy. Neelima Aron1, V. Arora2, R. Sagar3, V Sreenivas2, A. Rathi1, S. Kumar2, M. Wadehra1, T. Dadwal1. Dr. R P Centre for Ophthalmic Sciences, 2Department of Psychiatry, 3Department of Biostatistics, 1All India Institute of Medical Sciences, New-Delhi, India; 2Department of Ophthalmology, Government Medical College, Chandigarh, India.

6366 — A4 Metabolic Syndrome and the Risk of Developing Normal Tension Glaucoma. Mijin Kim1,2, J. Jeoung1, W. Oh1, H. Choi3, M. Kim1, K. Park1, S. Kim1, T-W. Kim1, D. Kim1. 1Department of Ophthalmology, Seoul National University Hospital, Seoul, Republic of Korea; 2Department of Ophthalmology, Seoul National University Bundang Hospital, Seongnam, Republic of Korea; 3Kong Eye Clinic, Seoul, Republic of Korea; 4Department of Ophthalmology, Healthcare System Gangnam Center, Seoul National University Hospital, Seoul, Republic of Korea; 5Department of Ophthalmology, Seoul National University Boramae Hospital, Seoul, Republic of Korea.


6368 — A6 Relationship of Structural and Functional Asymmetry to Sleep Position in Primary Open Angle Glaucoma. Eberechi Nwogu1,2, S. Thomas1, C. Hamill1,2, J. Marcus1, N.A. Loewen1,2. 1Ophthalmology, 2Ophthalmology and Visual Science, 3Ophthalmology & Visual Science, 4Yale University School of Medicine, New Haven, CT; 5Ophthalmology, Yale School of Medicine, New Haven, CT.

6369 — A7 Glaucoma Patient Day: Involving Patients, Improving Care, Prioritizing Research. Ananth C. Viswanathan1,5, R. Mathew2,3, S. Gillani2, L. Ramskold1, C. Bunce1, N. Okhravi3. 1Glaucoma Service, 2NIHR Biomedical Research Centre for Ophthalmology, Moorfields Eye Hospital NHS Foundation Trust and UCL Institute of Ophthalmology, London, United Kingdom; 3Glaucoma Service, 4Moorfields Eye Hospital NHS Foundation Trust, London, United Kingdom; 5UCL Medical School, London, United Kingdom.


6371 — A9 Profile of Patients Assisted During the 2011 World Glaucoma Week in Araguari - Minas Gerais - Brazil. fabia f. nogueira1, G.E. Carlos1, D.R. Martins1, G.R. Cunha1, M.S. Arcieri1, N.B. Ramos1, P.E. Rosa1, R.S. Arcieri1, R.L. Pereira1, E.S. Arcieri1,5, 6School of Medicine, Presidente Antonio Carlos University (UNIPAC), Araguaí, Brazil; 2School of Medicine of Ribeirão Preto, University of São Paulo (USP), Ribeirão Preto, Brazil; 3Ophthalmology, University of Campinas (UNICAMP), Campinas, Brazil.

6372 — A10 Distribution of Adherence to Intraocular Pressure Lowering Agents among Glaucoma Patients Is Bimodal and Robust to operational Definitions of Glaucoma and Adherence. Jason P. Jones1,4, D.S. Fong5,6, E.N. Fang7, C.A. Mesirov1,8, V.D. Patel1. 1Research & Evaluation, 2Ophthalmology, 3Kaiser Permanente, Pasadena, CA; 4Ophthalmology, Kaiser Permanente, Los Angeles, CA; 5Global Health Outcomes Study and Research, Allergan, Irvine, CA; 6CR.


6374 — A12 Refractive Status In Patients With Narrow Angles. Sarah M. Simpson, D.C. Warder, A. Moore, I. Irrcher, D. Jnapriya. Department of Ophthalmology, Queen’s University, Kingston, ON, Canada.

6375 — A13 Ordinal Measurement Error Model for Assessing Agreement Among Raters for Glaucoma Progression. Yun Ling1,2, R.A. Bilionick1,2, H. Ishikawa3, G. Wolfstein4, J.S. Schuman5,6. 1UPMC Eye Center, Eye & Ear Institute, Ophthalmology and Visual Science Research Center, Dept. Ophthalmology, U. Pittsburgh School of Medicine, Pittsburgh, PA; 2Dept. Biostatistics, U. Pittsburgh Graduate School of Public Health, Pittsburgh, PA; 3Dept. Bioengineering, Swanson School of Engineering, U. Pittsburgh, Pittsburgh, PA; 4CR.

6376 — A14 Intracocular Pressure and Central Corneal Thickness in a Multi-Ethnic Asian Population: The Singapore Epidemiology of Eye Disease (SEED) Study. Ching-Yu Cheng1,2, T. Aung1,2,3, Y. Zheng1, X. Li1, A.R. Amur1, M. Chev1, M. Bani1, S-M. Saw3,4, T.Y. Wong1,2, SEED Study Group. 1Department of Ophthalmology, 3Saw Swee Hock School of Public Health, National University of Singapore, Singapore, Singapore; 4Singapore Eye Research Institute, Singapore, Singapore.

6377 — A15 Evaluation Of The Impact Of Topical Medical Therapy on Quality Of Life In Newly Diagnosed Glaucoma Patients Using The Indian Vision Function Questionnaire (VFQ33). Tinu Dada1,2, V. Arora1, S.K. Gupta2, V. Sreenivas2, V. Pashist1,2, T. Agarwala, A. Panda1,2. 1RP Centre for Ophthalmic Sciences, 2Centre for Community Medicine, 3Department of Biostatistics, 4All India Institute of Medical Sciences, New Delhi, India.

6378 — A16 Risk Factors for Four-year Incidence of Open-angle Glaucoma: The Los Angeles Latino Eye Study. Xuejuan Jiang1, S. Wu1, M. Torres1, S.P. Azin1, B.A. Francis1, V. Chopra1, B.B. Nguyen1, R. Varma1. Los Angeles Latino Eye Study Group. Ophthalmology, Doheny Eye Institute, Univ. of Southern California, Los Angeles, CA; Preventive Medicine, USC Keck School of Medicine, Los Angeles, CA.

6379 — A17 Undiagnosed And Overdiagnosed Glaucoma In The United States. Mark W. Swanson. Optometry, Univ of Alabama at Birmingham, Birmingham, AL.

6380 — A18 Prevalence Of Glaucomatous Optic Neuropathy In A Telemedicine Population. Hana L. Takasagawa1, C. Sheppeler1, C. VanAlstine1, S.K. Gardiner1, S.L. Mansberger1. 1Discoveries In Sight Laboratories, 2Devers Eye Institute, Portland, OR.


6406 — A96 Color Discrimination And Categorization Differences Between Male And Female. Marcelo F. Costa, S.M. Moreira, D.F. Ventura. Psicologia Experimental, Univ of Sao Paulo, Sao Paulo, Brazil.

6407 — A97 The Relationship between Macular Pigment Optical Density and Retinal Straylight. Raymond O. Beirne. Vision Science Research Group, University of Ulster, Coleraine, United Kingdom.


6410 — A99 Retinal Degeneration And Neuroprotection

Moderators: Patrice E Fort and Jorgelina M Calandrila

6409 — A302 Activation of the Aldosterone/Mineralocorticoid Receptor System and Protective Effects of Mineralocorticoid Antagonism in Retinal Ischemia- Reperfusion Injury. Kazuyo Hirooka, T. Lisi, T. Fujita, F. Shiraga. 1Ophthalmology, Kagawa Univ Faculty of Medicine, Kitagun, Japan; 2Ophthalmology, The Fourth Affiliated Hospital of China Medical University, Shenyang, China.


6411 — A304 Neuroprotective Effects Of Erthyroproetin In Mouse Models With Retinal Degeneration. Jasmin Balmer, M. Tschopp, M. Menke, M. Gassmann, S. Wolf, V. Enzmann. 1Ophthalmology, University of Bern, Bern, Switzerland; 2Veterinary Physiology, University of Zurich, Zurich, Switzerland.

6412 — A305 Morphological Differences And Apoptotic Rate In An Experimental Model Of Retinal Detachment After Systemic Submission Of A Dhea-analogue. Pavлина A. Tsoka, I. Charalampopoulos, A. Gravanis, M.K. Tsilimbaris. 1Neurology & Sense Organs, Department of Pharmacology, 2University of Crete, Heraklion, Crete, Greece; 3Ophthalmology-Research Actt, University of Crete, Heraklion, Greece.


6414 — A307 Neuroprotective Effects Of Sirna, Targeted Caspase9, And Atecloplagen Complex On Rat Retinal Damage Induced By Transient Ischemic Injury. Shinichiro Ishikawa, A. Hirata, J. Nakabayashi, R. Iwakiri, S. Okinami. 1Saga Univ Faculty of Medicine, Saga, Japan; 2Saga Memorial Hospital, Saga, Japan.

6415 — A308 Subretinal Electrical Stimulation Preserves Visual Acuity In Dystrophic RCS Rats. Vincent T. Ciavatta, M.H. Aung, T.S. Obertone, J.K. You, M.T. Pardue. 1Rehab R&D Center of Excellence, Atlanta VA Medical Center, Decatur, GA; 2Ophthalmology, 3Neuroscience, Emory University, Atlanta, GA.


6417 — A310 Increased Susceptibility to Retinal Stress in Mice Lacking Sigma Receptor 1 (rS1). Yonju Ha, A. Sauta, C. Williams, E. Zorrilla, V. Ganapathy, S.B. Smith. 1Department of Molecular and Neuroscience, LSUHSC, New Orleans, LA.

6418 — A311 Arginase2 Deficiency Reduces Hypoesthesia-induced Retinal Neurodegeneration through the Regulation of Polyamine Metabolism. S. P. Narayan, J. Svanapradit, Z. Xia, T. Lemtisla, N. Patluri, A. Seekum, R.W. Caldwell, R.B. Caldwell. 1Vascular Biology Center, 2Department of Pharmacology and Toxicology, 3Georgia Health Science University, Augusta, GA; 4Department of Molecular and Cellular Biology, Baylor College of Medicine, Houston, TX; 5VA Medical Center, Augusta, GA.


6422 — A315 Quantum Dots As Neuroprotective Factor In A Model Of Retinal Photoreceptor Degeneration. Raul Velez-Montoya, N. Mandava, C.R. Stollf, J.L. Olson. 1Ophthalmology, University of Colorado Health and Science Center, Aurora, CO; 2Rocky Mountain Lions Eye Institute, Aurora, CO; 3Mechanical Engineering, University of Colorado Boulder, Boulder, CO.*CR

6423 — A316 Up-regulation Of Soluble Amyloid Beta And Down-regulation Of Soluble RAGE In The Vitreous Of Age-related Macular Degeneration Patients. Frances Fan, A. Montemarti, S. Rossi, G. Parish, F. Lamoke, F. Facchiano, G. Ripandelli, M. Bartoli. 1Ophthalmology, 2Pharmacology and Toxicology, 3Georgia Health Sciences University, Augusta, GA; 4Experimental Medicine and Pathology, University of Rome La Sapienza, Rome, Italy; 5Hematology and Oncology, Istituto Superiore Di Sanita, Rome, Italy; 6Fondazione GB Bietti, Rome, Italy.


*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures — Refer to Program Number in the Clinical Trial (CT) Registration Index — Travel Grant Awardee

6426 — A319 DHA Restores HNE And PDEF By Inhibiting Oxidative Damage In RPE At High Glucose Levels. Emma Arnal, S. Johnson-Soriano, M. Miranda, A. Navea, J. Romero, M.O. Cajal, FOM, Valencia, Spain; 2Dpto. Ciencias Biomédicas, UCH-CEU, Moncada, Spain; 3Facultad de Medicina, UCV, Valencia, Spain.

6427 — A320 Transferrin Delivery In The Eye Protects Photoreceptors From Light-Induced Retinal Degeneration. Emilie Picard, M. Berdugo, M. El Sanharawi, J-C. Jeanny, M. Courtouix, F.F. Behar-Cohen. 1UMRS 872 team 17, Université Pierre et Marie Curie et Université Descartes, Paris, France; 2Cell Biology, CNRS, Université de Tours, Tours, France; 3Sugar and Bone-Marrow Stem Cells for Hereditary Retinal Degenerations. INRA, CNRS, Université de Tours, Paris, France.


6430 — A323 TUDCA Prevents Microglia Activation In The P23H Rat Retina. Laura Fernandez-Sanchez, A. Noailles, I. Pinilla, J. Martin-Nieto, P. Lax, N. Cuenca. 1Physiology, Genetis & Microbiology, University of Alicante, Alicante, Spain; 2Ophthalmology, Univeristy Hospital Lozano Blesa. Aragon Health Sciences Institute, Zaragoza, Spain.


6432 — A325 Fixation Stability and Central Retinal Sensitivity after Intravitreal Autologous Bone-Marrow Stem Cells for Hereditary Retinal Dystrophy. Rubens C. Siqueira, A. Messias, J.C. Volttarel, K.V. Messias, R.S. Arcieri, R. Jorge. 1Retina, 2Bone Marrow Transplantation, 3Sao Paulo University, Ribeirao Preto, Brazil.


6434 — A327 A SubmicronVolts Focal ERG Technique for Evaluating Macular Function in Stargardt/FF Dystrophy: Clinical Assessment of Test Reliability. Benedetto Falsini, M. Piccardi, D. Marangoni, A. Minnella, M. Bertelli, S. Bisti, A. Fadda. 1Ophthalmology, Catholic University, Rome, Italy; 2Ophthalmology, MAGI Laboratory for molecular genetics in rare diseases, Rovereto, Trento, Italy; 3Physiology, University of L'Aquila, L'Aquila, Italy; 4Health and Technology, Istituto Superiore di Sanita, Rome, Italy.


6437 — A330 Retinal Degeneration and Microglial Activation in Mouse Models of Neuronal Ceroid Lipofuscinoses. Emilie Picard, M. Berdugo, M. El Sanharawi, J-C. Jeanny, M. Courtouix, F.F. Behar-Cohen. 1UMRS 872 team 17, Université Pierre et Marie Curie et Université Descartes, Paris, France; 2Ophthalmology, University Hospital Justus Liebig University Giessen, Giessen, Germany; 3Department of Ophthalmology, Justus Liebig University Giessen, Giessen, Germany; 4Laboratory for Genet Therapy, University of Nantes, Nantes, France; 5Neuroanatomy, Max-Planck-Institut for Brain Research, Frankfurt, Germany.

6438 — A331 Modeling Photoreceptor Interactions in the Presence of Retinitis Pigmentosa. Erik T. Camacho, S. Wirkus. 1Ophthalmology, 2Center for Genetic Eye Diseases, 3Cole Eye Inst/Cleveland Clinic Regensburg, Regensburg, Germany.

6439 — A332 Early S Cone Loss And L/m Cone Opsin Deolocalization In The Canine Model Of Rpe65 Deficiency. Daniela Klein, A. Mendez-Madeira, B. Lorenz, F. Roling, S. Haverkamp, K. Stieger. 1Department of Ophthalmology, Justus Liebig University Giessen, Giessen, Germany; 2Laboratory for Gene Therapy, University of Nantes, Nantes, France; 3Neuroanatomy, Max-Planck-Institut for Brain Research, Frankfurt, Germany.

6440 — A333 Degenerative Changes At The Rod Photoreceptor Synaptic Ribon In Aging Dba2j mice. Michael Schozl, M. Fuchs, J. Atoff, R. Enz, J.H. Brandstatter. 1Ophthalmology, 2Biotechnology, 3Department of Biology, University of Erlangen-Nuremberg, Erlangen, Germany; 4Ophthalmology, University Hospital Erlangen, Erlangen, Germany.


*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures — Travel Grant Awardee
Hall B/C  A371-A388
Thursday, May 10, 2012, 11:15 AM-1:00 PM
Retina
545 Retinitis Pigmentosa III

Moderator: Hendrik P Scholl


6446 — A372 Role of ER Stress-Induced Caspase6 in Retinal Degeneration of T17M Rhodopsin Transgenic Mice. Shyamali Choudhury, M.S. Gorbatyuk. Cell Biology And Anatomy, University of North Texas Health Science Center, Fort Worth, TX.

6447 — A373 Additional Neuroprotective Effects Of Prionsulin On Vision And Retinal Structure In The Rd10 Mouse Model Of Retinitis Pigmentosa. Enrique J. de la Rosa1, N. Forns1, M. Marchena2, A. Hernandez-Pinto1, R. Steel1, Zieger1A, C. Schubert1A, P. Uhrin1B, P. K. Ahnelt1A. 6450 Inst Ophthalmic Resrch, Tuebingen, Germany; 1Molecular Genetics & Microbio, University of Florida, Gainesville, FL; 2Department of Molecular Genetics and Microbiology, 1Department of Medical Genetics and Microbiology, 2The University of Florida, Gainesville, FL.

6448 — A374 Long-Term Rescue with Gene Therapy in a Mouse Model of Autosomal Dominant Retinitis Pigmentosa (ADRP). Hao Yu Mao1, M.S. Gorbatyuk1, B. Rossomiller2, W.W. Hauswirth3, A.S. Levin1A, 1Molecular Genetics & Microbiology, 2Molecular Genetics & Microbiology, Ophthalmology, University of Florida, Gainesville, FL; 3Department of Cell Biology and Anatomy, University of North Texas Health Science Center, Fort Worth, TX.

