Long-term Outcomes of Photorefractive Keratectomy for Low to High Myopia: Up to 19 Years of Follow-up

Vestergaard, Anders Højslet; Ivarsen, Anders; Hjortdal, Jesper; Grauslund, Jakob; Sjølie, Anne Katrin

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<td>Palm A</td>
<td>506 Innovative Approaches to Retinal Imaging [VI, MOI, RE] #5597-5603</td>
<td>537 New Directions for Bifocality, Multifocality and Restoration of Accommodation [VI] #6328-6334</td>
<td>564 Myopia IV: Clinics [AP] #6920-6926</td>
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### Thursday, May 10 • Posters

#### 8:30–10:15am

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<td>Novel Imaging, Photoreceptors, Vasculature and Disease [VI, MO, RE]</td>
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<td>Clinical Electrophysiology and Retinal Disease [VN]</td>
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<td>Visual Cortex and Brainstem Visual Centers [VN, VI]</td>
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<td>Visual Electrophysiology in Disease and Drug Toxicity [VN]</td>
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<td>Diabetic Retinopathy Epidemiology [CL]</td>
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<td>Vascular Mechanisms in Diabetic Retinopathy [RC, RE]</td>
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<td>Retinal Detachment II [RE]</td>
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<td>Laser/Choroidal Neovascularization/Retina-RPE Transplantation [RE]</td>
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<td>Retinopathy of Prematurity II [RE]</td>
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<td>Stem Cells In Vivo and In Vitro: Fates and Functional Outcomes [RC, NT]</td>
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<td>Corneal Endothelium [CO]</td>
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<td>Keratoplasty II (Eye Banking, Substrates, Penetrating and Lamellar Grafts, Keratoprosthesis) [CO]</td>
<td>#6028-6075</td>
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<tr>
<td>Contact Lens II (Basic Research) [CO]</td>
<td>#6076-6126</td>
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<tr>
<td>Cornea/Anterior Segment Infection and Inflammation I [IM, CO]</td>
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<td>Cornea/Anterior Segment Infection and Inflammation II [IM, CO]</td>
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<td>Retinitis Pigmentosa III [RE]</td>
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<td>AMD Disease Mechanisms II [BI]</td>
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<td>Retina and RPE Cell Biology [RC, VN]</td>
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<td>Cataract Surgery I [LE]</td>
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<td>Oculoplastics II [EV]</td>
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<td>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.
501 Retina Late Breaking Papers

Moderators: Ivana K Kim and David N Zacks

Floridian BCD
Thursday, May 10, 2012, 8:30 AM-10:15 AM Cornea
502 Reshaping the Cornea: Present and Future of Refractive Surgery

Moderators: Jesper Hjortdal and Dan Epstein

5569 — 8:30 Enantiomorphism Of The Human Cornea Based On Corneal Topography 3D Atlas Analysis. Georges M. Durr1, E. Auvinet1,2,3, J.A. Ong1,2, M. Gilca2, M-E. Choronzey1, J. Meunier2,1, M. Gobbe. London Vision Clinic, London, United Kingdom. *CR

5570 — 8:45 A Novel Approach To Determine Theoretical Head tilt Effect On Ocular Cycloptorsion Measurements During Laser Refractive Surgery. Adam L. Prickett1,4, W. Chamoni1, K.M. Bu1, J. Hallak1,4, P. Bakhtiari1, D.T. Azar4. *Ophthalmology, 3Ophthalmology & Visual Sciences, 1University of Illinois at Chicago, Chicago, IL; 2Ophthalmology, University of Illinois Chicago, Chicago, IL; 3Ophthalmology, Illinois Eye and Ear Infirmary, Chicago, IL; 4University of Montreal, Montreal, QC, Canada. *CR

5571 — 9:00 Long-term Outcomes Of Photorefractive Keratectomy For Low To High Myopia: Up To 19 Years Of Follow-up. Anders Vestergaard1, J. Grauslund1, A.K. Sjolie2B. *Refraction Surgery, 1London Vision Clinic, London, United Kingdom. *CR

5572 — 9:15 Incidence, Risk Factors, and Outcomes of LASIK Flap Striae Requiring Flap Re-Lift and Irrigation. Harmanjit Singh1, V. Gupta1, E. Adiguzel2, A. Wallerstein1, M. Cohen1,3, M. Harissi-Dagher1,2,2B. *Ophthalmology, University of Montreal, Montreal, QC, Canada; 2Ophthalmology, McMaster University, Hamilton, ON, Canada; 3LASIK MD, Montreal, QC, Canada; 4Ophthalmology, University of McGill, Montreal, QC, Canada; 5Ophthalmology, University of Sherbrooke, Sherbrooke, QC, Canada. *CR


Room 114

Thursday, May 10, 2012, 8:30 AM-10:15 AM Physiology & Pharmacology
503 Gene Therapy and Delivery II

Moderators: Rajendra Kumar-Singh and Muna Naash

5576 — 8:30 A Comparative Evaluation Of Translational Read-through Inducing Drugs For Treatment Of Ush. Kerstin Nagel-Wolfrum1, T. Goldmann1, F. Möller1, N. Overlack1, V. Lotery6, G.C. Black7, A.R. Webster8,2, M.C. Seabra3. *Ophthalmology, 1Maisonneuve–Rosemont Hospital Research Center, Montreal, QC, Canada; 2Ophthalmology, 5Ophthalmology, University of Manchester, Manchester, UK; 3Nuffield Laboratory of Ophthalmology, University of Oxford, Oxford, UK; 4Ophthalmology, University of Miami, Miami, FL; 5Oxford Eye Hospital, Oxford University, Oxford, UK; 6Royal Eye and Ear Infirmary, Dublin, Ireland; 7Genetics, University College London, London, UK; 8Oxford John Radcliffe Hospital, Oxford, UK. *CR

5577 — 8:45 Gene Therapy For Choroideremia - Initial Report On A New Clinical Trial. Robert E. MacLaren2, M. Gropp1, A.R. Barnard1, T. Tolmachova1, M.J. During1, S.M. Downes1, A.J. Lotery1, G.C. Black1, A.R. Webster1, M.C. Seabra1. *Nuffield Laboratory of Ophthalmology, University of Oxford, Oxford, UK; 1Moorfields Eye Hospital NHS Foundation Trust, London, UK; 2Molecular Medicine, Imperial College London, London, UK; 3State University Medical Center, Columbus, OH; 4Oxford Eye Hospital, Oxford University Hospitals NHS Trust, Oxford, UK; 5Ophthalmology - Eye Unit, Southhampton General Hospital, Southhampton, UK; 6Genetic Medicine, University of Manchester, Manchester, UK; 7UCL Institute of Ophthalmology, London, UK. *CR, R

5578 — 9:00 Adenoviral and Lentiviral Vectors for Efficient Gene Transfer to Mouse Retina. Agostina Pupp1, G. Ces1, D. Palmer2, P. Piccolo1, R.J. Parks3, P. Ng1, N. Brunetti-Pierrot1, A. Auricchio1,2. *TIGEM- Telethon Institute of Genetics and Medicine, Naples, Italy; 2Dept. of Molecular and Human Genetics, Baylor College of Medicine, Houston, TX; 3Ottawa Hospital Research Institute, Ottawa, ON, Canada; 4Dept. of Pediatrics, Medical Genetics, “Federico II” University, Naples, Italy.


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

Room 305

Thursday, May 10, 2012, 8:30 AM-10:15 AM Biochemistry & Molecular Biology
504 Retinal Biochemistry and Gene Expression

Moderators: Deborah Ferrington and Jerome E Roeger

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. Peshenko1, E.V. Olshesvskaya1, S. Lime1, J.B. Ames2, A.M. Dizhoor1. *Pennsylvania College of Optometry, Salus University, Elkins Park, PA; 2Department of Chemistry, University of California, Davis, CA.
Thursday Papers

5584 — 8:45 Alzheimer Retina Pathology in a Novel Animal Model of Neuropathology in Diabetes. Peter Frederikse, R. Kaswal3, W. Klein, C. Kastanathan. 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 Rd1 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.


5589 — 10:00 Tct3 is an Essential Epigenetic factor for Eye development. Stephen P. Sugrue, G. Xu, Y. Kato, Y. Xu, Y. Shi. 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 — 8:30 Deletion Of Cdclk1 In The Ocular Lens Leads To A Disruption Of The Lens Epithelial Cell Proliferation, Differentiation, And Nuclear Retention. Blake R. Chaffee, M.L. Robinson3, F. Shang4, T. Clement4, M. Eddy4, B. Wagner5, A. Taylor6. 1Zoolurgy, Miami University, Oxford, OH; 2Human Nutrition Res Ctr on Aging, 3Nutrition & Vision Res-USDA-HNRCA, Tufts University, Boston, MA; 4National Institute of Environmental Health Sciences, NIH, Research Triangle Park, NC; 5National Institute of Environmental Health Sciences, Research Triangle Park, NC.


5592 — 9:00 Glutaredoxin (Grx2) Gene Knockout Suppresses Fiber Cell Differentiation and Delays De-nucleation of the Mouse Lens. Marjorie F. Loi1, 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 K6W Mutant Ubiquitin Activates Calpain in Lens. Ke Liu1, A. Caceres1, J. Peng2, F. Shang2, J. Gao, X. Sun3, R.T. Mathias3, A. Taylor4. 1Human Nutrition Rsrch Ctr 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 Shatadal, R. Rachel1, A. Griepp4. 1Cell and Regenerative Biology, 2Anatomy, 3Univ of Madison-WI, Madison, WI.

5595 — 9:45 Post-translational Modifications of BFS1P. Roy A. Quinlan1, A. Tapodi1, E.W. Tate, W.P. Heat, A.R. Prescott1. 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 Smf2h/smarc5 And Brzl1/smarc4 Are Independently Required For Mouse Lens Morphogenesis. Shuying He1, J. Sun1, J. Kokevce1, T. Stopka1, A. Skoultchi1, J. Zavadil3, A. Cvekl1. 1Ophthalmology & Visual Sciences and Genetics, 2Cell Biology, Albert Einstein College of Medicine, Bronx, NY; 3Institute of Pathological Physiology and Center of Experimental Hematology, First Faculty of Medicine, Charles University, Prague, Czech Republic; 4New York University Langone Medical Center, New York, NY.

5597 — 8:30 In Vivo Optical Recording From Mouse Retinal Ganglion Cells. Lu Yin1, A.H. Cetin2, Y. Geng1,2, R. Sharma4,5, K. Ahmad3,4, E.M. Callaway3, D.R. Williams1,2, W.H. Merigan4,5,6. 1Center for Visual 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. Rossi3, D.R. Williams1,2, A. Dubra1,2,6, H. Song4, M.A. Folwell1,2,4, I.R. Latchman3, M.M. Chang1,2. 1Center for Visual Science, 2Institute of Optics, 3Flaum Eye Institute, University of Rochester, Rochester, NY; 4Ophthalmology, Biophysics, 5Medical 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. Merigan1,2,6, D.R. Williams1,2,3, J.J. Hunter1,2,6. 1Institute of Optics, 2Center for Visual 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. Kocagolu1, Q. Wang1, Z. Liu1, M.T. Miller1. 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 Millan1,2, B. Volshaus1. 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. Suda1, K. Kurokawa1, Y. Yasuno1. 1Ctr for Optical Resrch & Education, Utsunomiya College Dublin, Dublin, Ireland; 2Oral Biology, UMD New Jersey Dental School, Newark, NJ; 3School of Applied Physics, Computational Optics Group, Tsukuba, Japan; 4Computational Optics Group, University of Tsukuba, Tsukuba, 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

Palm A
Thursday, May 10, 2012, 8:30 AM-10:15 AM Visual Psychophysics & Physiological Optics / Multidisciplinary Ophthalmic Imaging Group / Retina

506 Innovative Approaches to Retinal Imaging

Moderators: Barry Cense and Stephen A Burns

*CR
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. Swanson1, V.E. Malinovsky1, M.W. Dul1,2, J.K. Torbit3, B.M. Sutton4, R. Malik4, 1School of Optometry, Indiana University, Bloomington, IN; 2Clinical Sciences, SUNY College of Optometry, New York, NY; 3SUNY Eye Institute, New York, NY; 4Glaucoma Research Ctr for Ophthal, London, United Kingdom.


5624 — 10:00 Correlation of Brain Volumes and Functional Deficits in Glaucoma. Alice L. Williams1, J. Lackey2, S. Wizov3, S. Gatia1,4, R. Sergott2, T. Chia1, S. Lai1, G.L. Spaeth1,4, 1Temple University School of Medicine, Philadelphia, PA; 2Department of Radiology, Thomas Jefferson University, Philadelphia, PA; 3William A. and Anna V. Goldberg Glaucoma Service, 4Neuro-ophthalmology, Wills Eye Institute, Philadelphia, PA; 5Thomas Jefferson University School of Medicine, Philadelphia, PA.

Grand H

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

Retina

510 Retinitis Pigmentosa II

Moderator: John R Heckenlively

5625 — 8:30 Inhibition of Receptor Interacting Protein Kinase Delays Necrotic Cone Photoreceptor Cell Death in a Mouse Model of Inherited Retinal Degeneration. Yisuke Murakami1, H. Matsimoto1, M. Roh1, J. Suzuki1, K. Takeuchi1, D. Mantopoulos2, T. Hisatomi2, Y. Ikeda2, J.W. Miller3, D. Vivas2, 1Angiogenesis Laboratory, Massachusetts Eye and Ear Infirmary, Boston, MA; 2Ophthalmology, Kyushu University, Fukuoka, Japan.

5626 — 8:45 Successful Photoreceptor-Directed Gene Therapy with AAV2/5-hRPGR Reverses Post-Receptorial Remodeling in Canine Models of X-linked RP. Gustavo D. Aguirre1, A.V. Cideciyan1, A.S. Levitin1, S. Iwabe2, H. Khanna1, A. Swaroop4, W.W. Hauswirth3, S.G. Jacobson2, W.A. Beltran1, 1Clinical Studies, Univ of Penn Sch Veterinary Med, Philadelphia, PA; 2Dept of Ophthalmology, Scheie Eye Institute, Philadelphia, PA; 3Molecular Genetics & Microbio, 4Ophthalmology, University of Florida, Gainesville, FL; 5Ophthalmology, University of Massachusetts Medical School, Worcester, MA; 6N-NRL, Bldg 6, National Eye Institute, Bethesda, MD.

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.

5628 — 9:15 Endothelial Progenitor Cells With Low Aldehyde Dehydrogenase Activity Recruited Monocyte-Derived Macrophages Through CCL2 Secretion And Rescued Vessel And Photoreceptor With Retinal Degeneration. Shinich Fukuda1,2, M. Nagano3, T. Yamashita3, K. Kimura4, K. Akimoto4, I. Tsuboi3, S. Ueno5, M. Kondo1, T. Oshika1, O. Ohneda2, 1Ophthalmology, 2Regenerative Medicine and Stem Cell Biology, 3Tsukuba University, Tsukuba, Japan; 4Ophthalmology, Nagoya Univ School of Med, Nagoya, Japan; 5Ophthalmology, Mie University Graduate School of Medicine, Tsu, Japan.

5629 — 9:30 Phenotypic conservation in RPGR mutations. Kari E. Branham1, S. Zahid1, N.W. Khan1, M.I. Othman1, A. Moncrief1, P.A. Sieving2, A. Swaroop4, K. Jayasundera1, J.R. Heckenlively2, 1Ophthalmology and Visual Sciences, University of Michigan, Ann Arbor, MI; 2N-NRL, Bldg 6, National Eye Institute, Bethesda, MD.

5630 — 9:45 CRB2 and CRB1 in Retinal Development and Maintenance. Celso H. Alves1, L. Pellissier1, B. Park1, A. Sanz Sanz1, S. Beck2, G. Huber2, N. Tanimoto1, M. Garrido1, F. Richard1, J. Wijnholds1, 1Neuromedical Genetics, Netherlands Inst for Neuroscience, Amsterdam, The Netherlands; 2Ocular Neurodegeneration Centre for Ophthalmology, Institute for Ophthalmic Research, Tubingen, Germany; 3Ingénieur d’étude CNRS / ACMO, Université de la Méditerranée, Developmental Biology Institute of Marseille Luminy (IBDML), Marseille, France.

5631 — 10:00 Knockout Of Cer2 Promotes Photoreceptor Survival In A Model Of Retinitis Pigmentosa. Atsushi Otani2, C. Guo3, A. Oshi4, N. Yoshimura1, 1Ophthalmology, Japanese Red Cross Wakayama Med Ctr, Wakayama, Japan; 2Ophthalmology, Kyoto University, Kyoto, Japan.

*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

352
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. Dagmele1, M. Khan1, 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. Rohit C. Khanna1, G.V. Murthy2, S. Krishnasaih3, H.B. Pan4, P. Giridhar1, C.E. Gilbert1, 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 Ryskulov1, 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, Cardiff University, Cardiff, United Kingdom; 2Vision Aid Overseas, Crawley, United Kingdom.

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. Mercer1A, R.J. Adams1, 2, 3, 4. 1Psychology, 2Psychology/Pediatrics, 3Memorial 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. Moldow1, H. Buch Hesgaard1, D. Erngaard1, K. Klemm1, M. La Cour1, C. Ellervik1. 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. Hou1, A. Norcia1. 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 Epidemic of Eye Disease (SEED) Study. Tien Y. Wong1, Y. Zheng1, W-L. Wong1, E.L. Lamoureux2,3,4, J-J. Wang1,2, P. Mitchell3, N. Cheung3,4, T. Au1,2, S. Saw3,4, C. Cheng3,4. 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; 5Saw Swee Hock School of Public Health, National University of Singapore, Singapore, Singapore.

5641 — A37  Epidemicology of Chinese Patients in the Ophthalmology Clinic of a New York City Public Hospital. Sze H. Wong1, L.G. Chen1, C.C. Teng1. 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. Iyengar1, B. Truitt1, R.P. Igo1, J.C. Johnson1, L. Tinker1, K.J. Meyers2, J.A. Mares1. 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


5644 — A40  Heritability Of Ocular Biometry Parameters Using Structural Equation Modeling In A Study Of Angle-closure Glaucoma. Robert Wojciechowski1, P.Y. Ramulu1, S. Kavitha1, P. Sureshwaran1, R. Jayanthy1, D.S. Friedman1, R. Venkatesh1. 1Epidemiology, Johns Hopkins School of Public Health, Baltimore, MD; 2Ophthalmology, Wilmer Eye Institute/Johns Hopkins, Baltimore, MD; 3Aravind Eye Hospital, Pondicherry, India; 4Genetics, Aravind Med Res Foundation, Madurai, India.


5646 — A42  Rare Variant Analysis of Refractive Error in the AREDS Cohort. Joan E. Bailey-Wilson1, C.L. Simpson1, R. Wojciechowski2, 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. Gupta1, C. Tung1, B.F. Godley3, M. Motamedi1, E.F. van Kuijk1. 1Ophthalmology & Visual Sciences, 2Ophthalm & 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 SD-OCT and Ultrasonic Method. Monika E. Danielewska1A, D. Szlag1, D. Iskander1A, M. Wajtkowski1. 1Institute of Physics, 2Institute of Biomedical Engineering and Instrumentation, 3Wroclaw University of Technology, Wroclaw, Poland; 4Institute of Physics, Nicolaus Copernicus University, Torun, Poland.

5650 — A46  High-resolution Imaging Of The White Dot Structure Observed In Fundus Albipunctatus. Yukiko Makiyama1, S. Ooto1, M. Hangoi1, K. Takayama1, A. Oishi1, K. Ogino1, S. Nakagawa1, K. Yonezawa1, Y. Sato1, 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


5653 — A49 Improved Retinal Blood Flow Analysis Method Using Abnormal Frame Information Automatically Detected From AOCSLO Image Sequence. Hiroshi Imamura1, P. Fretcher1, K. Nozato1, S. Ueda1, A. Uji2, N. Yoshimura1. 1Canon Inc, Tokyo, Japan; 2Canon Information Systems Research Australia, Sydney, Australia; 3Ophthalmology, Kyoto University Graduate School of Medicine, Kyoto City, Japan. *CR

5654 — A50 Characterization of Diabetic Retinopathy Lesions Using Adaptive Optics Imaging. T. Mihashi1*, K. Nishida2, V. Krivosic3, N. Chateau2, J.A. Sahel3. 1Institute for Ophthalmic Research, Scheie Eye Institute, Philadelphia, PA; 2Center for Ophthalmology, Institute for Ophthalmic Research, Molecular Genetics Laboratory, Tübingen, Germany; 3Imagine Eyes, University Paris 7, Paris, France. *CR

5655 — A51 Structural analysis of small vessels in the human retina: an adaptive optics study. Michel Pauques1, K. Nakashima2, P. Rossant1, J.A. Sahel1. 1Clinical Investigation Center 503, Quinze-Vingts Hospital, INSERM, Paris, France; 2School of Medicine, Univ of Texas, Galveston, TX; 3Ophthalmology, University of Melbourne, Melbourne, Victoria, Australia. *CR


5657 — A53 In Vivo Investigation of the Retinal Microvasculature in Patients with Type 1 Diabetes Mellitus. Mariacristina Parravano1, M. Lombardo1, G. Lombardo1, B. Boccossini1, S. Lioi1, M. Varano1. 1Ophthalmology, Fondazione GB Bietti-IRCCS, Rome, Italy; 2CNR-IPCF Unit of Support Cosenza, LiCryL Laboratory, University of Calabria, Rende, Italy.

5658 — A54 Measurement Of Retinal Blood Flow In Diabetic Retinopathy Using Adaptive Optics Scanning Laser Ophthalmoscopy. Akibito Uji1, M. Hangai1, S. Ooto1, T. Murakami1, N. Yoshimura1, H. Imamura1, K. Nozato1. 1Ophthalmology, Kyoto Univ Graduate Sch of Med, Kyoto City, Japan; 2Canon INC, Tokyo, Japan. *CR

5659 — A55 Adaptive Optics and SD OCT in Macular Telangiectasia Type 2. Alain Gaudric1, K. Nakashima1, V. Krivosic1, N. Chateau2, J.A. Sahel3, M. Paques1. 1Ophthalmology, Lariboisiere Hospital University Paris 7, Paris, France; 2Ophthalmology, Clinical Investigation Center 503 Quinze-Vingts Hospital, INSERM, Paris, France; 3Imagine Eyes, Orsay, France; 4Ophthalmology, UMR-S 968 Institut de la Vision, Paris, France. *CR

5660 — A56 Oximetry Imaging Of The Retinal Microvasculature Using Adaptive Optics. Phillip A. Bedgood1, A. Metha1. Optometry & Vision Sciences, University of Melbourne, Parkville, Australia.

5661 — A57 Effectiveness In Detecting Area Of Photoreceptor Disruption By Dioptic Adaptive Optics Scanning Laser Ophthalmoscopy (d-aoslo) With Wider Field Of View. Yoshikui Kitaguchi1, T. Fujikado1, H. Kand1, T. Morimoto2, T. Yamaguchi3, T. Mikashi2, K. Nishida1. 1Ophthalmology, Sumitomo hospital, Osaka, Japan; 2Applied Visual Science, Osaka University, Suita, Japan; 3Topcon Research Institute, Itabashi, Japan; 4Ophthalmology, Osaka University, Osaka, Japan. *CR

5662 — A58 Foveal Microvasculature And Its Relationship To Retinal Thickness. Tozo Y. Choa1*, A.E. Elsner1*, S.A. Burns1*, L. Latchney1*. 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 SDOCT Images. Joel A. Papay1, C.A. Clark1, T.Y. Chui1, L. Zhao1, A.E. Elsner1. Optometry, Indiana University, Bloomington, IN.

5665 — A61 Perifoveal Retinal Thickness and Temporal Contrast Sensitivity in Axial Myopia. Nancy J. Coletta1, Y. Pilz2, A. Ciepiela1. 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*, L. Chiu2, R. Harris2, M. Stephens2, M. Tomatomi1, E.F. van Kuijk1. 1Center for Biomedical Engineering, School of Medicine, Univ of Texas Medical Branch, Galveston, TX; 2Ophthalmology MMC 493, Univ of Minnesota, Minneapolis, MN.

5667 — A63 Adaptive Optics Scanning Laser Ophthalmoscopy With Amplitude Pupil Apodization. Jusufu N. Salai1, A. Dubra1. 1Institute of Optics, 2Flaun Eye Institute, 3University of Rochester, Rochester, NY; 4Ophthalmology, 5Biophysics, 6Medical College of Wisconsin, Milwaukee, WI. *CR

5668 — A64 Limitations To Adaptive Optics Imaging Quality In Highly Powered Eyes. Xiaolin Zhou1, P. Bedgood1, A. Metha1. 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. Rha1*, A.M. Dubis1*, A. Dubra1,2,3, J. Carroll1,4,5. 1Biomedical Engineering, Marquette University, Milwaukee, WI; 2Ophthalmology, 3Cell Biology, Neurobiology & Anatomy, 4Biophysics, 5Medical College of Wisconsin, Milwaukee, WI. *CR


5671 — A67 Retinal Structure and Visual Function in Patients with Blue Cone Monochromatism. Xinda Lu1, A.V. Cideciyan1, A. Samarak1, S.B. Schwartz1, J.A. Romani1, J.B. Goldberg1, B. Bauman1, B. Wissinger2, S. Kohf1, S.G. Jacobson1. 1Department of Ophthalmology, Scheie Eye Institute, Philadelphia, PA; 2Center for Ophthalmology, 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. Cooper1, B.R. Hansen1, J. Carroll1,4,5, N. Cell Biology, Neurobiology and Anatomy, 6Ophthalmology, 7Medical College of Wisconsin, Wauwatosa, WI; 8Biomedical 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. Hunter1,2,3, E.A. Rossi2, W. Fischer2, A. Dubra1,4,5, M.M. Chung1,2,8. 1Flaun Eye Institute, 2Center for Visual Science, 3University of Rochester, Rochester, NY; 4Ophthalmology, 5Biophysics, 6Medical College of Wisconsin, Milwaukee, WI.

5674 — A70 Measuring the Performance of an Adaptive Optics Flood Illuminated Camera for Imaging the Cone Mosaic in the Clinical setting. Jonathan D. Fay1, A. Faridi1, A. Garg1, M.E. Pennesi, Casey Eye Institute, Oregon Health and Science University, Portland, OR.

5675 — A71 Fluorescence Adaptive Optics Scanning Laser Ophthalmoscopy Demonstrates Intranasral Spots and low cone density in Fundus Albinetatus. Hangxin Song1, D.R. Williams1,2, L. Batchen1, A. Dubra2,3, M.M. Chung1,2,8. 1Center for Visual Science, 2Institute of Optics, 3Flaun Eye Institute, 4University of Rochester, Rochester, NY; 5Ophthalmology, Medical College of Wisconsin, Milwaukee, WI. *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
Temporal Mutations in RPE65 Associated with a Depolarizing Pattern of Focal Macular ERG. Shuhei Kameya1, Y. Goto-Fukuura1, T. Igarashi2, K. Takahashi1, Y. Goto-Fukuura1, T. Igarashi2, K. Yamaki1, A. Mizota2, Y. Miyake3, H. Takahashi4. 1Ophthalmology, Chiba Hokusoh Hosp Nippon Med Sch, Inzai, Japan; 2Ophthalmology, Nippon Medical School, Bunkyo-Ku, Japan; 3Ophthalmology, Teikyo University, Ibaraki-ku, Japan; 4Ophthalmology, National Institute of Sensory Organs, National Hospital Organization Tokyo Medical Center, Tokyo, Japan; 5Aichi Medical University, Aichi-gun, Japan.

5694 — A109 Phenotypic Characterization in Two Patients with Identified Rhodopsin Gene Mutation: Impact of Retinal Degeneration on Cortical Structure. Andrea C. Pereira1, C. Mateus1, A. Reis1, B. Quendera1, S. Ferreira1, M. Almeida2, E. Silva1, M. Castelo-Branco2. 1Visual Neuroscience Laboratory, IBILI-Faculty of Medicine-University of Coimbra, Coimbra, Portugal; 2Ophthalmology, University Hospital of Coimbra, Coimbra, Portugal.

5695 — A110 Environmental and Therapeutic Approaches to Limit the Consequences of Postnatal Hyperoxia. Allison L. Dorfman1, B. Campanaro2, K. Uy3, A. Polosa1, M. Djavari1, P. Wintermark1B, S. Chemtob3, P. Lachapelle1A, Mathieu Gauvin1,2, J Racine1, J. Daloze3, R. Koenekoop4, 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; 2Electrical Engineering, Ecole de Technologie Superieure, Montreal, QC, Canada; 3Ophthalmology, Laval University - Centre de recherche Universtit Laval Robert-Giffard, Quebec, QC, Canada.