6449 — A375 Mps3 is Required for Maintenance of Adherens Junctions in the Retina during Light Exposure. Jacobus J. Dudok1, A. Sanz Sanz2, D. Lundvig2, V. Sothilingam1, M. Garcia Garrido1, N. Tanimoto3, J. Klooster4, F. Janmrich1, M. Seeliger1, J. Wijnholds1. 1Neuromedical Genetics, Netherlands Inst for Neurosci, Amsterdam, The Netherlands; 2Division of Ocular Degeneration, Nr Ophthalm Inst Ophthalmic Research, Tuebingen, Germany; 3Molecular and Cellular Biology, Baylor College of Medicine, Houston, TX.

6450 — A376 Altered Fractalkine Homeostasis In Rd10 Dегenerating Mouse Retina. Marina Ziegler1, C. Schubert2, P. Uhrin2A, P.K. Ahnelt2A. 1Neurophysiology and Neuropharmacology, 2Vascular Biology and Thrombosis Research, Medical University of Vienna, Vienna, Austria.

6451 — A377 Characterization of a humanized Mouse-Model for X-linked Retinitis Pigmentosa caused by a point mutation in the Rpgrp gene. Jutta U. Schlegel1, D. Rolf1, M. Bergmann1B, B. Lorenz1B, K. Siergie1B. 1Department of Ophthalmology, 2Department of Veterinary Anatomy, Justus-Liebig-University Giessen, Giessen, Germany.

6452 — A378 A Knock-in Mouse Model of Human Rpg R173T Mutation Exhibits Retinal Dysfunction and Reduced Rpg Protein Levels. Zhijian Wu, S. Mookherjee, S. Hiriyanva, R. Rachel, T. Li, L. Dong, A. Swaroop, P. Colosi. NNR/L, NIH/NEI, Bethesda, MD.

6453 — A379 ER Stress Is Involved in Retinal Degeneration Induced by Human T17m Mutant Rhodopsin. Mansi M. Kunte1, S. Choudhury1B, V.M. Shinde1, J.F. Manhimi1, M. Miura2, O.S. Gorbatyuk3, M.S. Gorbatyuk1. 1Cell Biology and Anatomy, UNT Health Science Center, Fort Worth, TX; 2Laboratory for Cell Recovery Mechanisms, Brain Science Institute, RIKEN, Tokyo, Japan; 3Department of Molecular Genetics and Microbiology, University of Florida, Gainesville, FL.

6454 — A380 Ethanol Consumption Correlates with Retinal Degeneration and Vision Loss in the P23H Rat. Gema Esquivel1, P. Lau1, L. Fernandez-Sanchez1, A. Noailles1, J. Pinilla1, N. Cuenca1. 1Physiology, Genetics and Microbiology, University of Alicante, Alicante, Spain; 2Ophthalmology, Universityary Hospital Lozano Blesa, Zaragoza, Spain.


6456 — A382 Crb1 And Crb2 Controls Cell Division During Retina Development. Lucie P. Pellissier1, C.H. Alves1, D. Lundvig1, M. Garcia Garrido1, V. Sothilingam1, N. Tanimoto3, J. Klooster4, F. Janmrich1, M. Seeliger1, J. Wijnholds1. 1Neuromedical Genetics, Netherlands Inst for Neurosci, Amsterdam, The Netherlands; 2Division of Ocular Neurodegeneration, Institute for Ophthalmic research, Tuebingen, Germany; 3Institut de Biologie du Développement de Marseille Luminy, Marseille, France.

6457 — A383 Deficiency in the Pro-Apoptotic CHOP Protein, a UPR Downstream Marker, Does Not Prevent Vision Loss in T17M Rho Retina. Sonali R. Nashine1, A.S. Levin1, M.S. Gorbatyuk1. 1Cell Biology and Anatomy, University of North Texas Health Science Center, FortWorth, TX; 2Molecular Genetics & Microbio, University of Florida, Gainesville, FL.

6458 — A384 Effects of Chlorin e6 on Retinitis Pigmentosa Rhodopsin Mutants in vivo. Fernanda Balemi1,2, P.S. Akamine1, G.L. Yoshimoto1B, B.V. Nagy1, D.F. Ventura1, J. Klein-Seetharaman1, D. Hamassaki1B, 1Cell and Developmental Biology, 2Experimental Psychology, University of Sao Paulo, Sao Paulo, Brazil; 3Structural Biology, University of Pittsburgh, Pittsburgh, PA.

6459 — A385 siRNA preservation in rapidly progressing autosomal dominant retinitis pigmentosa. Brian P. Rossomiller1,2, H. Mao1B, A.S. Levin1A, 1Molecular Genetics & Microbiology, 2Molecular Genetics & Microbio, University of Florida, Gainesville, FL; 3Department of Molecular Genetics and Microbiology, 4Department of Molecular Genetics and Microbiology, 2The University of Florida, Gainesville, FL.

6460 — A386 Analysis of Retinal and Choroidal Circulation in the Early Phase of Fluorescein Angiography in an Abyssinian Cat Model of Retinitis Pigmentosa (rdAc). Christina Seide1, K. Narstrom1, M.W. Seeliger1. 1Division of Ocular Neurodegeneration, Center for Ophthal., Inst. for Ophth. Research, Tuebingen, Germany; 2Dept of Vet Med & Surgery, University of Missouri-Columbia, Columbia, MO.

6461 — A387 Long-term Preservation Of Cone Photoreceptors By A Novel Multifunctional Drug In A Mouse Model Of Human Retinitis Pigmentosa. Bin Lin1, K. Wang1B, M.B. Youdim1A, 1Anatomy, Eye Institute, 2Anatomy, University of Hong Kong, Hong Kong; 3Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel.

6462 — A388 Analysis Of Photoreceptor Abnormality In Gucy2d Antibody Transgenic Pigs. Corinne Kostic1, T. King1, C. Sylvain1, S. Philippe1, S. Lilliac1, C. Sarkis1, J. Mallet1, Y. Arsenievic1, B. White1, 1Gene Therapy & Stem Cell Biol, Jules-Gonin Eye Hosp, Univ Lausanne, Lausanne, Switzerland; 2Division of Developmental Biology, The Roslin Institute, University of Edinburgh, Scotland, United Kingdom; 3New Vectys, Paris, France; 4Team of Biotherapy and Biotechnology, CRICM, Paris, France.

Hall B/C  A389-A436
Thursday, May 10, 2012, 11:15 AM-1:00 PM
Biochemistry & Molecular Biology
546 AMD Disease Mechanisms II

Moderator: Anneke I Den Hollander

6463 — A389 Establishing a Human AMD Interactome. Paul Wong1, D.A. Ferrington2, T.W. Olsen1A, 1Ophthalmology, Emory University, Atlanta, GA; 2Ophthalmology, University of Minnesota, Minneapolis, MN.

*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures. *P Refer to Program Number in the Clinical Trial (CT) Registration Index. © Travel Grant Awardee

6445 — A391 Inflammatory Reactions Complicating Exudative Age-Related Macular Degeneration (AMD). Alena Reznik1, C.H. Weber2, D.G. Telder3, L.S. Morse4, S.S. Park5, C.E. Thirkell5. UC Davis Eye Center, UC Davis Eye Center, Sacramento, CA; 1Eye Center, University of California Davis, Sacramento, CA; 2Ophthalmology, University of California, Davis, Sacramento, CA; 3Ophthalmology, Univ of California-Davis, Sacramento, CA; 4Ophthalmology, Univ of California-Davis, Sacramento, CA; 5Ophthalmology & Vision Science, Univ of California Davis Eye Ctr, Sacramento, CA; 1Research Lab 1220 Surge III, UC Davis, Davis, CA.

6446 — A392 Properdin and Malondialdehyde (MDA) effects on the APOE4 mouse model of Age-Related Macula Degeneration (AMD). Una L. Kelly1, M. Groecke2, J. Ding3, W-C. Song2, C. Bowes Rickman4. 1Ophthalmology, 2Ophthalmology and Cell Biology, Duke University Medical Center, Durham, NC; 1School of Medicine, University of Pennsylvania, Philadelphia, PA.

6447 — A393 Pro-oxidant Properties of Human Retinal Melanolipofuscin in the Presence of Iron Ions; Comparison with Lipofuscin and Melanosomes. Malgorzata B. Rzazowska1, R. Zalewski1, A. Kotnala2, T. Velpandian2. 1Department of Ophthalmic Pharmacology, Aravind Medical Research Foundation, Madurai, Tamil Nadu, India; 2Department of Ophthalmology and Pharmacy, All India Institute of Medical Sciences, New Delhi, India.

6447 — A401 The Inflammatory Response To Immune Complex Formation In The Retina. Salome Murinello1A, A.J. Lotery1B, V. Perry1B, J.L. Teeling1B. 1Center for Biological Sciences, University of Southampton, Southampton, United Kingdom.

6447 — A402 Elucidating the correlation between the levels of Macular Xanthophylls and A2E In Normal Indian Donor Eyes, Srinivasa Senthilkumari1, R. Ranjith Kumar1, A. Kotnala1, T. Velpandian2. 1Ophthalmology, Medical University of South Carolina, Charleston, SC; 2Department of Ophthalmology, All India Institute of Medical Sciences, New Delhi, India.

6447 — A403 Linking Retinoids To Clinical Patterns Of AMD. Zsolt Ablomczy1, D. Highbee1, A.M. Hanneken1, K.L. Schey1, V. Koutalos1, R.K. Crouch1. 1Ophthalmology, Medical University of South Carolina, Charleston, SC; 2Molec & Exp Med, The Scripps Research Institute, La Jolla, CA; 3Biochemistry, Vanderbilt University, Nashville, TN.

6448 — A404 Quantification Of CEP By LC MS/MS, Geeng-Fu Jiang1, L. Zhang1, L. Hong2, H. Wang2, R.G. Salomon2, J.W. Crabb1,2. 1Cole Eye Institute, Cleveland Clinic, Cleveland, OH; 2Department of Chemistry, Case Western Reserve University, Cleveland, OH. *CR

6449 — A405 Cigarette Smoke Triggers Excessive Complement Activation in Human RPE Cells: Involvement of Nrf2 signaling, Leilani Wang, K. Naoshi, K.B. Ebrahimi, M.D. Canol, J.T. Handa. Ophthalmology, Johns Hopkins Univ., School of Medicine, Baltimore, MD.

6449 — A406 Correlation of Renal Function and C-reactive protein, with Disease Severity and Progression In Eyes with Dry AMD. Matthew K. George, C.A. Garcia Filho, Z. Yehoshua, G. Gregori, W. Feuer, P.J. Rosenfeld. Bascom Palmer Eye Institute, Univ of Miami Miller Sch of Med, Miami, FL. *CR


6474 — A400 Microrna-335 Inhibits Sod2 Expression And Increases Oxidant-induced Rpe Cell Injury. Haijiang Liu1, B.F. Godley1B. 1Ophthalmology, 2Ophthalmal & Visual Sciences, Univ of Texas Medical Branch, Galveston, TX.

6475 — A401 The Inflammatory Response To Immune Complex Formation In The Retina. Salome Murinello1A, A.J. Lotery1B, V. Perry1B, J.L. Teeling1B. 1Center for Biological Sciences, University of Southampton, Southampton, United Kingdom.

6476 — A402 Elucidating the correlation between the levels of Macular Xanthophylls and A2E In Normal Indian Donor Eyes, Srinivasa Senthilkumari1, R. Ranjith Kumar1, A. Kotnala1, T. Velpandian2. 1Ophthalmology, Medical University of South Carolina, Charleston, SC; 2Department of Ophthalmology, All India Institute of Medical Sciences, New Delhi, India.

6477 — A403 Linking Retinoids To Clinical Patterns Of AMD. Zsolt Ablomczy1, D. Highbee1, A.M. Hanneken1, K.L. Schey1, V. Koutalos1, R.K. Crouch1. 1Ophthalmology, Medical University of South Carolina, Charleston, SC; 2Molec & Exp Med, The Scripps Research Institute, La Jolla, CA; 3Biochemistry, Vanderbilt University, Nashville, TN.

6478 — A404 Quantification Of CEP By LC MS/MS, Geeng-Fu Jiang1, L. Zhang1, L. Hong2, H. Wang2, R.G. Salomon2, J.W. Crabb1,2. 1Cole Eye Institute, Cleveland Clinic, Cleveland, OH; 2Department of Chemistry, Case Western Reserve University, Cleveland, OH. *CR

6479 — A405 Cigarette Smoke Triggers Excessive Complement Activation in Human RPE Cells: Involvement of Nrf2 signaling, Lei Wang, K. Naoshi, K.B. Ebrahimi, M.D. Canol, J.T. Handa. Ophthalmology, Johns Hopkins Univ., School of Medicine, Baltimore, MD.

6480 — A406 Correlation of Renal Function and C-reactive protein, with Disease Severity and Progression In Eyes with Dry AMD. Mathew K. George, C.A. Garcia Filho, Z. Yehoshua, G. Gregori, W. Feuer, P.J. Rosenfeld. Bascom Palmer Eye Institute, Univ of Miami Miller Sch of Med, Miami, FL. *CR


6482 — A408 Intense Physiological Light Upregulates VEGF and Promotes Choroidal Neovascularization via PGC-1α/ERR-α Pathway. Takashi Ueta1, T. Inoue1, K. Yuda1, T. Furukawa2, Y. Yanagi1, Y. Yamaki1. 1Ophthalmology, Univ of Tokyo, School of Med, Bunkyo-ku, Japan; 2Department of Developmental Biology, Osaka Bioscience Institute, Suita, Osaka, Japan.

6483 — A409 Genetic Association of Glucose Transporter Type 1 Variants with Age-Related Macular Degeneration and its Direct Interaction with Complement Factor H at the Protein Level, Elod Kortevli1, A.1. Den Hollander1, M. Gorza1, V. Cipriani1B, J.R. Yates1, C. Hayward1, A.F. Wright1, S. Fauser1, C.C. Hoeyn1, M. Ueffing1B. 1Centre for Ophthalmology, University of Tuebingen, Tuebingen, Germany; 2Department of Ophthalmology, Radboud University Nijmegen, Medical Centre, Nijmegen, The Netherlands; 3Research Unit for Protein Science, Helmholtz Zentrum München, German Research Center for Environmental Health, Neuhberg, Germany; 4Institute of Ophthalmology, University College, London, London, United Kingdom; 5Department of Medical Genetics, University of Cambridge, Cambridge, Cambridge, United Kingdom; 6Institute of Genetics and Molecular Medicine, MRC Human Genetics Unit, Edinburgh, United Kingdom; 7University Eye Hospital Cologne, Cologne, Germany; 8Institute for Ophthalmic Research, University Eye Hospital, Tuebingen, Germany.
6487 — A413 The oystersterol, 27-hydroxycholesterol, disrupts Estrogen Receptor and Liver X Receptor signaling in Retinal Pigment Epithelial Cells. Bhanu C. Dasari, O. Ghirotti. Pharmacology Physiology & Therapeutics, Univ of North Dakota, Grand Forks, ND.


6489 — A415 Identifying the Roles of Interferon-Gamma Inducible Chemokines in Progression of Age-related Macular Degeneration (AMD). Syeda F. Absar, D. Cyr, A.D. Proia, M.T. Malik, P. Bex, K. Lashkari. 1Schepens Eye Research Institute, Massachusetts General Hospital, Boston, MA; 2Department of Pathology, Duke University Medical Center, Durham, NC.


6492 — A418 8-CPT-2-O-Me-cAMP, a Rap1 activator, suppress laser-induced CNV in Mice. Eichi Nishimura, M. McCloskey, Y. Jiang, G.W. Smith, H. Wang, E.S. Witcher, R. Koide, M.E. Hartnett. 1Ophthalmology, John A Moran Eye Ctr, Univ of Utah, Salt Lake City, UT; 2Ophthalmology, Showa University, School of Medicine, Tokyo, Japan; 3Cell and Developmental Biology, University of North Carolina, Chapel Hill, NC.


6494 — A420 Ginseng Mediated Improvement In The Hydraulic Conductivity Of Human Bruch's Membrane: Potential For Preventive Therapy In AMD. Cheul Muu Sim, J. Seok, M. Kang, Y. Shin, H. Shin, Y. Lee, A. Hussain. 1Neuron Science Department, Korea Atomic Energy Research Institute, Daejeon, Republic of Korea; 2KBioMix, Jeonju, Republic of Korea; 3Physics, JeonBuk University, Jeonju, Republic of Korea; 4Division of Molecular Therapy, UCL Institute of Ophthalmology, London, United Kingdom.

6495 — A421 The Kinetics of Retinal Gene Expression Profile of Ccl2/Cx3cr1 Double Deficient Mice on r8 Background: De Fen Shen, Y. Wang, K. Jin, T. Jiao, M. Xiang, C-C. Chen. 1Laboratory of Immunology, National Eye Inst/NH, Bethesda, MD; 2Center for Advanced Biotechnology and Medicine, University of Medicine and Dentistry of New Jersey, Piscataway, NJ.


6498 — A424 Understanding The Mechanism Behind Enhancing Survival Of Photoreceptors In Culture And Regulation Of Photoreceptor Metabolism. Ken Lindsay, T.A. Reh, J.B. Hurley, D. Lamba, J. Gust. 1Biological Structure, 2University of Washington, Seattle, WA.


6508 — A434 Conditional Knock-Out of Ran-binding protein 2 (RanBP2)/Neucleopetin 358 (NUP358) in the Retinal Pigment Epithelium Results in the Activation of Membrane to Nuclear Signaling Pathways and Hallmark Features of Age-Related Macular Degeneration (AMD). Paulo A. Ferreira1, A. Saha1, E. Haque1, Y-Y. Le1, M. Webb1, 1Ophthalmology, Duke University Medical Center, Durham, NC; 2Medicine, Univ of Oklahoma Hlth Sci Ctr, Oklahoma City, OK.

6509 — A435 Image Registration Reveals Sites of Injury from Mitochondrial Oxidative Stress in the Retinal Pigment Epithelium. Alfred S. Lewin1*, M.P. Krebs2, S. Soo2, K. Jones3, H. Mao2*, WW. Hauswirth3. 1Molecular Genetics & Microbio, 2Molecular Genetics & Microbiology, 3University of Florida, Gainesville, FL; 4The Jackson Laboratory, Bar Harbor, ME; 5Dept of Ophthalmology, Unif of Florida Coll of Medicine, Gainesville, FL. *CR

6510 — A436 Genetically-related Inflammatory Priming and Failing Retinal Maintenance Predispose to Age-Related Retinal Degeneration in Mice. Debarshi Mustafi1, H. Kohno1, K. Palczewski1, T. Maeda1*. 1Ophthalmology, John A. Moran Eye Center, Salt Lake City, UT; 2Theranostics, Boston, MA. *CR

6511 — A513 Associations Between Early Signs Of Age-related Macular Degeneration (AMD) And Risk Of AMD In The Fellow Eye In Patients With Unilateral AMD. Mariko Sasaki1, R. Kawasaki2, A. Uchida3, T. Koto3, H. Mochimaru4, H. Shioda5, T.Y. Wong6, K. Tsubota7, Y. Ozawa8. 1Department of Ophthalmology, Keio University, Tokyo, Japan; 2Centre for Eye Research Australia, Royal Victorian Eye and Ear Hospital, Department of Ophthalmology, Melbourne University, Victoria, Australia; 3Singapore Eye Research Institute, 4Case Western Reserve University, Cleveland, OH; 5University of Toronto, Toronto, ON, Canada; 6National Eye Institute, Bethesda, MA; 7Novartis Pharmaceuticals Canada Inc., Dorval, QC, Canada. *CR

6512 — A514 Initial Clinical Experience With RetnaGene AMD™, A Genetic Test For Prediction Of CNV. Briana E. Sawyer1, D.Y. Harrison1, L. Perlee2, P .S. Bernstein1. 1Ophthalmology, Duke University Medical Center, Durham, NC; 2Medicine, Univ of Oklahoma Hlth Sci Ctr, Oklahoma City, OK.

6513 — A515 Genetics And Prevention Of Blindness: Risk Factors Associated With Age-related Macular Degeneration In A Brazilian Population. Priscila H. Rim1, A.P. Marques-de-Faria1, L.A. Magna1. 1Ophthalmology, 2Medical genetics, 3Univ Estadual de Campinas, Campinas, Brazil.

6514 — A516 Do Ultraviolet Radiations Induce Earlier Aged Ocular Pathologies Among Mountaineers? Hussain El Chehab1, C. Dot2, J. Blein3, J. Herry4, J. Giraud5, F. May4, J. Renard4. 1Department of Ophthalmology, Val de Grace Military Hospital, Paris, France; 2Desgenettes Military Hospital, Lyon, France; 3Ophthalmologist, Chamonix Mont-Blanc, France; 4Ecole Nationale de Ski et d’Alpinisme, Chamonix Mont-Blanc, France. 

6515 — A517 Impact Of Visceral Fat, Serum Leptin Levels And High-sensitive Crp Levels On The Pathogenesis Of Age-related Macular Degeneration. Paulina Haus1, K. Kubista1, W. Krugluger2, J. Huber3, S. Binder1. 1Ophthalmology, Rudolf Foundation Clinic, Vienna, Austria; 2Institute for Laboratory Medicine/ SMZ-East, Vienna, Austria; 3Gynecology, Medical University of Vienna, Vienna, Austria. 

6516 — A518 Correlation of Osteoporosis and Incidence of Skin Cancers and AMD grade in the Irish Nun Eye Study Population. Evelyn Moore1, V. Silvestri2, M. Stevenson2, G. Silvestri2. 1Ophthalmology, Royal Group Hospital, Belfast, United Kingdom; 2Ophthalmology, Royal Hospital Trust, Belfast, United Kingdom; 3Centre for Public Health, 4Centre for Vision and Vascular Science, 5Queen’s University, Belfast, United Kingdom.

6517 — A519 Plasma Homocysteine And Extracellular Soluble Receptor For Advanced Glycation End Products (esRAGE) In Aqueous Humor Of Patients With Age-related Macular Degeneration. Pinio Matoula1,2, K. Ninios1. 1Department of Ophthalmology, 2Department of Clinical Chemistry and Laboratory Medicine, 3University of Saarland, Homburg, Germany.

6518 — A520 Visual Impairments In Age-related Macular Degeneration To Process Spatial Frequencies During Natural Scene Categorization. Roxandra Hera1, B. Musel2, S. Chokron3, C. Chiquet1, J. Romanet1, J. Le Bas1,4, P. Carole2. 1Ophthalmology, 2Institute for Laboratory Medicine/ SMZ-East, Vienna, Austria; 3Fondation Ophtalmologique Rothschild, Unite Fonctionnelle Vision et Cognition, Paris, France; 4Université Joseph Fourier Grenoble, France; 5Institut des Neurosciences, INSERM U836, Grenoble, France.

6519 — A521 Contrast Sensitivity As A Predictor Of Central Field Loss. Jennifer Wallis1, P.J. Bet2, L. Lesmes2, T.S. Wallis2, M. Jackson2. 1Vision Rehabilitation, Harvard Medical School/ Massachusetts Eye and Ear Infirmary, Boston, MA; 2Scheepens Eye Research Institute, Harvard Medical School, Boston, MA.

6520 — A522 A Canadian Registry Of Lucentis Treatment To Collect Effectiveness And Safety Data In Patients With Neovascular Age-related Macular Degeneration Over 36 Months (LENS): Findings From A 12-month Interim Analysis. Sebastien Olivier1, A. Charbonneau1, M. Guinta1, P. Saurel1, B. Rabe1, B. De Takacsy2, R. Li3. 1Ophthalmology, Hospit Malonne-Rosemont, Montreal, QC, Canada; 2Polyclinique de Trois-Rivieres, Trois-Rivieres, QC, Canada; 3Université de Sherbrooke, Sherbrooke, QC, Canada; 4Clinique ChirurgieVision, Drummondville, QC, Canada; 5Health Sciences Centre-Eye Clinic St-John’s, St-John’s, NL, Canada; 6Everest Clinical Research Services, Inc., Markham, ON, Canada; 7Novartis Pharmaceuticals Canada Inc., Dorval, QC, Canada. *CR

6521 — A523 The Impact Of Anti-vegf Treatment On Vision-related Quality Of Life In Age-related Macular Degeneration Outside Clinical Trials. Robert P. Finger1, J.B. Hassell2, F. Ahed3, M.C. Gillies1, J.E. Keeffe1, R.H. Guymer1. 1Centre for Eye Research Australia, Melbourne, Australia; 2Save Sight Institute, Sydney, Australia. *CR

6522 — A524 Outcome Study of Treating Neovascular Age-related Macular Degeneration: Preliminary Results. Margriet I. van der Reis1, M. Elshout1, Y. de Jong - Hesse1, E.C. La Heij2, P.J. Ringens2, F. Hendrikse1, C.A. Webers, J.S. Schouten2. 1Ophthalmology, University Eye Clinic Maastricht, Maastricht, The Netherlands; 2Ophthalmology, VU University Medical Center, Amsterdam, The Netherlands; 3Ophthalmology, University Medical Center Utrecht, Utrecht, The Netherlands.

6523 — A525 Spectral Domain Optical Coherence Tomography Treatment Guidance Of Monthly Follow-up Of Patients With Exudative Age-Related Macular Degeneration. Roberto Gallego-Pinazo1, E. Sanz-Marco1, S. Martinez-Castillo1, R. Dolz-Marco1, J. Arévalo1, M. Diaz-Llopis1, 1Ophthalmology, University and Polytechnic Hospital La Fe, Valencia, Spain; 2Retina, Wilmer Eye Institute. Johns Hopkins University School of Medicine, Baltimore, MD; 3King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia; 4Faculty of Medicine, University of Valencia, Valencia, Spain. *CR

6524 — A526 A Review Of The Indications For And Subsequent Visual, Anatomic And Safety Results After Switching From One Anti-VEGF Therapy Agents To Another In AMD Patients. Jennifer A. Day, S. Dev. VitreoRetinal Surgery, PA, Minneapolis, MN. 

6525 — A527 One year’s treatment with intravitreal Ranibizumab (lucentis®) and Verteportin PDTf Combination Therapy at Month 2 for Neovascular Age-related Macular Degeneration (AMD). Eric Fournaux, M. Dominguez, L. Rosier, L. Velasque. Retine Tourny, Bordeaux, France.
6526 — A528 Clinical Features Of Self-resolving Sub-foveal Choroidal Neovascularisation in ‘Wet’ Age Related Macular Degeneration. Sharmin Badiei1, N. Patel2, S. Walker2, 1ophthalmology, William Harvey Hospital NHS trust, Ashford, United Kingdom; 2Medical Retina Department, Medical Retina Department, East Kent Hospitals University Foundation NHS Trust, Canterbury, Kent, Kent, United Kingdom.

6527 — A529 Novel Methods to Enhance Reading Ability in Patients with Macular Disease. Anthony Fernandez1, D. Roth1, A. Shah1, H. Fine1, J. Prenger1, W. Feuer1, 1Ophthalmology, Robert Wood Johnson Medical School, New Brunswick, NJ; 2Bascom Palmer Eye Institute of the University of Miami School of Medicine, Miami, FL.

6528 — A530 A French Version Of Skread To Identify Reading Difficulties Related To Central Scotoma. Anne Catherine Scherlen1, G. Faure1, M. Golschmidt1, D. Raffort1, F. Vital-Durand1, C. Miege1, 1R&D Optics Low Vision, Essilor International, Paris, France; 2Hospital La Timone, Marseille, France; 3Low Vision Clinic, Marseille, France.

6529 — A531 Optical Coherence Tomography Hyperreflective Foci Increase in Quantity and Central Foveal Density in Intermediate Age-related Macular Degeneration. Rachelle O’Connell1, F.A. Folgar1, J.G. Christensen2, S.J. Chiu3, S. Farsiu3, C.A. Toth4, 1Center for Neurosciences and Cell Biology, University of Coimbra, Coimbra, Portugal; 2Faculty of the Southwest, Dallas, TX; 3Ophthalmology, Duke University, Durham, NC; 4Department of Ophthalmology, Ludwig-Maximilians-University, Munich, Germany.


6532 — A534 Reproducibility of Fundus Autofluorescence Patterns in Geographic Atrophy Secondary to Age-Related Macular Degeneration. Marc Biarnes, J. Mones, F.M. Trindade. Institut de la macula de la retina, Barcelona, Spain.


6534 — A536 Evaluation of Peripheral Fundusautofluorescence Changes in Patients with Wet ARMD: The OTELLO Study. Anita Zenger1, M.B. Rougier1, H.F. P.E. Stanga2, S. Schmitz-Valkenburg1, L. Reznicek3, U.E. Wolf-Schwarzbusch1,4, 1Bern Photographic Reading Centre, 2Ophthalmology, University Bern, Bern, Switzerland; 3Service d Ophthalmologie, CHU- Bordeaux Univ de Bordeaux, Bordeaux, France; 4Vitreoretinal Unit, Manchester Royal Eye Hospital, Manchester, United Kingdom; 5Ophthalmology, University of Bonn, Bonn, Germany; 6Department of Ophthalmology, Ludwig-Maximilians-University, Munich, Germany.

6535 — A537 Significance of Small Dense Particles During Treatment of Exudative Age-related Macular Degeneration. Randhir Chavan1, A528 Ann Catherine Scherlen1, G. Faure2, S.Panneerselvam, N. Narendran, Y.C. Yang, 1Ophthalmology, Royal Wolverhampton Hospitals NHS Trust, Wolverhampton, United Kingdom.

6536 — A538 Bilateral Multifocal Electretinogram Changes After Nanosecond Laser In Subjects With Early Age-related Macular Degeneration. Chi D. Luu1, K. Braxtoning1, G. Makeyeva, R.G. Guymier 1Low Vision Clinic, Marseille, France; 2Department of Ophthalmology, Ludwig-Maximilians-University, Munich, Germany.

6537 — A539 Within-visit And Between-visit Repeatability Of The Diagnosys Full-field Stimulus Threshold (D-FST) When Measuring Rod Sensitivity In Patients With Atrophic Age-related Macular Degeneration (ARMD). Martin Klein1, D.G. Birch1,2, J. Chandler3, J. Koester3, H. Hughes3, A. Reaves3, R. Kubota3, 1Department of Ophthalmology, 2Department of Imaging, University of Kentucky, Lexington, KY; 3Research Unit, Centre for Eye Research Australia, University of Melbourne, Australia.

6538 — A540 Evaluation of Peripheral Fundusautofluorescence Changes in Patients with Wet ARMD: The OTELLO Study. Anita Zenger1, M.B. Rougier1, H.F. P.E. Stanga2, S. Schmitz-Valkenburg1, L. Reznicek3, U.E. Wolf-Schwarzbusch1,4, 1Bern Photographic Reading Centre, 2Ophthalmology, University Bern, Bern, Switzerland; 3Service d Ophthalmologie, CHU- Bordeaux Univ de Bordeaux, Bordeaux, France; 4Vitreoretinal Unit, Manchester Royal Eye Hospital, Manchester, United Kingdom; 5Ophthalmology, University of Bonn, Bonn, Germany; 6Department of Ophthalmology, Ludwig-Maximilians-University, Munich, Germany.


6540 — A542 Involvement of P2X7 receptor and therapeutic efficacy of Brilliant Blue G in a mouse model of subretinal hemorrhage. Shoji Notomi1, T. Hisatomi2, A. Takeda3, Y. Ikeda4, H. Enaida5, T. Ishibashi, Sr. 1Ophthalmology, 2Dept of Ophthalmology, 3Kyushu University, Fukuoka, Japan; 3Department of Ophthalmology, Kyushu University, Higashi-ku, Japan.

6541 — A543 Changes In P2X Receptor Activity During Retinal Degeneration. Aleksandra Polosukhina, A. Nobler, I. Tochitsky, R.H. Kramer. UC Berkeley, Berkeley, CA.

6542 — A544 Localization & Physiology of L-type Ca2+ Channels in Human RPE. Qin Wan, Y. Raghuram, R. Li, J. Adjianto, R. Fariss, A. Manniniskis, S.S. Miller. NEI/NIH, Bethesda, MD.

6543 — A545 Intercellular Ca2+ Wave Induced In Human Retinal Pigment Epithelium Cells Induced By Mechanical Stimulation. Anna E. Abu Khadilah2, K. Juuti-Uusitalo3, K. Larsson3, H. Skottman3, J. Hytinen3. 1Department of Biomedical Engineering, Tampere University of Technology, Tampere, Finland; 2BioMediTech, Tampere, Finland; 3Institute of Biomedical Technology, University of Tampere, Tampere, Finland.

6544 — A547 Alpha 2 adrenergic agonist receptor in chick retina. Gabriella V. Costa1,4, M.K. Shigetomi1,2, K. Fleming1,2, V.V. Oliveira1, A.A. Costa1,4, P. Gardino1,4, A.M. Dantas1,4, 1Institute of Biophysics Carlos Chagas Filho, 2Department of Ophthalmology, 1Federal University of Rio de Janeiro, Rio de Janeiro, Brazil.

6545 — A548 Angiotensin II upregulates MCP-1 Expression through the NF-kB Pathway in Human Retinal Pigment Epithelium. Maria E. Marin Castano, M. Pons. Ophthalmology, Bascom Palmer Eye Institute, Miami, FL.


6547 — A550 Loss of Ifhe Leads to Progression of Tumor Phenotype in Primary Retinal Pigment Epithelial Cells. Jayd Pranava Gnaana Prakashani, R. Veeranan-Karmegam4, V. Coothanankandaswamy4, S.K. Reddy5, P.M. Martin5, M. Thangaraju5, S.B. Smith5, V. Ganapathy5. 1Biochemistry and Molecular Biology, 2Cellular Biology and Anatomy, 3Georgia Health Sciences University, Augusta, GA.

*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures  –  Refer to Program Number in the Clinical Trial (CT) Registration Index –  Travel Grant Awardee
6549 — **A551** Therapeutic Inhibition Of Retinoblastoma By Nanoceria. Kathryn E. Klump*, S.V. Kiosseva*, S. Seal†, M.A. Dyer‡, J.F. McGinnis‡, §. "Oklahoma Center for Neuroscience, §Department of Ophthalmology, †University of Oklahoma Health Sciences Center, Oklahoma City, OK; ‡Mechanical Materials Aerospace Engineering, Nanoscience, and Technology Center, University of Central Florida, Orlando, FL; †Department of Developmental Neurobiology, St. Jude’s Children’s Research Hospital, Memphis, TN; ‡Howard Hughes Medical Institute, Chevy Chase, MD. 