5677 — A73 Spatially-resolved Adaptive Optics Photopigment Densitometry for Assessing Photoreceptor Function. Benjamin D. Masella1,2, J.J. Hunter1, D.R. Williams3. 1The Institute of Optics, 2Center for Visual Science, 3Flaum Eye Institute, University of Rochester, Rochester, NY. *CR


5681 — A77 Design And Use Of A Fiber Electrode Prototype In Patients With Retinal Dystrophy. J.J. Hunter1, D.R. Williams1. 1Medical University of South Carolina, Charleston, SC. *CR


5685 — A100 Topographic Mapping Of Functioning Cone And Rod System In Inherited Retinal Degenerations With Confirmed Gene Mutations. Ivan Slessoriay1, E. Treeger1, S. Kohi1, B. Wissinger2, A. Vincent3, G.E. Holder1. 1Institute for Ophthalmic Research, University of Tuebingen, Tuebingen, Germany; 2Institute for Ophthalmic Research, Molecular Genetics Laboratory, Tuebingen, Germany; 3Molecular Genetics Laboratory, Institute for Ophthalmic Research, Centre for Ophthalmic Research, Tuebingen, Germany.

5686 — A101 Molecular Modeling Of Functioning Cone And Rod System In Inherited Retinal Degenerations With Confirmed Gene Mutations. Ivan Slessoriar1, E. Treeger1, S. Kohi1, B. Wissinger2, A. Vincent3, G.E. Holder1. 1Institute for Ophthalmic Research, University of Tuebingen, Tuebingen, Germany; 2Institute for Ophthalmic Research, Molecular Genetics Laboratory, Tuebingen, Germany; 3Molecular Genetics Laboratory, Institute for Ophthalmic Research, Centre for Ophthalmic Research, Tuebingen, Germany.

5687 — A102 Retinal Function Assessed By Full-field ERG In Ranibizumab Treated Macular Degeneration. E. Ageorges, I. Varela, J. Castelhano1, E. Silva2, M. Castelo-Branco1. 1Visual Neuroscience Laboratory, IBILI-Faculty of Medicine-University of Coimbra, Coimbra, Portugal; 2Ophthalmology, University Hospital of Coimbra, Coimbra, Portugal.

**5697 — A112** Focal Macular Electoretinogram Elicited By Hemiterritorial Stimuli In Eyes With Branch Retinal Vein Occlusion. Shunsuke Yasuda1, S. Ueno1, C-H. Piao1, M. Kondo2, H. Terasaki1. 1Ophthalmology, Nagoya Univ Graduate Sch of Med, Nagoya, Japan; 2Ophthalmology, Mic 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, IBBL-Faculty of Med-Univ of Coimbra, Coimbra, Portugal; 2Ophthalmology, University Hospital of Coimbra, Coimbra, Portugal.


**5703 — A118** The Characteristics Of Cone-driven Oscillatory Potentials In Human Ophthalmologen. Bo Lef, H. Peng1, J. You1, 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. Panourgias2, D.J. McKeefry1, B.B. Lee3, J.J. Kremer1. 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** Severe Depression Depresses the Photopic ERG. Scott E. Brodie1, J.H. Francis2, B. Murr1, D.H. Abramsor1. 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, K.J. Quinn1, L. Milner1, R.L. Robinson1, A.F. Taktak1, A.C. Fisher1-2. 1Department of Medical Physics & Clin Eng, Royal Liverpool Univ Hospital, Liverpool, United Kingdom; 2Clinical Eye Research Centre, Royal Liverpool University Hospital, Liverpool, United Kingdom.

**5708 — A123** Generation of Steady State Pattern Electretinograms Explained by Convolution of Transient Responses. Jonathon A. Toft-Nielsen1, J. Bohorquez1, V. Porciatti1, 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. Juan Shi, K.A. Godwin, 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. Challa2, I.J. Murray3, J.J. Kremer1, N.R. Parry5. 1Optometry, Bradford School of Optometry & Vision Science, Bradford, United Kingdom; 2Optetric Physiology, 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, B.V. Nagy1, A. Magyar1, A. Farkas2, J. Nemeth1. 1Department of Ophthalmology, 2Dept of Ophthalmology, Semmelweis University, Budapest, Hungary; 3Experimental 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, G. Sheif, X. Tao1, E.L. Smith, III1, J.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 Zebrasfish. Peony C. Tam, P. Rassamdana, K. Dang, D. Cameron. Optometry, 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, G.S. Souza1, T.L. Costi1, B.D. Gomes1, L.C. Silveira4, D.F. Ventura1. 1Departamento de Psicologia Experimental, Instituto de Psicología, São Paulo, Brazil; 2Smith-Kettlewell Eye Research Institute, San Francisco, CA; 3Instituto de Ciencias Biologicas, Universidad Federal do Para, Belem, Brazil; 4Instituto 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. Karuso2. 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. Zhao2,3. 1Ped Ophthal & 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. Mayo3,4, M.A. Sommer1, A. DiTomasso1,4. 1Ophthalmology, #Center for Neuroscience, 2University of Pittsburgh, Pennsylvania, PA; 3Neurobiology, Harvard Medical School, Boston, MA; 4Dept. 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 Amane1, I. Ingster-Moati1, E. Albuisson1, 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-lès-Nancy, France; 4Department of Ophthalmology, University Hospital, Besancon, France.

5726 — A141 Full-field Electroretinogram Changes In Patients In Therapy With Chloroquine And Hydroxychloroquine: Time And Dose Effect. Giulio Ruberto1, C. Tinelli2, P. Piccinini2, L. Bossole2, M. Raimondi2. 1Clinica Oculistica, 2Biometric Service, 1IRCCS Policlinico San Matteo, Pavia, Italy.

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

5728 — A143 Ganzfeld-electroretinogram In Patients With Coronary Heart Disease. Katja Goebel1, A. Reffken2, H. Drexler2, C. Erb2,3. 1Ophthalmology, Schloss Park Clinic, Berlin, Germany; 2Ophthalmology, 3Kardiology, Hannover Medical School, Hannover, Germany; 2Eye clinic, Wittenbergplatz, Berlin, Germany.

5729 — A144 Electrophysiology And Fluorescein And Indocyamine Green Angiography In Susac Syndrome. Julia M. Promesberger1, A.F. Alex1, I. Kleffner2, J-M. Dörr2, N. Eter1. 1Ophthalmology, University hospital of Muenster, Muenster, Germany; 2NeuroCure Clinical Research Center, Charité, University hospital of Berlin, Berlin, Germany.

5730 — A145 Flash Electroretinogram In Children With Mitochondrial Diseases. Frederic Nico1, A. Bron1, C. Creuzot-Garcher1, F. Renaud2. 1Ophthalmology, CHU Dijon, Dijon, France; 2Neurophysiology Unit, Hôpital Armand Trousseau, Paris, France.

5731 — A146 Flicker Electroretinogram - Temporal Response Function In Children On Vigabatrin (VGB). Aparna Raghuram1, O. Kolawole1, R.M. Hansen1, 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. Wright3, C. Westall3. 1Institute of Medical Sciences, University of Toronto, Toronto, ON, Canada; 2Ophthalmology and Vision Sciences, Hospital for Sick Children, Toronto, ON, Canada. *CR

5733 — A148 Electroretinogram Anomalies In Psychiatric Disorders: The Possible Implication Of GSK3. Joelle Lavoie1, J-M. Beaulieu1, M. Hebert1. 1CRULRG, Quebec, QC, Canada; 2Ophthalmology, Laval University, Quebec, QC, Canada.

5734 — A149 Habitation of the Ganglion Cell Response to Sustained Pattern Stimulation: Reduced by Multiple Sclerosis. Antoello Fadda1, A. Di Renzo1, F. Martelli1, D. Marangoni1, A. Botocchi1, 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. Zemon1, S.B. Varghese3, E.T. Kessler3, E. Hartmann1,2. 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, A. Ayuso1,2. 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 Oftalmologia, Universidad de Alcalá, Alcala de Henares (Madrid), Spain.

516 Diabetic Retinopathy Epidemiology

Moderator: Robin D Hamilton

5738 — A256 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. Litvin¹, J.A. Cuadros², S. Ramaswamy³, M.S. Muller⁴, A.E. Eslser⁵, T.J. Gast⁶. ¹UC Berkeley School of Optometry, Berkeley, CA; ²School of Optometry, Indiana University, Bloomington, IN; ³AEON Imaging, LLC, Bloomington, IN. *CR


5740 — A258 Cognitive impairment (CI) does not correlate with severity of diabetic retinopathy (DR) in people with type 2 diabetes (T2D). Roxanne R. Crosby-Nvaa¹, A. Forbes², S. Sivaprasad³. ¹King’s College London, London, United Kingdom; ²Ophthalmology, King’s College Hospital, London, London, United Kingdom.

5741 — A259 Diabetic Retinopathy Inpatient Study. Jessica J. Kovarik¹, L.A. Willard², E.L. Waznaw³. ¹Ophthalmology, UPMC Eye Center, Eye and Ear Institute, University of Pittsburgh School of Medicine, Pittsburgh, PA; ²Medicine, UPMC Mercy Hospital, Pittsburgh, PA.

5742 — A260 How much does glycated hemoglobin A₁c explain the risk of diabetic retinopathy in persons with type 2 diabetes? The Diabetes Management Project (DMP). Jing Xie¹, S. Selvarajah², R. Kawasaki³, T. Nicolaou⁴, S. Sammsgandaram⁵, J. Wang⁶, T. Wong⁷, E. Lamourreaux⁸. 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.

5743 — A261 Telemedicine-based Digital Retinal Imaging Improves Diabetic Retinopathy Screening Compliance. Seema Garg¹, B. King², P. Jani³, S. Weir⁴, T. Karnaowski⁵, S. Li⁶, E. Chaum⁷. 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


5746 — A264 An Edutainment Tool for Increased Compliance with DR Screening and Management, Part 2: Efficacy Study. Anne M. Edwards¹, G. Bartsuksy², J. Chihia³, A. Thiagalingam³, P. Kovoor⁴, P. Mitchell⁵. ¹Ophthalmology, Centre for Vision Research, Sydney, Australia; ²Cardiology, Westmead Hospital, Sydney, Australia; ³Cardiology, Westmead Hospital, Sydney, Australia.

5747 — A265 Efficient Early Diagnosis of Diabetic Retinopathy using zero-dilation Scanning Laser Ophthalmoscopy. Dirk De Braesere¹, P. van Eygen², J. Martins³, M. Mensinsk⁴. ¹i-Optics bv, The Hague, The Netherlands; ²Rotterdam Eye Institute, Rotterdam, The Netherlands; ³Rotterdam Eye Hospital, Rotterdam, The Netherlands. *CR

5748 — A266 Diabetes and Diabetic Retinopathy in an Australian Cardiac Population: the Australian Heart Eye Study. Adam J. Plant¹, G. Bartsuksy², J. Chihia³, A. Thiagalingam³, P. Kovoor⁴, P. Mitchell⁵. ¹Ophthalmology, Centre for Vision Research, Sydney, Australia; ²University of Sydney, Sydney, Australia; ³Cardiology, Westmead Hospital, Sydney, Australia.

5749 — A267 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. Green¹A, M. Nybo²C, A. Sjølie¹A. ¹Centre for National Clinical Databases, South, Clinical Biochemistry and Pharmacology, ²Odense University Hospital, Odense, Denmark.

5750 — A268 Sight impairment certification amongst patients attending diabetic retinopathy screening in East London. Tunde Peto¹, R. Bourkiza¹, M. Subash¹, J. Da Costa¹, D. Qatarneh¹, C. Bunce¹. ¹NIHR Biomedical Research Centre for Ophthalmology, at Moorfields Eye Hospital NHS Foundation Trust and UCL Institute of Ophthalmology, London, United Kingdom; ²UCL Institute of Ophthalmology, London, United Kingdom.

5751 — A269 Risk Factors for Prevalence, Incidence and Progression of Diabetic Retinopathy Among Non-insulin Dependent Diabetics in Taiwan. Shwa-Juan Sheu¹A, W-L. Ho², J-Y. Lin³, N-C. Liu⁴, S-C. Chen⁵, Y-H. Horng⁶, H-C. Lam⁷. ¹Department of Ophthalmology, ²Department of Endocrinology, ³Kaohsiung Veterans Gen Hospital, Kaohsiung, Taiwan; ⁴Ophthalmology, National Yang Ming University, Taipei, Taiwan.

5752 — A270 The Incidence Of Vitrectomy For The Complications Of Proliferative Diabetic Retinopathy. David H. Steel¹, ²D. Vaideanu³, S.S. Sandhu⁴. 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.

5753 — A271 Risk factors Associated with Progression from Nonproliferative to Proliferative Diabetic Retinopathy. Kristen H. Nwanyanwu¹, N. Tawar², J.W. Gardner², J.S. Wrobel³, J.D. Stein²A. ¹Ophthalmology and Visual Sciences, ²Internal Medicine, University of Michigan, Ann Arbor, MI.

Hall B/C A272-A301

Thursday, May 10, 2012, 8:30 AM-10:15 AM
Retinal Cell Biology / Retina

517 Vascular Mechanisms In Diabetic Retinopathy

Moderator: Nader Sheibani

5754 — A272 Fractal-Based Oscillation of Venous Density Within the Macula During Progression of Diabetic Retinopathy. Patricia A. Parsons-Wingerter¹, K. Radhakrishnan². ¹Research & Technology Directorate, John Glenn NASA Research Center, Cleveland, OH; ²Dept. of Pathology/ Cancer Center, SOM, University of New Mexico, Albuquerque, NM.


5756 — A274 Angiogenic and Vasculogenic Factors in the Vitreous from Patients with Proliferative Diabetic Retinopathy. Mohd I. Nawaz¹, M.S. Olá¹, M.M. Siddiqué², K. Geboes³, A.A. El-Asrar³. ¹Ophthalmology, Kind Saud University, Riyadh, Saudi Arabia; ²Laboratory of Histochemistry and Cytochemistry, University of Leuven, Leuven, Belgium. ☀

Thursday – Posters – 5758 – 5781


5759 – A277  Angiopoietin-like Protein 6 (ANGPTL6) has Angiogenic Activity on Retinal Endothelial Cells under High Glucose Concentrations. Hirono Yukiuro1, T. Oshikari, S. Yamamoto. Ophthalmology, Chiba Univ Graduate School of Medicine, Chiba, Japan.

5760 – A278  Role of Nr2 in the regulation of diabetic retinopathy. Junsun Gongs1, Z. Xia2, Y. Wei2, H. Huang3, C. Eberhart4, R. Thimmulapp2, S. Biswal2, E.J. Duh1. Wilmer Eye Institute, Johns Hopkins Univ School of Medicine, Baltimore, MD; 2Bloomberg School of Public Health, Baltimore, MD.

5761 – A279  Increased Oxygen Saturation in Retinal Vessels Of Patients With Diabetic Retinopathy Requiring Treatment. Christina M. Joergensen1, T. Bek1, S. Hardarson2.

5762 – A280  Thioredoxin Interacting Protein Is Required For S-glutathionylation and Redox Regulation Of VEGF Angiogenic Signal. Mohammed A. Abdelsaid3, A.B. El-Remessy1,2. 1Clin & Experimental Therapeutics, Experimental & Translational Therapeutics, University of Georgia, Augusta, GA; 2Georgia Health Sciences University, Augusta, GA; 3Georgia Health Sciences University, Augusta, GA.


5764 – A282  Overexpression of IL-1 Receptor Antagonist in the Rat Retina by Retinopathy-mediated Gene Transfer Prevents Capillary Loss in Experimental Diabeties. Chiara Gerhardinger1, Y. Liu2, Z. Dagher1. 1Scheeps Eye Research Institute Massachusetts Eye and Ear, Boston, MA; 2Harvard Medical School, Boston, MA.

5765 – A283  Lipoprotein-associated Phospholipase Inhibition Regulates Retinal Vasoproliferativity During Experimental Diabetes. Alan W. Stitt1, P. Canning1, P.J. Lutfer1, J.V. Glenn2, L-D. Allen1, V. Prise1, P.S. Adamson1. Centre for Vision & Visual Science, Queens University Belfast, Belfast, United Kingdom; 2Pathology, UCL Institute of Ophthalmology, London, United Kingdom; 3Ophthalmology Discovery Performance Unit, GlaxoSmithKline, Stevenage, United Kingdom. ©

5766 – A284  HFD-induced Retinal Microvascular Degeneration: Suggested Role Of Thioredoxin Interacting Protein (TXNIP). Islam N. Mohamed2,3, S. Hafez2,3, M. Abdelsaid2,3, S. Matrogon2,3, B. Pillai2, A. Ergul3, J.D. Imig3, A.B. El-Remessy1,2,4,5. Clinical and Experimental Therapeutics, University of Georgia, Augusta, GA; 2Vision Discovery Institute, 3Physiology, 4Georgia Health Sciences University, Augusta, GA; 5Pharmacology and Toxicology, Medical College of Wisconsin, Milwaukee, WI.


5768 – A286  Chemokine Mediated Monocyte Trafficking into the Retina: Role of Inflammation in Diabetic Retinopathy. Arup Das4, S. Rangasamy5, P. McGuire6. 1MSC0-5610 Surgery, 2Cell Biology & Physiology, 3Univ of New Mexico Sch of Med, Albuquerque, NM.

5769 – A287  Neuro Avascular Gene Expression Changes In The Diabetic Rat Retina. Jennifer C. Lau1, R.A. Linsenmeier1,2, R.J. Moskal3, R.A. Krouse3,4,5. 1Chemical & Biological Engineering, 2Biomedical Engineering and Neurobiology, 3Falk Center for Molecular Therapeutics, 4Northwestern University, Evanston, IL.

5770 – A288  Overexpression of ProNGF Induces Apoptosis and Acellular Capillary Formation Via Activation of P75NTR. Azza B. El-Remessy1, M.M. Al-Gayyar1, S. Matrogon1, H. Saragovi1. 1Clin & Experimental Therapeutics, University of Georgia, Augusta, GA; 2Pharmacology, McGill Univ - Jewish General Hosp, Montreal, QC, Canada.

5771 – A289  Vitreous Biomarker Changes in the Progression from Nonproliferative to Proliferative Retinopathy. Stephanie M. Ecker, A.O. Igbre, J.C. Hines, B.M. Glaser, M. Farkas, B. Storr, B. Castaldi, A. Agustin, S. Hafez, M. Abu-Saad, S. Hafez, M. Abdelsaid1,2A.

5772 – A290  Intravitreal Anti-vegf Therapy Blocks Inflammatory Cell Infiltration And Angiogenic Signaling Mechanisms In Diabetic Retina. Deeksha Gambhir, S. Ananth, R. Veeraman-Karmegam, J.P. Guana Prakasam, V. Ganapathy, P.M. Martin. Biochemistry and Molecular Biology, Georgia Health Sciences University, Augusta, GA.


5774 – A292  Endothelial Mesenchymal Transition in Human Diabetic Epiretinal Fibrosis. Ray Graziano1, L.L. Zheng2. Ophthalmology, 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. Gabrielle E. Lang, H.L. Deissler. Department of Ophthalmology, University of Ulm, Ulm, Germany. ©

5776 – A294  Nurturant Therapy Of The Retinal Microvascularity As Oxidative Stress: Ion Channel-dependent Mechanisms. Atsuko Nakazumi1, M. Fukumoto1,2, D.G. Purdy1,3,4,5,6. 1Ophthalmology & Visual Sciences, 2Molecular & Integrative Physiology, 3University of Michigan, Ann Arbor, MI.


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


5780 – A298  Semaphorin 3A Promotes Vascular Leakage in Diabetic Retinopathy. Agustin Cerani, N. Tetreault, F. Binet, F. Rezende, N. Sitaras, E. Palamde, S. Favret, F. Guimont-Desrochers, S. Lesage, P. Sapieha. Research Centre, Maisonneuve-Rosemont Hospital, Montreal, QC, Canada.

5781 – A299  Adult Endothelial Progenitor Cell Populations: Functional Differences in Diabetic Retinopathy. Sergio Caballero, Jr1, S. Hazd1, A. Bhathade2, S. Li Calzi3, L.J. Paradisso4, L. Miller5, T.S. Korn6, M.B. Grant7. 1Pharmacology & Therapeutics, University of Florida, Gainesville, FL; 2America Stem Cell, Inc., Heleos, TX; 3Department of Medicine, Case Western Reserve University, Cleveland, OH. ©

*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

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 Cells (EPC): Implications For Diabetic Retinopathy (DR) Pathogenesis. Maria B. Grant1, A. Bhutwadkar2, P. Hu3, S. Haza4, S. Caballero5, S. Mohr6, S.F. Becuwer2, D.R. Saban7, T. Chang-Ling5, J.V. Bush8. 1Pharmacology and Therapeutics, University of Florida, Gainesville, FL; 2Department of Anatomy, University of Sydney, Camperdown, Australia; 3Department of Physiology, 4Physiology, 5Michigan State University, East Lansing, MI; 6Ophthalmology & Visual Science, Univ of Michigan Kellogg Eye Ctr, Ann Arbor, MI; 7Anatomy, University of Sydney, Sydney, Australia.

5783 — A301  Caspase-14: A Novel Caspase with Potential Role in Diabetic Retinopathy. Sylvia Megyeri1, S. Ahmad2, S. Hsu3, Z. Guret3, E.S. Shin1, N. Shehban1, M. Al-Shabrawey4. 1Oral Biology and Anatomy, 2Ophthalmology, 3Georgia Health Sciences University, Augusta, GA; 4Ophthalmology and Visual Sciences, University of Wisconsin, Madison, WI.

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. Ramirez1, F. Ochoa1, J. Trajillo2. 1Clinica Ver Bien, Pereira, Risaralda, Colombia; 2Clinica Ver Bien, Pereira, Risaralda, Colombia.


5786 — A340  The Outcome of vitrectomy for chronic diabetic tractional retinal detachment. Muneeza A. Abunajma1, H.N. Al-Shamsi, H. Al-Dhib1, N.G. Ghazzi1. 1Ophthalmology Residency Program, King Saud University, Riyadh, Saudi Arabia; 2Vitreoretina, King Khalid Eye Specialist Hospital, Riyadh, Saudi Arabia.

5787 — A341  Evaluation of Retinectomy in the Treatment of Severe Retinal Detachment. Thais S. Mender1, A.M. Gomez1, H.V. Pasos1, A. Baptista1. 1Ophthalmology, Suel Abujama Institute, Sao Paulo, Brazil; 2Ophthalmology, University of Sao Paulo, Sao Paulo, Brazil.


5791 — A345  Triamcinolone-Assisted Internal Limiting Membrane Peeling During Primary Rhegmatogenous Retinal Detachment Repair Reduces Postoperative Macular Pucker Formation. Rajesh C. Rao1, K.J. Blinder2, G.K. Shah3. 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 Stapper1, 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. Arranzuza Mateo Montoya1, M.D. de Sner1. 1Clinique de Montchoisi (Lausanne, Switzerland), Lausanne, Switzerland; 2Ophthalmology, Clinique 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-rules*. Ulrich Thelen1, H. Gerding1. 1Private Practice, Munster, Germany; 2Clinic Pallas, Osten, Germany.

5796 — A350  Retinal Detachment from Guttering also a Problem after Vitrectomy. Milad Hakimbash1, P. Amini1, A. Khatibi1, M.H. Goldbaum1. 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.

5798 — A352  The Effect Of Retinal Detachment On Retinal Oxygenation. Alexander Kyhnel, III1, S. Traustason1, J. Hajiari1, J. Kiltgaard2, E. Stefansson1, M. La cour2. 1Ophthalmology, Glustrup University Hospital, Glustrup, Denmark; 2Department of Ophthalmology, Landspasti 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. Choudhry1, D.M. Wu1, G.K. Shah4, D. Vavvas1, 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 Sdoct Ultra Structural Findings In Patients With Successfully Repaired Rhegmatogenous Retinal Detachments. Marco F. Vieira1, F. Falcão-Reis1, M. Falcao2, P. Brito1, A. Sousa1, F. Faria1, N. Gomes1, E. Brandão1, F. Falcão-Reis1. 1Ophthalmology, Hospital S Joao Porto, Porto, Portugal; 2Ophthalmology, Hospital S Joao Porto, Porto, Portugal.

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. Dufour1, U.E. Wolf-Schnurrbusch1, L. Ceklic1, S. Wolf1. Dept of Ophthalmology, University of Bern, Bern, Switzerland; 2Ophthalmic Technologies, ARTORG Center, Bern, Switzerland.

5807 — A361 Foveal Thickness After Surgery In Eyes With Retinal Detachment, gakuteserauchi1, C.S. Matsutomo1, E. Watanabe2, K. Shinoda2, H. Matsumoto3, T. Kondo4, A. Mizota5. 1Ophthalmology, Teikyo University School of Medicine, Tokyo, Japan; 2Ophthalmology, Teikyo University, Itabashi-ku, Japan; 3Matsumoto Eye Clinic, Tokushima, Japan; 4Teikyo University, Tokyo, Japan; 5Ophthalmology, University Of West Verginia, Morgantown, WV.


5809 — A363 Prognosis Factors Of Rhegmatogenous Retinal Detachments Associated With Giant Tear. Mounir Benzerroug1, B. Chanaoui2, O. Genevois3, G. Brassear2, S. Milazzo3, M. Maraine4. 1Ophthalmology, Teikyo University School of Medicine, Tokyo, Japan; 2Ophthalmology, Teikyo University, Itabashi-ku, Japan; 3Matsumoto Eye Clinic, Tokushima, Japan; 4Teikyo University, Tokyo, Japan; 5Ophthalmology, University Of West Verginia, Morgantown, WV.


5811 — A365 Characteristics and Outcomes of Rhegmatogenous Retinal Detachment in Stickler Syndrome at a Tertiary Eye Care Center in Saudi Arabia. Saeed T. Alshahrani, S. Alrashda1, N.G. Ghazi2. 1Ophthalmology, Amiens University Hospital, Amiens, France; 2Ophthalmology, Rouen University Hospital, Rouen, France.

5812 — A366 Retinal Detachment In Coats’ Disease In Infants. Emmanuel L. Bui Quoc1, G. Dethorey1, E. Costantini1, J. Jostger-Moati1. 1Ophthalmology, Hospital Robert Debre, Montrouge, France; 2Service 5, CHNO des 15-20, Paris, France; 3Ophthalmology, Univ Paris 7 Diderot, Hopital Necker, Paris, France.

5813 — A367 Use of Silicone Oil for Complex Retinal Detachment in Pediatric Population. Krishnapriya kalyam1, P. Emami1, D. Shali2, K. Gorakant1, 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.


Hall B/C  A437-A469

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

Retina

519 Laser/Choroidal Neovascularization/Retina-RPE Transplantation

Moderators: Lihteh Wu and Demetrios Varvas


5818 — A438 In vivo Retinal Laser Lesion Formation with Simultaneous Adaptive Optics Enhanced Confocal Scanning Laser Ophthalmoscopy (AOcSLO) and Spectral Domain Optical Coherence Imaging (AO-SDOCT). Ginger M. Pocock1, J.W. Oliver1, C.A. Harbert1, G.D. Nooij1, K.J. Schuster2, A. Shingledecker2, D.J. Stolarcki1. 1Air Force Research Laboratory, Fort Sam Houston, TX; 2Biomedical Engineering, The University of Texas at Austin, Austin, TX.


5820 — A440 Laser Titration Algorithm For Minimally-traumatic, Sub-visible And Sub-lethal Retinal Phototherapies. Daniel Lavinsky1,2,3, Sramek1, Y. Mandel2,3, P. Huie2, D.F. Pulanker1,2,3. 1Ophthalmology, Hawaii Hansen Experimental Physics Laboratory, 2Stanford University, Stanford, CA; 3Topcon Medical Laser Systems, Santa Clara, CA.*CR

5821 — A441 Development Of A Simulated Model For Battlefield Retinal Laser Injury. Sher A. Aslam1, M. Sing1, P. Charbel Issa2, W. Davies1, M. McClements1, R. Scott1, R.E. MacLaren1. 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. Barteselli3, D-U.G. Bartsch3, W.R. Freeman3. 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 Arteriotoyism For Central Retinal Artery Occlusion (crao). Clayton Scanlon1, M. Currie2, A. Grant3, E.N. Cetin4, 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. Koh1, A.A. Rageh1, D.A. Ferrington1, S.R. Montezuma1,2, 1Ophthalmology, 1University of Minnesota, Minneapolis, MN.

5826 — A446 Impact of Endothelium-specific NFκ-B Signaling on Choroidal Neovascularization. Sooska Zandi1,2, N. Nakao1, D. Sun1, R. Schmidt-Ullrich1, A. Schering2, A. Hafezi2, A. Hafezi-Moghadam3, 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. Kame1, H. Kidoya2, H. Naito1, N. Matsunara3, M. Suzuki, H. Sakaguchi4, N. Takakura2, K. Nishida5. 1Ophthalmology, Osaka University Graduate School of Medicine, Suita, Japan; 2Signal Transduction, Research Institute for Microbial Diseases, Osaka University, Suita, Japan.
8582 — A448 Implication of GPx4 in Choroidal Neovascularization. Murilo F. Roggia1, T. Ueta1, I. Hirota2, T. Inoue1, Y. Tamaki1, Y. Yanagi1.  
1Ophthalmology, University of Tokyo, Tokyo, Japan; 2Pharmaceutical Sciences, Kitasato University, Tokyo, Japan.

1Genetics, Retinal Cell Signaling, Boys Town Nati Res Hospital, Omaha, NE; 2Genetics, Boys Town Nati Research Hosp, Omaha, NE.

8583 — A450 Topical NPD1 Promotes Microglia Ramification in Experimental CNV. Kristopher G. Sheets1A, W.C. Gordon1B, N.G. Bazan1A.  
1Genetics/ Retinal Cell Signaling, Boys Town National Research Hospital, Omaha, NE; 2Department of Ophthalmology, Retina Specialist, Baltimore, MD; 3Ophthalmology, Retina Specialist, Baltimore, MD. *CR

8584 — A451 Selective Cre/lox Flt-1 Ablation In RPE Induces CNV: A Novel Transgenic Murine CNV Model. Ling Lau1, T. Olsen1, X. Zhang, S. Dus1, H. Uehara1, N. Singh1, T. Miyat1, B. Archer1, Y.Z. Le1, B.K. Ambati1.  
1Moran Eye Center, Salt Lake City, UT; 2Department of Ophthalmology, The 306th Hospital of PLAG, Beijing, China; 3Department of Medicine and Harold Hamm Oklahoma Diabetes Center, University of Oklahoma Health Sciences Center, Oklahoma City, OK.

Ophthalmal & Vis Science, University of Louisville, Louisville, KY.

Shanghai Key Laboratory of Ocular Fundus, Shanghai First People’s Hospital, Shanghai, China.

Retina Service, Department of Ophthalmology, Massachusetts Eye and Ear Infirmary and Harvard Medical School, Boston, MA.

8585 — A455 Long Term Results of Photodynamic Therapy in Patients with Age Choroidal Neovascularization Secondary to Age Related Macular Degeneration. Amy Chawla1, J.T. Thompson1, R.J. Sgaarda1.  
1Ophthalmology, University of Maryland, Baltimore, MD; 2Ophthalmology, Retina Specialist, Baltimore, MD. *CR

1Dept of Ophthalmology, Rigshospitalet, Copenhagen, Denmark; 2Dept. of Ophthalmology, Glorup Copenhagen Univ. Hospital, Glorup, Denmark; 3Eye Pathology Inst, Copenhagen University, Copenhagen, Denmark.

Physics, Biocomplexity Institute, Bloomington, IN.

8588 — A458 Transplantation of Human ESC-derived RPE into Rodent Models of Retinal Degeneration. Madalena Carudio1, Y. Zhu1, T. Benker1, T. Kurth1, T. Munch1, E. Tanaka1, M. Ader1.  
1Center for Regenerative Therapies Dresden, Dresden, Germany; 2Werner Reichardt Center for Integrative Neuroscience, Tubingen, Germany.

8589 — A459 Transplantation of Human Embryonic Stem Cell-Derived Retinal Cells into the Subretinal Space of a Non-Human Primate. Jennifer R. Chua1, D.A. Lamb1, T. Klesert1, K. Sternhagen1, R. Taylor1A, A. Tanaka1, M. Neitz1A.  
1A451 Genetics Center, 2Ophthalmology, Massachusetts Eye and Ear Infirmary and Harvard Medical School, Boston, MA; 3Ophthalmology, Univ of Washington, Medical School, Seattle, WA. *CR

8589 — A460 Characteristics Of Rat Iris Pigment Epithelial Cells Cultured On Modified Expanded-polytetrafluoroethylene (ePTFE) Substrates. Shen Nian1A, C.M. Sheridan2, V. Kearns2.  
1A451 Department of Ophthalmology, University of Louisville, KY; 2Research Center for Regenerative Medicine, University of Louisville, Louisville, KY.

8589 — A461 Cell-based Therapy In A Mouse Model Of Leber Congenital Amaurosis. Yi-Sheng Chang1, W. McIntosh Ambrose1, C. Lin2, H. Qian2, T. Li1, T. Cogliati1, A. Svoorop1.  
1National Eye Institute, National Institutes of Health, Bethesda, MD; 2Department of Ophthalmology, National Cheng Kung University, Tainan, Taiwan.

Dept of Ophthalmology, RWTH Aachen University, Aachen, Germany.

IOWA-Campus Miguel Delibes, University of Valladolid, Valladolid, Spain.

8589 — A464 Repeated Ab-Externo Catheterization of the Sub-retinal Space Using a Microcathether for Targeted Delivery of a Cell Therapy Product in a Pig Model. Marc D. de Smet1, S. Wyse1, M. Vezina1, S. Conston1, C. Sachs1, S.H. Popma1.  
1Ophthalmology, Clinique de 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

8589 — A465 Correlation Of The Detection Of Blood Flow In An RPE-choroidal Graft With Phase-resolved Doppler OCTD, With The Revascularization Steps Found On SD-OCT. Elsheth J. Van Zeeburg1, B. Braaf2, M.G. Cereda3, 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

8589 — 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.

8589 — A467 Efficient Transfection and Genomic Integration of the PEDF Gene into a Limited Number of Primary IPE Cells. Gabriele Thumann, N. Harmening, A. Dobias, S. Johnen.  
Department of Ophthalmology, RWTH Aachen University, Aachen, Germany.

8589 — A468 Autologous Bruch’s Membrane Rotation As A Potential Adjunct To Retinal Pigment Epithelium Cell Replacement Therapy For Age Related Macular Degeneration. Manideep S. Singh2, E.J. Lee1, H.E. Jones2, B. Ahmed1, I.M. Andolina1, P.M. Munro1, K.L. Grieve1, G.W. Aylward2, A.M. Silitti3, R.E. MacLaren2.  
1University of Oxford & Oxford Eye Hospital NIHR Biomedical Research Centre, Oxford, United Kingdom; 2UCL Institute of Ophthalmology & Moorfields Eye Hospital NIHR Biomedical Research Centre, London, United Kingdom; 3Faculty of Life Sciences, University of Manchester, Manchester, United Kingdom.

*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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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


5851 — A471 Earlier Laser Treatment Of Retinopathy of Prematurity Could Reduce Need For Vitrectomy. Joo Eun Lee1, S. Jei1, I. Yun1. 1Ophthalmology, Haedaeun 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 Baci1, T.N. Zyman2, C. S. Teitelbaum3,4, W.W. Davis3,5, T. Kurishara6, J. Wang3,6, A.L. Dorsey3,4, S. Bravo4, G. Sziudak5, M. Friedlander6,4. 1Cell Biology, 2Center for Metabolomics, 3The Scripps Research Institute, La Jolla, CA.  

5855 — A475 Anti-vegf In Rop Treatment - 5.5 Years Of Experience. Susana M. teixeira1,2, C.M. Santos1,2, F.C. Silvia1,2, G. Pires2, R. Barnsos2. 1Ophthalmology, 2Ophthalmology Department, Hospitail 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. Schoonevoff2, J.J. Fromow-Guerra3, V. Morales-Canton4, G. Garcia-Aguire5, H. Quiraz-Mercado6, M.A. Martinez-Castellanos7. 1Retina, Asoc Para Evitar la Ceguera en Mexico, Mexico City, Mexico; 2Retina, Asoc Para Evitar la Ceguera en Mexico, Mexico, Mexico; 3Retina, Asoc Para Evitar la Ceguera en Mexico, Mexico City, Mexico; 4Retina, Asoc Para Evitar la Ceguera, Mexico City, Mexico; 5Retina, Asoc Para Evitar la Ceguera, Mexico City, Mexico; 6Retina, Asoc Para Evitar la Ceguera, Mexico City, Mexico; 7Ophthalmology, Denver Health Medical Center, Denver, CO; 8Retina and Vitreous, Asociacion Para Evitar la Ceguera, Mexico City, Mexico.  

5858 — A478 Structural Outcome Of Intravitreal Injection Of Bevacizumab For Type I Rop Compared To Conventional Laser Treatment. Antonio Baldascino1, D. Leopre2, F. Molle1, P. Papacch1, C. Giannantonio1, V. Purcaro1, L. Orazi1, P. Perrini1, A. Molisso2, C. Romagnoli1. 1Ophthalmology, 2Pediatrics, 3Catholic 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, A. Baldascino1, P. Perrini1, L. Orazi1, M.M. Pagliara1, V. Purcaro1, C. Giannantonio1, P. Papacch1, C. Romagnoli1. 1Ophthalmology, 2Pediatrics, 3Catholic University of the Sacred Heart, Rome, Italy.  

5860 — A480 Fluorangiographic Study of Retinal and Choroidal Vasculature in a Preterm Population. Domenico Leopre1, M.M. Pagliara1, A. Baldascino1, L. Orazi1, S. Luceri2, P. Perrini1, G. D’Amico1, C. Angora1, F. Lafranceschina1, F. Molle1. Ophthalmology, Catholic University of the Sacred Heart, Rome, Italy.  

5861 — A481 Fluorescein angiographic findings in spontaneously-regressing stage 1 or 2 retinopathy of prematurity. Andrea Portilla Demichelis1, P. Schoonevoff2, M.F. Chang3, R. Bolliens4, H. Winninghoff4, J. Hernandez-Vargas4, V. Morales-Canton1, M. Martinez Castellanos1, A.I. Ortiz5. 1Asociacion para Evitar la Ceguera en Mexico, IAP; 2Col. Barrio San Lucas, Coyoacan, Mexico; 3Retina, Asoc Para Evitar la Ceguera en Mexico, Mexico, Mexico; 4Ophthalmology and Medical Informatics, Casey Eye Institute, Oregon Health & Science University, Portland, OR; 5Pomona College, Claremont, CA; 6Retina, Asoc Para Evitar la Ceguera, Mexico, Mexico; 7Retina-Col San Lucas Coyoacan, APEC, Mexico City, Mexico.  

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 Schoonevoff1, V.E. Giordano2, V. Morales-Canton3, R.V. Chan4, H. Quiraz-Mercado1, M.A. Martinez-Castellanos3. 1Retina, Asoc Para Evitar la Ceguera en Mexico, Mexico, Mexico; 2Retina, Asoc Para Evitar la Ceguera en Mexico, Mexico, Mexico; 3Retina, Asoc Para Evitar la Ceguera, Mexico City, Mexico; 4Ophthalmology, Denver Health Medical Center, Denver, CO; 5Retina and Vitreous, Asociacion Para Evitar la Ceguera, Mexico City, Mexico.  

5864 — A484 New method of analysis of tortuosity of retinal vessels in Retinopathy of Prematurity. Alfredo reibaldi1, A. Scuderi1, A. Longo1, L.M. Franco1, A. Russo1, F. Munno1, 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-Acansizoglu1, S. You1, D. Erdogmus1, M.F. Chiang1,2,4. 1Ophthalmology, 2Medical Informatics, 3Oregon Health & Science University, Portland, OR; 4Radiology, Massachusetts General Hospital, Boston, MA; 5Electrical and Computer Engineering, Northeastern University, Boston, MA.  

5866 — A486 Aggressive posterior retinopathy of prematurity: Quantitative analysis of vascular features. Rany Woo1, R.V. Chan2, M. Martinez-Perez2, M.F. Chiang3. 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.  

*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
5874 — A494 Description Of A Technique To Make Stereo Ocular Images And Retina Angiograms Using The Retcam II In Pediatric Patients. Victoria Gonzalez‡, F. Schooneveld†, V. Morales-Canton1, M.A. Martinez-Castellanos‡.


5876 — A496 Digital Imaging Identification Of Skip Lesions In Laser Treatment Of Retinopathy Of Prematurity. Robison V. Chana, K.B. Kang, A. Orlin‡, M.F. Chiang2, T.C. Lee2. Ophthalmology, Weil Cornell Medical College, New York, NY; Ophthalmology and Medical Informatics, Casey Eye Institute, Oregon Health & Science University, Portland, OR; Ophthalmology, Childrens Hospital Los Angeles, Los Angeles, CA. *CR

5877 — A497 Comparison Of Neurodevelopmental Outcomes In Two Retinopathy Of Prematurity (ROP) Cohorts: Standard vs Revised Oxygen Saturation Protocol Groups. Tamara J. Lee1, J. Bernardo1, C. Igwe1, J. Adamson1, P. Kozulin2, R. Maccarone1, S. Yun‡, P. Hu†, S. Bisti‡, J. Provis‡, M.C. Madigan‡, J. McCollin, T. Chan-Ling1. Department of Anatomy & Histology, The University of Sydney, Sydney, Australia; 2Pediatrics, Childrens Hospital at Westmead, Sydney, Australia; 3Biomedical & Science Technology, University of L’Aquila, L’Aquila, Italy; 4Optometry & Vision Science, 2Pediatrics, University of Illinois at Chicago - UIC, Chicago, IL.


5882 — A502 Arginase 2 Deficiency Limits Microglia/Macrophage Activation and Prevents Hyperoxia-induced Vascular Injury in the Mouse Retina.. Jatnas Suganpradit‡, Z. Xu‡, S.P. Narayanan‡, R.W. Caldwell†, R.B. Caldwell‡,§. Vascular Biology Center, Department of Pharmacology and Toxicology, Georgia Health Sciences University, Augusta, GA; 2VA 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 Fu‡, S.Y. Li‡, S. Chung‡, D. Wong‡, A.C. Lo‡,§. Eye Institute, Departments of Anatomy, Research of Heart, Brain, Hormone and Healthy Aging, The University of Hong Kong, Hong Kong, Hong Kong.

5884 — A504 Systemic Safety After Intravitreal Bevacizumab Injection In Newborn Rabbit Eyes. Wei-Chi Wu, C-C. Lai. 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. Kozulin2, R. Maccarone1, S. Yun‡, P. Hu†, S. Bisti‡, J. Provis‡, M.C. Madigan‡, J. McCollin, T. Chan-Ling1. Department 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 Duhamel‡, S. Tremblay1, K. Zanolof‡, 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 IGFl1 Expression Associated with Avascular Retina in Model of Retinopathy of Prematurity. Yunchiao Jiang¹, B. Numpang², B. Yiu¹, H. Wang¹, G. Smithh, M. McCloskey¹, S. Patel¹, R. DiGeromino¹, M. Harnett, R. Lane¹. 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, S. Nitaras², D. Hamel¹, A. Madaan¹, J-C. Honore³, B. Noueihed¹, M. Blais², C. Quiniou¹, P. Sapieha¹, S. Chemtob¹. ¹Pediatrics, Ophthalmology, Pharmacology, Hospital Sainte-Justine/Montreal University, Montreal, QC, Canada; ²Ophthalmology, Maisonneuve-Rosemont Hospital, Montreal, QC, Canada.

5890 — A510 A Novel Model Of Retinopathy In Normobaric Hyperoxia: Conditions With Fewer Oxygen Supply In The Rat. Umut Karaca¹, T. Ozgurtas²A, A.H. Durukan³. ¹Gazi Univercity of Medicine, Ankara, Turkey; ²Frankel Laboratory, Center for Stem Cell Research, Indiana University, Indianapolis, IN; ³Biology, University of Texas at San Antonio, San Antonio, TX.

5891 — A511 Nitric Oxide and Signal Loss in the “ROP Rat” Retina. Tala L. Favoza³, G. DeValdè², N. Zhang¹, R.M. Hansen¹, A.B. Fulton¹, W.D. Eldred¹, T.D. Akula³. 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, T.L. Favoza³, A. Baglieri¹, A.B. Fulton¹, R.M. Hansen¹, P.M. Juvone¹, J.D. Akula³. ¹Ophthalmology, Children’s Hospital Boston, Boston, MA; ²Ophthalmology, 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. Hirofumi Kanda¹, M. Mandal¹, A. Suga¹, J. Kiyura¹, M. Takahashi¹. ¹Laboratory for Retinal Regeneration, RIKEN Ctr for Devlpmntl Biology, 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. Apricottor, A. DiContti², T.C. Lee³. 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.

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 Cohen³. ¹The Krieger Eye Research, Sackler Faculty of Medicine, Tel Aviv University, Petach Tikva, Israel; ²Frankel Laboratory, Center for Stem Cell Research, Petach Tikva, Israel; ³Department of Pediatric Ophthalmology, Schneider Children’s Medical Center of Israel, Petach Tikva, Israel.


5897 — A576 Optimizing Retinal Progenitor Differentiation of hESC - Effect of RPE Co-Culture. Magdalene J. Seiler¹, D. Ferguson¹, G. Nistor², S. Rana³, J. Turovets¹, J. Almodovar¹, J. Taylor¹, N.A. Turovets¹, H.S. Keirstead¹. ¹Anatomy & Neurobiology/Reeve-Irvine Res Ctr, Univ of California, Irvine, Irvine, CA; ²California Stem Cell Inc., Irvine, CA; ³International Stem Cell Corporation, Oceanside, CA.

5898 — A577 Growth and Organization of Human iPSC Cell-Derived Retinal Cell Types on a Biocompatible Membrane. Jessica M. Martin¹, J. Phillips¹, L.S. Wright¹, C. Johnson², N. Radbke¹, D.M. Gamm¹. ¹University of Wisconsin - Madison, Madison, WI; ²Cook Biotech, West Lafayette, IN; ³University of Louisville, Louisville, KY.

5899 — A578 Enhanced Progenitor Cell Integration and Differentiation Following Transplantation on to PLGA Polymer Construct. Brandon M. Menke¹, V.B. Joshi², A. Wongrakphanich³, K.R. Anfinson¹, M.R. Streb¹, M.E. Eyestone¹, A.K. Salem¹, B.A. Tucker². ¹Laboratory for Retinal Regeneration, RIKEN Ctr for Devlpmntl Biology, Kobe, Japan; ²Ophthalmology, University of California, Los Angeles, JSEI, Los Angeles, CA; ³Ophthalmology, John Moran Eye Center, The University of Utah, Salt Lake City, UT.


5901 — A580 Characterization Of Human Retinal Progenitor Cells. Petr Y. Baranov¹, G.B. Melo¹, M.J. Young¹. ¹Scheppens Eye Research Institute, Boston, MA; ²Ophthalmology, Federal Univ of Sao Paulo/UNIFESP, Araacu, Brazil; ³Scheppens Eye Research Inst, Harvard Medical School, Boston, MA.

5902 — A581 Transdifferentiation And Molecular Characterization Of Bone Marrow-derived Progenitors In A Coulture system. Stephanie G. Lecaude, I. Mathivan, S. Wolf, V. Enzmann. 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. Johnson¹, 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. Abhayalakshmi Srividhar¹, 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. Mellow⁴, E. Sernagor⁵, D.H. Steel⁶, M. Lako⁷. ⁴Institute of Genetic Medicine, ⁵School of Neurology, Neurobiology and Psychiatry, ⁶University of Newcastle Upon Tyne, Newcastle, United Kingdom; ⁷Sunderland Eye Infirmary, Sunderland, United Kingdom.

5906 — A585 Functional Comparison Of RPE Cultures Expanded From Differentiated Human iPSC Cells And Prenatal Eye Tissue. Ruchira Singh¹, W. Shen¹, X. Guo¹, E.T. Perez², D. Kuai³, L.S. Wright¹, B. Pattnaik¹. ¹Biology, ²Depts. of Ophthalmology and Visual Sciences and Pediatrics, ³Eye Research Institute, ⁴Dept. of Ophthalmology and Visual Sciences and Eye Research Institute, ⁵University of Wisconsin, Madison, WI.

5907 — A586 Soluble Factors Secreted by Fibroblast Feeder Cells Induce Retinal Pigment Epithelium Differentiation from Human Pluripotent Stem Cells. Alexandra Mikhalova¹, H. Hongisto¹, H. Vaajasaari², S. Narkilahti², R. Suuronen², T. Ilmarinen¹, 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.
5908 — A587 Engraft Of Hyaluronic Acid-based Hydrogel Loaded Mesenchymal Stem Cell Into The Vitreous Body Of The Ischemic Rat Retina. Su-Ju Oh1, J. Lee1, J. Shin1, C. Yeum1, G. Chae2, M-H. Chun1, 4Department of Anatomy, Institute of Hansen's Disease, Coll of Med Catholic Univ of Korea, Seoul, Republic of Korea.

5909 — A588 Characterization Of Human Induced Pluripotent Stem Cells Derived Neural Progenitor Cells. Wei Kong1, N. Yang1, X. Li2. 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. Xiufeng Zhong1, C. Hampton1, T. Park1, D.M. Gamm1, E. Zamblud1, V. Cantosoler1, 1Wilmer Eye Inst, Johns Hopkins Univ Sch, Baltimore, MD; 2Institute for 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 Neural Genes in ImM10 Müller Glia-Derived Retinal Stem Cells. Deborah C. Oteson1, J. Phillips1, T.D. Petković1. 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. Rizzolo1, G. Gan2, S. Peng1,2, T.A. Van Zyl1, L.S. EdirwicKendra1, H. An2, M. Zhong2, C. Qiu2, R.A. Adelman2. 1Surgery/Ophthalmology, 2Cell and Neurobiology, University of Southern California, Los Angeles, CA; 3Pathology, Keck School of Medicine USC, Los Angeles, CA.

5913 — A592 Retinal Differentiation Of Human Es Cells Maintained In Chemically Defined, Xeno-free E8 Culture Medium. Kyle Wallace1, A. Gerner1, J. Martin1, Z. Hou1, D.M. Gamm1, 1Waisman Center, University of Wisconsin, Madison, WI; 2Waisman Center, Department of Ophthalmology, Eye Research Institute, University of Wisconsin Madison, Madison, WI; 3Morgridge Institute for Research, Madison, WI.

5914 — A593 Microparticles in Differentiation of Retinal Pigment Epithelial Cells from Human Pluripotent Stem Cells. Amni E. Sorkio1,2, T.H. Ilmarinen1,2, J.S. Luo1, H.T. Skottman1,2, 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 IGFBP-1 in Neuronal Progenitor Cells from Human Persistent Fetal Vascular for Neuroprotection. Jie Ma1, C. Guo1, G. Chen1, D. Cyr1, K. Lashkari1,2, 1Schepens Eye Research Institute, Boston, MA; 2The Second Xiangya Hospital, Central South University, Changsha, China; 3Massachusetts Eye & Ear Infirmary, Boston, 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. Thomas1, B.B. Thomas1, L. Liu1, Y. Hu1, D. Zhu1, E. Barron2, D.O. Clegg3, D.R. Hinton4, M.S. Humayun5. 1Ophthalmology, 2Doheny Eye Institute-USC, Los Angeles, CA; 3Cell and Neurobiology, University of Southern California, Los Angeles, CA; 4Ophthalmology, Yale University, New Haven, CT; 5Ophthalmology, 2nd Hospital of Harbin Medical University, Harbin, China.

5921 — A600 Activated Omental Stromal Cells Protect Against Light-Induced Retinal Injury. Evan B. Price1,2, P. Bu3,4, P. Sethupathi5, E.B. Stubbs, Jr1,6, J.L. Perlman6,2, 1Surgery, 2Research, 3Edward Hines, Jr. VA Hospital, Hines, IL; 4Ophthalmology, 5Microbiology and Immunology, 6Loyola University Medical Center, Maywood, IL.

5922 — A601 Embryonic Stem Cell Derived Retinal Pigment Epithelium Stem Cell Transplant: Survival And Lack Of Tumor Formation In Athymic Nude Rats. Bruno Diniz, Sr1,2, R. Ribeiro1, R. Brant1, Y. Hu1, L. Liu1, P. Thomas1, B. Thomas1, D. Hinton4, M. Humayun1. 1Doheny Eye Institute, University of Southern California, Los Angeles, CA; 2Ophthalmology, Universidade Federal de São Paulo, São 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. Shaoning Peng1,2, G. Gan1, C. Qiu3, L. Li4, R.A. Adelman5, L.J. Rizzolo1. 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 Zhu1, D.O. Clegg2, D.R. Hinton2. 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 Ecto-nucleotidases that Control In Vivo Cell Proliferation. Ariadna G. Battista1, M.P. Faillace1. 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

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. Kirk3. 1Georgetown University School of Medicine, Washington, DC; 2Ophthalmology, Allegheny General Hospital, Pittsburgh, PA; 3Ophthalmology, Kirk Eye Center, River Forest, IL.

5929 – A154 Trabecome™ Outcomes in Patients of African Decent. Nita H. Neuburger, C. van Oterendorp, T. Wecker, D. Matthia. 1UMDNJ/ Bucknell University of Medicine, New Haven, CT.


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. Kolomeyer4, M. Zarbin5, R. Fetchner6, N. Bhagat7. 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. Inatani2, M. Iwao3, M. Kawai4, T. Inoue5, K. Iwao6, H. Tanikara7. 1Ophthalm & Vis Science, Kumamoto Univ Sch of Med, Kumamoto, Japan; 2Department of Ophthalmology, University of Fukui, Fukui, Japan; 3Ophthalmology, Asahikawa Medical College, Asahikawa, Japan; 4Ophthalmology, Saga University, Saga City, Japan.


5939 – A164 A Comparison Of Intraocular Pressure Reduction After Selective Laser Trabecuoplasty With The Co-administration Of Lopetredanol Versus None. Ronald L. Rebentisch, N.R. Binder, A. Jani, K. Pikey. 1Ophthalmology, University of Missouri-Kansas City, Kansas City, MO.


5941 – A166 Efficacy Of Glaucoma Surgical Procedures: A Systematic Review And Metaanalysis. Luciano Quaranta1, I. Floriani2, I. Riva1, G. Gambirasio1, I. De Simone2, E. Rullf1, E. Biagioli1, S. Credidio2. 1Ophthalmology-Glaucoma Unit, University of Brescia, Brescia, Italy; 2Laboratory of Clinical Trials, Istituto di ricerche farmacologiche «Mario Negri», Milan, Italy.


5943 – A168 To Report On Long-term Comparative Outcomes For Mitomycin C Augmented Needle Revisions For Failing Deep Sclerectomies And Trabeculectomies. Antigoni Kokaouli1, F. Musa, N. Anand. 1Ophthalmology, Queen’s University, Kingston, ON, Canada; 2Ophthalmology and Vision Science, 3Dalla Lana School of Public Health, 4University of Toronto, Toronto, ON, Canada; 5Ophthalmology, Shaare Zedek Medical Center, Jerusalem, Israel.

5944 – A169 Progression Rate Before and After Trabeculectomy. Jimena Schmidt1, S. Araneda2, E. Abusleme3, C. Perez4, E. Mau5, L.A. Maris6, D. E. Maul7, A. Gerhard7, C. Triger7. 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. Shuba3, M. Nicolel1. 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. Scheurer1, 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.

5952 – A177 The Effects Of Trabeculectomy On Visual Field Progression Rates In Glaucoma. Aachal Kotecha1, R.A. Russell2, J.C. Clarke3, P.T. Khaw1, Moorflow Study Group, 1NIHR BRC for Ophthalmology, UCL Institute of Ophthalmology and Moorfields Eye Hospital, London, United Kingdom; 2Optometry and Visual Science, The City University, London, United Kingdom; 3Glaucoma, Moorfields Eye Hospital, London, 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 – θ Travel Grant Awardee
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 Samudin1, S. Brocchini2, P.T. Khar1, I. Eames3. 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. *CR Department of Mechanical Engineering, London, United Kingdom.


5955 — A180 Eyes With Occludable Angles Despite Patent Iridotomy: How Efficient Is Laser Iridoplasty In These Cases? Vitor G. Prado1, P.A. Moreno1, E.D. Almeida, Jr1, A.S. Sousa1, T.S. Prata2. 1Ophthalmology, Federal University of São Paulo, São Paulo, Brazil; 2Hospital Medicina dos Olhos, São Paulo, Brazil.