**CR**

6550 — **A552** Inhibition of Protein Glycosylation by Tunicamycin Induces Shortening and Disorganization of Rod Outer Segments and Photoreceptor Degeneration in Mouse. Lauren N. Correa, Y. Li, Z. Wang, P. Chen, Y. Li, B.L. Lam, R. Wen. Bascom Palmer Eye Institute, University of Miami, Miami, FL.

6551 — **A553** Absorption Of Spio Nanoparticles Using Different Media On Arpe-19 and Hec Cell Cultures. Gustavo T. Grotto‡, R.R. Loureiro, J. Courve, L. Gamarra, P. Cristovam, J.P. Gomes. 1Ophthalmology, UNIFESP/Santa Casa de Santos, Santos, Brazil; 2Ophthalmology, UNIFESP, Santos, Brazil; 3Oncology, Instituto Israelita de Pesquisas Albert Einstein, São Paulo, Brazil.

6552 — **A554** Secretion Of VEGF From Polarized RPE By Tnf-a Or Thrombin. Hiroto Terasaki, M. Shirasawa, N. Arimura, S. Sonoda, T. Sakamoto. 1Ophthalmology, 2Department of Ophthalmology, Kagoshima University, Kagoshima, Japan.

6553 — **A555** CEP290 is Required for Photoreceptor Ciliogenesis and Ventricular Epithelial Clia Function. Erin Tanamoto, R. Rachel,a, M. Dewanja, J. Manasingh, T. Li, L. Dong, A. Swaroop. 1Neurobiol-Neurogenenr & Repair, NEI, Bethesda, MD; 2NINDS, Bethesda, MD.

6554 — **A556** Rapid Photoreceptor Degeneration In Zebrafish art13b Mutants Following Suppression Of Pep Signaling. Brian D. Perkins, L. Dudinski. Biology, Texas A & M University, College Station, TX.


6556 — **A558** Effect of Storage Temperature on the Viability of Cultured Retinal Pigment EPithelial Cells. Laura Pasovic, J.R. Eder, P. Asbel, T. Lyberg, Y. Cher, T.P. Utzheim. 1Center for Clinical Research, 2Department of Ophthalmology, 3Oslo University Hospital, Oslo, Norway; 4SynsLaser Kirurgi Oslo/Tromso, Oslo, Norway. 

**CR**


6560 — **A562** The Cysteine Prodrug L2-Oxothiazolidine-4-Carboxylic Acid (OTC) Elicits Potent Antioxidant and Anti-inflammatory Effects in RPE: Relevance to Treatment of Age-Related Macular Degeneration. Wanwisa Promsote, 1S. Ananthisarng, R. Veeranand-Karmegam, N. Lamberti, C-C. Chan, G. Pathapanyawong, P.M. Martin. 1Biochemistry and Molecular Biology, 2Pharmacology and Toxicology, 3Georgia Health Sciences University, Augusta, GA; 4Immunopathology Section, National Eye Institute, Bethesda, MD.


6564 — **A566** The mir-183/96/182 Cluster Is Essential For Normal Functions Of The Retina And Other Sensory Organs. Shubin Xu, S. Lumayag, C. Haldin, C. Covian, B. Kovacs. Ophthalmology, Rush University Medical Center, Chicago, IL.

6565 — **A567** Putative Role for Melanoregulin (Mrg) in Bisretinoid Lipofuscin Degradation in the Retinal Pigment Epithelium (RPE). Laura S. Frost, J.R. Sparrow, P.F. Stefano, K. Boeze-Battaglia. 1School of Dental Medicine, University of Pennsylvania, Philadelphia, PA; 2Department of Ophthalmology, Columbia University, New York, NY.

6566 — **A568** Subretinal gene therapy in Bbs1 mice. Arlene V. Drack, S. Bharattari, S. See, D. Gratje, E.M. Stone, R. Mullins, V. Sheffield. Ophthalmology, Univ of Iowa Hospitals, Iowa City, IA.

6567 — **A569** The Influence Of Substrate Elastic Modulus On Retinal Pigment Epithelial Cell Phagocytosis. Kieron S. Boochoon, J.T. Davis, J.C. Manaranca, A.M. McDermott, W.J. Foster. 1Biology & Ophthalmology, 2Physics, 3Optometry & Vision Science, University of Houston, Houston, TX; 4Ophthalmology, Weill-Cornell Medical College, Houston, TX.

6568 — **A570** Synergistic interaction of Tubby and Tubby-like Protein 1 (Tulp1). Gabriela S. Alvarado, N.B. Caberoy, Y. Zhou, W. Li. Ophthalmology, Bascom Palmer Eye Inst, Univ of Miami, Miami, FL.


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Thursday – Posters – 6549 – 6571

Hall B/C  A208-A255

Thursday, May 10, 2012, 11:15 AM-1:00 PM

Glucoma / Anatomy & Pathology / Retina / Retinal Cell Biology / Multidisciplinary Ophthalmic Imaging Group

549 Ganglion Cell Function, Injury, Protection and Imaging

Moderators: James E Morgan and Jonathan G Crowston

6570 — **A208** Exogenous PACAP Acts as a Retinoprotective Agent and a Modulator on Microglia/Macrophages Status in Mice NMDA-induced Retinal Injury Model. Yoshihiro Wada, T. Nakamura, K. Endo, S. Seki, S. Shioda, R. Koide. 1Department of Ophthalmology, 2Department of Anatomy, 3Showa University School of Medicine, Tokyo, Japan.

6571 — **A209** Increased Neuro-retinal Injury After Intraocular Pressure Elevation In Xenotransochondrial Mice And Compensation By Ophxos Complex IV. Ian A. Trounce, N. Van Bergen, G. Kong, V. Chrysostomou, C-A. Pinkert, J.G. Crowston. 1Center for Eye Research Australia, University of Melbourne, Melbourne, Australia; 2College of Veterinary Medicine, Auburn University, Auburn, AL.
6572 — A210 **Elevated Intraocular Pressure Increases Serum Protease Levels In The Retina And Promotes Retinal Ganglion Cell Loss.** Shreenu K. Chintala, X. Zhang, M. Cheng. Eye Research Institute, Oakland University, Rochester, MI.


6574 — A212 **Neuroprotective Effects of Epigallocatechin-3-gallate against N-methyl-D-aspartate Induced Excitotoxicity in Rat Retina.** Libin Jiang, F. Chen, N. Wang. Eye Center, Beijing Tongren Hospital, Beijing, China.


6577 — A215 **Down Regulation of BM88 after Optic Nerve Crush.** Ahmad M. Siddiqui, T.F. Sabilie, A.K. Ball. Pathology and Molecular Medicine, McMaster University, Hamilton, ON, Canada.

6578 — A216 **Effects of 24S-hydroxycholesterol On Primary Glial Müller Cells.** New Insights on Müller Cells Function and Cholesterol Homeostasis In The Retina. Cynthia Fourgeux, L. Martine, L. Leclere, B. Buteau, C. Bron. 1INRA, University of Angers, France; 2INRIA, University of Angers, France.

6579 — A217 **Neuroprotective Effect of Resveratrol after Optic Nerve Transection.** SeokHwan Kim, J. Park, M. Kim, D. Kim, J. Jeong, T-W. Kim. 1University of Kyunggi, Republic of Korea; 2Department of Ophthalmology, College of Medicine, Yonsei University, Seoul, Republic of Korea; 3Department of Ophthalmology, College of Medicine, Hallym University, Chuncheon, Gangwon, Republic of Korea.


6581 — A219 **Royal jelly Peptide Promotes Retinal Ganglion Cell Survival in Experimental Model of Glaucoma Through Up-regulating BDNF and GDNF.** Jihong Wu, X. Sun, S. Zhang. Eye & ENT Hospital, Fudan University, Shanghai, China.

6582 — A220 **SIRT1 Mediated Mitochondrial Biogenesis For The Protection of RGC-5 Cell During Oxidative Stress.** Qian Fan, S. Chen, J. Ge, X. Zhang. Zhongshan Ophthalmic Center, Sun Yat-sen University, Guangzhou, China.

6583 — A221 **Valproate Exerts Pleiotropic Neuroprotective Effects on Retinal Ganglion Cells in vivo Through Epigenetic Modulation in an Experimental Model of Glaucoma.** Shenghui Zhang, X. Sun, J. Wu. Eye & ENT Hospital, Fudan University, Shanghai, China.

6584 — A222 **Acid Phosphomyleinylase Plays a Role in IR-induced Retinal Degeneration.** He Fan, B.X. Wu, S.A. Ammann, C.E. Crosson. 1Ophthalmology-Storm Eye Institute, BBiochemistry and Molecular Biology, 2Ophthalmology, 3Medical Univ of South Carolina, Charleston, SC.

6585 — A223 **Soluble IL-6r and Neuroprotection of Retinal Ganglion Cells in Glaucoma.** Heather M. Callcott, R.M. Sappington. Vanderbilt Eye Institute, Vanderbilt Univ Medical Center, Nashville, TN.

6586 — A224 **Ectenecipt, A Widely Used Inhibitor of Tumor Necrosis Factor alpha (TNF-alpha), Prevents Retinal Ganglion Cell Loss In A Rat Model Of Glaucoma.** Min Roh, Y. Zhang, Y. Murakami, A. Thamou, D.G. Vavvas, L. Benowitz, J.W. Miller. 1Ophthalmology, MEEI, Angiogenesis 2Adrenergic Receptor Agonist, 3Department of Ophthalmology, Eye & ENT Hospital, Fudan University, Shanghai, China.

6587 — A225 **α2-adrenergic Receptor Agonist Restores Mitochondrial Transcription Factor A and Antioxidative Phosphorylation, And Protects Retinal Ganglion Cells Against Retinal Ischemic Injury.** Won-Kyu Ju, D. Lee, K. Y-Kim, Y. Noh, B.X. Wu, Y.A. Hannun, C.E. Crosson. 1University of California, San Diego, La Jolla, CA; 2Department of Ophthalmology, Zhongshan Ophthalmic Center, Sun Yat-sen University, Guangzhou, China.

6588 — A226 **Ocustatin M protects Retinal Ganglion Cells in an Optic Nerve Crush Mouse Model.** Xin Xia, Y. Li, Z. Wang, L. Luo, H. Fane. 1National Eye Institute, University of California, San Francisco, San Francisco, CA; 2Helen Wills Neuroscience Institute, University of California, Berkeley, Berkeley, CA.


6591 — A229 **Effect Of γ-synuclein Antibody On Rge5 and Mitochondrial Apoptosis Pathways.** Corina Wilding, K. Bell, F. Grus, N. Pfeiffer. Experimental Ophthalmology, Mainz, Germany.

6592 — A230 **Down Regulation Of 14-3-3 Ab In Glaucoma Patients Could Lead To Loss Of Protective Effects.** Katharina Bell, C. Wilding, N. Pfeiffer, F.H. Grus. Experimental Ophthalmology, Medical Centre University of Mainz, Mainz, Germany.

6593 — A231 **The TRPV1 Response to Stress of Retinal Ganglion Cells.** Nicholas J. Ward, K.W. Ho, T.N. Sidorenko, D.J. Calkins. Ophthalmol & Vis Sciences, Vanderbilt Eye Institute, Nashville, TN.


6597 — A235 **Membrane Attack Complex Induces Apoptosis In Retinal Ganglion Cells In Chronic Ocular Hypertension Model.** Purushottam Jha, V.Y. Lyzogyubov, P.S. Bora, N.S. Bora. Ophthalmology, Jones Eye Institute - UAMS, Little Rock, AR.
6598 — A236 Differential Expression of CCL5 Receptors in Acute and Chronic Murine Models of Glaucoma. Amanda C. Rehorst1, D.S. Duncan2, M. Stanford3, G. Davis3, R.M. Sappington1. 1Vanderbilt Eye Institute, 2Interdisciplinary Graduate Program, 3Vanderbilt University Medical Center, Nashville, TN.

6599 — A237 Alpha-1 Adrenergic Receptor Stimulation Induces Ocular Disease via TGF-Beta-Mediated Mechanisms. Jose L. Vega1, I. Agoulnik1, S. Masli2, F. Mir3, D. Chen4, W. Bowden4, Y. Quang5, E. Suarez6, P. Durand1,2. 1Department of Neurology, 2Department of Cell Biology and Pharmacology, 3Herbert Wertheim College of Medicine, Miami, FL; 4Ophthalmology, Schepens Eye Research Institute, Boston, MA; 5Department of Biology, Florida International University, Miami, FL. *CR


6601 — A239 Slt2 Delays The Death Of Retinal Ganglion Cells After Optic Nerve Crush Injury. Thomas F. Sabljic, A. Ball. Strain From Within Neurons. Isolated Rat Retina Ganglion Cells: Response To IL; ABiomedical Engineering, BNeurobiology, CPhysiology, 1University of Eastern Finland, Kuopio, Finland; 2Ophthalmology, Johns Hopkins University Hospital, Baltimore, MD.

6602 — A240 Subtype- and Location-Dependent Degeneration of Retinal Ganglion Cells in a Mouse Model of Ocular Hypertension. Liang Feng, Y. Zhao2, M. Yoshida2, S. Lindstrom1, T.S. Kim3, J. Cang1, J.B. Troy2, X. Liu2. 1Ophthalmology, Northwestern University, Chicago, IL; 2Biomedical Engineering, 3Neurobiology, 4Northwestern University, Evanston, IL.

6603 — A241 Mechanosensitive Channels In Isolated Rat Retina Ganglion Cells: Response To Strain From Within Neurons. Jingsheng Xia1, J.C. Lim1, W. Lu1, J.M. Beckel1, A.M. Laties1, C.H. Mitchell2,3. 1Anatomy and Cell Biology, 2Ophthalmology, 3Physiology, University of Pennsylvania, Philadelphia, PA.

6604 — A242 Retinal ganglion cell morphology is not affected by chronic experimental glaucoma in mice selectively expressing Yellow Fluorescent Protein. Giedrius Kalesnykas1, E. Oglebsky1, F. Cone1, M. Steinhart1, M. Pease1, H. Quigley1. 1Ophthalmology, University of Eastern Finland, Kuopio, Finland; 2Ophthalmology, Johns Hopkins School of Med, Baltimore, MD.


6606 — A244 Alteration Of Lymphocyte Levels In An Autoimmune Model Of Retinal Ganglion Cell Loss. Sandra Kuehn1, R. Norristani2, M. Kuehn3, J. Schiwek2, F. Gras2, B. Dick2, S. Joachim2. 1Experimental Eye Research Institute, Ruhr University, Bochum, Germany; 2Experimental Ophthalmology, University Medical Center, Mainz, Germany.


6608 — A246 Axonal Subtypes in Normal and Glaucomatous Retinas. Ye Zhou1, X. Zhao2, S. Williams3, W. Kong1, X. Huang4. 1Department of Biomedical Engineering, College of Engineering, University of Miami, Miami, FL; 2Bascom Palmer Eye Institute, Miller School of Medicine, University of Miami, Miami, FL; 3ShenYang No.4 Hospital, ShengYang, China.

6609 — A247 Aquaporins in glaucoma eyes. Thuy Linh Tran1, T. Bel1, M.D. de La Cour1, S. Nielsen1, J.U. Prouse1, S. Hamann1, S. Heegaard1,2. 1Dept. of Neuroscience & Pharmacology, University of Copenhagen, Copenhagen, Denmark; 2Dept. of Ophthalmology, Aarhus University Hospital, Aarhus C, Denmark; 3Dept. of Ophthalmology, Glostrup University Hospital, Copenhagen, Denmark; 4Dept. of Biomedicin, University of Aarhus, Aarhus, Denmark.

6610 — A248 Pre-degenerative Astrocyte Modifications in the Optic Projection of Glaucomatous Mice. Caroline C. Benoist1, J.D. Dapper1, S.D. Crish2, D.J. Calkins1. 1Ophthalmology, 2Biomedical Engineering, College of Engineering, University of Aarhus, Aarhus, Denmark; 3Pharmaceutical Sciences, Northeastern Ohio Univ College of Med, Rootstown, OH.

6611 — A249 Stress-Induced Upregulation and Translocation of TRPV1 in Retinal Astrocytes. Karen W. Ho, D.J. Calkins. Ophthalmology, Vanderbilt Univ Medical Center, Nashville, TN.

6612 — A250 Enhancement Of Stem Cell Integration Into The Retina By Modulating Gial Reactivity In An In-vitro Stem Cell Transplantation Model. Alessia Tassoni1, N.D. Bull1, K.R. Martin2. 1Clinical Neurosciences, Centre for Brain Repair, University of Cambridge, Cambridge, United Kingdom; 2Department of Ophthalmology, University of Cambridge, United Kingdom. *CR

6613 — A251 Brinzolamide Has Positive Effect on Retinal Function and Structure in Normotensive Glaucomatous Canine Eyes. Sinisa D. Grozdanic1, E. Hernandez-Merino1,2, H. Kecova1, R.H. Kardon1,2. 1Center for Prevention and Treatment of Vision Loss, Dept of Veterans Affairs - Iowa City, Iowa City, IA; 2Department of Ophthalmology and Visual Sciences, University of Iowa, Iowa City, IA.

6614 — A252 Is Transforming Growth Factor Beta 2 (TGF-B2) An Inducer Of Cross-Linked Actin Networks (CLANs) In Cultured Optic Nerve Head Cells (ONH)? Laura M. Carrié1, N. Pollock2, L. Parauan1, A.F. Clark1, I. Grierson1. 1Eye and Vision Science, University of Liverpool, Liverpool, United Kingdom; 2Cell Biology & Anatomy, University of North Texas HSC, Fort Worth, TX. *CR

6615 — A253 TLR-4 Innate Immune Differential Response To Three Dietary Fatty Acids Challenged With Low Molecular Weight Hyaluronic Acid, a TLR-4 Ligand. Algis Grybauskas1, E. Wagner1, R. Burdi1, L. Walker1, A. Kneppe1,2. 1Ophthalmology and Visual Sciences, University of Illinois at Chicago, Chicago, IL; 2Ophthalmology, Northwestern University Medical School, Chicago, IL.