5956 — A181 Short-Term Efficacy of Selective Laser Trabeculoplasty in Primary Angle Closure Disease - Results of a Randomized Controlled Trial. Arun Kumar Narayanaswamy1, S.A. Perera2, C. Ho2, C.K. Leung1, D.V. Istianoto1, M.E. Nongpiur3, H.M. Hoon1, T.T. Wong1, D. Goh2, T. Aung1,2. 1Ophthalmology, Singapore Eye Research Institute, Singapore, Singapore; 2Glaucoma, Singapore National Eye Centre, Singapore, Singapore; 3Department of Ophthalmology and Visual Sciences, Chinese University of Hong Kong, Hong Kong, Hong Kong; 4Glaucoma, Jakarta Eye Center, Jakarta, Indonesia. *CR, #

5957 — A182 Excimer Laser trabeculotomy (ELT) combined with Phacoemulsification and Lens Implantation: 5 Year Post-OP Observations. Ulrich F. Giers1, L. Kleineberg3, R.P. Stodtmeister2, M.S. Berlin1, L.E. Pillunat2. 1Detmold Eye Clinic, Detmold, Germany; 2Ophthalmology, University Hospital Carl Gustav Carus, Rodalben, Germany; 3Ophthalmology, University Hospital, National University Health System, Singapore, Singapore; 4Ophthalmology, National University of Singapore, Singapore, Singapore.


5959 — A184 Primary and Repeat Selective Laser Trabeculoplasty in Pseudophakic Eyes: 2 year follow-up. Tamara L. Berezina1, A.S. Khouri1, B.A. Maltzman1, K. Shah1, R.D. Fechtner1. 1Ophthalmology, UMDNJ-New Jersey Medical School, Newark, NJ; 2Drexel University, Philadelphia, PA.


5961 — A186 The Effectiveness of Selective Laser Trabeculoplasty on Eyes of Different Corneal Thicknesses. Joseph A. Donnelly1, E. Miglionico1, L.F. Jindra1. 1Albert Einstein College of Medicine, Bronx, NY; 2Floral Park Ophthalmology, Floral Park, NY; 3Ophthalmology, Columbia University, Floral Park, NY. *CR

5962 — A187 Transscleral Micropulse Diode Laser Cyclophotocoagulation as Effective Adjunctive Treatment prior to Glaucoma Surgery. Maria Cecilia D. Aquino1, A. Tan1, S. Loon1, P.T. Chew2. 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. Mamtta Shah, B. Eliassi-Rad. Department of Ophthalmology, Boston University School of Medicine, Boston, MA.


5967 — A192 Subsequent Slt Can Be Effective After Initially Less Responsive Slt: 4 Year Follow-up. Albert S. Khouri1, T.L. Berezina1, B. Maltzman1, K. Shah1, R.D. Fechtner1. 1Ophthalmology, UMDNJ - New Jersey Medical School, Newark, NJ; 2Ophthalmology, Harvard Eye Physicians and Surgeons, Jersey City, NJ; 3Drexel University, Philadelphia, PA.


5969 — A194 Baseline Intraocular Pressure Strongly Predicts Response to Selective Laser Trabeculoplasty for Open Angle Glaucoma. J.D. Nussdorf, A. C. Janot1, D.W. Hanson, P.J. DeMarco2. 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 Bowler1, H. Saedon1, R. Thomas1, W. Chan1. 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.

5971 — A196 Repeat SLT In Comprehensive Ophthalmology Practices. Jeffrey D. Henderer1,4, E.S. Sung1, A. Johnston1, S.K. Luminais1, R. Sherry1, J.P. Gaughan0. 1Ophthalmology, #Epidemiology and Biostatistics, Temple University, Philadelphia, PA.

5972 — A197 Quantification of Short-Term Endothelial Cell Loss and Intraocular Pressure Reduction Following Laser Peripheral Iridotomy. Gabriela C. Barretto1, L. Trancoso1, M. Cota1, L. Bitelli1, T. S Prata1. 1Glaucoma, Hospital Medicina dos Olhos, Sao Paulo, Brazil; 2Glaucoma, Complexo Hospital Padre Bento, Sao Paulo, Brazil.

5973 — A198 Efficacy of Transscleral Diode Laser Cyclophotocoagulation on Neovascular Glaucoma: Vein Occlusion versus Proliferative Diabetic Retinopathy. Neha Sangal1, A. Anchal1, T.D. Patriankos2. 1University of Chicago, Chicago, IL; 2John H. Stroger Jr. Hospital of Cook County, Chicago, IL.


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

Anterior Segment OCT in Eyes with Cycloplegiasis after Trabeculectomy Glaucoma Surgery. Robert B. Knape, F.E. Sayad, M.R. Banitt. Ophthalmology, Bascom Palmer Eye Institute, University of Miami, Miami, FL.

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


Scanning Electron Microscopy Findings In Rabbit Eyes Undergoing Ultrasonic Cyclocoagulation. Florent Apfel1,2, A. Begle1, T. Charrel1,3, C. Lafon2, J-Y. Chapelon2, P. Denis4, Beaumont, Bloomfield Hills, MI; 5Glaucoma Center, W-S. Shieh2, O.S. Faridi3, C.K. Gupta4, M.S. A203 Cagliari, Cagliari, Italy.


Corneal Endothelium. Moderator: Ulia V Jurkanus

Analysis of the Role of ZEB1 in the Pathogenesis of Posterior Polymorphous Corneal Dystrophy. Vivek S. Yellow1, R.K. Gangalmoni1, S.A. Rayner1, C.K. Nguyen2, Z. Jing3, S.P. Bhut1, A.J. Aldave1. Jules Stein Eye Institute, Univ of California-Los Angeles, Los Angeles, CA; Ophthalmology, Jules Stein Eye Institute, UCLA, Los Angeles, CA; Jules Stein Eye Institute, University of California, Los Angeles, Los Angeles, CA; Ophthalmology, Jules Stein Eye Institute UCLA, Los Angeles, CA; Cornea Service, CHS/ UCLA, Los Angeles, CA.


Genetic screen of African-Americans with Fuchs endothelial corneal dystrophy. Natalie A. Afshari1, M.A. Minear2, J. Rochette Drouin3, I. Brunette1. 1Ophthalmology, Kresge Eye Institute, Detroit, MI; 2School of Medicine, Wayne State University, Detroit, MI; Ophthalmology, William Beaumont Hospital, Royal Oak, MI; Ophthalmology, Beaumont, Bloomfield Hills, MI; 3Glaucma Center of Michigan, Southfield, MI.

Relationship between Central and Peripheral Corneal Thickness in Fuchs Endothelial Dystrophy. Daniel Repp1,2, D. Hodge2, K. Baratz2, J. McLaren2, K. Kittenlton3, S. Patel4. 1Ophthalmology, 2Health Sciences Research, 3Mayo Clinic, Rochester, MN.


Reconstruction of a Corneal Endothelium Using Cells From Patients With Fuchs Endothelial Corneal Dystrophy. Stephanie Proust1, M. Haydar2, B. Goyer3, O. Roy3, S. Laprise1, O. Rochette Drouin3, I. Brunette1. Centre LOEX de l’Université Laval, Génie tissulaire et régénération; Centre de recherche FRSQ du CHA universitaire de Québec et Département d’ophthalmologie, Université Laval, Québec, Quebec, Canada; Département d’ophthalmologie, Université de Montréal and Centre de Recherche de l’Hôpital Maisonneuve-Rosemont, Montréal, QC, Canada.

Sulforaphane Decreases Endothelial Cell Apoptosis in Fuchs Endothelial Corneal Dystrophy: A Novel Treatment. Alireeze Ziaei, U.V. Jurkanus. Schepens Eye Research Institute, Massachusetts Eye and Ear, Department of Ophthalmology, Harvard Medical School, Boston, MA.

Fabricating Bioengineered Corneal Endothelial Cell Sheet Through Chitosan-polycaprolactone-blended Membranes. Tsung-Jen Wang1,2, I-J. Wang1,2, T-H. Young1. 1Department of Ophthalmology, Taipei Medical University Hospital, Taipei, Taiwan; 2Institute of Biomedical Engineering, College of Medicine and College of Engineering, National Taiwan University, Taipei, Taiwan; 3Department of Ophthalmology, National Taiwan University Hospital, Taipei, Taiwan; 4Department of Ophthalmology, National Taiwan University College of Medicine, Taipei, Taiwan.


1Institute of Anatomy, 2Department of Ophthalmology, Essen University Hospital, Essen, Germany; 3Institute of Inorganic Chemistry, University of Duisburg Essen, Essen, Germany; 4Department of Ophthalmology, Saarland University Hospital, Homburg/Saar, Germany; 5Department of Ophthalmology, Düsseldorf University Hospital, Düsseldorf, Germany.

5997 — D818 Cell cycle Cdk1 expression profile of Human Corneal Endothelial Cells (HCECs). Aboulghassem Shahdadfar1,2, J. Navaratnam2, J.K. Slettedal1A,2.

1Center for Eye Research, 2Department of Ophthalmology, University of Tokyo Graduate School of Medicine, Bunkyo-ku, Tokyo, Japan; 2Foundation for Biomedical Research and Innovation, Osaka, Japan; 3Research Institute for Clinical Research Osaka National Hospital, National Hospital Organization, Osaka, Japan; 4Center for Developmental Biology, Riken, Kobe, Japan.

5998 — D819 Viral Vectors For Gene Transfer To Corneal Endothelial Cells. Thomas A. Fuchs1,2,3, U.V. Jarkunas1, A. Kazlauskas1, R.H. Davis1,2.

1Department of Ophthalmology, Heinrich-Heine-University Duesseldorf, Duesseldorf, Germany; 2Department of Ophthalmology, Schepens Eye Research Institute, Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston, MA; 3Dept of Ophthalmology/Harvard Med Sch, Mass Eye&Ear Infirmary; Schepens Eye Res, Boston, MA; 4Ophthalmology, Schepens Eye Res Inst/ Harvard, Boston, MA; 5MEE/SERI Harvard Ophthalmology, Boston, MA.


1Biomedical Engineering, Doshisha University, Kyoto, Japan; 2Ophthalmology, Kyoto Prefectural Univ of Med, Kyoto, Japan; 3Research Center for Animal Life Science, Shiga University, Otsu, Japan.


1Center for Eye Research, 2Oslo University Hospital, Oslo, Norway.

6001 — D822 Increased Proliferation and Replicative Lifespan of Isolated Human Corneal Endothelial Cells with L-Ascorbic acid 2-phosphate. Satoru Yanagami1, N. Shima2, M. Kinoto3, M. Yamazaki4,5.

1Ophthalmology, University of Tokyo Graduate School of Medicine, Bunkyo-ku, Japan; 2Foundation for Biomedical Research and Innovation, Kobe, Japan.


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. Firenfeldhburgh2, A. Feinberg3, 4Ophthalmology, University of Pittsburgh School of Medicine, Pittsburgh, PA; 5Biomedical Engineering, Carnegie Mellon University, Pittsburgh, PA.


1Department of Genetics, UCL Institute of Ophthalmology, London, United Kingdom; 2Moorfields Eye Hospital, London, United Kingdom.


1School of Optometry, Indiana University, Bloomington, IN; 2Singapore Eye Research Institute, Singapore, Singapore; 3Singapore National Eye Centre, Singapore, Singapore; 4Department of Ophthalmology, Renmin Hospital of Wuhan University, Wuhan, China.

6006 — D827 Functional Characterization of the Zebrafish Corneal Endothelium. J.M. Heur1, S. Jiao1,4, G. Grump2,4,4, 4Ophthalmology, 6Cell and Neurobiology, 5University of Southern California, Los Angeles, CA.


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. Valdez1,2, J. Zavala1, V. Treviño1, E. Martínez.

1Dean’s Office, Tecnologico de Monterrey School of Medicine, Monterrey, Mexico; 2Catedra de Oftalmologia - Tecnologico de Monterrey, Monterrey, Mexico; 3Catedra de Bioinformatica - Tecnologico de Monterrey, Monterrey, Mexico.

6009 — D830 CD147 Expression Required for Lactate Transporters MCT1 and MCT4 in Rabbit Corneal Endothelium. Shimin Li, T.T. Nguyen, J.A. Bonanno.

1School of Optometry, Indiana University, Bloomington, IN.


1School of Optometry, University of Florida College of Medicine, Gainesville, FL; 2Department of Ophthalmology, Dr.R.P. Centre for Ophthalmic Education, University Eye Center, Durham, NC.


Schepens / Massachusetts Eye and Ear, Harvard Medical School, Boston, MA.

6012 — D833 NF-kB is the Transcription Factor of FGF-2 that Causes Endothelial Mesenchymal Transformation in Cornea. JeongGoo Lee1,2, J. M. Heur1, E.P. Kay1,2.

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. Toh2, B. D. Ballehos1, H-P. Ang1, M-X. Lee1, D.T. Tan1,2, J. Mehta2,4, 4Singapore Eye Research Institute, Singapore, Singapore; 3Singapore National Eye Centre, Singapore, Singapore; 4Department of Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore; 5Department 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. Wung2,3, T. Eppig4, A. Langenbucher5, B. Seitz1, N. Szentmáry1,2.

1Department of Ophthalmology, 2Experimental Ophthalmology, 3Saarland University Hospital, Homburg/Saar, Germany; 4Department of Ophthalmology, Renmin Hospital of Wuhan University, Wuhan, China.


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.


Ophthalmology, Wilmer Eye Institute, Baltimore, MD.


Ophthalmology, Duke University Eye Center, Durham, NC.

6018 — D839 Study of Effect of Donor Age and Death Eucalorature Time on in-vitro Culture of Human Corneal Endothelial Cells. Himi Singh1, R. Tandon1, S. Mohanty1B, A. Kumar1A.

1Ophthalmology, Dr.R.P. Centre for Ophthalmic Sciences, 2Stem Cell Facility, 3All India Institute of Medical Sciences, New Delhi, India.
6040 — D861 Reduced Hem-And Lymphangiogenesis Into A Fishscale-derived Collagen Scaffold Used As Biological Artificial Cornea (BioCornea). Deniz Hor1, F. Bock2, B. Regenfuss3, J. Onderka2, C.C. Lin1, H.J. Lut1, C. Cursiefen1. 1Department of Ophthalmology, University of Cologne, Cologne, Germany; 2Department of Ophthalmology, University of Erlangen-Nuremberg, Erlangen, Germany; 3Aeon Astron Corp., Taipei, Taiwan; 4Aeon Astron Europe B.V., Leiden, The Netherlands. *CR


6042 — D863 The Fate Of Collagen-based Hydrogels As Corneal Substitutes In “High Risk” Graft Recipients. Lucia Kuffova1, R. Fordyce1, M. Robertson1, M. Griffith1, J-J. Ahn1, K. Merritt, R.L. Hendrick1, J.V. Forrester1. 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.


6048 — D869 Risk Factors for Endothelial Cell Loss after Corneal Transplantation. Vincent M. Borderie1, J. Bullet1, O. Touszeau1, P. Goldschmidt1, L. Laroche1, 2. 1Ophthalmology, Laboratoire, CHNO des Quinze-Vingts, Paris, France.

6049 — D870 Graft Failure And Intraocular Pressure Control After Keratoplasty In Iridocorneal Endothelial Syndrome. Desmond T. Quek1, S. Han1, T. Wong1, D. Tan2, J. Mehta2. 1Singapore National Eye Center, Singapore, Singapore; 2Singapore Eye Research Institute, Singapore, Singapore; 3Ophthalmology, Samsung Medical Centre, Sungkyunkwan University, Korea, Republic of Korea.


6053 — D874 Long-Term Outcome of Corneal Transplant Surgery in Pediatric Patients with Keratoconus. Anna Djougiarian1, G.W. Zaidman1,2. 1New York Medical College, Valhalla, NY; 2Ophthalmology, Westchester Medical Center, Valhalla, NY.

6054 — D875 Spontaneous wound dehiscence after removal of combined penetrating keratoplasty suture. Retrospective study about 71 cases. Oualid Guechi, J-M. Perome, A. Agapie, O. Gheorghe, A. Ferte, I. Botez, P-J. Bertaux. Ophthalmology, Regional Hospital Center of Metz Bon-Secours, Metz, France.


6056 — D881 Optical Functional Properties Of The Osteo-odontokeratoprosthesis (ookp). Richard M. Lee1, G. Ong1, J. White1, F. Lam1, C.S. Liu1, C.C. Hult1. Ophthalmology, Sussex Eye Hospital, Sussex Eye Hospital, United Kingdom; 2Optometry & Visual Science, City University, London, United Kingdom.


6058 — D879 Femtosecond Laser-Assisted Mushroom Configuration Penetrating Keratoplasty And Deep Anterior Lamellar Keratoplasty In Advanced Keratoconus. Simon S. Fung1, F. Aiello1, A. Iovieno1, C. Nucci1, V. Maurino1. 1Cornea and External Disease Service, Moorfields Eye Hospital, London, United Kingdom; 2Department of Biopathology, Ophthalmology Unit, University of Rome Tor Vergata, Rome, Italy.


6060 — D883 Field of View of Modified Osteo-odontokeratoprosthesis. Victor M. Hernandez1,2, C. de Freitas1, G.C. Falcinelli1, Y. Sawatari1, V. Perez1, D. Sathia1, F. Manir1, E.C. Alfonso1, J-M.A. Pare1,2,3. 1Ophthalmic 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.

6061 — D884 Poly(ethylene glycol diacrylate) - Poly(2-hydroxyethyl methacrylate) (PEGDA-PHEMA) Based Keratoprosthesis. Amelia L. Zellander1, M. Mukhous2, M. Cho1. 1Bioengineering, University of Illinois at Chicago, Chicago, IL; 2Physical Therapy and Human Movement Sciences, Orthopaedic Surgery and Physical Medicine, Northwestern University, Chicago, IL. *CR

6062 — D885 Boston Type 1 Keratoprosthesis: Microbial Colonization and Antibacterial Resistance. Elle P. Eid1, M-C. Robert1, P. Saint-Antoine1, H. Harissi-Dagher1. 1Ophthalmology, 2Centre Hospitalier de l’Université de Montréal (CHUM), Hôpital Notre-Dame, Montréal, QC, Canada.

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6065 — D886  Light-induced Maculopathy After Keratoprosthesis Surgery - True Or False?
Borja Salvador Culla,1 I. Behlau,1 R.R. Sayegh1, F. Delori2, C.H. Dohlman1. 1Cornea - Keratoprosthesis, Massachusetts Eye & Ear Infirmary, Boston, MA; 2Schepens Eye Research Institute, Boston, MA.

6066 — D887  Outcomes following Boston Keratoprosthesis Type I Implantation in Aniridia Patients: The University of Montreal Experience.
Salima I. Hassanaly1, J. Talajic1, M. Harissi-Dagher1.
1Ophthalmology, Mass Eye & Ear Infirmary, Boston, MA; 2Schepens Eye Research Institute, Boston, MA.

1Ophthalmology, Massachusetts Eye & Ear Infirmary, Boston, MA; 2Ophthalmology, Menelick II Hospital, Addis Ababa, Ethiopia.

6068 — D889  Retroprosthetic Membrane Thickness and Risk of Melt in Patients with Type I Boston Keratoprosthesis. Kathi Ari Sivaranan, J.H. Hou, N. Alleman, J. De la Cruz, M.S. Cortina.
Department of Ophthalmology, University of Illinois Eye & Ear Infirmary, Chicago, IL.

6069 — D890  Results of the Boston keratoprosthesis type I larger backplate. Anita Shukla,1 A. Cruzat,1 J-C. Abu,1 C.H. Dohlman,1 K.A. Colby2.
1Ophthalmology, Massachusetts Eye & Ear Infirmary, Boston, MA; 2Ophthalmology, Clinica Oftalmica de Medellin, Medellin, Colombia.

6070 — D891  The Boston Type I Keratoprosthesis: The Weill Cornell Experience.
Department of Ophthalmology, Weill Cornell Medical College, New York, NY.

6071 — D892  Long-term Follow-Up Of Implanted Boston Type I Keratoprosthesis And Angle Structural Changes Using Using Anterior Segment Optical Coherence Tomography, Cynthia X. Qian1, S. Hassanaly1, M. Harissi-Dagher1.
1Ophthalmology, 2Medicine, University of Montreal, Montreal, QC, Canada.

1Massachusetts Eye and Ear Infirmary, Department of Ophthalmology, Harvard Medical School, Boston, MA; 2Schepens Eye Research Institute, Massachusetts Eye and Ear Infirmary, Department of Ophthalmology, Harvard Medical School, Boston, MA.

6073 — D894  Argon Laser Iridoplasty for Optic Obstruction in Boston Keratoprosthesis. Joanne J. Kang, A.A. Aref1, N. Alleman, M.S. Cortina, J. de la Cruz.
Ophthalmology and Visual Sciences, University of Illinois at Chicago, Chicago, IL.

1Ophthalmology, DiNOG, University of Genoa, Genova, Italy; 2Di NOG, Eye Clinic, Clinica Oculistica - Di NOG, 3University of Genova, Genova, Italy; 4Azienda Ospedaliera Universitaria San Martino, Genova, Italy.

Ophthalmology, Loyola University Medical Center, Maywood, IL.

Hall B/C — D897-D947
Thursday, May 10, 2012, 8:30 AM-10:15 AM
Cornelia
525 Contact Lens II (Basic Research)

Moderators: Nicole A Carnt and Nancy J Keir

1Faculty of Life Sciences, EuroLens Research, Faculty of Life Sciences, University of Manchester, Manchester, United Kingdom.

1R&D Center, Menicon Co Ltd, Kagasai, Japan; 2Ophthalmology, Univ Texas Southwestern Med Ctr, Dallas, TX.

1R&D and Innovation Center, Menicon LTD, Kagasai, 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. Yoshie Ito1, N. Miyata2, T. Kawagoe, M. Nobuhisa, E. Okada2.
1Okada Eye Clinic, 2Okada Eye Clinic, Yokohama, Japan; 3Department of Ophthalmology and Visual Science, Yokohama City University, Yokohama, Japan.

Bausch & Lomb, Rochester, NY.

4Ophthalmology, 5Optical and Visual Science, 6Microbiology, 7Texas Tech University Health Sciences Center, Lubbock, TX; 8Selenium Ltd., Lubbock, TX; 9Selenium Ltd., Austin, TX.

Vision Care R&D, Bausch + Lomb Inc., Rochester, NY.

Microbiology, Bausch & Lomb Inc., Rochester, NY.


Brien Holden Vision Institute, Sydney, Australia; School of Optometry and Vision Science, University of New South Wales, Sydney, Australia.

Ophthalmology and Visual Sciences, Microbiology, Ophthalmology, Texas Tech University Health Sciences Center, Lubbock, TX; *Selenium Ltd., Lubbock, TX.

6087 — D908  Non-Cultivable Bacterial Biofilm Communities in Used Contact Lens Cases. Judith L. Flanagan, M. Allgeier, M.D. Willcox, P. Hugenholtz.
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.

Brien Holden Vision Institute, UNSW, Sydney, 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.
Comparison Of Two Dual-Disinfection Systems For Ocular Comfort, Corneal Staining And Corneal Infiltrative Events. Daniel Tilia1, P. Lazon De La Jara2, N. Peng3, H. Zhu4, M.D. Wilcox5, B.A. Holden1. 1Brien Holden Vision Institute, Sydney, Australia; 2School of Optometry and Vision Science, University of NZ, Sydney, Australia; 3Brien Holden Vision Institute, Vision Cooperative Research Centre, Sydney, Australia. *CR, ©.

6091 — D912 Cytotoxic Potential Assessment Of Contact Lens Care Solutions And Evidence For A Useful Rinse Step With Unpreserved Solution. Melody Dutot4, J. Vincent2, I. Fabre2, C. Grasnick3, R. Fagon2, P. Rat. 4Toxicology, *Research & Development, YSLAB, Paris, France; Direction des Laboratoires et des Contrôles, Agence Française de Sécurité Sanitaire des Produits de Santé, Vendargues, France; Chimie-Toxicologie Analytique et Cellulaire (EA 4463), Université Paris Descartes, Sorbonne Paris Cité, Faculté de Pharmacie, Paris, France. *CR

6092 — D913 Morning Cleaning or Replacement of Lenses Reduces Complications with Extended Wear of Contact Lenses. Jerome Ozkan4, M.D. Wilcox, P. Lazon De La Jara, Y.M. Rathi3, 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.


6097 — D918 Proteoglycan 4 (lubricin) Enhances the Wettability Of Model Conventional And Silicone Hydrogel Contact Lenses. Lakshman N. Subbaraman1, T.A. Schmidt, 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. Jalahia P. Varikooty1, N.J. Keir, T.L. Simpson2. 1CCLR, School of Optometry, 2School of Optometry, University of Waterloo, Waterloo, ON, Canada.


6101 — D922 Ocular Delivery Of Ketotifen Fumarate By Silicone Hydrogel And Conventional Hydrogel Contact Lens Materials. Anthony Soluri, A. Hui, L. Jones. Centre for Contact Lens Research, University of Waterloo, Waterloo, ON, Canada.

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


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

6105 — D926 Oxygen Diffusion Behind Modern Sercial Rigid Gas Permeable Contact Lenses. Sofia C. Peixoto-de-Matos1, V. Compañ2, S. Moya1, J. Jorge1, J.M. Gonzalez-Meijome3. 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 Phorimetry. Sangly P. Srinivas1, G. Guidoboni2, L. Carichino2. 1Optometry, Indiana University, Bloomington, IN; 2Mathematics, IUPUI, Indianapolis, IN.


6109 — D930 Design and Development of an In Vitro Tear Replenishment System. Saman Mohammadi, M. Garbet. Systems Design Engineering, University of Waterloo, Waterloo, ON, Canada.


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. Cruz1, Y. Qazi1, N. Baniasadi1, M. Trinidad2, D. Critser3, C. Leathy1, C.W. Siddha1, P. Hamrahi1. 1Cornea/Ophthalmology, Harvard Medical School/MEEL, Boston, MA; 2Cornea / Ophthalmology, Harvard Medical Sch/MEEL, 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. Uruena2, H.A. Ketelson1, W.G. Sawyer1. 1Mechanical and Aerospace Eng, 2University of Florida, Gainesville, FL; 3R & D, Alcon Research Ltd, Fort Worth, TX. *CR


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


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6118 — D939 Cytotoxic and Inflammatory Effects of Contact Lens Multipurpose Solutions on Human Corneal Epithelial Cells. Nir Erdinest1, Y. Grossman1, R. Harari1, H. Ovadia3, A. Solomon2. 1Ophthalmology, 2Neurology, 3Hadassah 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 L. Lorenz, 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. Beumer, 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. Jones2, J.A. Forrest3. 1School of Optometry, 2Department of Physics & Astronomy, 3University of Waterloo, Waterloo, ON, Canada.


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 Excel Contributions to Host Resistance Following Pseudomonas Aeruginosa Corneal Infection But Not To Herpes Simplex Virus Type 1. Katie M. Hudson1,2,3, D.J. Carr1,2,3. 1Research, 2Infection, 3Immunology & Microbiology, Case Western Reserve University, Cleveland, OH; 4Dept. of Molecular Biology and Microbiology, Case western Reserve University, Cleveland, OH.

6130 — D990 Vasoactive Intestinal Peptide Regulates Toll-like Receptors in the Infected Cornea. Xiaoya 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.


6133 — D993 Virulence factors in Pseudomonas aeruginosa keratitis. Henri Suecke1, J. Shankar2, T. Neal3, S. Aldwinkle4, C. Winstanley, S. Tuft, S.B. Kaye5. Ophthalmology, 6Ophthalmology, 7Royal Liverpool University Hospital, Liverpool, United Kingdom; 8Ophthalmology, University of Liverpool, Liverpool, United Kingdom; 9Ophthalmology, Moorfields Eye Hospital, London, United Kingdom. ©CR

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) Efectator Molecules (Exo U/S/T) From Human Corneal Ulcer. Jeganathan lakshmi priya1, R. Sivaganesa Karthikeyan2, N. Venkatesh Prajna3, E. Pearlman1, A. Rietsch1, P. Lalitha4. 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 Elsaheb1,2, C. Heath1, M. Christodoulides2, P. Hossain2,3. 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 Sazuki, 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. Diaz3, E. Alfonsot, D. Miller4. 1Ophthalmology, 2Bascom Palmer Eye Institue, 3University of Miami, Miami, FL.