6616 — A254 Hemopexin: An Inhibitor for Hyalurondase-2. Robert A. Burdi1, E. Wagner1, L. Walker1, A. Grybauskas1, R.D. McCarty3, J.P. Mayer1,4, A. Kneppe1,2. 1Ophthalmology and Visual Sciences, University of Illinois at Chicago, Chicago, IL; 2Ophthalmology, Northwestern University Medical School, Chicago, IL.

6617 — A255 Effect Of Coenzyme Q10 On Mitochondrial Fission And Cellular ATP Reduction In Purified Rat Optic Nerve Head Astrocytes Exposed To Hydrogen Peroxide. You Huan Noi1, K-Y. Kim1, R.N. Weinreb2, W-K. Jue1. 1Hamilton Glaucoma Center and Department of Ophthalmology, University of California, San Diego, La Jolla, CA; 2National Center for Microscopy and Imaging Research and Department of Neuroscience, University of California, San Diego School of Medicine, La Jolla, CA.

Thursday – Posters – 6598 – 6618

Hall B/C  A607-A640

Thursday, May 10, 2012, 11:15 AM-1:00 PM

Lens

550 Cataract Surgery I

Moderator: Steven Bassnett

6618 — A607 In Vivo and In Vitro MRI of the Uvea in Pseudophakic Human Eyes, Susan A. Strek1, B.S. Tjan1, L. Werner1, N. Manalis1, L.M. Strek1, K.L. Lu2. 1MRI Research, Inc, Middleburg Heights, OH; 2Psychology, University of Southern California, Los Angeles, CA; 3Ophthalmology, University of Utah/Moran Eye Center, Salt Lake City, UT; 4MRI Research Inc, Middleburg Heights, OH; 5Ophthalmology, University of Southern California/Doheny Eye Institute, Los Angeles, CA. *CR
6619 – A608 Avardin Pseudoexfoliation Study (APEX) I: Intraoperative Results. Alan L. Robin1,2, R. Venkatesh1, A. Haririyya1, C. Shivakumar1, V Prabhu1, M. Sekhar1, B. Talwar1, P. Sathiyam, D. Ramakrishnan1. 1Avardin Eye Hospitals and Post Graduate Institute of Ophthalmology, Madurai, India; 2Ophthalmology and International Health, Johns Hopkins University, Baltimore, MD.


6621 – A610 Reduced Laser Pulse Width Improves Cutting Efficiency in Laser Refractive Cataract Surgery. Simone Schneider1,2, H. Uys1, K. Edwards1, T. Olmstead1, V. Teuma1, S. Botz1. 1Clinical and Regulatory Affairs, 2Research & Development, 3Laser AR, Orlando, FL; 4Asian Eye Institute, Makati, Philippines. *CR, ☀

6622 – A611 Morphology of Femtosecond Intrastromal Arcuate Incisions. Percy S. Binder1,2, B. Gray2, M. Brownell2, J. Martiz, MD3, A. Gwon. 1Ophthalmology, Hopital Desgenettes, Lyon Cedex, France; 2Department of Ophthalmology, Eye Hospitals and Post Graduate Institute of Ophthalmology, Busan, Republic of Korea; 3Ophthalmology, Haedundae Paik Hospital, Inje University College of Medicine, Busan, Republic of Korea.

6623 – A612 Posterior Capsule Opacification of a 1-piece and a 3-piece Microincision Intraocular Lens - 1 year Comparison. Ana Prinz1, B. Weingessel1, O. Findl1, P.V. Vecsei-Marlovits1. 1Department of Ophthalmology, Hietzing Hospital, Vienna, Austria; 2Department of Ophthalmology, Hanusch Hospital, Vienna, Austria.


6625 – A614 Corneal And Total Optical Quality After 2.2mm Coaxial Mini-incision Cataract Surgery Combined With Bimanual Irrigation-aspiration. Corinne Dot1, H. El Chehab1, P. Savary1, E. Agard1, A. Malec1e, N. Chave1, G. Ract-Madoix1, J. Giraud1. 1Ophthalmology, Hopital Desgenettes, Lyon Cedex 03, France; 2Department of Ophthalmology, Hopital Desgenettes, Lyon, France.


6627 – A616 Major Breed Distribution and Common Histopathologic Findings in Canine Globes Enucleated as a Result of Glaucoma Following Cataract Surgery. Erin M. Scott1, D.W. Essor1, K.J. Fritz1, R.R. Dubielzig1. 1Pathobiological Sciences, UW-Madison School of Veterinary Medicine, Madison, WI; 2Eye Care for Animals, Tustin, CA.

6628 – A617 Correlation Of Subjective Nuclear Sclerotic Cataract Grading And Intraoperative Cumulative Dispensed Energy During Phacoemulsification. Nakul Shekhawat1, A. Chomskey1,2. 1Vanderbilt University School of Medicine, Nashville, TN; 2VA Tennessee Valley Healthcare System, Nashville, TN.

6629 – A618 Asymptomatic Capsular Bag Distension 10 years After Cataract Surgery, 7 Case Reports. Eva Menezum. Clinical Sci & Ophthalm, UMEA University, Umea, Sweden.

6630 – A619 Objective Discrimination Between Operable And Non-operable Cataracts. Clemente Paz Filgueira1, R.F. Sanchez1, L.A. Issollo1, M. Vilaseca1, J. Pujol1, E.M. Colombo1. 1Departamento de Luminotecnica, ILAV, CONICET - UNT, San Miguel de Tucuman, Argentina; 2CD6-Optica i Optometria, Universitat Politecnica Catalunya, Terrassa, Spain. *CR

6631 – A620 Subjective Outcomes Evaluation of Aspheric Diffractive and Apodized Diffractive Aspheric Multifocal IOLs. Dwayne K. Logan1, E. Sadri1. 1Cataract and Refractive Surgery, Atlantis EyeCare, Newport Beach, CA; 2Cataract and Refractive Surgery, Atlantis EyeCare, Newport Beach, CA. *CR


6633 – A622 Postoperative Refractive Error After Simultaneous Vitrectomy and Phacoemulsification with Sulfur Fixation of Intraocular Lens, eok soo suh, S. LEE, J. Chun. department of ophthalmology, Dongguk University Gyeongju Hospital, Gyeongju, Republic of Korea.

6634 – A623 Evaluation Of Subjective Outcomes With Two Phacoemulsifying IOLs Following Phacoemulsification. Larry Katzen. Katzen Eye Care & Laser Ctr, Boynton Beach, FL. *CR

6635 – A624 Randomized Comparison of a Transversal Ultrasound vs. a Torsional Handpiece in Phacoemulsification: A Contralaterally-Controlled Trial. Kerry Assil1, W. Christian, L. Harris. Assil Eye Institute, Beverly Hills, CA. *CR, ☀

6636 – A625 Continuous Intraocular Pressure Measurements During Small Incision Phacoemulsification Surgery In Porcine Eyes. Seung Youn Jeu1, M. Son1, T. Baek1, J. Lee1. 1Ophthalmology, GM St. Mary’ eye center, Busan, Republic of Korea; 2Ophthalmology, Haedundae Paik Hospital, Inje University College of Medicine, Busan, Republic of Korea.

6637 – A626 Silicone Sleeve Polishing Of Posterior Capsule, A Safe And Costless I/A Technique. Jean-Marie Giraudeau1, H. El Chehab1, J-R. Fenolland1, M. Francoz1, D. Sendon1, F. El Asri1, C. Denier1, C. Dot2, F. May1, J-P. Renaud1. 1Ophthalmologie, Hopital d’Instruction des Armees du Val de Grace, Paris, France; 2Ophthalmologie, Hopital d’Instruction des Armees Desgenettes, Lyon, France.

6638 – A627 Intracameral Anesthesia For Cataract Surgery, A Population-based Study On Patient Satisfaction And Outcome. Inger M. Westborg1, E. Moeestam1. 1Ophthalmology, Eye Clinic, Sunderby Hospital, Lulea, Sweden; 2Clinical Sci & Ophthalm, UMEA University, Umea, Sweden.

6639 – A628 Corneal Astigmatism And Its Correction With The Toric Intraocular Lens And Peripheral Corneal Relaxing Incisions. Li Wang, D.D. Koch, M.P. Weikert, R. Jenkins: Cullen Eye Institute, Dept Ophthalmology, Baylor College of Medicine, Houston, TX.

6640 – A629 Viscoat Versus Visthesia During Phacoemulsification Cataract Surgery: Corneal And Foveal Changes. Marilita M. Moschos1, E.P. Chatzivalli1, T.N. Sergentanis1, I. Ladas1. 1st Department of Ophthalmology, 2Department of Epidemiology and Biostatistics, University of Athens, Athens, Greece.


6642 – A631 A Comparative Study Of Phacoemulsification With The Ozil-Intelligent Phaco(IP) handpiece and Ozil handpiece:retrospective clinical study. Yoshinao Setoguchi1, H. Ito1, H. Nakashiki1, K. Kuroda1, A. Anemiya1, M. Taniguchi1, Y. Okamoto1, A. Ootani1, Y. Tanaka1. 1Japanese Red Cross Wakayama Medical Center, Wakayama, Japan; 2Tanaka Eye Clinic, Wakayama, Japan.

6643 – A632 Balancing the Small Angle Domain (Amblyopia) and the Large Angle Domain (Straylight) of the Point-Spread-Function for Cataract Surgery. Thomas J. Van Den Berg1, J.L. van der Meulen1. 1Ophthalmic Research, Netherlands Inst for NeuroSci, Royal Acad, Amsterdam, The Netherlands; 2Ophthalmology, Academic Medical Center, Amsterdam, The Netherlands. *CR, ☀

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Hall B/C A641-A670
Thursday, May 10, 2012, 11:15 AM-1:00 PM

551 Cataract Surgery II

Moderator: Ales Cvekl

A641 — Pre-Clinical Evaluation of Femtosecond Laser-assisted Capsulotomy in Cataract Surgery. James E. Hill1, L.C. Huang2, B. Gray2, P. De Guzman1, A. Gwon1, L.G. Vargas1, M. Brownell1. 1Biological Sciences R&D, 2R&D Equipment, ‘Abbott Medical Optics, Santa Ana, CA; University of California Irvine, Irvine, CA.*CR


A643 — Clinical Outcomes at a VAMC after the Introduction of Universal NSAID Therapy Perioperatively in Cataract Patients. Cameron C. Johnson1, R.A. Rombola, II1, P.J. Krall1. Ophthalmology, ‘College of Medicine, 1University of Florida, Gainesville, FL.


A645 — Sutureless transcleral Intraocular Lens implantation after ocular trauma. Malek Khousni1, D. Gaucher2, T. Bourgier3, C. Speeg2, M. Montard1, B.Y. Delbosc4, M. Saleh1. Ophthalmology, University Hospital of Besancon, Besancon, France; Ophthalmology, Hopital Civil de Strasbourg, Strasbourg, France; Ophthalmology Dept SMOH Pole, University Hospital, Strasbourg, France; Ophthalmology, University Hospital, Strasbourg, France; Ophthalmology, Centre Hospitalier Universitaire, Besancon, France; Ophthalmology, Univ Hosp, Besancon, France.


A647 — Change In Central Corneal Volume After Cataract Surgery. Melissa M. Wong1, A. Shukla2, W.M. Moir1. Ophthalmology, Boston Univ School of Med, Boston, MA; Ophthalmology, Massachusetts Eye and Ear Infirmary, Boston, MA.


A650 — Central Corneal Thickness Related to the Volume of BSS Plus used during Phacoemulsification. Erin Lessner, B. Markowitz, K. Banks. Ophthalmology, University of South Carolina, Columbia, SC.

A651 — Preoperative Cataract Density Grading by Scheimpflug Imaging and its influence on operative fluids and phacoemulsification energy. Jesus Arrieta-Camacho1, V. Estefani1, A.J. Ramirez-Miranda1, E. Chavez Mondragon1. 1Anterior Segment, Inst de Oftalmologia CONVAL, Mexico City, Mexico; 2Cornea and refractive Surgery, Instituto de Oftalmologia Conde de Valenciana, Mexico City, Mexico.


A653 — Shadowphotography of IOL Injectors and Clear Cornea Incision Size. Alejandro Arboleda1, E. Arrieta1, D. Nankivil, M.C. Aguilar1, K. Solotongolo1, S.H. Yoo1, J.M.A. Pare1. Ophthalmic Biophysics Center, Dept. of Ophthalmology, Bascom Palmer Eye Institute, University of Miami Miller School of Medicine, Miami, FL; Biomedical Optics and Laser Laboratory, Dept. of Biomedical Engineering, University of Miami College of Engineering, Coral Gables, FL.*CR


A655 — Improvement in Quality of life following Monocular or bilateral cataract extraction with lens implantation in patients in Lima Peru. Andrea P. Dreyfuss. adeyita@stanford.edu, Stanford School of Medicine, Stanford, CA.

A656 — Management of Retained Lens Fragments After Phacoemulsification: Comparing Visual Outcomes of Early Pars Plana Lensectomy versus Late Pars Plana Lensectomy. Gelareh Abedi1, T. Cleland1, L. Marrouf1. 1Department of Ophthalmology, Univ of Texas Health Sci Center, San Antonio, TX; 2Retina Associates of South Texas, San Antonio, TX.

A657 — The Effect of Posterior Capsule Polishing on Posterior Capsule Opacification. Jeanie V. Paik1, M. Shiloach2, M.S. Macsai-Kaplan1. 1University of Chicago, Chicago, IL; 2NorthShore Univ Health System, Glenview, IL; 3Ophthalmology, NorthShore Univ Hlth System, Glenview, IL.

*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures.  \(\text{\#}\) Refer to Program Number in the Clinical Trial (CT) Registration Index.  \(\text{\#CR}\) Travel Grant Awardee

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6669 – 6690 – Thursday – Posters

6669 – A658 Retrospective Evaluation of Tecnis Multifocal (ZMA00 or ZMB00) and ReSTOR (SN60D1) Intraocular Lenses Following Phacoemulsification. Gabriela Perez, J.A. Khell, A. Kshetrapal, W. Trattler, C. Buznego, F. Spokot. Ctr for Excellence in Eye Care, Miami, FL. *CR


6671 – A660 Comparison of Intraocular Pressure by Tonopen vs Palpation after Cataract Extraction. Jeffery C. Hinson, Jr. Ophthalmology, University of South Carolina, Columbia, SC.


6673 – A662 Evaluation Of Toric IOL Implantation In Cataract Surgery. Ilana Eyecare, Miami, FL.


6679 – A669 Morgagnian Cataract Simulating Iris Neoflora: Case Report. Alessandra Protti1, S.A. Gandolfi1, P. Mora1, L. Zografos2. 1Ophthalmology, University of Parma, Parma, Italy; 2Ophthalmology, Jules-Gonin Eye Hospital, Lausanne, Switzerland.

6680 – A670 The Efficacy of Soap and Water Versus Bleach for the Disinfection of Gonioscopy Instrument. Ninel Z. Gregori1, A. Abbey1, D. Miller2. 1Ophthalmology, Bascom Palmer Eye Institute, Miami, FL; 2Bascom Palmer Eye Institute, Univ of Miami Miller Sch of Med, Miami, FL.

Hall B/C  D701-D729

Thursday, May 10, 2012, 11:15 AM-1:00 PM

Lens

552 Cataract Complications and Drugs

Moderator: Paul G FitzGerald

6681 – D701 Conjunctival Bacterial Flora And Antibiotic Resistance Patterns After Preoperative Application Of Topical Levofloxacin 0.3%. Herminia Mino de Kaspar1, L.E. Hoffmann1, L. He2, B. Li3, M.M. Nentwich1, C. Haritoglou1, D. Kooy1, M. Grueterich1, A. Kampik1. 1Department of Ophthalmology, Ludwig-Maximilians-University, Munich, Germany; 2Department of Ophthalmology, School of Medicine, Stanford University, Stanford, CA.

6682 – D702 Hypertension Complicated by Cardiovascular Disease is an Important Risk Factor for the Development of Intraoperative Floppy Iris Syndrome. Cynthia I. Tung1. 1Department of Ophthalmology, Massachusetts Eye and Ear Infirmary, Boston, MA.


6688 – D708 Management Of Vitreal Loss From Posterior Capsular Rupture During Cataract Operation: Posterior Versus Anterior Vitrectomy? Chaerin Park1,2, S. Wool1, J. Hyon1, T. Kim1, K. Park1. 1Department of Ophthalmology, Seoul National University Hospital, Seoul, Republic of Korea; 2Seoul Artificial Eye Center, Institutes for Biomedical Research, Seoul National University Hospital, Seoul, Republic of Korea; 3Department of Ophthalmology, Seoul National University Bundang Hospital, Seongnam, Republic of Korea.

6689 – D709 Laterality as a Risk Factor for Intraoperative Complications During Cataract Surgery. Danielle Trief1,4, P.A. Legutko5, M.K. Daly6. 1Ophthalmology, Veterans Affairs Boston Healthcare System, Boston, MA; 2Ophthalmology, Massachusetts Eye and Ear Infirmary, Boston, MA; 3Semophobic, Novato, CA; 4Ophthalmology, Boston University School of Medicine, Boston, MA.