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6141 — D1001 Involvement of Corneal Epithelial Cells in the TLR7 Response in an In Vitro Bacterial Inflammation Model. Isabel Arranz-Valsecio, U. Schütze, L. Contreras-Ruiz, L. García-Posadas, A. Lopez-Garcia, F. Pausen, Y. Diebold. 1Ocular Surface Group, IOBA-University of Valladolid, Valladolid, Spain; 2NetworkResearch Center on Bioengineering, Biomaterials and Nanomedicine (CIBER-BBN), Valladolid, Spain; 3Department of Anatomy and Cell Biology, Martin Luther University Halle-Wittenberg, Halle/Saale, Germany; 4Department of Anatomy II, Friedrich Alexander University Erlangen/Nuremberg, Erlangen, Germany.

6142 — D1002 Role of Antimicrobial Peptides in the Defense against E. coli keratitis. Satya Sree N. Kolar, H. Baidouri, A. McDermott. University of Houston College of Optometry, Houston, TX.


6144 — D1004 Analysis of Acanthamoeba cysts isolated from contact lenses with the Raman spectroscopy microscope. Pablo L. Goldschmidt, D. DiCave, S. Degorge, D. Benallaloua, E. Borsali, A. Le Bouter, B. Batellier, V. Borderie, L. Laroco, C. Chaumet. 1Laboratoire, 2Service, 3Quinze Vingts Hôts, Paris, France; 4Department of Public Health and Cell Biology, University of Rome Tor Vergata, Rome, Italy.

6145 — D1005 Acanthamoeba Associated Microbial Communities. Darlene Miller, J. Maestre-Mesa, M. Diaz, E. Perez, V. Shestopalov, R. Van Gelder, E.C. Alfonso, 1Bascom Palmer Eye Institute, Univ of Miami Miller Sch of Med, Miami, FL; 2Ophthalmology, Univ of Washington School of Medicine, Seattle, WA.


6151 — D1011 CD8+ T Cells Inhibit Viral Replication but Become a Source of VEGF Expression During Corneal Herpes Simplex Virus Type I Infection. Christopher D. Conwady, M. Zheng, D.U. Stone, D.J. Carr. 1Microbiology and Immunology, Univ of Oklahoma Hlth Sci Ctr, Oklahoma City, OK; 2Ophthalmology, University of Oklahoma, University of Oklahoma/Oklahoma City, OK. *CR

6152 — D1012 Protective Asymptomatic Human Leukocyte Antigen (HLA)-A*0201- Restricted CD8+ Cytotoxic T-Lymphocyte Epitopes Identified from Herpes Simplex Virus Glycoprotein B. Anthony B. Nesburn, X. Dervillez, A.A. Chentofig, G. Dsuppa, K.W. Kabbara, M.C. Villacres, C. Nguyen, S.L. Wechsler, L. BenMohamed. 1Gavin Herbert Eye Institute, University of California, Irvine, CA; 2University of Southern California, Los Angeles, CA.

6153 — D1013 Non-Muscle Myosin IIa Mediates HSV-1 Entry Into the Cells of the Human and Pig Corneas. Theisscar E. Antoine, D. Shukla, 1Ophthalmology and Visual Sciences, 2Microbiology and Immunology, 3University of Illinois at Chicago, Chicago, IL.

6154 — D1014 Corneal Dendritic Cells Suppress Local Corneal Damage and Mediate Systemic Viral Dissemination in Herpes Simplex Keratitis. Kai Hu, H. Ghias, U. Von Andriani, P. Hamrah. 1Ophthalmology, Massachusetts Eye & Ear Infirmary, Boston, MA; 2Surgery/Ophthal Research, Cedars-Sinai Medical Center, Los Angeles, CA; 3Immune Disease institute, Boston, MA; 4Immune Institute Disease, Boston, MA.


6157 — D1017 Mistyping of Human Adenovirus Type 19 Associated with Epidemic Keratoconjunctivitis. Xiaohong Zhou, C.M. Robinson, J. Rajadhy, D. Seto, M.S. Jones, D.W. Dyer, J. Chodos. 1Ophthalmology, Mass Eye and Ear - Harvard Medical School, Boston, MA; 2School of Systems Biology, George Mason University, Manassas, VA; 3Viral and Rickettsial Disease Laboratory, California Department of Public Health, Richmond, CA; 4Microbiology and Immunology, University of Oklahoma Health Science Center, Oklahoma City, OK.*CR


6160 — D1020 Neutralizing Kc (cxcl1) Ameliorates Recurrent Hsk. Patrick M. Stuart, D. West. Ophthalmology, St Louis University, St Louis, MO.


*CR Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures. *CR Refer to Program Number in the Clinical Trial (CT) Registration Index. *CR Travel Grant Awardee.
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, N. Acharya1. 1F.I. Proctor Foundation, University of California San Francisco, San Francisco, CA; 2Ophthalmology, Kaiser Permanente Honolulu, Honolulu, HI.

6163 – D1023 Pattern of Herpetic Eye Disease In A Referral Centre In Milan, Northern Italy. Giulio Midorari, E. Misericordia, I. Bianchi, A. Colucci, F. Bandello. Dept of Ophthalmology, Univ Hospital San Raffaele, Milan, Italy.


6167 – D1027 The Immune Response To 3 Different Therapies In Herpetic Stromal Keratitis. Mauricio Cedillo Sarabia, Sr1, R. Velasco Ramos, II1, S. Perez Tapia, III1, A. Babayan Sosa, IV1, O. Baca Lozada, V1, O. Farández Vásquez, VI1, R. Suárez Velasco, VI1, G. Cortés 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.*CR

6169 – D1029 Clinical and epidemiological characteristics of infectious keratitis at Fundacion Banco de Ojos “Fernando Oca del Valle” in Paraguay. Martin M. Bentwich1, M. Borda1, D. Sánchez di Martino1, A. Ruiz Cumpanapo2, W. Martínez Torres2, S. Lichi2, M. Samudio2, N. Fariña2, F. Lapina1, H. Mino de Kaspar2. 1Department of Ophthalmology, Ludwig-Maximilians-University, Munich, Germany; 2Fundacion Banco de Ojos “Fernando Oca del Valle”. Instituto de Investigaciones en Ciencias de la Salud, Asunción, Paraguay.

6170 – D1030 10 year experience of fungal keratitis at the University of Iowa. Gina M. Rogers, K.M. Goins, A.S. Kitzmann, N.A. Syed, M.D. Wagoner. Ophthalmology & Visual Science, University of Iowa, Iowa City, IA.


6173 – D1033 Characterization Of Bacteria From Contact Lens Storage Cases Of Corneal Infiltrative Event Patients. Simon Kilvington1, J.P. Showler1, M. Nikolic1. 1Corneal R&D Microbiology, Abbott Medical Optics, Santa Ana, CA; 2Northeastern Eye Institute, Scranton, PA.


6175 – D1035 Rapid Identification of Microorganisms Using the Two-Photon Ophthalmoscope. Yin Hong Qiu1, K.E. Thomas2, M. Eugenia Vola1, A-C. Roch-Leveque2, Y-Y. Wu1, T.L. Purcell1, J.F. Bille1, D.J. Schanzlin2. 1Medical Physics, Heidelberg University, Heidelberg, Germany; 2Shiley Eye Center, UCSD, La Jolla, CA.

6176 – D1036 Reduced Corneal Inflammation By Birch Leave Extract In Combination With Sub-therapeutic Cyclosporin A. Kattrin Wacker1, C. Gründemann1, R. Huber1, T. Reinhard1, J. Schwartzkoff. 1University Eye Hospital, Freiburg, Germany; 2Department of Environmental Health Sciences, University Medical Center, Freiburg, Germany.*CR

6177 – D1037 Topical sCD83 Induces Graft Tolerance In High-risk Corneal Transplantation. Felix Bock1, A. Steinkasserer2, C. Cursiefen3, E. Zinner4. 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+ T Cells In Mice After Allergic Penetrating Keratoplasty. Qihua Le1, X. Wang1, W. Wang1, J. Xu2. 1Ophthalmology, 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 Suzuki1, Y. Sano1, N. Yokoi1, S. Kinoshita1. 1Department of Ophthalmology, Kyoto Prefectural University of Medicine, Kyoto, Japan; 2Kyoto City Hospital, Kyoto, Japan.

6180 – D1040 I-CAM-1 is Necessary for Efficient Accumulation of CD11c+ Cells in Healing Corneal Epithelium. Yuan Gao1,3, Z. Li1,4, C.W. Smith1, A.L. Kuekcyte 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. Siebelding1, M.E. Sterne2, J.Y. Niederkorn3, P. Siever1. 1Ophthalmology, University Hospital of Cologne, Cologne, Germany; 2Biological Sciences, Allergan, Inc; 3Department of Ophthalmology, UTSouthwestern Medical Center, Dallas, TX.*CR


6183 – D1043 Peripheral Antigen Presenting Cells Are Differentially Distributed in Normal and Inflamed Murine Corneas. Albert H. Alhatem1, U.H. von Andrian2, P. Hamrah1,2. 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.

6185 — D1045 In Vivo Confocal Microscopy Of Corneal Langerhans Cells In Systemic Lupus Erythematosus (SLE) Without Ocular Surface Manifestation. Miklos D. Resch1, L. Marosovsky, E. Medgyessy2, A. Balog, L. Kovacs, J. Nemeth. 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 Gloria. 1Faculty of Medicine, Szeged, Szeged, Hungary; 2Rheumatology Department, University of Szeged, Albert Szent-Györgyi Clinical Center, Faculty of Medicine, Szeged, Szeged, Hungary.

6187 — D1047 Inhibitory Role Of ICOS in Antigen-specific T cell-mediated Ocular Tissue Damage. Misao Terada1A, H. Taniguchi1B, R. Abe1B, J. Hori1B. 1Division of Lab Animal Science, Ophthalmology, Nippon Medical School, Bunkyo-ku, Japan; 2Research Institute for Biological Science, Tokyo University of Science, Noda, Japan.


6190 — D1050 Etiology Diversity Of Atypical And Severe Anterior Uveitis. Audrey Fel1M, M. Bojanova1M, V. Touitou1M, P. Le Hoang1M, F. Rozenberg1M, B. Bodaghi2M. 1Ophthalmology, Hospital la Pitié Salpêtrière, Paris, France; 2Virology, Hospital Cochin, Paris, France.

6191 — D1051 The Role of Toll-like Receptors In Corneal Angiogenesis. Lei Liu, J. Liu, A. Dick. Dept of Ophthalmology, School of Clinical Sciences, University of Bristol, Bristol, United Kingdom.

6209 — D1069 Treatment of Infectious Keratitis from Acanthamoeba by Corneal Crosslinking. Martin Bera1, G. Galperin1, G. Boscaro1, J. Zarate1, J. Tuai1, P. Charadial, A. Berra1. Lab de Investigaciones Oculares, Buenos Aires, Argentina; 2Biofundus, Buenos Aires, Argentina; 3Servicio de Ophthalmologia-Hal Clinicas, Buenos Aires, Argentina.


6211 — D1071 In Vitro Efficacy Of Amoebicidal Treatment Using Riboflavin/UV-A (365nm) Combination. Jonathan Letch, Jr1, A. Sauer1, C. Speeg-Schatz1, A. Abou-Bacar2, E. Candolfi2, Optics, Santa Ana, CA.


6214 — D1074 The Effect of Low Concentrations of Benzalkonium Chloride on Acanthamoeba survival. Elmer Y. Tu1, M.E. Shoff1, C.E. Joslin1. 1Ophthalmology, University of Illinois at Chicago, Glenview, IL; 2CDRH/OSEL/DB, FDA, Silver Spring, MD; 3Ophthalmology/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. Yeh1. Ophthalmology, 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. Mitchell11, P. Tran1, A. Arnett1, T. Mosley1, R. Hanes1, C. Jarvis1, A. Hamood1, L. Dominguez1, T. Reid12. 1Ophthalmology, 2Microbiology and Immunology, 3Texas Tech University HSC, Lubbock, TX; 4Texas A & M University, College Station, TX; 5Selenium Ltd., Austin, TX.

Hall B/C D1078-D1087 Thursday, 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. Sugar12, A.T. Lyon1, R.A. Lewis4, D.A. Jabs5, M-H. Heinemann6, J.P. Dunn12, J.H. Kemper12. Studies of Ocular Complications of AIDS Research Group. 1Biostatistics, 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, University of California, San Francisco; 6Ophthalmology, Internal Medicine, Mount Sinai School of Medicine, New York, NY; 7Ophthalmology, Weil Cornell Medical College, New York, NY; 8Ophthalmic Oncology Service, Department of Surgery, Memorial Sloan Kettering Cancer Center, New York, NY; 9Ophthalmology, Epidemiology, Center for Clinical Epidemiology and 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. Koazak1, D-U.G. Bartschi1, H. Lemus1, L. Dustin1, J. Chhablani1, G. Barteselli1, H. Wang1, S.P. Azen1, W.R. Freeman4. 1UCSD Jacobs Retina Center, 2Ophthalmology, University of California San Diego, La Jolla, CA; 3Ophthalmology-Shiley Eye Ctr, Univ of California-San Diego, La Jolla, CA; 4Graduate School of Public Health, San Diego State University, san diego, CA; 5Biostatistics, University of Southern California, Los Angeles, CA; 6Vitreo-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. Gangapatra1, J.E. Thorne1, V. Vaidya1, L.T. Drye1. Longitudinal Study of Ocular Complications of AIDS(LSOSCA) 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. Yuko Iwasaki12, N. Yamamoto12, S. Saito12, T. Kawaguchi12, N. Ozaki1, M. Mochizuki1, K. Murakami1. 1Ophthalmology, 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. Forster2, R.A. Adelman2. 1Ophthalmology and Visual Science, Yale University School of Medicine, New Haven, CT; 2University of Botsswana School of Medicine, Gaborone, Botsswana.


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.
6227 — D1087 Characteristics of Suppressor of Cytokine Signaling (SOCS)1 and SOCS3 Expression in Response to Murine Cytomegalovirus (MCMV) Infection During Health and Retrovirus-Induced Immunosuppression (MAIDS). Christine I. Alston, H. Choi, E.L. Blalock, R.D. Diss1,2. 1Department of Biology, Viral Immunology Center, Georgia State University, Atlanta, GA; 2Department of Ophthalmology, Emory University School of Medicine, Atlanta, GA.

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 C4d+ Foxp3+ C2d5Bright T Regulatory Cells Population In Ocular Sarcoidosis. Alexis Pintel1, A. Mathian1,2, M. Miyara3, C. Chapelon-Abric4, C. Parizi5, D. Boatin6, Z. Amoura7, G. Gorochov6, P. Lehoang6, B. Bodaghi6,7. 1Ophthalmology, 2Internal medicine, 3Immunology, 4CHU Pitie-Salpetriere, Paris, France; 5INSERM UMR-S 945, Paris, France; 6U972 INSERM, Paris, France.


6232 — D1092 Clinical Course of Patients with Behcet’s Uveoretinitis that Discontinued Infliximab Therapy. Tatsumi Kiwaguchii, Y. Iwasaki2, S. Kanda2, S. Sugita2, 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 Kanoori1, C. Martin-Granados1, C. Bobu2, M.E. Wikstrom3, M.A. Degli-Esposti4, R.M. Steinman5, J.V. Forresterson. 1Ophthalmology, University of Aberdeen, Aberdeen, United Kingdom; 2Center for Molecular Biology, National Eye Institute, Bethesda, MD; 3Rockefeller University, New York, NY.

6234 — D1094 Monocyte-derived Macrophages in EAU Resolution. Inbal Benhar1, A. London1, R.R. Kaspi2, 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. Fatmiz, X. Xia3, E. Suarez4, V.L. Perez5, J.L. Vega5. 1Neurology, Herbert Wertheim College of Medicine-Florida International University, Miami, FL; 2Ophthalmology, Bascom Palmer Eye Institute, Miller School of Medicine, Miami, FL.

6236 — D1096 Effect Of P2Y2 Deficiency On Experimental Autoimmune Uveitis Development. Laure E. Caspers1, L.L. Velas2, R. Dewispelaere1, M. Makhoul2, D. Communi2, J-M. Boeynaems2, B. Robaye2, C. Bruyns2, F. Willermain1. 1Ophthalmology, 2Univ of Brussels-St Pierre Hosp, Brussels, Belgium; 3Univ of Brussels-IRBBM, Brussels, Belgium.


6238 — D1098 Temporal Expression of mir-155 Correlates with the Initiation and Development of Experimental Autoimmune Uveitis (EAU). Bernadette Marrero, Y. Chen-Rong, C. Nagineni, C. Esguerra. Immunology, NEI, Bethesda, MD.

6239 — D1099 DAP-12, a Major Immunomediator, Either Promotes or Suppresses EAU Development. Barbara P Vistica1, V. Montalvo-Reddin1, G. Shi2, L. Nugent2, L. Quigley2, D.W. McVicar2, I. Gery1. 1Lab of Immunology, National Eye Institute, Bethesda, MD; 2Cancer and Inflammation Program, NCI-Frederick, Frederick, MD.

6240 — D1100 Inhibition of CdK5 Attenuates Experimental Autoimmune Uveitis. Zili Zhang1, X. Wu1, J. Duan2, J.T. Rosenbaum2. 1Pediatrics, Oregon Health & Science University, Portland, OR; 2Ophthalmology, Casey Eye Institute-OHSU, Portland, OR.

6241 — D1101 Immunological Inhibition of Pigment Epithelium-Derived Factor (PEDF)? Charles E. Thirkell. Ocular Immunology Research Lab 1220 Surge III, UC Davis, Davis 95616, CA. CR

6242 — D1102 Label-free LC-MSMS-based Differential Proteome Analysis of Vitreous from Autoimmune Uveitis Cases. Stefanie M. Hauck1, F. Hofmair1, J. Dietter2, M. Blindert1, E. Kremmer1, M.E. Swadzba2, B. Amann1, C.A. Deeg1, M. Ueffing1, M.E. Swadzba2, B. Amann1, C.A. Deeg1, M. Ueffing1. 1Department of Protein Science, Helmholtz Center Munich, Neuherberg, Germany; 2Department for Veterinary Sciences, Institute of Animal Physiology, Munich, Germany; 3Centre for Ophthalmalimology, Institute for Ophthalmic Research, Tuebingen, Germany; 4Institute for Molecular Immunology, Helmholtz Center Munich, Munich, Germany.


6244 — D1104 Amelioration of Experimental Autoimmune Uveoretinitis by Inhibition of Toxic AGEs Formation. Zhenyu Dong1,2,3, N. Kitai2,3,4, D. Iwata1,2,3,4, R. Ando1,2,3,4, J. Fukuhara1,2,3,4, A.M. Lennikov1,2,3,4, A. Kanda1,2,3,4, K. Noda1,2,3,4, S. Ohno5,6, S. Ishida1,2,4,6. 1Department of Ophthalmology, Laboratory of Ocular Cell Biology and Visual Science, 2Department of Ocular Inflammation and Immunology, 3Hokkaido University Graduate School of Medicine, Sapporo, Japan; 4Department of Ophthalmology, Health Sciences University of Hokkaido, Sapporo, Japan.


6246 — D1106 Ocular Immune Pathological Analysis in a Murine Model of Anterior Scleritis. Hiroko Taniguchi1, M. Wang2, A. Nakajima2, J. Hori1. 1Ophthalmology, Nippon Medical School, Tokyo, Japan; 2Rheumatology, Tokyo Metropolitan Police Hospital, Tokyo, Japan.

6247 — D1107 Erythrocyte Sedimentation Rate and C-Reactive Protein in Anterior Uveitis. Justin D. Marsh, B.B. Markowitz. University of South Carolina, Columbia, SC.


6249 — D1109 Scleritis Associated with Inflammatory Bowel Disease. Matte Saint de la Mazza1, N. Molina1, L.A. Gonzalez-Gonzalez2, P.P. Doctor1, J. Tauber1, S. Foster1,2. 1Instituto Clinico Oftalmologia, Hospital Clinico Oftalmologia, Barcelona, Spain; 2Ophthalmology, Massachusetts Eye Research and Surgery Institution, Cambridge, MA; 3Ophthalmology, Bay-Wiew Clinic, Mumbai, India; 4Ophthalmology, Tauber Eye Center, Kansas City, MO; 5Ophthalmology, Harvard Medical School, Boston, MA.
6250 — D1110  Posterior Scleritis and Orbital Mass Associated to Positive Antineutrophil Cytoplasmic Autoantibodies Without Systemic Involvement. Maca de los Angeles Ramos Cadena1, G. Aguilar Montes2, M. Ruiz Cruz2. 1Ophthalmology, Hospital General Dr. Manuel Gea Gonzalez, Mexico City, Mexico; 2Ophthalmology, Centro de Investigacion 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. Sanchez-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. Radwan1, C. Arcinue1, R. Parikh1, A. Mohamed2, C. Foster1. 1Ophthalmology, Massachusetts Eye Research and Surgery Institution, Cambridge, MA; 2Hyderabad Eye Research Foundation, L V Prasad Eye Institute, Hyderabad, India.

6253 — D1113  Risk Factors for Loss of Visual Acuity among Patients with Uveitis Associated With Juvenile Idiopathic Arthritis: The SITE Study. Jennifer E. Thorne1, A. Gregory1, E. Daniel2, A. Acosta3, A. Acosta4, J. Kempen8. 1Ophthalmology, Johns Hopkins University School of Medicine, Baltimore, MD; 2Bryn Mawr College, Bryn Mawr, PA; 3University of Puerto Rico, San Juan, PR; 4Bryn Mawr, PA; 5University of Puerto Rico, San Juan, PR; 6National Eye Inst/NIH, Bethesda, MD; 7VA Medical Center, Louisville, KY; 8School of Biological Sciences (IPN), Mexico, D.F., Mexico.

6254 — D1114  In Search Of Intracellular Biomarkers In Uveitis Associated With Juvenile Idiopathic Arthritis (jia). Viera Kalinina Ayuso1, J.D. de Groot-Mijnes1, J. Dekkers6, L. de Visser14, A. Rothova1, J.H. de Boer14. 1Ophthalmology, University of Pennsylvania, Philadelphia, PA; 2Ophthalmology, Ocular Immunol & Uveitis Fdn, Cambridge, MA; 3Ophthalmology, Mount Sinai School of Medicine, New York, NY; 4Tampa Uveitis, Tampa, FL; 5National Eye Inst/NH, Bethesda, MD; 6Ophthalmology, Uveitis Clinic/Portland VAMC, Casey Eye Institute-OHSU, Portland, OR; 7Ophthalm-Biostatistics & Epidemiol, Scheie Eye Inst/Univ of Penn, Philadelphia, PA.


6256 — D1116  Inhibition Of The Acid Sphingomyelinase/ceramide System Prevents Hallmarks Of Graves Ophthalmopathy. Melissa Meyer zu Hyste1, E. Stroheker1, Y. Zhang2, K. Roecz3, J. Fischer3, U. Bercher-Pfannschmidt4, A.K. Eckstein1, E. Gulbins1. 1Department of Ophthalmology, University Hospital Duisburg-Essen, Essen, Germany; 2Department of Molecular Biology, University of Duisburg-Essen, Essen, Germany; 3Institute of Pharmacology and Clinical Pharmacology, University of Duesseldorf, Duesseldorf, Germany.


6259 — D1119  In Vitro Activity of ACH-0139586, a Novel Isothiazoquinolone, Mosfloxacin and Gatifloxacin Against Clinical Isolates, Including Methicillin and Fluoroquinolone Resistant. Aron Shapiro2, L. Belen1, A. Whillock2, D. Sult2. 1Ora, Inc., Andover, MA; 2Eufrinos Medinet, Chantilly, VA.

6260 — D1120  A Novel Antiviral Protein RC28. Naihong Yan1, F. Piraino2, X. Liu3. 1Ophthalmic Laboratories, Chengdu, China; 2Department of Ophthalmology and Visual Sciences, University of Wisconsin Medical School, WI. *CR


6263 — D1123  A Comparative Study in the Clinical and Microbial Efficacy of Topical Befloxacin 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 Co-infection. Diana Gabriela Ponce-Angulo, Jr1, M. Martinez-Rivera, Sr2, V. Bautista-de Lucio, Sr2, A. Rodriguez-Tovar, Sr2, C. Santacruz-Valdez, Sr2, A. Climent-Flores, Sr2, A. Robles-Contreras, Jr3, C. Diaz-Godiniez, Jr3, E. Felix Diaz-Parga, Jr3, H. Mejia-Lopez, Sr3. 1Research Unit / Microbiology and Proteomics, 2Cornia service, 3Institute of Ophthalmology, Mexico, D.F., Mexico; 4Laboratory 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. Samudre2, J.D. Sheppard, Jr2, G.W. Laurie2, R.L. Mckown3, P.B. Williams1. 1Physiological Sciences, Eastern Virginia Medical School, Norfolk, VA; 2Virginia Eye Consultants, Norfolk, VA; 3Cell Biology, University of Virginia, Charlottesville, VA; 4Integrated Science & Technology, James Madison University, Harrisonburg, VA.

6267 — D1127  Susceptibility Of Methicillin-resistant Staphylococcal Clinical Isolates To Nortimicin And Other Antibiotics Commonly Used In Ophthalmologic Therapy. Anna Rita Blanco1, A. Sudano Rocca1, V. Papa1, M. Mazzone2. 1Pharmaco Biology Unit - BU Pharma, 2Medical Marketing - BU Pharma, 3Product Portfolio Development - BU Pharma, 4SIFI SPA, Catania, Italy. *CR

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. Chambaretta2, H. Nezzar2, B. Mortemousque1, C. Speeg-Schatz3, S. Milazzo3. 1Research Unit / Microbiology and Proteomics, 2Institute of Ophthalmology, St Victor Center, CHU Amiens, Picardie University, Amiens, France; 3Ophthalmology, CHU Clermont Ferrand, Clermont Ferrand, France; 4Ophthalmology, CHU Bordeaux, Bordeaux, France; 5Ophthalmology, CHU Strasbourg, Strasbourg, France; 6Ophthalmology/Saint Victor Center, CHU Amiens, University Jules Verne, Amiens, France. *CR
6269 — D1129 Increased Antibiotic Resistance Of Ocular Surface Flora After Repeated Use Of Prophylactic Topical Fluoroquinolone Post Intravitreal Injection For Neovascular Age-related Macular Degeneration (amd). Vivian T. Yin1, D. Weisbrod2, E. Mandelcorn1, C. Schwartz2, R. Kohly3, K. Eng1, W-C. Lam1, P. Kertes1. 1Department of Ophthalmology, University of Toronto, Toronto, ON, Canada; 2Sunnybrook Health Sciences Center, Toronto, ON, Canada; 3Toronto Western Hospital, University Health Network, Toronto, ON, Canada. *CR, ➥

6270 — D1130 Multicenter Comparison Of Loteprednol 0.5% vs Prednisolone Acetate 1% in Patients Post-Phacoemulsification with IOL implants. Carlos Buznego1, G. Perez2, W. Trattler3, J.A. Khell4, B. Henderson1. 1General & Surgical Ophthalm, Center for Excellence in EyeCare, Miami, FL; 2Ctr for Excellence in Eye Care, Miami, FL; 3Cornea, Center For Excellence in Eye Care, Miami, FL; 4Optical and Ophthalmic,Keio University School of Medicine, Tokyo, Japan; 5Boston Eye Surgery and Laser Center, Boston, MA. *CR, ➥


6272 — D1132 Retinal Damage in Severe Chemical Burn and the Use of Infliximab Therapy. Fabiano Cade1, E. Paschalis2, C.V. Regattieri1, R. Dana1, C.H. Dohlman1. 1Department of Ophthalmology, BDepartment of Neuropathology, University of Massachusetts Medical School, Worcester, MA; 2Department of Ophthalmology, Keio University School of Medicine, Tokyo, Japan; 3Boston Seikatsu Co., Ltd., Kyoto, Japan. *CR

6273 — D1133 Topical Treatment With A Selective COX-2 Inhibitor Promotes Retinal Ganglion Cell Survival After Optic Nerve Crush. Oliver W. Gramlich1, H.D. von Pein1, A. Ziegler1, K. Bicz1, N. Pfeiffer2, F.H. Gruet1. 1Experimental Ophthalmology, 2Department of Neuroradiology, University Medical Center, Mainz, Mainz, Germany.


6275 — D1135 A Novel Peptide from Adiponectin Suppresses LPS-induced Pro-inflammatory Signaling in Macrophages by Inducing Interleukin-10 Expression. Huiyi Jin, X. Yang, X. Xu, K. Liu. Shanghai First People’s Hospital, Shanghai, China.

6276 — D1136 Amelioration of Endotoxin-induced Uveitis Treated With An Ikb Kinase Inhibitor, Imd-0354 In Rats. Anton Lennikov1, N. Kitachi2, K. Noda2, R. Ando3, Z. Dong4, K. Namba5, K. Namba6, S. Ohno5, S. Ishida3. 1Laboratory of Ocular Cell Biology and Visual Science, Department of Ophthalmology, 2Department of Ocular Inflammation and Immunology, 3Hokkaido University, Sapporo, Japan; 4Department of Ocular Inflammation and Immunology, Keio University School of Medicine, Tokyo, Japan; 5Department of Ophthalmology, Keio University School of Medicine, Tokyo, Japan; 6Laboratory of Ocular Cell Biology and Visual Science, Department of Ophthalmology, Hokkaido University, Sapporo, Japan. *CR

6277 — D1137 Lutein-rich Marigold Extract Induces Gene Expression Of Phase II Antioxidants In The PC12D Neuronal Cells. Seiji Miyake1, N. Takahashi1, M. Sasaki2, S. Kobayashi1, K. Tsutota1, Y. Ozawa1. 1Laboratory of Retinal Cell Biology, 2Department of Ophthalmology, Keio University School of Medicine, Tokyo, Japan; 3Wakasa Seikatsu Co., Ltd., Kyoto, Japan. *CR

6278 — D1138 Ocular and Systemic Pharmacokinetics of Loteprednol Etabonate Gel (0.5%) following Topical Ocular Administration To Rabbits. Shellise Glogowski, J.W. Proskach. Drug Metabolism & Pharmacokinetics, Global Pharmaceutical R&D, Bausch & Lomb, Rochester, NY. *CR

6279 — D1139 Topical Application Of Infliximab (Remicade®) In The Treatment Of Corneal Caustration. Fabio Bignami1, G. Ferrari1, C. Jacquemin2, S. Scarchilli3, P. Rama4. 1Cornea Unit - Eye Repair Lab, 2Ophthalmic- Cornea and Ocular Surface Unit, 3San Raffaele Scientific Institute, Milan, Italy; 4Bietti Eye Foundation, Rome, Italy.

6280 — D1140 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. Samantha Yazidi1, A. Leonardi2, V. Calder1, R. Flower3. 1Molecular Therapy, UCL, Institute of Ophthalmology, London, United Kingdom; 2Department of Medicine, School of Padua, Padua, Italy; 3Biochemical Pharmacology, QMUL, William Harvey Research Institute, London, United Kingdom.


6284 — D1144 A Novel Peptide Inhibits Inflammation in Endotoxin-induced Uveitis by Suppressing NF-kappaB and MAPK Signaling Pathway. Xiao lu Yang, H. Jin, X. Xu. Ophthalmology, Shanghai First People’s Hospital, Shanghai, China.


6286 — D1146 Clinical Experience With Sustained-Release Intravitreal Corticosteroid Implants: A Comparison Between The Fluocinolone Acetone (Retisert) And Dexamethasone (Ozurdex) Implants In Uveitis. Cheryl A. Arcinue1, C. Foster1, O. Ceromi1, L. Aimulk1. 1Uveitis and Ocular Immunology, Massachusetts Eye Research & Surgery Institution, Cambridge, MA; 2Ophthalmology, Massachusetts Eye and Ear Infirmary, Boston, MA. *CR

6287 — D1147 Cytokine Levels In The Vitreous Fluid Of Patients With Ocular Sarcoidosis And Patients With Diabetic Retinopathy. Kenji Nagata1, K. Maruyama1, K. Yoned1, T. Yoshimura2, K-H. Sonoda1, S. Kinoshita. 1Ophthalmology, Kyoto Prefectural Univ of Med, Kyoto, Japan; 2Ophthalmology, Kyushu University, Fukuoka, Japan; 3Ophthalmology, Yamaguchi University, Ube, Japan; 4Ophthalmology, Kyto Prefectural Univ of Med, Kamigyo-Ku, Japan.

6288 — D1148 Human Tears Reveal Insights Into Corneal Neovascularization. Nada Zakaria1, S. Van Grassdorf1, J. Kouters1, J. Rozema1, N. Cools2, V. Van Tendeloo2, Z. Berneman1, M-J. Tassignon1. 1Ophthalmology, 2Statistics, Hematology, Center for Cell Therapy and Regenerative Medicine, 1University Hospital Antwerp, Antwerp, Belgium; 2Center for Cell Therapy and Regenerative Medicine, Antwerp University Hospital, Antwerp, Belgium.

6289 — D1149 Errors In Measuring VEGF Concentrations In The Presence Of Anti-VEGF Antibodies By Using ELISA. Hidenori Takahashi1, Y. Fujino2, Y. Yama2. 1Ophthalmology, Tokyo KoseiNenkin Hospital, Tokyo, Japan; 2Ophthalmology, University of Tokyo, Tokyo, Japan.


6292 — D1152  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.
Florianid A
Thursday, May 10, 2012, 11:15 AM-1:00 PM
Retinal Cell Biology

532 Experimental ROP

Moderators: John Flannery and Faizah N Bhatti

6293 — 11:15 Tyrosinase Function Determines Retinal Vascular Regeneration and Retinal Vascular Endothelial Progenitor Cell Recruitment in the Oxygen-Induced Retinopathy Model. Robert C. Symons1, R.S. White2, B.E. O’Brhyim1. 1Ophthalmology, Kansas University Medical Center, Prairie Village, KS; 2Ophthalmology, Kansas University Medical Center, Kansas City, KS.

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’Brhyim1, R. White3, A. Symons3. 1Molecular & Integrative Physiology, Univ of Kansas Medical Center, Kansas City, KS; 3Ophthalmology, Univ of Kansas Medical Center, Prairie Village, KS.


6296 — 12:00 Activation of the Endothelin System in Models of Ischemic Retinopathy. Chintan Patel1, W. Zhang2, Z. Xu2, S.P. Narayanan3, N-T. Tsai1, W. Caldwell4, R.B. Caldwell4. 1Vascular Biology Center, 2Pharmacology & Toxicology, 3Georgia Health Sciences University, Augusta, GA; 4Ophthalmology, The University of Texas Medical Branch, Galveston, TX.

6297 — 12:15 Progressive Central Photoreceptor Damages and Retinal Pigment Epithelium Abnormalities in Oxygen Induced Retinopathy. Zhou Shao1, J. Riveria2, T.E. Zhou3, P. Sapieha4, P. Lachapelle1, S. Chemtob1. 1Pediatrics 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.

6298 — 12:30 N*t*rin-1 Promotes Vascular Regeneration in a Mouse Model of Ischemic Retinopathy. Francois Binet1, G-S. Mawambo-Tagne1, S. Favret1, N. Situras1, N. Tétreault4, A. Cerani2, E. Lapalme1, F. Rezende1, T. Kennedy2, P. Sapietia1. 1Research Center, Maisonneuve Rosemont Hospital, Montreal, QC, Canada; 2Montreal Neurological Institute, McGill University Montreal, QC, Canada.

6300 — 11:15 Decreasing Periphereal Hypoperfusion With Distance-centre Relatively-plus Powered Peripherey Contact Lenses Reduced The Rate Of Progression Of Myopia: A 5 Year Vision Clin Study. Brien A. Holden1, P.R. Sankaridurg1, P. Lazon De La Jara1, T. Naduvilath3, A. Ho3, D.F. Sweeney4, M. Markoulid4, E.L. Smith, J.G. Ma4, Vision CRC Myopia Clinical Study Group. 1Brien Holden Vision Institute, Sydney, Australia; 3School of Optometry and Vision Science, University of New South Wales, Sydney, Australia; 4Vision Cooperative Research Centre, Sydney, Australia; 3College of Health and Science, University of Western Sydney, Sydney, Australia; 4College of Optometry, University of Houston, Houston, TX; 4Zhongshan Ophthalmic Center, Guangzhou, China. *CR, P

6301 — 11:30 Impact of a Novel Silicone Hydrogel Material on Meibomian Gland Structure. Jason J. Nichols1, K.E. Osborn2, T. Henderson3. 1College of Optometry, University of Houston, Houston, TX; 2Vistakon, Columbus, OH; 3Vistakon, Jacksonville, FL. *CR, P

6302 — 11:45 A Novel Method Of Measuring Tear Evaporation Rates Using Infrared Thermography. Andrea Petznick1, S. Lee1, J. Tan2, U. Acharaya1, E. Ng2, L. Tong1. 1Ocular Surface Research Group, Singapore Eye Research Institute, Singapore; 2Singapore Institute of Technology, University of Glasgow, Glasgow, United Kingdom; 3School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore; 3Cornea and External Eye Disease Service, Singapore National Eye Centre, Singapore.

6303 — 12:00 Keratoconus Detection by Corneal Epithelial Thickness Mapping with Fourier-Domain Optical Coherence Tomography. Yan Li, O. Tan1, R. Brass2, J.L. Weiss3, D. Huang4. 1Ophthalmology, Oregon Health and Science University, Portland, OR; 2Albany Med Coll/Brass Eye Ctr, Latham, NY; 3Gordon & Weiss Vision Institute, San Diego, CA. *CR

6304 — 12:15 Vitrified Collagen Gels with Optimized Material Properties for Repair of Ocular Injuries. Xiaona Calderon-Colon1, Z. Xia2, Q. Guo3, J.E. Tiffany4, J.P. Maranchi5, R.L. McCully5, O. Schein5, J.H. Eliseeff5, M.M. Trestler6. 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; 4Department of Ophthalmology, Johns Hopkins University, Baltimore, MD; 5Department of Ophthalmology, Johns Hopkins University, Baltimore, MD; 6Ophthalmology, Boston University School of Med, Boston, MA. *CR


6306 — 12:45 A Novel Method to Generate Precut Tissue for Descemetic Membrane Endothelial Keratoplasty (DMEK). Bjorn O. Bachmann1, U. Schlötzer-Schrehardt1, M. Bögler2, F.E. Kruse1. 1Ophthalmology, Universityhospital Erlangen, Erlangen, Germany; 2Deutsche Gesellschaft für Gewebeversagen (DGFG), Hannover, Germany.
Thursday – Papers – 6310 – 6331

Room 305
Thursday, May 10, 2012, 11:15 AM-1:00 PM

**Biochemistry & Molecular Biology**

**353 Biochemistry and Molecular Biology of Glaucoma**

**Moderators:** Michael A Walter and Tonio S Rex

6314 — 11:15 Innate Immune Network in the Retina Activated by Optic Nerve Crush. Eldon E. Geisert1, J. Templeton1, J.M. Nickerson2, X. Wang1, M.M. Jahbonski1, R.W. Williams1, T.S. Rex1. 1Optomtometry, Univ of Tennessee Health Sci Ctr, Memphis, TN; 2Ophthalmology, Emory University, Atlanta, GA.

6315 — 11:30 Hmgb-1 Induces Apoptosis In Retinal Ganglion Cells And Intraocular Inflammation By Activation Of Tlr4 And Cytokine Release. Maurice Schallenberg1, H. Melkonian2, S. Thanos2. 1Ophthalmology, University of Washington, Seattle, WA; 2School of Optometry, University of Arizona, Tucson, AZ.

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

6317 — 12:00 Amyloid Fibril Formation By Theolfactomedin Domain Of Myocilin. Raquel L. Lieberman1, S.D. Orwig1, C.W. Perry1, L.Y. Kim1, K.C. Turnage1, R. Zhang1, D. Vollrath1, I. Schmidt-Krey1. 1School of Chemistry & Biochemistry, 2School of Biology, 3Georgia Institute of Technology, Atlanta, GA; 4Department of Genetics, Stanford University School of Medicine, Palo Alto, CA.


6320 — 12:45 Analysis Of HSP70B As A Potential Direct Target Gene Of The FOXC1 Transcription Factor. Yoko Ito1, F. Berry1. 1Medical Genetics, 2Surgery, 3Univ of Alberta, Edmonton, AB, Canada.


6326 — 12:30 Doppominergic Amacrine Cells Are Inhibited by Melatonin through Activation of MT1 and MT2 Receptors in The Mammalian Retina. Jie Feng1, C.L. Atkinson1, D-Q. Zhang1. 1Eye Research Institute, Oakland University, Rochester, MI; 2Department of Physiology and Pathophysiology, 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. Whitney1,2. 1Molecular, Cellular, and Developmental Biology, 2Neuroscience Research Institute, 3Psychological and Brain Sciences, 4University of California, Santa Barbara, CA.

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. Neuroscience, Ohio State Univ College of Medicine, Columbus, OH.


6326 — 12:30 Doppominergic Amacrine Cells Are Inhibited by Melatonin through Activation of MT1 and MT2 Receptors in The Mammalian Retina. Jie Feng1, C.L. Atkinson1, D-Q. Zhang1. 1Eye Research Institute, Oakland University, Rochester, MI; 2Department of Physiology and Pathophysiology, 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. Whitney1,2. 1Molecular, Cellular, and Developmental Biology, 2Neuroscience Research Institute, 3Psychological and Brain Sciences, 4University of California, Santa Barbara, CA.

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

**Visual Psychophysics & Physiological Optics**

**537 New Directions for Bipocularity, Multifocality and Restoration of Accommodation**

**Moderators:** Jim Schwiegerling and Sanjeev Kasthuriyan

6328 — 11:15 Optimizing Modified Monovision to Improve Binocular Through-Focus Visual Performance. Len Zheleznyak1, R. Sabesan1, S. MacRae2, G. Yoon1. 1The Institute of Optics, 2Flaum Eye Institute, 3University of Rochester, Rochester, NY. *CR

6329 — 11:30 Depth Of Focus With Induced Coma At Different Orientations. Christina Schwarz1, C. Canovas2, S. Manzanera1, P.M. Prieto1, H.A. Weeber1, P.A. Piers1, P. Artal1. 1Laboratorio de Optica, Universidad de Murcia, Murcia, Spain; 2School of Health and Life Sciences, Aston University, Birmingham, United Kingdom.


6331 — 12:00 Curvature Changing Accommodating IOLs. Jim Schwiegerling, N. Savidis, S. McCafferty. Optical Sciences, University of Arizona, Tucson, AZ. *CR


6337 — 11:45 Musculoskeletal Involvement 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.

**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

6341 — 12:45 Sustained IGF-I Treatment Improves Eye Alignment in Adult Strabismic Monkeys. Linda K. McLoon1, C.L. Willoughby2, S.P. Christiansen, V.E. Das3, M.J. Mustard4. 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 Petso 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. Tay3, M. Ikram4,5,6, E. Tai2, T.Y. Wong1,2. 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. Polack3, H. Kuper2, N. Cockburn3, P. Gomez4, M. Rabiu5. 1Tennent Institute of Ophthalmology, 2Glaucoma Center of Excellence, 3Dana Center for Preventive Ophthalmology, 4Johns Hopkins Wilmer Eye Inst, Baltimore, MD; 5Epidemiology and Prevention, Wake Forest School of Medicine, Winston-Salem, North Carolina, MD.


6347 — 12:30 Longitudinal Changes In Retinal Vascular Caliper Measurements In Children And Its Relationship With Cardiovascular Risk Factors. Emil D. Kurniawan1, N. Cheung2, W. Tay3, C.Y. Cheung4, P. Mitchell5, S.M. Saw2, T.Y. Wong1. 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 Trabececoloplasty In The Medicare Population. Henry D. Jampel1,2, S.D. Cassard1, D.S. Friedman3,4, H.A. Quigley5, E.W. Gower2. 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.

*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

1Ophthalmology, Cambridge University Teaching Hospitals NHS Foundation Trust, Cambridge, United Kingdom; 2NIHR Biomedical Research Centre, University of Cambridge, Cambridge, United Kingdom; 3Ophthalmology, NIHR BRC for Ophthalmology, Moorfields Eye Hospital & UCL Institute of Ophthalmology, London, United Kingdom; 4Ophthalmology, University Hospitals Birmingham NHS Foundation Trust, Birmingham, United Kingdom.

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. Sr1, S. Kent1, C.M. Hutnik2, K. Damji3, P. Harasymowycz2, W.G. Hodge4, Y.I. Pav5, A. Crickton6.

1Ophthalmology, University of Western Ontario, London, ON, Canada; 2Ophthalmology, & Vis Research Lab of UCL Institute of Ophthalmology, London, United Kingdom; 3Ophthalmology, University Hospitals Birmingham NHS Foundation Trust, Birmingham, United Kingdom.


6355 — 12:45  Three Year Results of the Ahmed Baerveldt Comparison (ABC) Study. Donald L. Budenz1, K. Barton2, W.J. Feuer3, J.C. Schiffman1, V.P. Costa1, D. Godfrey4, Y.M. Boys5, Ahmed Baerveldt Comparison Study Group.

1Ophthalmology, University of North Carolina, Chapel Hill, NC; 2Glucoma 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; 6Glucoma Associates of Texas, Dallas, TX; 7Ophthalmology & Vision Sciences, University of Toronto, Toronto, ON, Canada. *CR, CR

Grand H
Thursday, May 10, 2012, 11:15 AM-1:00 PM
Retina
541 Retinal Detachment III
Moderators: Stanislas Rizzo and Howard F Fine


1Retina, 2Ophthalmology, University of Western Ontario, London, ON, Canada; 3Ophthalmology, University of Alberta, Edmonton, AB, Canada.


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 Grana1, L. Arias Barquet1, J. Caminal Mitjana1, J. Catala Moro1, P. Garcia Bru1, O. Pujol Goya1, J. Arruza Ginebreda1, J. Garcia-Arumi1. 1Ophthalmology, Hospital Universitari 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). Thasarat S. Vajaranant1,3, J.A. Hallak2a,1,3, C.E. Joslin4a,1,3, aOphthalmology and Visual Sciences, bEpidemiology and Biostatistics, cUniversity 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. Aung1, C-Y. Cheng1,2. Singapore Eye Research Institute (SERI), Singapore National Eye Centre, Singapore, Singapore; Department of Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore; Centre for Quantitative Medicine, National University of Singapore, Singapore, Singapore; Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*Star), Singapore, Singapore; Department 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 Aron1,2, V. Arora1, R. Sagar1, V. Sreenivas1, A. Rathi1, S. Kumar1, M. Wadhwani1, T. Dada1. Dr R P Centre for Ophthalmic Sciences, Department of Psychiatry, Department of Biostatistics, All India Institute of Medical Sciences, New-Delhi, India; Department of Ophthalmology, Government Medical College, Chandigarh, India.

6366 — A4  Metabolic Syndrome and the Risk of Developing Normal Tension Glaucoma. Mijin Kim1, J. Jeoung1, W. Oh1, H. Choi1, M. Kim1, K Park1, S. Kim1, T-W. Kim1, D. Kim1. Department of Ophthalmology, Seoul National University Hospital, Seoul, Republic of Korea; Department of Ophthalmology, Seoul National University Bundang Hospital, Seongnam, Republic of Korea; Kong Eye Clinic, Seoul, Republic of Korea; Department of Ophthalmology, Healthcare System Gangnam Center, Seoul National University Hospital, Seoul, Republic of Korea; Department 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, S. Thomas2, C. Hamill3, I. Marcus4, N.A. Loewen5, aOphthalmology, bOphthalmology and Visual Science, cOphthalmology & Visual Science, dYale University School of Medicine, New Haven, CT; eOphthalmology, Yale School of Medicine, New Haven, CT.


6371 — A9  Profile of Patients Assisted during the 2011 World Glaucoma Week in Araguari - Minas Gerais - Brazil. Fabia f. nogueria1, G.E. Carlos1, D.R. Martins1, G.R. Cunha1, M.S. Arcieri1, N.B. Ramot1, P.E. Rosa1, R.S. Arcieri1, R.L. Pereira1, E.S. Arcieri1. School of Medicine, Presidente Antonio Carlos University (UNIPAC), Araguaí, Brazil; School of Medicine of Ribeirão Preto, University of São Paulo (USP), Ribeirao Preto, Brazil; Ophthalmology, University of Campinas (UNICAMP), Campinas, Brazil.


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

6375 — A13  Ordinal Measurement Error Model for Assessing Agreement Among Raters for Glaucoma Progression. Yun Ling6, R.A. Bilionick7, H. Ishikawa7, G. Wollstein7, J.S. Schuman7, APM Eye Center, Eye & Ear Institute, Ophthalmology and Visual Science Research Center, Dept. Ophthalmology, U. Pittsburgh School of Medicine, Pittsburgh, PA; Department of Biostatistics, U. Pittsburgh Graduate School of Public Health, Pittsburgh, PA; Dept. Bioengineering, Swanson School of Engineering, U. Pittsburgh, Pittsburgh, PA. *CR

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. Aung3,4, Y. Zheng1, X. Li5, A.R. Anuar1, M. Chev1, B. Mani1, S-M. Saw1,2, T.Y. Wong3,4, SEED Study Group. Department of Ophthalmology, Saw Swee Hock School of Public Health, National University of Singapore, Singapore; Singapore 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). Tanuj Dada1, V. Arora4, S.K. Gupta4, V. Sreenivas1, P. Vashist4, T. Agarwal4. RP Centre for Ophthalmic Sciences, Centre for Community Medicine, Department of Biostatistics, All 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. Xiaojuan Jiang1, S. Wu1, M. Torres1, S.P. Azem1, 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. Sheppler1, C. VanAlstine1, S.K. Gardiner1, S.L. Mansberger1. Discoveries In Sight Laboratories, Devers Eye Institute, Portland, OR.


*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

6383 — A21 The Observed Co-prevalence Of Open-angle Glaucoma And Age-related Macular Degeneration Is Higher Than Predicted From The Prevalence Of Each Disease Alone. Lyne Racette, J.D. Rupp, A-D.T. Phan. Eugene and Marilyn Glick Eye Institute, Indiana University, Indianapolis, IN.


6386 — A24 Systemic Illnesses In Glaucoma: A Possible Link Between Glaucoma And Breast Cancer? Felise May Bart1, S. Muhanneh1, B. Adams-Huet1B, K. Kooner1A. University of Texas DHopital, Texas, USA; 1University of Texas Southwestern Medical Center, Dallas, TX.


6388 — A26 Direct Cost Of Glaucoma Treatment For Patients With Primary Angle Closure Glaucoma Over 10 Years. Kailing Yong1, H.M. Hou2, D.T. Quest1, V.W. Wang1, E.L. Lamoureux, III1, T. Aung1. Ophthalmology, Singapore National Eye Centre, Singapore, Singapore; 1Statistics(Admin), Singapore Eye Research Inst, Singapore, Singapore; 1Center for Health Services Research, Singapore Health Services, Singapore; 1Ophthalmology, University of Melbourne, Melbourne, Australia; 1Singapore Eye Research Institute, Singapore National Eye Centre, Singapore; 1Glaucoma, Singapore National Eye Center, Singapore, Singapore.


Hall B/C A80-A98

Thursday, May 10, 2012, 11:15 AM-1:00 PM
Visual Psychophysics & Physiological Optics

543 Color Vision

Moderator: Dora F Ventura

6390 — A80 Learning to Name Colors Altered by Colored Filters. Thomas Kuyk1, A. Smith2, S. Kumar1. 1TASC, Inc, Ft Sam Houston, TX; 2Air Force Research Laboratory, Ft Sam Houston, TX.


6395 — A85 Color Contrast Sensitivity Estimated With Two Different Psychophysical Methods. Luiz Carlos L. Silveira1, C.D. Perry1, E.C. Lacerda1B, M.M. Jacob1B, G.S. Souza1B, R.D. Gomes1B, M.E. Fitzgerald1B. 1Nucleo de Medicina Tropical, 1Instituto de Ciencias Biológicas, 1Universidade Federal do Para, Belem, Brazil; 2Biolog, Biology Xavier University of Louisiana, New Orleans, LA; 3Anat & Neurobiol & Ophthalmol, UTHSC, Memphis, TN.

6396 — A86 Color Discrimination Task Using Pseudoisochromatic Stimulus; Luminance Noise Variation Provides Better Sensitivity Than Noise Mean Luminance. Bruno D. Gomes1, T.L. Carmichael1, M.M. Jacob1, E.C. Lacerda1B, G.S. Souza1B, M.E. Fitzgerald1B, L.L. Silveira1B. 1Instituto de Ciencias Biológicas, 1Nucleo de Medicina Tropical, 1Universidade Federal do Para, Belem, Brazil; 2Natural Science, 3Biology, 6Christian Brothers University, Memphis, TN; 3Anat & Neurobiol & Ophthalmol, UTHSC, Memphis, TN.

6397 — A87 Magno-And Dorsal Stream Processing Decline Slower Than Parvocellular Performance In Normal Aging. Maria F. Loureiro1, C. Mateus1, B. Oliveira1, R. Lemos1, A. Reis1, M. Castelo-Branco1. 1Visual Neuroscience, IBIL-Faculty of Medicine-University of Coimbra, Coimbra, Portugal; 2Ophthalmology, University Hospital of Coimbra, Coimbra, Portugal.

6398 — A88 Binocular Enhancement of Color Contrast Sensitivity. Jeff C. Rabin1, B. Stewart1, V. Wong1, J. Boster1, M. Ruette1, T. Tran1, J. Gooch1, S. Wright1. 1Optometry, UWI Rosenberg School of Optometry, San Antonio, TX; 2Ophthalmology, USAF School Aerospace Medicine, Dayton, OH.


6400 — A90 Cone Isolating Electroretinograms In Individuals With A Mutant Opsin Allele Associated With Cone Dystrophy. James A. Kuchenbecker1, S.H. Greenwald1, J. Carroll1,2P, G.A. Fishman1,2, M.A. Gnezdilov1, T.B. Connor Jr1,2, M. Neitz1, J. Neitz1. Ophthalmology, University of Washington, Seattle, WA; 2Ophthalmology, Cell Biology, Medical College of Wisconsin, Milwaukee, WI; 3Chicago Lighthouse for People Who Are Blind or Visually Impaired, Chicago, IL; 4Ophthalmology and Visual Sciences, University of Illinois - Chicago, Chicago, IL; 5The Pangere Center for Hereditary Retinal Diseases, Chicago, IL.

6401 — A91 Color vision of female carriers and color vision deficiency subjects evaluated with the Cambridge Colour Test. Daniela M. Bonel1, M. Neitz1, J. Neitz1, M. Gualtieri1, M.T. Barbón1, T.L. Costa1, L.L. Silveira1, D.F. Ventura1. Experimental Psychology, University of Sao Paulo, Sao Paulo, Brazil; 2Medicine, University of Sao Paulo, Sao Paulo, Brazil; 3University of Sao Paulo, Sao Paulo, Brazil; 4Ophthalmology, University of Washington, Seattle, WA; 5Nucleo de Medicina Tropical, Universidade Federal do Para, Belem, Brazil.


6404 — A94 A New Color Visual Function Test to Evaluate the Aging Changes in Normal Eyes. Kazuo Ichikawa1, S. Yokoyama1, Y. Tanaka1, H. Nakamura1, S. Tanabe1, K. Tanaka1, R. Horie1, Y. Kato1. 1Ophthalmology, Social Insurance Chukyo Hosp, Nagoya Aichi, Japan; 2Faculty of Engineering, Shinshu University, Nagano, Japan; 3Chukyo Eye Clinic, Nagoya Aichi, Japan.

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.

6408 — A98 Does Color Vision Impairment Correlate with Neurophysiological Losses in Visual Space and Object Perception Tests? Rosani A. Texeira1,2, A.L. Moura1, M.F. Costa1,4, A. Taub1,4, D. Callegaro1A, D.F. Ventura1. 1Psychology, 2Department of Psychology, 3Psychiatry, 4Neurology, 1Universidade de Sao Paulo, Sao Paulo, Brazil; 4Experimental Psychology, University of Sao Paulo, Sao Paulo, Brazil.

Hall B/C A302-A337

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

Retinal Cell Biology

544 Retinal Degeneration and Neuroprotection

Moderators: Patrice E Fort and Jorgelina M Calandra

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


6411 — A304 Neuroprotective Effects Of Erythropoietin In Mouse Models With Retinal Degeneration. Jasmin Balmer1, M. Tschopp1, M. Menke1, M. Gassmann1, S. Wolf2, V. Enzmann1. 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. Pavlina A. Tsokai1, I. Charalampopoulos1, A. Gravanis1A, M.K. Tsilimbaris1. 1Neurology & Sense Organs, 2Pharmacology, University of Crete, Heraklion, Crete, Greece; 3Ophthalmology-Research Act, University of Crete, Heraklion, Greece.