6690 – D710 Clinical Efficacy Of Loteprednol Etabonate Gel 0.5% In The Treatment Of Ocular Inflammation And Pain After Cataract Surgery. Rajesh K. Rajpal1, R. Siou-Mermet2, T. Erb3, T.L. Comstock8. 1Cornea Consultants, PC, McLean, VA; 2European Pharmaceutical Clinical Science, Bausch & Lomb, Montpellier, France; 3Bios tatistics, 4Medical Affairs, Global Pharmaceutical, 5Bausch & Lomb, Rochester, NY. *CR

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6692 — D712 Effect of Modified Cyclosporine A on Lens Epithelial Cell and Corneal Endothelial Viability. Elizabeth A. Lutz4, D.A. Wilkie5, A.J. Gemeensky-Metzler6, H.L. Chandler7. 4Veterinary Clinical Sciences, 5Optometry, 7The Ohio State University, Columbus, OH.


6694 — D714 Incidence Of Postoperative Complications In Infants Undergoing Bilateral Simultaneous, Bilateral Sequential, Or Unilateral Cataract Surgery. Sheela Masiri8, E. Agabegi9, B. Schnell10, M.B. Yang11, A. Abrahmson Pediatric Eye Institute, Department of Ophthalmology, 8Department of Biostatistics, 9Cincinnati Children’s Hospital Medical Center, University of Cincinnati College of Medicine, Cincinnati, OH.


6697 — D717 Intraocular Pressure Response in Glaucoma Patients Using Diluprednate 0.5% Post Operatively after Phacoemulsification. Melissa M. Cable. Discover Vision Centers, Independence, MO. *CR


6700 — D720 Subconjunctival Steroid Injection versus Steroid Eyedrops: Evaluation of the Inflammatory Reaction after Phacoemulsification. Myrthe Dieleman1, R.J. Wubbeke2, P.W. de Waard2, 3Rotterdam Ophthalmic Institute, 4Glaucoma, 5Rotterdam Eye Hospital, Rotterdam, The Netherlands. #


6703 — D723 Complications of Phacoemulsification After Repeated Intravitreal Injections. Michael J. Coleman, Jr., M. McDermott. Ophthalmology, Kresge Eye Institute, Detroit, MI.


6705 — D725 The Effect of Tamsulosin (Flomax) on Iris Vasculature. Christopher T. Hood, M. Hussain, T.M. Cooney, Y.M. Elner, R.M. Shtein. Kellogg Eye Center, University of Michigan, Ann Arbor, MI.

6706 — D726 Risk Factors For Developing Capsular Distension Syndrome. Maged Nessim1, P. Pany2, M. Tahan2, P. Good1. 1Ophthalmology, 2Kresge Eye Institute, Detroit, MI.


6708 — D728 Factors Influencing Retinal Image Contrast in Eyes with Retrolodos (Rekyjivak Eye Study). Kota Nagai3, N. Mita4, N. Hatusaka1, R. Honda1, H. Osada2, E. Kubo3, H. Sasaki1, K. Sasaki4, F. Jonasson1. 1Ophthalmology, Nagai Eye Clinic, Ibaraki, Japan; 2Department of Ophthalmology, 3Department of Ophthalmology, 4Department of Ophthalmology, 5Kanazawa Medical University, Kishiwada, Japan.

6709 — D729 Ultrastructural Changes In The Crystalline Lens Of Diabetic Patients Treated With Panretinal Argon Laser Photocoagulation. Zelika Izizzar1, M. Kilic1, E. Eredenli1, F. Topal Celikkan1. 1Ophthalmology, Ankara Numune Education and Research Hospital, Ankara, Turkey; 2Histology, Ankara University Medicine Faculty, Ankara, Turkey.

Hall B/C  D730-D762

Thursday, May 10, 2012, 11:15 AM-1:00 PM

Lens

553 Cataract Training, Modeling, Pediatries

Moderator: Paul G FitzGerald

6710 — D730 A Comparison of the Outcomes of Resident-Performed Phacoemulsification in Patients on Alpha Blockers Before and After the Description of Floppy Iris Syndrome (IFIS). Asher Neren1, A. Greenberg1, E. Burstein1, C. Muhkopadhyay1, A. Schrier1, E. Smith1. 1Ophthalmology, VA Medical Center Brooklyn, Brooklyn, NY; 2Ophthalmology, Columbia University Medical Center, New York, NY.


6713 — D733 Determination of Endotoxin Concentration in Hyaluronic Acid by The Light Scattering Method. Taiki Oshida1, Y. Sugiiro1, T. Asano1, T. Hiroto1, M. Sawa1. 1Division of Ophthalmology, Department of Visual Sciences, Nihon University School of Medicine, Tokyo, Japan; 2Biophotonics Section, Research & Development Training, Electronics & Optics Division., Kowa Company, Ltd., Tokyo, Japan.


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6719 – D739 Resident Cataract Surgery Outcomes with Toric Intraocular Lenses. Helen R. Moreira*, P.B. Greenberg, MD*. 1Division of Ophthalmology, Providence Veterans Affairs Medical Center, Providence, RI.


6721 – D741 Vector Analysis of Induced Astigmatism after 2.2 mm and 2.6 mm Scleral Incisions. Peter Jeppesen, T.K. Olsen. Ophthalmology, Aarhus Univ Hospital, Aarhus, Denmark.


6723 – D743 Relation between some IOL Injectors and Clear Cornea incision size in the rabbit model. Esdras Arrieta, D. Nankivil, K. Sotolongo, A. Arboleda, M.C. Aguilar, E. Hernandez, S. Yoo, J-M. Parel. 1Ophthalmology, Gavin Herbert Eye Institute, University of Miami Miller School of Medicine, Miami, FL. *CR


6725 – D745 Validity of a Miniaturised Open-field Aberrometer with Surgical Application. James S. Wolfssohn, U.K. Bhati, A.L. Sheppard, S. Shah, H. Dua, T. Mihashi, T. Yamaguchi. 1School of Life and Health Sciences, Aston University, Birmingham, United Kingdom; 2Midland Eye Institute, Birmingham, United Kingdom; 3Ophthalmology, Nottingham University, Nottingham, United Kingdom; 4Topcon, Tokyo, Japan. *CR


6729 – D749 Effects Of Cumulative Dissipated Energy On Postoperative Corneal Pachymetry In Resident Performed Cataract Surgery. Adam G. Choo. Ophthalmology, Univ of S Carolina, School of Medicine, Columbia, SC.


6733 – D753 Evaluation Of A Warm-up Effect In Resident-Performed Cataract Surgery. Mohsin Chowdhury*, J.B. Rosenberg*. 1Biostatistics and Epidemiology, 2Ophthalmology and Visual Sciences, 3Division of Critical Care Medicine, 4Department of Ophthalmology and Visual Sciences, 5Montefiore Medical Center/Albert Einstein College of Medicine, Bronx, NY; 6Department of Ophthalmology and Visual Sciences, Case Western Reserve University, Cleveland, OH.


### Thursday – Posters – 6743 – 6767

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<tr>
<th>Poster Number</th>
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<th>Authors</th>
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<tr>
<td>6746</td>
<td>Evaluation of Modified Levator Plication as Compared to Frontalis Sling for Severe Congenital Ptosis.</td>
<td>Abhishek Dave, M. Bajaj, N. Pushkar, B. Chawla, M. Chandra, S. Ghose, Ophthalmology, Dr RP Centre, AIIMS, New Delhi, India.</td>
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<td>Muller’s Muscle-Conjunctiva Resection Outcomes And Phynphenoline Predictability In Ptosis From Horner’s Syndrome.</td>
<td>Senad Osmanovic, J. Hou, V. Aakalu, P. Setabutr, A.M. Pattern, Ophthalmology, University of Illinois at Chicago, Chicago, IL.</td>
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<td>Outcomes And Complications Of Eyelid Gold Weight Implantation For Facial Paralysis.</td>
<td>Preeti J. Thiyaprunil, S. Lee, M. Yan, Ophthalmology, Baylor College of Medicine, Houston, TX.</td>
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<td>Jacqueline K. Ng, J. Ng, Ophthalmology, Oregon Health and Science University, Portland, OR.</td>
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<td>Cara W. Snyder, Y. Enzer, Ophthalmology, Brown University, Providence, RI.</td>
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<td>Mayomi S. Kamarmu, S.A. Schellini, Ophthalmology, Faculdade de Medicina de Botucatu - UNESP, Botucatu, Brazil.</td>
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<td>Intraoperative Mitomycin C To Retard Future Cicatrix Formation During Severe Cicatricular Lid Retraction Repair.</td>
<td>Renelle Pointdujour, J. Gutman, C. Calderon, P. Langer, R. Shinder, Ophthalmology, SUNY Downstate Medical Center, Brooklyn, NY.</td>
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<td>Repair of pediatric canicular lacerations using monocanicular Monoka stent.</td>
<td>Scott W. Yeates, F. Orge, Ophthalmology, Univ Hosp Case Western Med Ctr, Cleveland, OH.</td>
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<td>Method for Measuring Lacrimal Drainage Resistance.</td>
<td>Milap Mehta, J.D. Perry, Ophthalmology, Cleveland Clinic-Cole Eye Inst, Cleveland, OH.</td>
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<td>Cyanoacrylate Pseudotarsorrhaphy: Presentation &amp; Treatment Strategies.</td>
<td>Matthew Gorski, R. Shinder, Department of Ophthalmology, SUNY Downstate Medical Center, Brooklyn, NY.</td>
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<td>Charlene H. Crockett, S. Lee, M.T. Yen, Department of Ophthalmology, Baylor College of Medicine, Cullen Eye Institute, Houston, TX.</td>
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<td>Retrospective Review Of Records From A School Based Vision Clinic Serving The Chicago Community.</td>
<td>Sandra S. Block, M. Suckow, S. Reed, School-Based Vision Clinic, Illinois College of Optometry, Chicago, IL.</td>
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<td>Evolution Of Axial Length In Congenital Glaucoma.</td>
<td>Bruno Sautiere, A. Duhamel, A. Galet, J-F. Rouland, Ophthalmology, Anesthesiology, Huriez Hospital, CHRU Lille, Lille, France.</td>
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<td>Central Corneal Thickness and Intraocular Pressure in Moderate-Late Premature School Aged Children.</td>
<td>Lina H. Raffa, J. Dahlgreen, A-K. Karlsson, M.A. Gronland, Department of Ophthalmology, Institute of Neuroscience and Physiology, Gothenburg, Sweden.</td>
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*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures – ‡ Refer to Program Number in the Clinical Trial (CT) Registration Index – † Travel Grant Awardee

6769 — D789 IOLunder2: Outcomes Following Surgery With And Without Primary Intraocular Lens Implantation In Children under 2years Old. Lola A. Sologo1, J.S. Rahi1,2, British Isles Congenital Cataract Interest Group. MRC Centre Epidemiology (Child Health), Institute of Child Health, UCL, London, United Kingdom; 2Kingston Eye Hospital, London, United Kingdom; 3Moorfields Eye Hospital, London, United Kingdom.

6770 — D790 Eye Injuries in US High School Athletes: Results of a Six-Year Epidemiologic Study. Andrew W. Stacey1, C.N. Czyz1, J.A. Foster2, D. Comstock2, 1Department of Medical Education, Riverside Methodist Hospital, OhioHealth, Columbus, OH; 2Division of Ophthalmology, Section Ocular Plastic and Reconstructive Surgery, Ohio University, Doctor’s Hospital, Columbus, OH; 3Nationwide Children’s Hospital, Columbus, OH; 4Center for Injury Research and Policy, The Research Institute at Nationwide Children’s Hospital, Columbus, OH; 5Division of Epidemiology, The Ohio State University College of Public Health, Columbus, OH.

6771 — D791 Investigation on the reading ability in the hyperopic children at the Nishikasai Inouye Pediatric Eye Clinic. Mikio tsuorum1, O. Katsumi1, M. Miyata2, Y. Aoki1, Y. Miyana1, K. Inoue1, K. Oda1. 1Nishikasai Inouye Eye Hospital, Tokyo, Japan; 2Inouye Pediatric Eye Clinic, Tokyo, Japan; 3Tokyo Woman’s Christian University, Tokyo, Japan; 4Inouye Eye Hospital, Tokyo, Japan.


6774 — D794 Refractive changes in children with Marfan Syndrome. Luisa M. Hopker1, S.X. Wang1, D.R. Weakley1. Ophthalmology, UT Southwestern, Dallas, TX.

6775 — D795 Consumer Digital Cameras: A Feasible Strategy for the Early Detection of Childhood Blindness. Tirth N. Pathel1, A.C. Malipatna4, A. Merchant5, R. Batte1, K. Nischal1, R.W. Arnold1, V. Naresh1, J. Matalia1, H. Dimaras3, B. Galle1. 1ophthalmology, 2Pediatric Ophthalmology, 3Narayana Nethralaya, Bangalore, India; 4Pediatric Ophthalmology, Narayana Nethralaya, Bangalore, India; 5Pediatric Ophthalmology, Childrens Hospital of Pittsburgh, Pittsburgh, PA; 6Pediatric Ophthalmology and Strabismus, Ophthalmic Associates, Anchorage, AK; 7Hematology Oncology, 8Ophthalmology, 9Hospital for Sick Children, Toronto, ON, Canada.

6776 — D796 Natural History And Risk Factors Analysis For Retinopathy Of Prematurity In Premature Infants In Taiwan: A Prospective Study At The Post Bevacizumab Era. Yi hsing Chen1, W-C. Wu1. 1Ophthalmology department, Chang Gung Memorial Hospital, Taoyuan county, Taiwan; 2Ophthalmology, Chang Gung Memorial Hosp, Taoyuan county, Taiwan.


6779 — D799 The Impact Of Amblyopia And Strabismus On Child Development And Quality Of Life In Young Chinese Children. Audrey Chia1, Y. Chan1, E. Lamoureux1, J. Thumboo1, T. Wong1, S. Saw1. 1Pediatric Services, Singapore National Eye Centre, Singapore; 2National University Singapore, Singapore; 3University of Melbourne, Melbourne, Australia; 4Singapore General Hospital, Singapore; 5Singapore Eye Research Institute, Singapore.

6780 — D800 Sibling Motivation Cards - New Screening Initiative in South India for Pediatric Eye Disease. Brinda Muthusamy1, B. Day1, V. Kannusamy1, F. Moutoupa1, H.J. Park1. 1Pediatric Ophthalmology & Strabismus, The Wilmer Eye Institute, Johns Hopkins Hospital, Baltimore, MD; 2Pediatric Ophthalmology & Strabismus, Aravind Eye Hospital, Pondicherry, India.

6781 — D801 Secondary Glaucoma and Pediatric Traumatic Hyphema. Jeffrey SoolHoo1, E. McCourt1, R. Sands Braverman1, R. Enzenauer1. Ophthalmology, University of Colorado, Aurora, CO.


6783 — D803 Barriers to Care Following Failure of Population Based Vision Screening. Kristin Rarcy, A. Summers, J. Vaughan, L. Reznick. Pediatric Ophthalmology, Casey Eye Institute, Portland, OR.

Cornea

556 Corneal Biomechanics II

Moderator: Cynthia J Roberts

6784 — D948 Corneal Biomechanical Properties and their Change with Corneal UV-Riboflavin Cross-linking from 2D Flap-Extensiometry, Sabine Kri1, H.S. Ginis2, S. Marcos Celestino1. 1Instituto de Optica, Consejo Superior de Invest Cientificas, Madrid, Spain; 2Institute of Vision & Optics, University of Crete, Heraklion, Greece; 3Instituto de Optica, Consejo Sup de Invest Sci, Madrid, Spain.


6786 — D950 To Evaluate Patient Outcomes Following Epithelium-on CXL In Patients Who Received The Treatment In One Or Both Eyes. Ray Ruhinfeld1, W. Traller2, G. Perez1, C.J. Kaiser1, A. Koreishi1, P. Majmundar1, R.J. Epstein1, S. Bajnai1, R. Malhotra1. 1Washington Eye Physicians and Surgeons, Chevy Chase, MD; 2Cornea, Center For Excellence in Eye Care, Miami, FL; 3Cornea Associates of Texas, Dallas, TX; 4Chicago Cornea, Chicago, IL; 5Cleveland Eye Clinic, Cleveland, OH; 6Ophthalmology Associates, St. Louis, MO.


Hall B/C D948-D986

Thursday, May 10, 2012, 11:15 AM-1:00 PM

Thursday Posters

11:15 am - 1:00 pm

*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures - Refer to Program Number in the Clinical Trial (CT) Registration Index - Refer to Program Number in the Travel Grant Award Index - 406
6788 — D952 Lack Of Influence Of Corneal Thickness On Biomechanical Waveforms And How That Impact In Distinguishing Candidates For Lasik Or Prk. Marconi R. Sanhiago, R. Ambrosio, Jr., W.J. Dupps, Jr., D. Smadja, E.M. España, S.E. Wilson. 8Ophthalmology, Cleveland Clinic Foundation, Cleveland, OH; 9Ophthalmology, University of Sao Paulo and Rio Laser, Sao Paulo and Rio de Janeiro, Brazil; 3Ophthalmology, University of Naples, Napoli, Italy; 2University Eye Institute, University of Rochester, Rochester, NY.


6791 — D955 An Experimental Evaluation Of Know Computer Models Of The Porcine Cornea. Vito Romano, M. Angelillo, A. Pandolfi. 2Second University of Naples, Napoli, Italy; 3University of Salerno, Salerno, Italy; 4Politecnico of Milan, Milan, Italy.


6793 — D957 Biomechanical Response Of Paired Donor Corneas To An Air Puff: Isolated Cornea vs Intact Whole Globe. Kimberly Metzler, A.M. Mahmoud, J. Liu, D. Lee, S.J. Shiao, C.J. Roberts. 8Biomedical Engineering, 9Ophthalmology, 10College of Medicine, 11The Ohio State University, Columbus, OH.

6794 — D958 A Molecular-level Model For Swelling Pressure In The Corneal Stroma. Xi Cheng, P.M. Pinsky. Mechanical Engineering, Stanford University, Stanford, CA.


6796 — D960 The Role of Collagen Interweaving in Stromal Elasticity: A Model Based on the 3-D Collagen Architecture. Steven J. Petsche, P.M. Pinsky. Mechanical Engineering, Stanford University, Stanford, CA.

6797 — D961 Changes In Corneal Biomechanics after Descemet Stripping Endothelial Keratoplasty in Fuchs’ Dystrophy. Richard Y. Huang, B. Goldhagen, A.N. Kuo, N.A. Afshari. 8Ophthalmology, Vanderbilt University, Nashville, TN; 9Ophthalmology, Duke University Eye Center, Durham, NC.


6801 — D965 Natural history of Intacts in keratoconus and corneal ectasia. Jasmin R. Desai, P.S. Hersh. 8Ophthalmology, 9Cornea and Laser Eye Institute, Teaneck, NJ.

6802 — D966 A Simple, Inexpensive And Efficient Method To Measure Changes In Biomechanics Of The Entire Globe. Olivier Richoz, F. Hafezi. Ophthalmology, Geneva University Hospital, Geneva, Switzerland.


6807 — D971 Reducing Riboflavin Pre-soaking Time In Corneal Cross-linking. Silvia Schumacher, J. Werndi, S. Mrochen. 2Radiation/Oncology, 3Radiology, University of California, San Francisco, San Francisco, CA.

6808 — D972 A Multifactorial Treatment Analysis and Algorithm for Corneal Collagen Crosslinking. Steven A. Greenstein, P. Hersh. Cornea and Laser Eye Institute- Hersh Vision Group, Teaneck, NJ.


6813 — D977 Rapid Collagen Photo-crosslinking Method to Increase Cornea Mechanical Strength. Irene E. Kochevar, D. Cherfan, T.E. Gisel, E.E. Vertei, R.W. Redmond, S. Melki. Wellman Center for Photomedicine, Massachusetts General Hospital, Boston, MA; 2Medical Sciences Program, Boston University, Boston, MA; 3Boston Eye Group, Boston, MA.


6816 — D980 Model Of Corneal Cross-linking Photochemical Kinetics With Riboflavin. David Muller, P. Kamaev, M.D. Friedman, E. Sherr. Avedro, Waltham, MA.

6817 — D981 Contralateral Eye Long-term Follow-up Of Prophylactic High-fluence Collagen Cross-linking Combined With Lasik For High Myopia. Kathy M. Tran, S.L. Wang, A.J. Kanellopoulos. 1New York University School of Medicine, New York, NY; 2Laservision.gr Institute, Athens, Greece.
Thursday – Posters – 6843 – 6866


6844 — DI174 Retinal Arteriolar Reactivity Response Characteristics Assessed Using a Sinusoidal Hypoxic Provocation. Richard W. Cheng1A, J.A. Fisher1A, J. Duffin1A, J.G. Planagum1A, T. Wong1A, M. Jong1A, S.R. Patel1A, A. Adlemann1A, C. Hudson1A. *Physiology, 0Ophthalmology and Vision Sciences, 1Medical Science, 1University of Toronto, Toronto, ON, Canada; 2Dept of Ophthalm & Vision Sci, Univ of Toronto,Toronto Western Hosp, Toronto, ON, Canada; 3Vision Science Division, University Health Network, Toronto Western Research Institute, Toronto, ON, Canada; 4School of Optometry, University of Waterloo, Waterloo, ON, Canada. *CR

6845 — DI175 Signaling Pathway for Porcine Retinal Arteriolar Constriction to PKC Activation: Roles of L-type Voltage-operated Calcium Channels, Myosin Light Chain Kinase and Myosin Light Chain Phosphatase. Luke B. Potts1A, L. Kuo1A, W. Xu1A, T.W. Hei1A. *SBTM, Texas A&M Health Science Ctr, Temple, TX; 2Surgery, Scott & White Memorial Hospital, Temple, TX.

6846 — DI176 Correlation Of Retinitis Pigmentosa Disease Stage With Orbital Color Doppler Imaging. Amani S. Albakri1, E. Al-Shahwan1, S.R. Nowilaty1. *Vitreoretinal Division, King Khaled Eye Specialist Hospital, P.O Box 7191, Riyadh 11462, Saudi Arabia.

6847 — DI177 Theoretical Analysis Of Myogenic And Metabolic Responses In Retinal Blood Flow Autoregulation. Julia Arciero1A, A. Pickrell1B, B. Stesky1B, A. Harris1B. 1Mathematics, Indiana University-Purdue University Indianapolis, Indianapolis, IN; 2St. George’s University School of Medicine Grenada West Indies, Great River, NY; 0Ophthalmology, Indiana University School of Medicine, Indianapolis, IN.

6848 — DI178 The Dcx-dsRed Transgenic Rat As A Model To Study Pericyte Function. Andrea Trost1A, F. Schroedl1C, B. Bogner1C, C. Strohmair1C, C. Runge1A, G. Grabner1A, L. Aigner1A, H.A. Reitsamer1A. *Ophthalmology/Optometry, 0Anatomy, 0Molecular Regenerative Medicine, 0Paracelsus Medical University, Salzburg, Austria.

6849 — DI179 Caffeine Affects Ocular Microcirculation In Young Healthy Subjects. Naim Terai1A, E. Spoerli1A, R.P. Stedmeister1A, L.E. Pihlan1A, 0Ophthalmology, Dept of Ophthalmology, 1University of Dresden, Dresden, Germany; 0Ophthalmology, University Hospital Carl Gustav Carus, Rodalben, Germany.


6851 — DI181 Lower Limit of Blood Flow Autoregulation in Optic Nerve Head. Lin Wang1A, C.C. Cull1A, C. Piper1A, C.F. Burgoyne1A, B. Fortune1A. *Devers Eye Institute, Legacy Research Institute, Portland, OR.


6853 — DI183 Changes In The Blood Volume Of The Optic Nerve Head By Epinephrine In Intravitreal Infusion Solution During Vitrectomy. Makoto Uhaka1A, Y. Onoda1A, K. Hitani1A, T. Shibata1A, Y. Horii1A, T. Maeno1A. Ophthalmology, Toho Univ Sakura Med Ctr, Sakura, Japan.

6854 — DI184 Dilatation of Porcine Retinal Arterioles via a CAM/Protein Kinase A and AMP-Activated Protein Kinase-Dependent Mechanism with Cilostazol. Ichiro Tanano1A, T. Nagaoaka1A, T. Omae1A, A. Kamiya1A, S. Ono1A, A. Yoshida1A. Ophthalmology, Asahikawa Medical University, Asahikawa, Japan.

6855 — DI185 Effect of Intravitreal Rho Kinase Inhibitors on Retinal Microcirculation in Cats. Takafumi Yoshioka1A, S. Nakabayashi1A, T. Nagaoaka1A, T. Omae1A, A. Yoshida1A. Ophthalmology, Asahikawa Medical University, Asahikawa, Japan.

6856 — DI186 Intracocular Vascular Communication Through Collateral Vessels In An Experimental Pig Model. Hakan Moren1A, B. Gesslein1A, P. Undren1A, S. Andreasson1A, M. Malmsjö1A. 0Ophthalmology, Retinal Vascular Research, Lund University, Lund, Sweden; 0Department of Neuroradiology, Skåne University Hospital, Lund, Sweden.

6857 — DI187 Dorzolamide-induced Vasorelaxation of Porcine Ciliary Arteries is Mediated by Nitric Oxide, Sildenafil, T. Beck1A. 0Department of Ophthalmology, Aarhus University Hospital, Aarhus C, Denmark; 0Department of Biomedicine, Aarhus University, Aarhus C, Denmark.


6859 — DI189 Relationship between Subfoveal Choroidal Thickness and Choroidal Circulation in Response to Increased Systemic Blood Pressure Induced by Cold Pressure Test. Kenji Sogawa1A, T. Nagaoaka1A, T. Tanano1A, T. Omae1A, A. Yoshida1A. Ophthalmology, Asahikawa Medical University, Asahikawa, Japan; 0Ophthalmology, Asahikawa Medical College, Asahikawa, Japan.

6860 — DI190 Retinal Blood Flow Velocity in Patients with Active Uveitis Using the RFI. Sanjay R. Redkar1A, X. Feng1A, R.B. Rosen1A, C. Samson1A. 0Ophthalmology, New York Eye & Ear Infirmary, New York, NY; 0Ophthalmology, Beijing Tongren Eye Center, Beijing, China.

6861 — DI191 Time of Collapse of Spontaneous Venous Pulsation. Fabrice Moret1A, W.A. Lagrèce1A, C.M. Poloschek1A, M. Bach1A. 0Sect. Visual Function and Electrophysiology, 0Sect. Neuroophthalmology, 0Eye Hospital, University of Freiburg, Freiburg, Germany.

6862 — DI192 Manometric Investigation Of The Relationship Between Pulsatile Ocular Blood Flow And Intracocular Pressure In Living Human Eyes. Nikolaos Karyotakis1A, H.S. Ginis1A, A.I. Dastiridou1A, M.K. Tsilimbaris1A, I.G. Pallikaris1A. 0Medicine School, University Of Crete, Heraklion, Greece; 0Institute of Vision & Optics, 0Ophthalmology-Research Acct, 0University of Crete, Heraklion, Greece; 0Medicine School, University Of Larisa, Larisa, Greece; 0School of Medicine, University of Crete, Heraklion - Crete, Greece.


6864 — DI194 Optic Nerve Head Capillaries Blood Oxygenation Following Dynamic Exercise in Human. Vasilie Diaconu, P. Sauvageau, V. Vucea. École D’optometrie, University of Montreal, Montreal, QC, Canada.

6865 — DI195 Age Effects on Retinal Blood Flow Assessed Using Spectral-Domain Optical Coherence Tomography Doppler. Firdaus Yusof1A, F. Tayyari1A, J.G. Planagum1A, C. Hudson1A, 0School of Optometry and Vision Sciences, University of Waterloo, Waterloo, ON, Canada; 0Department of Optometry and Vision Science, International Islamic University of Malaysia, Bandar Indera Mahkota, Kuantan, Malaysia; 0Department of Ophthalmology and Vision Sciences, University of Toronto, Toronto, ON, Canada. *CR

6866 — DI196 Effect of Slow Releasing Hydrogen Sulfide Donor GYY4137 on Isolated Bovine Ciliary Artery. Madhura S. Kulkarni1A, Y. Njie-Mbye1A, C.A. Opere2A, M. Whiteman3A, S.E. Ohia1A. 0Pharmaceutical Sciences, 0Provost/ Academic Affairs, 0Texas Southern University, Houston, TX; 0Pharmacy Sciences, Creighton University, Omaha, NE; 0University of Exeter, Peninsula Medical School, Exeter, United Kingdom.

*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures – Refer to Program Number in the Clinical Trial (CT) Registration Index – Travel Grant Awardee
6871 — D1201 The Protein Kinase C (PKC)/Protein Kinase D (PKD)/Steroid Receptor Coactivator (SRC)-3 pathway is an important therapeutic target in Gu-mutant Uveal Melanomas. Vasiliiki Poulaki1, S. Chew1, B. He2, V. Eedunuri1, D. Bedoya3, M.J. Jager4, B.W. O'Malley2, N. Mitsiades2, D. Abramson5. Ophthalmology, VA Boston Healthcare System, Boston University, Boston, MA; 4Medicine/Molecular and Cellular Biology, Molecular and Cellular Biology, 5Baylor College of Medicine, Houston, TX; 6Adrienne Helis Malvin Medical Research Foundation, New Orleans, LA; 7Ophthalmology, Leiden University Med Center, Leiden, The Netherlands.

6872 — D1202 Periocular Tissue Concentration of Proporanalprolof Delivery with a Gel-forming Solution. Michael B. Yang1, J. Hao2, H. Liu2, S. Li1. 1Abrahamson Pediatric Eye Institute/ Ophthalmology, Cincinnati Children’s Hospital, College of Medicine, 2Division of Pharmaceutical Sciences/Winkle College of Pharmacy, 3University of Cincinnati, Cincinnati, OH.*CR


6876 — D1206 Therapeutic Efficacy By Targeting Correction Of N-l 1-challenged Aberrants In Uveal Tumors. Xiaolin Huang1, L. Wang1, H. Zhang2, R. Jia1, H. Wang2, X. Zhao2, G. Qian1, A.D. Singh2, S. Ge1, X. Fan1. 1Ophthalmology, Ninth People’s Hospital, Shanghai Jiaotong University School of Medicine, Shanghai, P.R., China; 2Department of Biochemistry and Molecular Biology, Shanghai Jiaotong University School of Medicine, Shanghai, P.R., China; 3Cole Eye Institute, Cleveland, OH.

6877 — D1207 Towards a Novel Therapy For Uveal Melanoma: Targeting Oncogenic Gαq. Timothy W. Corson, K. Sishtla. Glick Eye Institute, Department of Ophthalmology, Indiana University School of Medicine, Indianapolis, IN.


6879 — D1209 Association Of Ocular Findings And Preventive Therapy With Onset Of Cerebral Involvement In Patients With Primary Intraocular Lymphoma. Noriyasu Hashida1, K. Nak1, N. Ogbara1, K. Nishida1. 1Dept of Ophthalmology, Osaka University, Suita, Japan; 2Dept of Ophthalmology, Osaka Koseinenkinn Hospital, Osaka, Japan.


6881 — D1211 Precise Modeling of the Eye for Proton Beam Radiotherapy of Intraocular Tumors. Michael B. Rueeggsegger1,2, J.H. Kowa1, S. Wolf1, 1ARTORG Center Ophthalmic Technologies, 2Department of Ophthalmology, 3University of Bern, Bern, Switzerland.

6882 — D1212 In Vivo Confocal Microscopy Study Of Conjunctival Intraepithelial Neoplasia Treated With Interferon-alpha2b. Hyunjoo J. Lee1,2, R. Dunphy3, M. Daly4, D. Siracuse-Lee4, 1Ophthalmology, Boston Medical Center / Boston University School of Medicine, Boston, MA; 2Ophthalmology, 3Optometry, 4Veterans Affairs Boston Healthcare System, Boston, MA.


6884 — D1214 Sulindac Protects RPE Cells Against Oxidative Damage but Enhances the Killing of Retinoblastoma Cells Exposed to Oxidative Stress. Arunodoy Sar1, H.M. Prentice2, H. Weissbach3, J.C. Blank3. 1Integrative Biology Phd Program, Dept of Biology, 2Charles E Schmid College of Medicine, 3Center for Complex Systems & Brain Sci, 4Florida Atlantic University, Boca Raton, FL; 5Center For Cellular and Molecular Biology, Florida Atlantic University, Jupiter, FL.

*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures – Refer to Program Number in the Clinical Trial (CT) Registration Index – Travel Grant Awardee
559 AMD/Retinal Degeneration Models

Modulators: Martin-Paul G Agbaga and William A Beltran


6886 — 1:30 Acid Sphingomyelinase Deficiency Induces Age-related Degeneration In The Mouse Retina. Bill X. Wu, J. Fan1, J.W. Jenkins1, Y. Koutalos1, R.K. Crouch1, C.E. Crosson1, M. Kono1, Y.A. Hannon1. Biochemistry and Molecular Biology, Medical University of South Carolina, Charleston, SC; Ophthalmology, Medical Univ of South Carolina, Charleston, SC.


6888 — 2:00 Canine Bystrophenopathies: Lesion Morphology and Molecular Pathology. Karina E. Gaziewicz1,2, A.V. Cideciyan2, W.A. Beltran1, B. Zangerl1, J. Slavik1, B. Zangerl1, J. Slavik1, H. Zangerl1, F. Mullins1, S.G. Jacobson1, G.D. Aguirre1. Clinical Studies, Biochemistry, University of Pennsylvania, Philadelphia, PA; Scheie Eye Institute, Philadelphia, PA; Ophthalmology and Visual Sciences, University of Iowa, Iowa City, IA.

6889 — 2:15 Integration, Survival and Function of Transplanted RPE Stem Cells into Mouse Models of Geographic Atrophy. C. Nathaniel Roybal1, S.S. Sarfjare1, C.X. Ruan1, J. Hu1, S. Habib1, J. Kong1, G. Fan1, S. Nusinowiz1, D. Bok1, G.H. Travis1. Jules Stein Eye Institute, Human Genetics, UCLA School of Medicine, Los Angeles, CA.

6890 — 2:30 STGD3 Mutant Exerts A Dominant Negative Effect On Elov4 Enzymatic Activity During VLC-PUFAL Biosynthesis. Sreevani Logani1, M-P.G. Agbagha2, M.D. Chai2, R.S. Brush2, R.E. Anderson3, Cell Biology, Ophthalmology, University of Oklahoma HSC, Oklahoma City, OK; Dean A. McGee Eye Institute, Oklahoma City, OK.