6413 — A306 The Effect Of Ketone Bodies On The Synthesis Of Kynurenine Acid In Bovine Retinal Slices. Tomasz Zarnowski1, M. Tulidowicz2, T. Choragiewicz2,4, R. Robert1, T. Kocki2, W. Turski1A. 1Dept of Ophthalmology, 2Dept of Pharmacology and Toxicology, 3Medical University Lublin, Lublin, Poland.

6414 — A307 Neuroprotective Effects Of Sirna, Targeted Caspase9, And Atoleopollen Complex On Rat Retinal Damage Induced By Transient Ischemic Injury. Shinichiro Ishikawa1, A. Hirota1, J. Nakabayashi1, R. Ikiviri1, S. Okinami1. 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. Ciavatta1,2, M.H. Aung1, T.S. Obertone2, J.K. You1, M.T. Pardue1,2A. 1Rehab R&D Center of Excellence, Atlanta VA Medical Center, Decatur, GA; 2Ophthalmology, Emory University, Atlanta, GA.

6416 — A309 Neuroprotection And Neurotoxicity Of The Sustained Intraocular Delivery Of Gdnf In Retinal Degeneration. Elodie Touchard1, P. Heiduschka2, M. Berdugo1, Kowalczuk1, P. Bigey3, S. Chahory4, C. Gandolphe3. 1INSERM UMR8151, Paris, France; 2Univ Eye Hosp Muenster, Muenster, Germany; 3CNRS UMR8151, Paris, France; 4Ecole Nationale Vétérinaire d’Alfort, Maisons-Alfort, France.

6417 — A310 Increased Susceptibility to Retinal Stress in Mice Lacking Sigma Receptor 1 (σR1). Yonju Ha1, A. Saul1B, C. Williams1C. 1Faculty of Engineering, Shinshu University, Matsumoto, Japan; 2Emory University, DBiochemistry and Molecular Biology, 3Georgia Institute of Technology, Atlanta, GA; 4Mechanical Engineering, University of Colorado Boulder, Boulder, CO.*CR

6418 — A311 Arginase2 Deficiency Reduces Hypoxia-induced Retinal Neurodegeneration through the Regulation of Polyamine Metabolism. S. P. Narayanan1, J. Sawanpradit2, X. Z. Xie1, T. Lentiats1, N. Patturi1, A. Sreekumar1, R.W. Caldwell1B, R.B. Caldwell1A. 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. ☺

6419 — A312 The Protective Effects Of Brimonidine For Arpe-19 And Müller Cells Exposed To Hydroquinone In Vitro. Mohamed Tarek1, C.A. Ramirez1, M. Chwa1, G. Limb1, B.D. Kuppermann1, C.M. Kenney1. 1Ophthalmology, Gavin Herbert Eye Institute, Irvine, Irvine, CA; 2Ophthalmology, University of California, Irvine, Irvine, CA; 3Ocular Biology and Therapeutics, UCL Institute of Ophthalmology, London, United Kingdom; 4Gavin Herbert Eye Inst Dept Ophthal, University of California Irvine, Irvine, CA; 5Ophthalmology, Univ of California-Irvine, Irvine, CA.


6422 — A315 Quantum Dots As Neuroprotective Factor In A Model Of Retinal Photoreceptor Degeneration. Raúl Vélez-Montoya2, N. Mandava2, C.R. Stoldt1, J.L. Olson1A. 1Ophthalmology, University of Colorado Health 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 Fan1, A. Montemar1, S. Rossi1, G. Parisi1, F. Lamoke2, F. Facchiano2, G. Ripandelli4, M. Bartoli1A. 1Ophthalmology, 2Experimental Medicine and Pathology, University of Crete, Heraklion, Greece; 3CNRS UMR8151, Paris, France; 4Department of Ophthalmology, Bascom Palmer Eye Institute, University of Miami, Miami, FL.


6426 — A319 DNA Restores HNE And PDE7 By Inhibiting Oxidative Damage In RPE At High Glucose Levels. Emma Arnaud1, S. Johnsen-Soriano1, M. Miranda2, A. Navea1, J. Romero1,2. 1FOM, 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 Picard1,2, M. Berdugo1, M. El Sanharawi1, J-C. Jeanny1,2, Y. Courtot1,2. F.F. Behr-Cohen1, 1UMRS 872 team 17, INSERM, paris, France; 2UMRS 872 team 17, Université Pierre et Marie Curie et Université Descartes, Paris, France; 3Ophthalmology, Hotel Dieu de Paris, Universite Paris Descartes. INSERM UMR5872, Paris, France.


6429 — A322 Iron Accumulation In Animal Models Of Genetic Retinal Degeneration: Human Transferrin As A Protector For Photoreceptors. Jean-Claude P. Jeanny1, J. Jonet1, M-H. Vessevre1, S. Sergeant1, F. Guillo1, F.F. Behr-Cohen1, C. Vessevre1, E. Picard1. 1UMRS 872 team17, INSERM Centre des Cordeliers, Paris, France; 2UMRS 872 team 17, Université Pierre et Marie Curie et Université Descartes, Paris, France; 3UMR 5084, Nuclear and Bio-environmental Chemistry, CNRS, Bordeaux, France; 4UMR 6175, Physiologie de la Reproduction et des Comportements, INRA, CNRS, Université de Tours, Paris, France.

6430 — A323 TUDCA Prevents Microglia Activation In The P23H Rat Retina. Laura Fernandez-Sanchez1, A. Noailles1, I. Pinilla1, J. Martin-Nieto1, P. Lax1, N. Cuenc1. 1Physiology, Genetics & Microbiology, University of Alicante, Alicante, Spain; 2Ophthalmology, University 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. Siqueira1, A. Messias2, J.C. Voltarelli2, K.V. Messias3, R.S. Arcieri1, R. Jorge1. 1Retina, 2Bone Marrow Transplantation, 3Sa Paulo University, Ribeirao Preto, Brazil. *


6434 — A327 A SubmicroVolts Focal ERG Technique for Evaluating Macular Function in Stargardt/FF Dystrophy: Clinical Assessment of Test Reliability. Benedetto Falsini1, M. Piccardi1, D. Marongioni1, A. Minnella1, M. Bertelli2, S. Bisti3, A. Fadda4. 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.


6436 — A329 Progressive RPE Dystrophy in Dutch Belt Rabbits. Meg Ramos1,2, I. Raymond1, C. Ghosn1, J. Burke1, S. Whitcup1. 1Ophthalmology, 2Wayne State Univ - Wayne State University Health Science University, Portland, OR.


6438 — A331 Modeling Photoreceptor Interactions in the Presence of Retinitis Pigmentosa. Erika T. Camacho, S. Wirkus. Division of Math and Natural Sciences, Arizona State University, Glendale, AZ.

6439 — A332 Early S Cone Loss And L/M Cone Opsin Deocalization In The Canine Model Of Rpe65 Deficiency. Daniela Klein1, A. Mendes-Madeira1, B. Lorenz1, F. Rolling1, S. Haverkamp1, K. Stieger1. 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 Ribbon In Aging Dba2/j Mice. Michael Scholz1, M. Fuchs2, J. Atorff, R. Enz2, J.H. Brandstatter2. 1Anatomy 2, 2Biological, 3Department of Biology, 4University of Erlangen-Nuremberg, Erlangen, Germany; 5Ophthalmology, University Hospital Erlangen, Erlangen, Germany.


6443 — A336 Retinal Histopathology in Eyes from a Patient with Autosomal Dominant Retinitis Pigmentosa caused by the Pro23His Rhodopsin Mutation. Mary E. Rayborn1, V.L. Bonilha1, B.A. Bell1, M.J. Marino1, G.J. Pauer1, C.D. Beight1, E.I. Traboulsi1, S.A. Hagstrom1, J.G. Hollyfield1. 1Ophthalmology, 2Wayne State Univ - Wayne State University Health Science University, Portland, OR; 3Columbia Coll Phys Surg, Columbia Univ-Harkness Eye Inst, New York, NY; 4Ophthalmology, University of California San Diego, La Jolla, CA; 5McGill Uocular Genetics Laboratory, McGill University Health Centre, Montreal, QC, Canada; 6Ophthalmology/Hamilton Eye Institute, Univ Tennessee Health Sci Ctr, Memphis, TN; 7Human Genetics, Raboud Univ Nijmegen Med Ctr, Nijmegen, The Netherlands; 8Ophthalmology, Erasmus Medical Center, Rotterdam, The Netherlands.
545 Retinitis Pigmentosa III

Moderator: Hendrik P Scholl


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

6447 — A373 Additional Neuroprotective Effects Of Proinsulin On Vision And Retinal Structure In The Rd10 Mouse Model Of Retinitis Pigmentosa. Enrique J. de la Rosa1, N. Foros2, M. Marchena3, A. Hernandez-Pinto4, R. Steel5, C. Hisug6, E. Ayuso7, F. de Pablo8, F. Bosch9, P. de la Villa10. 1Cell & Molecular Medicine, Centro de Investigaciones Biologicas, Madrid, Spain; 2Physiology, University of Alcala, Alcala de Henares, Spain; 3ProRetina Therapeutics SL, Madrid, Spain; 4CBATEG, Universitat Autonoma de Barcelona, Bellaterra, Spain. *CR

6448 — A374 Long-Term Rescue with Gene Therapy in a Mouse Model of Autosomal Dominant Retinitis Pigmentosa (ADRP). Haoyu Mao1,2, M.S. Gorbatyuk1, B. Rossomolli1,2, W.W. Hauswirth1, A.S. Levin1,2. 1Molecular Genetics & Microbiology; 2Molecular Genetics & Microbiology, University of Florida, Gainesville, FL; 3Department of Cell Biology and Anatomy, University of North Texas Health Science Center, Fort Worth, TX. *CR

6449 — A375 Mpp3 is Required for Maintenance of Adherens Junctions in the Retina during Light Exposure. Jacobus J. Dudok1, A. Sanz Sanz2, D. Lundvig3, V. Sothilingam4, M. Garcia Garrido5, N. Tanimoto6, J. Klooster7, M. Janrich8, M. Seeliger9, J. Wijnholds10. 1Neuromedical Genetics, Netherlands Inst for Neurosci, Amsterdam, The Netherlands; 2Division of Ocular Degeneration, Ctr Ophthal Inst Ophthalmic Research, Tuebingen, Germany; 3Molecular and Cellular Biology, Baylor College of Medicine, Houston, TX.

6450 — A376 Altered Fractalkine Homeostasis In Rd10 Degenerating Mouse Retina. Marina Ziegler1, C. Schubert1, P. Uhrin1, P.K. Ahnet1. 1Neurophysiology and Neuropharmacology, 2Vascular Biology and Thrombosis Research, 3Medical 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 Rpgcr gene. Jutta U. Schlegel1, D. Röll2, M. Bergmann3, B. Lorenz4, K. Stieger5. 1Department of Ophthalmology, 2Department of Veterinary Anatomy, 3Justus-Liebig-University Giessen, Giessen, Germany.


6453 — A379 ER Stress Is Involved in Retinal Degeneration Induced by Human T17m Mutant Rhodopsin. Mansi M. Kunte1, S. Choudhury2, V.M. Shinde3, J.F. Manhimi4, M. Miura5, O.S. Gorbatyuk6, 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. *CR

6454 — A380 Ethanol Consumption Correlates with Retinal Degeneration and Vision Loss in the P23H Rat. Gema Esquivel1, P. Lax1, L. Fernandez-Sanchez2, A. Noailer3, J. Pinilla1, N. Cuenca4. 1Physiology, Genetics and Microbiology, University of Alicante, Alicante, Spain; 2Ophthalmology, University Hospital Lozano Blesa, Zaragoza, Spain.


6456 — A382 Crbl1 And Crbl2 Controls Cell Division During Retina Development. Lucie P. Pellissier1, C.H. Alves1, D. Lundvig2, M. Garcia Garrido3, V. Sothilingam4, N. Tanimoto5, F. Richardson6, A. Le Bivic3, M. Seeliger7, J. Wijnholds8. 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. Levin2, 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 Balem1,2, P.S. Akamine3, G.L. Ioshimoto4, B.V. Nagy2, D.F. Ventura5, J. Klein-Seetharaman1, D. Hamassaki1, A. Cell and Developmental Biology, *Experimental 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. Rossomolli1,2,4, H. Miao1,2,3, A.S. Levin1,2,8. 1Genetics, 2Molecular Genetics & Microbiology, 3Molecular Genetics & Microbio, University of Florida, Gainesville, FL; 4Department of Molecular Genetics and Microbiology, 5Department of Molecular Genetics and Microbiology, The University of Florida, Gainesville, FL.


6461 — A387 Long-term Preservation Of Cone Photoreceptors By A Novel Multifunctional Drug In A Mouse Model Of Human Retinitis Pigmentosa. Bin Lin1, K. Wang6, M.B. Youdim7. 1Anatomy, Eye Institute, 2University, University of Hong Kong, Hong Kong; 3Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel.

6462 — A388 Analysis Of Photoreceptor Abnormality In Gucy2d Transgenic Mice. Corinne Kostic1, T. King2, C. Sylvain3, S. Philippe4, S. Lillo4, C. Sarkis5, J. Mallet6, Y. Arsenjevic6, B. Whitehead1. 1Gene Therapy & Stem Cell Bld, Jules-Gonin Eye Hosp, Univ Lausanne, Lausanne, Switzerland; 2Division of Developmental Biology, The Roslin Institute, University of Edinburgh, Scotland, United Kingdom; 3NewVectys, Paris, France; 4Team of Biotherapy and Biotechnology, CRICM, Paris, France. *CR

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. Olsen1. 1Ophthalmology, Emory University, Atlanta, GA; 2Ophthalmology, University of Minnesota, Minneapolis, MN.
6486 — A412 Characterisation Of The Large Macromolecular MMP Complex Of Human Bruch’s Membrane With Respect To Stability, Activation And Effects Of Ginseng Compounds. Yong Dol Shin1, J. Seok1, C. Sim1, M. Kang2, H. Shin3, Y. Lee4, A. Hussain5. 1Jeonbuk National University, Jeonju-si, Republic of Korea; 2GibioMix, Jeonju-si, Republic of Korea; 3Korean Atomic Energy Research Institute, Dae Jeon, Republic of Korea; 4Division of Molecular Therapy, UCL Institute of Ophthalmology, London, United Kingdom. CR

6487 — A413 The oxysterol, 27-hydroxycholesterol, disrupts Estrogen Receptor and Liver X Receptor signaling in Retinal Pigment Epithelial Cells. Bhanu C. Dasari, O. Ghribi. Pharmacology Physiology & Therapeutics, Univ of North Dakota, Grand Forks, ND.

6488 — A414 Translational diffusion of ranibizumab and bevacizumab as measured by Fluorescence Recovery after Photobleaching (FRAP). Nishanthan Srikanta1,4, S. Khilini1,4, T. Jackson1,4. 1Ophthalmology, 4Physics, Kings College London, London, United Kingdom.

6489 — A415 Identifying the Roles of Interferon-Gamma Inducible Chemokines in Progression of Age-related Macular Degeneration (AMD). Syeda F. Absar1, D. Cyr1, A.D. Proia1, M.T. Malik1, P. Beci1, K. Lashkari1, 1Scheepens Eye Research Institute, Massachusetts Eye and Ear, Department of Ophthalmology, Harvard Medical School, 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. Eiichi Nishimura1,2, M. McCloskey3, Y. Jiang4, G.W. Smith5, H. Wang6, E.S. Witcher7, R. Koide2, M.E. Hartnett1. 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.

6493 — A419 Impaired Vision in the DNA Double-Strand Break Repair Poly-mutant Mouse. Noemi L. Alvarez-Lindo1, J. Baleriola1, J.M. Sammartin2, T. Suarez2, G. Terrados2, B. Escudero1, A. Bernad1, L. Blanco1, P. de la Villa1, E. de la Rosa1. 1Cellular and molecular medicine, Centro de Investigaciones Biologicas-CSIC, Madrid, Spain; 2Centro de Biologia Molecular CSIC-UMA, Madrid, Spain; 3Centro de Nacional de Investigaciones Cardiovasculares, Madrid, Spain; 4Physiology, University of Alcala, Alcala de Henares, Spain.

6494 — A420 Ginseng Mediated Improvement In The Hydraulic Conductivity Of Human Bruch’s Membrane: Potential For Preventive Therapy In AMD. Cheul Miu Sim1, J. Seok1, M. Kang2, Y. Shin3, H. Shin3, Y. Lee4, A. Hussain5. 1Neuron Science Department, Korea Atomic Energy Research Institute, Daejon, Republic of Korea; 2GibioMix, Jeonju, Republic of Korea; 3Physics, Jeonbuk University, Jeonju, Republic of Korea; 4Division of Molecular Therapy, UCL Institute of Ophthalmology, London, United Kingdom. CR

6495 — A421 The Kinetics of Retinal Gene Expression Profile of Crl2/Cx3cr1 Double Deficient Mice on rdb background. De Fen Shen1, Y. Wang2, K. Jin1, J. Tao2, M. Xiang2, C-C. Chan1. 1Laboratory of Immunology, National Eye Inst/NHI, 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 Lindsay1,2, T.A. Reh3,4, J.B. Harley5,6, D. Lamba6, J. Gust1,2. 1Biochemistry, 3Biological Structure, University of Washington, Seattle, WA.


6502 — A428 Diet Can Influence Human Retinal n-3/n-6 VLC-PUFA Ratios. Aihua Liu1, R. Terry1, K. Nelson3, X. Sheng3, P.S. Bernstein3. 1Ophthalmal & Visual Sci, Univ of Utah/Moran Eye Center, Salt Lake City, UT; 2Department of Pediatrics, Univ of Utah/Department of Pediatrics, Salt Lake City, UT.


6505 — A431 Modifications Of Glycoproteins In The Bruch’s Membrane Via Glycolaldehyde Or Nitration: A Model For Aging And Inflammation. Mai T. Thao1, J.P. Dillon2, E.R. Guillard3,4. 1Chemistry and Biochemistry, Northern Illinois University, Sycamore, IL; 2Chemistry and Biochemistry, 3Northern Illinois University, DeKalb, IL.


6507 — A433 ArmS2 In/del Polymorphism Predicts Response To Intra Vitreal Anti-veg F Therapy For Choroidal Neovascular Age-related Macular Degeneration (amd). Alan J. Franklin1, M.F. Shuler2, S. Gupta3, J. Myers4, W.B. Lauten4. 1Retina Specialty Institute, Mobile, AL; 2Retina Specialty Institute, Panama City, FL; 3Retina Specialty Institute, Pensacola, FL. 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
6508 — A434  Conditional Knock-Out of Retinal Pigment Epithelium Results in the Activation of Membrane to Nuclear Signaling Pathways and Hallmark Features of Age-Related Macular Degeneration (AMD). Paolo A. Ferreira1A, A. Saha1, E. Haque1, Y-Z. Le1, M. Webb1, Ophthalmology, Duke University Medical Center, Durham, NC; 2Medicine, Univ of Oklahoma Hlth Sci Ctr, Oklahoma City, OK.


6510 — A436  Genetically-related Inflammatory Priming and Failing Retinal Maintenance Predispose to Age-Related Retinal Degeneration in Mice. Debarshi Mustafi1A, H. Kohno1A, K. Palczewski1A, T. Maeda1B. 1Department of Ophthalmology, Keio University, Tokyo, Japan; 2Centre for Eye Research Australia, Royal Victorian Eye and Ear Hospital, Department for Prediction Of CNV . Briana L. Sawyer1, Jennifer Wallis1, W.W. Hauswirth3. Molecular Genetics & Microbio, 1Univ Estadual de Campinas, Campinas, Brazil; 2Institute for Laboratory Medicine/ SMZ-East, Vienna, Austria; 3Dept of Ophthalmology, Univ of Florida Coll of Medicine, Gainesville, FL. *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 Sasaki1,2, Florida Coll of Medicine, Gainesville, FL; 2The Jackson Laboratory, Bar Harbor, ME; 3Singapore Eye Research Institute, Royal Victorian Eye and Ear Hospital, Department Of Monthly Follow-up Of Patients With Neovascular Age-related Macular Degeneration. Robert P. Finger1, J.B. Hassell1, F. Abed1, M.C. Gillies2, J.E. Keeffe2, R.H. Guymer2. 1Centre for Eye Research Australia, Melbourne, Australia; 2Save Sight Institute, Sydney, Australia. *CR

6512 — A514  Initial Clinical Experience With RetnaGene AMD™, A Genetic Test For Prediction Of CNV. Briana L. Sawyer1, D.Y. Harrison1, L. Perlee2, P.S. Bernstein1. Ophthalmology, 1Department of Ophthalmology, Hospital Albert Einstein, Sao Paulo, Brazil; 2Pharmacology, 1Ophthalmology, 2Medical genetics, Univ Estadual de Campinas, Campinas, Brazil.

6513 — A515  Genetics And Prevention Of Blindness: Risk Factors Associated With Age-related Macular Degeneration In A Brazilian Population. Priscila H. Rinc1A, A.P. Marques-de-Faria1A, L.A. Magna1A. Ophthalmology, 1Medical genetics, Univ Estadual de Campinas, Campinas, Brazil.

6514 — A516  Do Ultraviolet Radiations Induce Earlier Aged Ocular Pathologies Among Mountainaineers? Hussan El Chehab1, C. Dot2, J. Blein3, J. Herry4, J. Giraud5, F. May6, J. Renard6. 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 Haas1, K. Kubista1, W. Krugluger1, J. Huber1, S. Binder1. Ophthalmology, 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. Silvestri1, M. Stevenson1, G. Silvestri1, Ophthalmology, Royal Group Hospital, Belfast, United Kingdom; 2Ophthalmology, Royal Hospital Trust, Belfast, United Kingdom; 3Centre for Public Health, 4Centre for Vision and Vascular Science, Queen’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, K. Nionios1, N. Szentmarty1, R. Obeid2, B. Seitz2. Department of Ophthalmology, Department of Clinical Chemistry and Laboratory Medicine, University 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. Díaz-Llopis1,4, M. Díaz-Llopis1,4. Ophthalmology, University Eye Clinic Maastricht, Maastricht, The Netherlands; 2Institute for Laboratory Medicine, University of Vienna Medical Center, Amsterdam, The Netherlands; 3Ophthalmology, University Medical Center Utrecht, Utrecht, The Netherlands.


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. Gianta1, P. Saurel1, M. Besne2, B. Rebél, F. De Takacsy3, R. Li4. Ophthalmology, Hospital Maisonneuve-Rosemont, Montreal, QC, Canada; 2Pratuy-Deux-Rivières, Trois-Rivières, QC, Canada; 3Université de Sherbrooke, Sherbrooke, QC, Canada; 4Clinique Chirurgi Vision, 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. Hassell1, F. Abed1, M.C. Gillies2, J.E. Keeffe2, R.H. Guymer2. 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. Ringens1, F. Hendrikse1, C.A. Webers1, J.S. Schouten1. Ophthalmology, 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-Marcó1, S. Martinez-Castillo1, R. Dolz-Marco1, J. Arévalo1,3, M. Diaz-Llopis1,4. Ophthalmology, 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 Verteporfin PDT as Combination Therapy at Month 2 for Neovascular Age-related Macular Degeneration (AMD). Eric Fourmaux, M. Dominguez, L. Rosier, L. Velasque. Retine Tourny, Bordeaux, France.

Hall B/C  A513-A539
Thursday, May 10, 2012, 11:15 AM-1:00 PM
Retina

547 AMD Clinical Research VII

Moderator: Jordi M Mones

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 Sasaki1,2, Richard Sasaki3, R. Kawasaki2, A. Uchida1, T. Koto1, H. Mochimaru1, H. Shinoda1, T.Y. Wong2, K. Tsubota1, Y. Ozawa1. 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, National University of Singapore, Singapore, Singapore. *CR

6512 — A514  Initial Clinical Experience With RetnaGene AMD™, A Genetic Test For Prediction Of CNV. Briana L. Sawyer1, D.Y. Harrison1, L. Perlee2, P.S. Bernstein1. Ophthalmology, 1Department of Ophthalmology, Hospital Albert Einstein, Sao Paulo, Brazil; 2Pharmacology, 1Ophthalmology, 2Medical genetics, Univ Estadual de Campinas, Campinas, Brazil.

6513 — A515  Genetics And Prevention Of Blindness: Risk Factors Associated With Age-related Macular Degeneration In A Brazilian Population. Priscila H. Rinc1A, A.P. Marques-de-Faria1A, L.A. Magna1A. Ophthalmology, 1Medical genetics, Univ Estadual de Campinas, Campinas, Brazil.
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 Fernandes1, D. Roth1, A. Shah2, H. Fine3, J. Prenter1, W. Feuer4. 1ophthalmology, Robert Wood Johnson Medical School, New Brunswick, NJ; 2Bascom Palmer Eye Institute of the University of Miami School of Medicine, Miami, FL. *CR

6528 — A530 A French Version Of小姐Keady Identifying Difficulties Related To Central Scotoma. Anne Catherine Scherlen1, G. Faure2, M. Goldschmidt3, D. Raffort2, F. Vital-Durand3, C. Miege1. 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.

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. Christenbury1. 1ophthalmology, William Harvey Hospital NHS trust, Ashford, United Kingdom; 2Bascom Palmer Eye Institute of the University of Miami School of Medicine, Miami, FL. *CR


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 i de la retina, Barcelona, Spain.


6534 — A536 Evaluation of Peripheral Fundusautofluorescence Changes in Patients with Wet ARMD: The OTELLO Study. Anita Zenger1, M.B. Rougier2, H.F. Pezanga, S. Schnitz-Valkenberg3, L. Reznicek1, U.E. Wolf-Schnurrbusch2, 1Bern Photographic Reading Centre, 2ophthalmology, University Bern, Bern, Switzerland; 3Service d Ophthalmologie, CHU- Bordeaux Unis 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. *CR


6536 — A538 Bilateral Multifocal Electroretinogram Changes After Nanosecond Laser In Subjects With Early Age-related Macular Degeneration. Chi D. Lui, K. Brassington, G. Makeyeva, R.H. Guymer. Macular Research Unit, Centre for Eye Research Australia, East Melbourne, Australia.

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. 1ophthalmology, University of California, San Diego, CA; 2ophthalmology, University of California, San Diego, CA; 3Institute of Biophysics Carlos Chagas Filho, Brazil.

Hall B/C A540-A571 Thursday, May 10, 2012, 11:15 AM-1:00 PM

548 Retina and RPE Cell Biology

Moderator: Peter F Hitchcock

6538 — A540 Neuropeptide Y Protects Retinal Neuron Cells From Glutamate-induced Toxicity Through The Activation Of NPY Y2 Receptor. Ana Santos-Carvalho1, A.F. Ambrósio1, C. Cavadas2. 1Center for Neuroscience and Cell Biology, University of Coimbra, Coimbra, Portugal; 2Faculty of Pharmacy, University of Coimbra, Coimbra, Portugal; 3Center of Ophthalmology and Vision Sciences, IBIIL, Faculty of Medicine, University of Coimbra, Coimbra, Portugal.


6540 — A542 Involvement of P2X7 receptor and therapeutic efficacy of Brilliant Blue G in a mouse model of subretinal hemorrhage. Shoji Notomi1, T. Hisatomi1, A. Takeda2, Y. Ikeda3, H. Enaide4, T. Ishibashi, Sr. Ophthalmology, Department of Ophthalmology, Kyushu University, Fukuoka, Japan; 5Department 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. Adjimanto, R. Fariss, A. Manninisikis, S.S. Miller. NEI/NIH, Bethesda, MD.

6543 — A545 Intercellular Ca2+ Wave Propagation In Human Retinal Pigment Epithelium Cells Induced By Mechanical Stimulation. Anna E. Abu Khamis4, K. Juuti-Uusitalo5, K. Larsson5, H. Stoettmann5, J. Hyttinen5. 1Department of Biomedical Engineering, Tampere University of Technology, Tampere, Finland; 2BioMediTech, Tampere, Finland; 3Institute of Biomedical Technology, University of Tampere, Tampere, Finland.

6545 — A547 Alpha 2 adrenergic agonist receptor in chick retina. Gabriella V. Costa1, M.K. Shigetomi1, R. Fleming1, V.V. Oliveira4, A.A. Costa1, P. Gardino1, A.M. Dantas1, J. Huttunen1. 1Expression through the NF-κB Pathway in Human Retinal Pigment Epithelium, 2Department of Ophthalmology, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil.