6892 — 1:15 Patient Specific Finite Element Cornea Model. David Varsano1,2, R. Ahmer2, E. Moissieiev1,2, A. Gefen2. Ophthalmology, Tel Aviv Medical Center, Tel Aviv, Israel; Sackler School of Medicine, Dept. of Biomedical Engineering, Tel Aviv University, Tel Aviv, Israel.

6893 — 1:30 Conservation of Arclength in Keratoconic and Normal Corneas with Air Puff Induced Deformation. Cynthia J. Roberts1, A.M. Mahmoud2, J. Liu1, Z. Sharalaya1, T.F. Moisseiev1, R.G. Lambch1, A.J. Hendershot1, R. Kuenen4, S.D. Klyce4. Ophthalmology, Biomedical Engineering, College of Medicine, The Ohio State University, Columbus, OH; Ophthalmology, Mount Sinai School of Medicine, New York, NY.*CR

6894 — 1:45 A New Approach to Experimentally Determine Human Corneal Biomechanical Characteristics Using OCT Applied to an Anisotropic Finite Element Model. Wallace Chamoni1, O. Ozturk1, D. Fahad1, M. Allemann1, J. De la Cruz1, M.S. Cortina1, C. Foster2, D.T. Azard1, S. Jain1. Ophthalmology & Visual Sciences, College of Engineering, University of Illinois at Chicago, Chicago, IL.

6895 — 2:00 Numerical analysis of the influence of Intraocular Pressure on the photorefractive keratectomy for myopia correction. Maria A. del Buey1, E. Lanches4, J.A. Cristóbal1,2, B. Calvo1, F.J. Ascaso1, L. Lavilla1, C. Palomino4, N. Cruz1, P. Casas1. Ophthalmology, Optometry and Vision Sciences, University of Malaga, Spain; Ophthalmology, Optometry and Vision Sciences, University of Malaga, Spain.

6896 — 2:15 Estimation Of Modulus Change After Corneal Crosslinking (cxl) Using Multiple Post-cxl Topographies And Inverse Finite Element. Abhijit Sinha Roy1, B. Fan1, K. Rocha1, W. Dupps3, Jr. Ophthalmology, Cleveland Clinic Cole Eye Inst, Cleveland, OH; Clinical Research Consultants, Cincinnati, OH.*CR, PR

6897 — 2:30 Quantification of Changes in Optical Properties of Cornea with Stress In Vitro. Ashutosh Richhariya1, V.S. Sangwan1, S. Punjabi1, G. Yoon2, J. Jester1, R. Sreemathi Logan1, M-P.G. Agbaga1, B. Zangerl1, J. Slavik1, B. Zangerl1, J. Slavik1, H. Zangerl1, F. Mullins1, S.G. Jacobson1, G.D. Aguirre1. Clinical Studies, Biochemistry, University of Pennsylvania, Philadelphia, PA; Scheie Eye Institute, Philadelphia, PA; Ophthalmology, University Eye Hospital, Tuebingen, Germany; Institute for Ophthalmic Research, Medical University of South Carolina, Charleston, SC.

Retinal Cell Biology / Genetics Group

560 Corneal Biomechanics III

Modulators: Jodhib S Mehta and James Y Jester

6898 — 1:15 Corneal Transplant Rejection In NIH Miniature Swine Is Associated With Donor-recipient Mismatches In A Region Containing The Homologue Of The Mouse Zfp106 Gene Encoding The H3a Antigen. Susan M. Nicholls1, L.K. Mitchell1, R. Pang-Wong2, R. Harley2, A.D. Dick1, A.L. Archibald2, M. Bailey2. Ophthalmology, School of Clinical Sciences, School of Veterinary Sciences, University of Bristol, Bristol, United Kingdom; Division of Genetics and Genomics, The Roslin Institute and R(D) SVS, University of Edinburgh, Edinburgh, United Kingdom.

6900 — 1:30 In Vivo Imaging Of T Cell Trafficking In Eyes During Spondyloarthitis. Ellen J. Lee1, H. Kim2, S.R. Planck1, J.T. Rosenbaum2, H.L. Rosenzweig1. Case Eye Institute, Oregon Health & Science Univ, Portland, OR; Ophthalmology, Inje University, Pusan, Republic of Korea.

6901 — 1:45 Iba-1 Is Critical For Disease Pathogenesis In A Spontaneous Mouse Model Of Autoimmune Uveitis. Jun Chen, R. Horai, P. Silver, C-C. Chan, R. Caspi. Lab of Immunology, National Eye Inst/NIH, Bethesda, MD.

6903 — 2:15 II-4 Conditions Macrophage In Vitro and Retina In Vivo to Generate Soluble Flt-1 Expression and Inhibit Laser-induced CNV in Mice. Wei-Kang Wu1, L.B. Nicholson1, A.D. Dick1. 1School of Cellular and Molecular Medicine, University of Bristol, Bristol, United Kingdom.


6905 — 2:45 Decreased Interleukin-27 Expression is Associated with Active Uveitis in Behcet's Disease. Peizeng Yang1, C. Wang1, Y. Tian2, Z. Ye2, A. Kijlstra1. 1Ophthalmal, The 1st Hosp, Chongqing Medical University, Chongqing, China; 2Ophthal, University Hospital Maastricht, Maastricht, The Netherlands.

Room 305
Thursday, May 10, 2012, 1:15 PM-3:00 PM

562 Signaling and PCO

Moderators: John W McAvoy and Alek Cepek


6907 — 1:30 ERK1/2 Signaling is Required for Lens Cell Survival and Fiber Cell Differentiation during Development. Dinesh Upadhyia, L. Reneker. Ophthalmology, Mason Eye Institute, Columbia, MO.

6908 — 1:45 Genome-wide Identification Of Genes And MicroRNAs Regulated By Fgf2 During In Vitro Lens Fiber Cell Differentiation. Louise V. Wolf1, C.C. Gaar2, K. Gueta3, N. Podduturi3, P.S. Zelenka4, R. Ashery-Padan1, J. Zavadin1, A. Cepek1. 1Ophthalmology & Visual Sciences and Genetics, Albert Einstein College of Medicine, Bronx, NY; 2LMDDB, NEI, Bethesda, MD; 3Sackler School of Medicine, Tel Aviv University, Tel Aviv, Israel; 4Langone Center, NYU, New York, NY.


6910 — 2:15 A Putative Role for Histamine Releasing Factor in Posterior Capsule Opacification. I.M. Wormstone1, J.K. Kular1, J.R. Reddan1, L.J. Dawes1. 1School of Biological Sciences, University of East Anglia, Norwich, United Kingdom; 2Biological Sciences, Oakland University, Rochester, MI; 3Save Sight Institute, University of Sydney, Sydney, Australia.

6911 — 2:30 Cataract EPHA2 SAM Domain Mutations Alter Receptor Stability and Function. Jeong Eun Park1, A.I. Son1, R. Hua2, X. Zhang2, R. Zhou1. 1Department of Chemical Biology, Susan Lehman-Cullman Laboratory for Cancer Research, Ernest Mario School of Pharmacy, Rutgers University, Piscataway, NJ; 2McKusick-Zhang Center for Genetic Medicine and State Key Laboratory of Medical Molecular Biology, Institute of Basic Medical Sciences, Chinese Academy of Medical Science & Peking Union Medical College, Beijing, China.

6912 — 2:45 Evaluation Of Doxorubicin Loaded Mepeg-pcl Nanoparticle For Prevention Of Posterior Capsular Opacification. Aditya Konar1, R. Guha1, S. Chowdhary1, H. Palui2A, A. Mishra2B, G.K. Vemuganti3, S. Basak4, T.K. Mandal2B, S. Hazra2B. 1Department of Chemical Biology, Victorian College of Pharmacy, Monash University, Melbourne, VIC, Australia; 2Department of Biopharmaceutics and Pharmaceutical Chemistry, University of Calcutta, Kolkata, India; 3Department of Pharmaceutical Sciences, University of Hyderabad, Hyderabad, India; 4Department of Chemical Sciences, University of Calcutta, Kolkata, India.

Room 315
Thursday, May 10, 2012, 1:15 PM-3:00 PM

Visual Neurophysiology

563 Ganglion Cells: Types, Modulation and Development

Moderators: Maureen McCall and William R Taylor

6913 — 1:15 Light Adaptation at Distinct Intensity Levels within the Photopic Regime. Alexandra Tikidji-Hamburan, T.A. Münch. Centre for Integrative Neuroscience, University Tübingen, Tübingen, Germany.

6914 — 1:30 What Information Does the Eye Send to the Brain? Recording The Entire Visual Output At A Single Retinal Location. Tom Baden1, P. Berens1B, M. Bethge1B, T. Eiler1B. 1BCCCN / CIN, 2BCCCN / CIN / MPI, University of Tübingen, Tübingen, Germany.


6916 — 2:00 Nicotinic Block Reduces Direction Selectivity to Moving Gratings by Increasing Amplitude and Shifting Phase of Null Direction Excitation. Mikhail Y Lipin1, W.R. Taylor2, R.G. Smith1. 1Department of Biomedical Sciences, Colorado State University, Fort Collins, CO; 2Casey Eye Institute, Ophthalmology, Oregon Health Sciences University, Portland, OR; 3Dept of Neuroscience, University of Pennsylvania, Philadelphia, PA.


6918 — 2:30 Developmental Characterization Of NMDA Receptor Expression In Identified Retinal Ganglion Cells Of The Mouse Retina. Ben Stafford1, K.Y. Wong1, J.B. Demb1. Ophthalmology and Visual Sciences, University of Michigan, Ann Arbor, MI; Ophthalmology & Visual Sciences, Yale University, New Haven, CT.


Room 914
Thursday, May 10, 2012, 1:15 PM-3:00 PM

Anatomy & Pathology

564 Myopia IV: Clinics

Moderators: Thomas T Norton and Jane E Gwiazda

6920 — 1:15 The REPAIR Study: Prospective, Multi-center Trial of ranibizumab in Choroidal Neovascularization due to Pathological Myopia - Interim Analysis. Adnan Tufail, REPAIR Study Group. Ophthalmology, Moorfields Eye Hospital, London, United Kingdom.*CR, 📢

6921 — 1:30 Choroidal thickness associated with spherical equivalent in healthy young adults: The Raine Eye Health Study. Alexander X. Tan1, H. Forward1, C. McKnight1, S. Yazaz4, C. Pennell2A, J. Mountain4, T.L. Young2, A.W. Hewitt2, D.A. Mackey3, F.K. Chen4. 1Lions Eye Institute, 2Telethon Institute for Child Health Research, University of Western Australia, Perth, Australia; 3Ophthalmology, Duke University Eye Center, Durham, NC; 4Department of Ophthalmology, Centre for Eye Research Australia, Sierra Hills, Australia.

*CR: Travel Grant Awardee

Grand A

Thursday, May 10, 2012, 1:15 PM-3:00 PM

Retina

565 Macular Edema

Moderators: Frank G Holz and Edoardo Miden


Moderators: Frank G Holz and Edoardo Miden

Grand D
Thursday, May 10, 2012, 1:15 PM-3:00 PM
Glaucome / Anatomy & Pathology

**567 Molecular and Cellular Mechanisms**

**Moderators:** Abbot F Clark and Rebecca M Sappington

**6941 — 1:15**
Increased Immune Response Against Ocular Tissue After Immunization With An Optic Nerve Antigen.
Stephanie C. Joachim
O.W. Gramlich*, P. Laspas*, S. Kuehn*, H.D. von Pein*, B. Dick*, F.H. Grus*. 1Experimental Eye Research Institute, Ruhr University, Bochum, Germany; 2Experimental Ophthalmology, University Medical Center, Mainz, Germany; 3Experimental Ophthalmology, Department of Neuropathology, Mainz, Germany.

**6942 — 1:30**
Retinal Ganglion Cell Loss Correlates With Increased IOP in MMP-9 Knockout Mice.

**6943 — 1:45**
Dark-phase Intraretinal Pressure Elevation and Retinal Ganglion Cell Loss in Experimental Glaucome.

**6944 — 2:00**
Overstimulation of TRPV4 in vivo Induces Selective Apoptosis of Retinal Ganglion Cells. An Acute in vivo Experimental Model for Glaucome, anber m. frye1, D. Ryskamp2, S. Chashani3, A. Jo1, D. Krizaj2, Moran Eye Institute, The University of Utah, Department of Ophthalmology & Visual Sciences, Salt Lake City, UT; 2ophthalmology, The University of Utah, Salt Lake City, UT.

**6945 — 2:15**
Anti-Connective Tissue Growth Factor Antibody Therapy Combats Expression of Fibrotic Genes in Glaucome. Deborah M. Wallace*, A.F. Clark*, N. Oliver*, J.K. Crean*, C.J. O’Brien*. 1School Medicine & Medical Science, School of Biomolecular & Biomedical Science, Conway Inst., University College Dublin, Dublin, Ireland; 2Dept. Of Ophthalmology, Mater Misericordiae University Hospital, Dublin, Ireland; 3Cell Biology & Anatomy, University of North Texas HSC, Fort Worth, TX; 4FibroGen Inc, San Francisco, CA; 5ophthalmology, Mater Misericordiae Univ Hospital, Dublin, Ireland; 6School of Medicine and Medical Science, University College Dublin, Ireland.

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**6946 — 2:30**
Crossed Linked Actin Networks are Formed in Human Trabecular Meshwork Cells after treatment with Latrunculin B. Paul Russell*, K. Murphey*, A.J. Wood*, C.T. McKee*, C.J. Murphy*, 1School of Veterinary Medicine, 2School of Biomedical Engineering, 3School of Medicine and School of Veterinary Medicine, 4University of California Davis, Davis, CA.

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**6947 — 2:45**
Defects In Whole Cell Respiration In POAG Lymphoblasts. Jonathan G. Crowston1*, L. Sheek1, N. Van Bergten1, S. Lee1, V. Chrysostomou1, A.L. Vincent1, I.A. Trounce1. 1Department of Ophthalmology, Glaucoma Research Unit, Centre for Eye Research Australia, East Melbourne, Australia; 2Ophthalmology, University of Auckland, Auckland, New Zealand; 3Glaucoma Research Unit, Centre for Eye Research Australia, Melbourne, Australia; 4University of Melbourne, Centre for Eye Research Australia, Melbourne, Australia.

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**Grand H**
Thursday, May 10, 2012, 1:15 PM-3:00 PM
Retina

**568 Retinal Prosthesis II**

**Moderator:** Eberhart Zrenner

**6948 — 1:15**

**6949 — 1:30**

**6950 — 1:45**

**6951 — 2:00**
The influence of visual information on walking behaviour in the Graz Mobility Test. Thomas Georgi1, D. Ivastinovic2, M. Brandner1, R. Hornig1, M. Velikay-Parl1, 1Ophthalmology, Medical University of Graz, Graz, Austria; 2IM Intelligente Medical Implants GmbH, Bonn, Germany.

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*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures – † Refer to Program Number in the Clinical Trial (CT) Registration Index – ‡ Travel Grant Awardee
6952 — 2:15  Patients blinded by outer retinal dystrophies are able to perceive simultaneous colors using the Argus® II Retinal Prosthesis System. Paolo E. Stanga1,2, J.A. Sahel, Jr,1, L. da Cruz3, F. Hafezi4, F. Merlini5, B. Coley6, R.J. Greenberg7, Argus II Study Group. 1Manchester Royal Eye Hospital and University of Manchester, Manchester, United Kingdom; 2Manchester Biomedical Research Centre, Manchester, United Kingdom; 3UMR-S 968, Institut de la Vision, Paris, France; 4Moorfields Eye Hospital, London, United Kingdom; 5Ophthalmology, Geneva University Hospitals, Geneva, Switzerland; 6Second Sight Medical Products (Switzerland), Lausanne, Switzerland; 7Second Sight Medical Products, Inc, Sylmar, CA. *CR, T

6953 — 2:30  Results Update from Second Sight’s Argus® II Retinal Prosthesis Study. Mark S. Humayun1, L. da Cruz2, G. Dagnelie3, J-A. Sahel4, P.E. Stanga5, E. Filley6, D. Elliott7, J. Duncan8, R.J. Greenberg9, Argus II Study Group. 1Ophthalmology, Doheny Eye Institute - USC, Los Angeles, CA; 2Moorfields Eye Hospital, London, United Kingdom; 3Lions Vision Research and Rehab Center, Johns Hopkins University, Baltimore, MD; 4Centre Hospitalier National d’Ophthalmologie des Quinze-Vingts, Paris, France; 5Manchester Royal Eye Hospital, Manchester, United Kingdom; 6Ophthalmology, Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston, MA; 7Ophthalmology, University of California, San Francisco School of Medicine, San Francisco, CA; 8Second Sight Medical Products, Sylmar, CA. *CR, T

6954 — 2:45  An Eye-surface Conformable Retinal Prosthesis using Liquid Crystal Polymers. Joonsoo Jeong1,A, S. Lee2, K. Min1,A, S. Shin1,A, S. Bae1, J-M. Seo1,A, H. Chung1, S. Kim1,A. 1Electrical Engineering & Computer Science, Inter-University Semiconductor Research Center, Seoul National University, Seoul, Republic of Korea; 2Department of Neurosurgery, Massachusetts General Hospital, Boston, MA; 3Ophthalmology, Seoul National University Hospital, Seoul, Republic of Korea.