6546 — A548 Angiotensin II upregulates MCP-1 Expression through the NF-kB Pathway in Human Retinal Pigment Epithelium. Maria E. Maria Castano, M. Pons. Ophthalmology, Bascom Palmer Eye Institute, Miami, FL.


6548 — A550 Loss of Hif Leads to Progression of Tumor Phenotype in Primary Retinal Pigment Epithelial Cells. Jaya Pranava Gnana Prakasam1, R. Veeraranjan-Karmegam1, V. Coothankandaswamy1, S.K. Reddy1, P.M. Martin1, M. Thangaraj1, S.B. Smith1, V. Ganapathy1. 1Biochemistry and Molecular Biology, 2Cellular Biology and Anatomy, 3Georgia Health Sciences University, Augusta, GA.
A551  Therapeutic Inhibition Of Retinoblastoma By Nanoceria. Kathryn E. Klump1, S.V. Kisseleva2, S. Seel1, M.A. Dyer1, J.F. McGinnis2,3. "OKlahoma Center for Neuroscience, 1Department of Ophthalmology, 2University of Oklahoma Health Sciences Center, Oklahoma City, OK, 3Mechanical Materials Aerospace Engineering, Nanoscience, and Technology Center, University of Central Florida, Orlando, FL.

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.

A553  Absorption Of Spio Nanoparticles Using Different Media On Arpe-19 And Hec Cell Cultures. Gustavo T. Grotto1, R.R. Loureiro1, J. Couvre1, L. Gamarra2, P. Cristovam1, J.P. Gomes2. "Ophthalmology, UNIFESP/Santa Casa de Santos, Santos, Brazil; 2Ophthalmology, UNIFESP, Santos, Brazil; 3Oncology, Instituto Israelita de Pesquisas Albert Einstein, São Paulo, Brazil.

A554  Secretion Of VEGF From Polarized RPE By Tnf-a Or Thrombin. Hiroto Terasaki1, M. Shirasawa1, N. Arimura1, S. Sonoda2, T. Sakamoto2. "Ophthalmology, 1Kagoshima University, Kagoshima, Japan; 2Department of Ophthalmology, Kagoshima University, Kagoshima, Japan.

A555  CEP290 is Required for Photoreceptor Ciliogenesis and Ventricular Ependymal Cilia Function. Erin Tanamoto1, R. Rachel1, M. Dewanji1, J. Munasinghe1, T. Li1, L. Dong1, A. Swaroop1. "Neurobiol-Neurodegenrtn & Repair, NEI, Bethesda, MD; 2NINDS, Bethesda, MD.

A556  Rapid Photoreceptor Degeneration Occurs In Zebrafish arl12b Mutants Following Suppression Of Pep Signaling. Brian D. Perkins, L. Dudinsky. Biology, Texas A & M University, College Station, TX.


A558  Effect of Storage Temperature on the Viability of Cultured Retinal Pigment Epithelial Cells. Laura Pasovic1, J.R. Eide1, P. Aasle1, T. Lyberg2, X. Chen2, T.P. Utheim2. "Center for Clinical Research, 1Department of Ophthalmology, 2Oslo University Hospital, Oslo, Norway; 3SynsLaser Kirurgi Oslo/Tromso, Oslo, Norway.


A561  Changes In The Expression Of Genes Related To Oxidative Stress In Rd1 Mice. Violeta Sanchez-vallejo1, M. Flores-Bellev1, R. Alvarez-Noling1, S. Johnsen-Soriano1, M. Miranda1, R. Romero Gomez1,2,3. "Physiology, Univ CEU Cardenal Herrera, Valencia, Spain; 2Fundación Oftalmológica del Mediterráneo, Valencia, Spain; 3Facultad de Ciencias del Vehículo, Valencia, Spain.

A562  The Cysteine Prodrug L-2-Oxothiazolidine-4-Carboxylic Acid (OTC) Elicits Potent Antioxidant and Anti-inflammatory Effects in RPE: Relevance to Treatment of Age-Related Macular Degeneration. Sanjivani P. Aabel1, A. J. P. T. Lyberg2, P. J. P. Utheim1. "Ophthalmology, 1University of Oslo, 2Health Sciences North, Sudbury, Ontario, Canada; 3Department of Ophthalmology, 1University of Pennsylvania, Philadelphia, PA; 2Department of Ophthalmology, 3Department of Biochemistry, 2University of Oklahoma Health Sciences Center, Oklahoma City, OK; 3Department of Developmental Neurobiology, St. Jude's Childrens Research Hospital, Memphis, TN; 4Howard Hughes Medical Institute, Chevy Chase, MD.


A564  Whole Number And Spatial Distribution Of The Pou4f Family Of Transcription Factors In The Adult Rat Retina. Francisco M. Nadal-Nicolés1, J. Jimenez-Lopez1, M. Salinas-Navarro1, L. Nieto-Lopez1, A. Ortin-Martinez1, C. Galindo-Romero1, M. Sanchez-Migallon1, P. Sobrado-Calvo1, M. Vidal-Sanz1, M. Aguado-Barriuso1. "Unidad of Investigation, Hospital Universitario Virgen de la Arrixaca, Murcia, Spain; 3Pou4f Ophthalmologia, Universidad de Murcia, Murcia, Spain.

A565  Subretinal gene therapy in Bbs1 mice. Arlene V. Drack, S. Bhattarai, S. Seo, D. Gratte, E.M. Stone, R. Mullins, V. Sheffield. Ophthalmology, Univ of Iowa Hospitals, Iowa City, IA.

A566  The Influence of Substrate Elastic Modulus on Retinal Pigment Epithelial Phagocytosis. Kieron S. Wodehouse1, J.T. Davis1, J.C. Manaranac1, A.M. McDermott1,2, W.J. Foster1,2. "Biology & Biochemistry, 1Physics, 2Optometry & Vision Science, 3University of Houston, Houston, TX; 4Ophthalmology, Weill-Cornell Medical College, Houston, TX.


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

549 Ganglion Cell Function, Injury, Protection and Imaging

Moderators: James E Morgan and Jonathan G Crowston

A208  Exogenous PACAP Acts as a Retinoprotective Agent and a Modulator on Microglia/Macrophages Status in Mice NMDA-induced Retinal Injury Model. Yoshihiro Wada1,2,3, T. Nakamachi1, K. Endo1,2,3, S. Shioda1, K. Kido1, R. Koide1. "Department of Ophthalmology, 2Department of Anatomy, 3School of Medicine, Tohoku, Japan.

A209  Increased Neuro-retinal Injury After Intracocular Pressure Elevation In Xenotransplantochorial Mice And Compensation By Oxyphos Complex IV. Ian A. Trounce1, N. Van Bergen1, G. Kong2, Y. Chrysostomou1, C.A. Pinkert1, J.G. Crowston1. "Center for Eye Research Australia, University of Melbourne, Melbourne, Australia; 2College of Veterinary Medicine, Auburn University, Auburn, AL.
6572 — A210 Elevated Intraocular Pressure Increases Serine Protease Levels In The Retina And Promotes Retinal Ganglion Cell Loss. Shrvan 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. Linh Jiang, F. Chen, N. Wang. Eye Center, Beijing Tongren Hospital, Beijing, China.


6577 — A215 Down Regulation of BM88 after Optic Nerve Crush. Ahad M. Siddiqui, T.F. Sabljic, 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 Fourgeux1, L. Martine1, L. Lecleere1, B. Buteau1, A. Bron2, C-G. Catherine2. 1INRA, University of Burgundy, Eye, Nutrition & Cell Signalling Res Grp, Dijon, France; 2Department of Ophthalmology, University Hospital, Dijon, France.

6579 — A217 Neuroprotective Effect of Resveratrol after Optic Nerve Transection. SeokHwan Kim1, J. Park1, M. Kim1, M. Kim2, D. Kim1, J. Jeoung1, T-W. Kim1. 1Ophthalmology, Boramae Hospital, Seoul, Republic of Korea; 2Ophthalmology, Seoul National University Hospital, Seoul, Republic of Korea; 3Ophthalmology, Seoul National University Bundang Hospital, Kyunggi, Republic of Korea; 4Ophthalmology, Seoul National University Bundang Hospital, Seongnam, 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.


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

6584 — A222 Acid Phosphomyleinylase Plays a Role in IR-induced Retinal Degeneration. Jie Fan1, B.X. Wei2, Y.A. Hamman2, C.E. Crosson3. 1Ophthalmology-Storm Eye Inst, 2Biochemistry and Molecular Biology, 3Ophthalmology, Medical Univ of South Carolina, Charleston, SC.

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

6586 — A224 Etanercept, A Widely Used Inhibitor Of Tumor Necrosis Factor-α (tnf-α), Prevents Retinal Ganglion Cell Loss In A Rat Model Of Glaucoma. Min Roh1, Y. Zhang1, Y. Murakami1, A. Thane1, D.G. Vasvás1, L. Benowitz1, J.W. Miller1. 1Ophthalmology, MEEI, Angiogenesis Lab, Boston, MA; 2Neuroscience, Laboratories for Neurosurgery, F.M. Kirby Neurobiology Center, Children’s Hospital Boston, MA.

6587 — A225 α2-adrenergic Receptor Agonist Restores Mitochondrial Transcription Factor A And Oxidative Phosphorylation, And Protects Retinal Ganglion Cells Against Retinal Ischemic Injury. Won-Kyu Ju1, D. Lee1, K.-Y. Kim2, Y. Noh3, R.N. Weinreb4. 1Hamilton Glaucoma Center, 2Neuroscience, 3Univ of California San Diego, La Jolla, CA; 4Ophthalmology, Chonbuk National University, Jeonju, Republic of Korea.

6588 — A226 Oncostatin M Protects Retinal Ganglion Cells in an Optic Nerve Crush Mouse Model. Xin Xia1,2, Y. Li1, Z. Wang1, L. Luo1, R. Wen1. 1Bacoum Palmer Eye Institute, University of Miami, Miami, FL; 2Department of Ophthalmology, Shanghai First People’s Hospital, Jiaotong University, Shanghai, China.


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. Sidovara, D.J. Calkins. Ophthalm & Vis Sciences, Vanderbilt Eye Institute, Nashville, TN.


6596 — A234 ShH10, A Novel Müller Glia Cell-specific AAV Vector, Expressing GDNF Promotes Retinal Ganglion Cell Survival Following Neuronal Injury In Thy1-YFP Mice. Chendong Pan1,2, L. Guo1, S. Gu1, T.W. Chalberg, Jr2, J.M. Beckel1B, A.R. Santiago2, A.F. Ambrosio2. 1Glaucoma Research Laboratory, Dyson Institute, Weil Medical College of Cornell University, New York, NY; 2Avalanche Biotechnologies, Inc, Redwood City, CA; 3Helen Wills Neuroscience Institute, University of California, Berkeley, Berkeley, CA.


*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 – 6598 – 6618

**6598 — A236** Differential Expression of CCL5 Receptors in Acute and Chronic Murine Models of Glaucoma. Amanda C. Renhorn1, D.S. Duncan2, M. Stanford1, G. Davis1, R.M. Sappington1. 1Vanderbilt Eye Institute, 2Interdisciplinary Graduate Program, Vanderbilt University Medical Center, Nashville, TN.

**6599 — A237** Alpha-1 Adrenergic Receptor Stimulation Induces Ocular Disease via TGF-Beta-Mediated Mechanisms. Jose L. Vega1, I. Agoulnik2, F. Masl1, F. Mir2, D. Chen1, W. Bowden3, Y. Quang1, E. Suarez1, P. Durand1-E2. 1Department of Neurology, 2Department of Cell Biology and Pharmacology, 3Herbert Wertheim College of Medicine, Miami, FL; 4Ophthalmology, Schepps Eye Research Institute, Boston, MA; 5Department of Biology, Florida International University, Miami, FL. *CR


**6601 — A239** Slit2 Delays The Death Of Retinal Ganglion Cells After Optic Nerve Crush Injury. Thomas F. Sablijic, A. Ball. Pathology & Molecular Medicine, McMaster University, Hamilton, ON, Canada.

**6602 — A240** Subtype- and Location-Dependent Degeneration of Retinal Ganglion Cells in a Mouse Model of Ocular Hypertension. Liang Feng, Y. Zhao1, M. Yoshida2, S. Lindstrom1, J. Cang2, J.B. Troy2, X. Liu1. 1Ophthalmology, Northwestern University, Chicago, IL; 2Biomolecular Engineering, 3Neurobiology, 4Northwestern University, Evanston, IL.


**6604 — A242** Retinal ganglion cell morphology is not affected by chronic experimental glaucoma in mice selectively expressing Yellow Fluorescent Protein. Giedrius Kalesnykas1, E. Oglesby2, F. Blez1, M. Steinhardt1, M. Pease1, H. Qiu2. 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. Noristani2, M. Kuehn1, J. Schiwek1, F. Grass1, B. Dick1, S. Joachimi1. 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. Williams1, W. Kong1, X. Huang2. 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. Bek1, M.D. de La Cour3, S. Nielsen1, J.U. Prasse1, S. Hamann4, 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. Cride2, D.J. Calkins. 1Ophthalmology, Vanderbilt Univ Medical Center, Nashville, TN; 2Pharmaceutical 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 University, 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. Bull2, K.R. Martin1. 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. Kecov1, 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. Currie1, N. Pollock2, L. Paraoun1, A.F. Clark2, I. Grierson3. 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, P.A. Kneppe1. 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. McCarty1, J.P. Mayer1, P.A. Kneppe1. 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 No1, K-Y. Kim1, R.N. Weisreb2, W-K. Ju1. 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.

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

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Thursday Posters – 11:16 am – 1:30 pm

**550 Cataract Surgery I**

Moderator: Steven Bassnett

**6618 — A607** In Vivo and In Vitro MRI of the Uvea in Pseudophakic Human Eyes. Susan A. Sreen1, B.S. Tran1, B. Werner3, N. Mamalis1, L.M. Sreen1, K.L. Lu1. 1MRI Research, Inc, Middleton Heights, OH; 2Psychology, University of Southern California, Los Angeles, CA; 3Ophthalmology, University of Utah/Moran Eye Center, Salt Lake City, UT; 4MRI Research Inc, Middleton Heights, OH; 5Ophthalmology, University of Southern California/Doheny Eye Institute, Los Angeles, CA. *CR

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Hall B/C A607-A640

Thursday, May 10, 2012, 11:15 am-1:00 pm

**Lens**

11:16 am – 1:30 pm
Thursday Posters

**A608**
Aravind Pseudoexfoliation Study (APEX) I: Intraoperative Results. Alan L. Robinson,1,2 R. Venkatesh,1 A. Harripriya,1 C. Shivakumar,1 V Prabhul,1 M. Sekhar,1 B. Talwar,1 P. Sathyan,1 D. Ramakrishnan.1 Aravind Eye Hospitals and Post Graduate Institute of Ophthalmology, Madurai, India; 2Ophthalmology and International Health, Johns Hopkins University, Baltimore, MD.

**A609**
Evaluation of Femtosecond Laser-Assisted Clear Cornea Cataract Surgery. Milan P. Ranaka,1,2 M.Y. Choi,1 S. Dimitriou,1 J. Datseris1, A. Kanellopoulos1,2.1 Ophthalmology, New York University, New York, NY; 2RealEye Center, Munich, Germany; 3OMMA Eye Center, Athens, Greece; 4Laser Vision Institute.gr, Athens, Greece.

**A610**
Reduced Laser Pulse Width Improves Cutting Efficiency in Laser Refractive Cataract Surgery. Simone Schneider1,2, H. Uy3, K. Edwards4, T. Olsmstead2, V. Tsamud2, S. Botz1.1 Clinical and Regulatory Affairs, 2Research & Development, 3LensAR, Orlando, FL; 4Asian Eye Institute, Makati, Philippines. *CR, ®

**A611**
Morphology Of Femtosecond Intrastromal Arcuate Incisions. Perry S. Binder1, B. Gray2A, M. Brownell2B, J. Martiz3, MD4, J. Hill5.1 Gavin Herbert Dept of Ophthalmology, Univ of California, Irvine CA, San Diego, CA; 2A611 Radiation Oncology, Santa Ana, CA; 3Cornea, International Prinz1, B. Weingessel1, O. Findl2, P. V. Vecsely-Ana Intraocular Lens - 1 year Comparison. Of a 1-piece and a 3-piece Microincision

**A612**
Posterior Capsule Opacification of a 1-piece and a 3-piece Microincision Intraocular Lens - 1 year Comparison. Ana Prinz1, B. Weingessel1, O. Findl2, P.V. Vecsely-Marlovits1.1 Department of Ophthalmology, Hietzing Hospital, Vienna, Austria; 2Department of Ophthalmology, Hanusch Hospital, Vienna, Austria.

**A613**

**A614**
Conical And Total Optical Quality After 2.2mm Coaxial Mini-incision Cataract Surgery Combined With Bimanual Irrigation-aspiration. Corinne Dot1, H. El Chehab1, P. Savary2, E. Agard,1 A. Malec2, N. Chave1, G. Ract-Madoux1, J. Giraud.1 Ophthalmology, Hospital Desgenettes, Lyon Cedex 03, France; 2department of ophthalmology, Dongguk University Gyeongju Hospital, Gyeongju, Republic of Korea.

**A615**

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

**A617**
Correlation Of Subjective Nuclear Sclerotic Cataract Grading And Intraoperative Cumulative Dispersed Energy During Phacoemulsification. Nakul Shekhawat1, A. Chomsky2,3.1 Vanderbilt University School of Medicine, Nashville, TN; 2VA Tennessee Valley Healthcare System, Nashville, TN.

**A618**
Asymtomatic Capsul Curvature Distension 10 years After Cataract Surgery, 7 Case Reports. Eva Monestam. Clinical Sci & Ophthal, UMEA University, Umea, Sweden.

**A619**

**A620**
Subjective Outcomes Evaluation of Aspheric Diffractive and Aspheric Diffractive Aspheric Multifocal IOLS. Dwanye K. Logan1, E. Sadri1.1 Cataract and Refractive Surgery, Atlantis EyeCare, Long Beach, CA; 2Cataract and Refractive Surgery, Atlantis EyeCare, Newport Beach, CA. *CR

**A621**

**A622**
Postoperative Refractive Error After Simultaneous Vitrectomy and Phacoemulsification With Sulcus Fixation Of Intraocular Lens: eek soo suh, S. Lee, J. Chun. department of ophthalmology, Dongguk University Gyeongju Hospital, Gyeongju, Republic of Korea.

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

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

**A625**
Continuous Intraocular Pressure Measurements During Small Incision Phacoemulsification Surgery In Porcine Eyes. Seung Youn Jeu1, M. Son1, T. Baek, J. Lee2.1 Ophthalmology, GM St. Mary eye center, Busan, Republic of Korea; 2Ophthalmology, Haedae Paik Hospital, Inje University College of Medicine, Busan, Republic of Korea.

**A626**

**A627**
Intracameral Anesthesia For Cataract Surgery, A Population-based Study On Patient Satisfaction And Outcome. Inger M. Westborg1, E. Monsenstam1.1 Ophthalmology, Eye Clinic, Sunderby Hospital, Lulea, Sweden; 2Clinical Sci & Ophthal, UMEA University, Umea, Sweden.

**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.

**A629**
Viscoat Versus Visthesia During Phacoemulsification Cataract Surgery: Corneal And Foveal Changes. Marilita M. Moschos1,2, E.P. Chatziralli1, T.N. Sergentanis1,2, I. Ladas1.1 1st Department of Ophthalmology, 2Department of Epidemiology and Biostatistics, University of Athens, Athens, Greece.

**A630**

**A631**

**A632**
Balancing the Small Angle Domain (Acuity) and the Large Angle Domain (Straylight) of the Point-Spread-Function for Cataract Surgery. Thomas J. Van Den Berg1, I.J. van der Meulen1.2 Ophthalmic Research, Netherlands Inst for Neurosci, Royal Acad, Amsterdam, The Netherlands; 3Ophthalmology, Academic Medical Center, Amsterdam, The Netherlands. *CR, ®
Hall B/C  A641-A670
Thursday, May 10, 2012, 11:15 AM-1:00 PM

551 Cataract Surgery II

Moderator: Alex Cvekl

A664 — A663 Comparison of surgically-induced astigmatism after a 2.2 mm vs. 2.6 temporal corneal incisions in more than 2 years follow-up. Lei Zheng, J.C. Merriam. Ophthalmology, Columbia Univ-Harkness Eye Inst, New York, NY.


A666 — A665 The Effect Of Anterior Capsulorrhexis Optic Capture Of A Sulcus Fixed Iol Implant On Refractive Outcome. Eoghan R. Millar†, K. Merchant†, D. Steel†. 1Royal Victoria Infrmary, Newcastle upon Tyne, United Kingdom; 2Sunderland Eye Infrmary, Sunderland, United Kingdom.

A667 — A666 Comparison Of Visual Outcomes Of Toric Intraocular Lenses Implanted By Resident Surgeons Using Keratometry Measurements From An Autorefractor Or The IOLMaster In The Setting Of A Veterans Hospital. Benjamin A. Katz†, C.R. Blake†, S.W. Ross†. 1Ophthalmology, University of South Carolina, Columbia, SC; 2Ophthalmology, Dorn Veterans Hospital, Columbia, SC.

A668 — A667 Iris-sutured Posterior Chamber Intraocular Lens : Visual Results And Complications About 76 Cases. Olivier Le Moigne, M. Muraine, O. Genevois. Rouen University Hospital, Rouen, France.


A670 — A669 Evaluation of Aspheric Diffractive Multifocal and Accommodating Intraocular Lenses. Stuart I. Kaplan, F.C. Tyson. General,Contact Lenses, Ocular Disease, Cape Coral Eye Center, Cape Coral, FL. *CR, A

A671 — A668 Refractive Outcomes Of Combined Cataract And Glaucoma Surgery At A VA Hospital. Christopher T. Shah†, J. Tzu2, A. Galor2,3, A.K. Junk2,3, C.W. See4, S.R. Wellik5,3. 11Ophthalmic Biophysics Center, Dept. of Biomedical Engineering, University of Miami College of Engineering, Coral Gables, FL; 2Department of Ophthalmology, Miami Veterans Affairs Medical Center, Miami, FL; 3Ophthalmology, Miami Veterans Affairs Medical Center, Miami, FL; 4Ophthalmology, University of Miami College of Medicine, Miami, FL; 5Ophthalmology, Bascom Palmer Eye Institute, University of Miami Miller School of Medicine, Plantation, FL.


A664 — A663 Clinical Outcomes at a VAMC after the Introduction of Universal NSAID Therapy Perioperatively in Cataract Patients. Cameron C. Johnson†, R.A. Rombola, II†, P.J. Krall†. 1Ophthalmology, College of Medicine, University of Florida, Gainesville, FL.


A666 — A665 Sutureless transceleral Intraocular Lens implantation after ocular trauma. Malek Khouani†, D. Guachter†, T. Bourcie†, C. Speeg†, M. Montard†, B.Y. Delbosc2, M. Saleh3. 1Ophthalmology, University Hospital of Besancon, Besancon, France; 2Ophthalmology, Hopital Civil de Strasbourg, Strasbourg, France; 3Ophthalmology, Université Strasbourg, Strasbourg, France; 4Ophthalmology, Centre Hospitalier Universitaire, Besancon, France; 5Ophthalmology, Univ Hosp, Besancon, France.

A667 — A666 Sutureless transceleral Intraocular Lens implantation after ocular trauma. Malek Khouani†, D. Guachter†, T. Bourcie†, C. Speeg†, M. Montard†, B.Y. Delbosc2, M. Saleh3. 1Ophthalmology, University Hospital of Besancon, Besancon, France; 2Ophthalmology, Hopital Civil de Strasbourg, Strasbourg, France; 3Ophthalmology, Université Strasbourg, Strasbourg, France; 4Ophthalmology, Centre Hospitalier Universitaire, Besancon, France; 5Ophthalmology, Univ Hosp, Besancon, France.

A668 — A667 Changes In Anterior Chamber Depth And Refractive Power After Cataract Surgery With Or Without Simultaneous Vitreous Surgery. Mao Kusano, E. Tsuiki, M. Uematsu, A. Inoue, F. Cameron, M. Brownell1B. 1Ophthalmology, Centre Hospitalier Régional Universitaire, Rouen, France; 2Ophthalmology, Hopital Civil de Strasbourg, Strasbourg, France; 3Ophthalmology, Centre Hospitalier Universitaire, Besancon, France; 4Ophthalmology, Univ Hosp, Besancon, France.

A669 — A668 Change In Central Corneal Volume After Cataract Surgery, Melissa M. Wong†, A. Shukla†, W.M. Morris†. 1Ophthalmology, Boston Univ School of Med, Boston, MA; 2Ophthalmology, Massachusetts Eye and Ear Infirmary, Boston, MA.


A672 — A665 Preoperative Cataract Density Grading by Scheimpflug Imaging and its influence on operative fluidics and phacoemulsification energy. Jesus Arrieta-Camacho†, V. Estefan†, A.J. Ramirez-Miranda†, E. Chavez Mondragon†. 1Anterior Segment, Inst de Oftalmología CONVAL, Mexico City, Mexico; 2Cornea and refractive Surgery, Instituto de Oftalmología Conde de Valenciana, Mexico City, Mexico.


A674 — A663 Shadowphotography of IOL Injectors and Clear Cornea Incision Size. Alejandro Arboleda†, E. Arrieta†, D. Nankivil†, M.C. Aguilar†, K. Sotolongo†, S.H. Yoo†, J-M.A. Pare‡. 1Ophthalmic Biophysics Center, Dept. of Ophthalmology, Bascom Palmer Eye Institute, University of Miami Miller School of Medicine, Miami, FL; 2Biomedical Optics and Laser Laboratory, Dept. of Biomedical Engineering, University of Miami College of Engineering, Coral Gables, FL. *CR


A676 — A665 Improvement in Quality of life following Monocular or bilateral cataract extraction with lens implantation in patients in Lima Peru. Andrea P. Drerysus. adeyita@stanford.edu, Stanford School of Medicine, Stanford, CA.


A678 — A667 The Effect of Posterior Capsule Polishing on Posterior Capsule Opacification. Jeannie V. Paik†, M. Shiloach2, M.S. Macsai-Kaplan1. 1University of Chicago, Chicago, IL; 2NorthShore Univ Health System, Glenview, IL; 3Ophthalmology, NorthShore Univ Hlth System, Glenview, IL.

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

6672 — A661 Evaluation Of PhotoRefractive Keratectomy Enhancement For Optimizing Refractive Error In Patients With An Implanted Acun Acrysof Toric Iol. Eric Liss1, G. Perez2, G. Lacayo1, B.B. Simon1, J.A. Khell1, W. Trattler1, C. Buznego Jr.1, B. Mendelsohn1. 1UIU Herbert Wertheim College of Medicine, Sarasota, FL; 2Ctr for Excellence in Eye Care, Miami, FL; 3Center For Excellence in Eye Care, Miami, FL; 4Ophthalmology/Cornea, Center for Excellence in Eyecare, Miami, FL.


6679 — A669 Morgagnian Cataract Simulating Iris Neoplasia: Case Report. Alessandra Protti1, S.A. Gandolfi1, P. Morà2, L. Zagrofas3. 1Ophthalmology, University of Parma, Parma, Italy; 2Ophthalmology, Jules-Gonin Eye Hospital, Lausanne, Switzerland.


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 Pre-operative Application Of Topical Levofloxacin 0.3%. Herminia Mino de Kaspar1, L.E. Hoffmann1, L. He2, B. Li1, M.M. Nentwich1, C. Hariotoglou1, D. Kook1, 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. Tseng1, G. Vizzieri1, B. Luong1, T.C. Prager2, J.M. George1, O.J. Alsheikh1. 1Ophthalmology and Visual Sciences, University of Texas Medical Branch, Galveston, TX; 2Ophthalmology and Visual Science, University of Texas Health Science Center at Houston, Houston, TX.

6683 — D703 Is Topical Ketorolac Tromethamine 0.4% Ophthalmoic Solution Needed for Cataract Surgery? A Randomized Controlled Trial. Flavia G. Tickey1, R.P. Lira, F.R. Zanetti1, M. Machado, G.B. Rodrigues, C.E. Arieta. 1Ophthalmology, UNICAMP, Campinas, Brazil.


6688 — D708 Management Of Vitreal Loss From Posterior Capsular Rupture During Cataract Operation: Posterior Versus Anterior Vitrectomy? Chaerin Park1,2, S. Wool3, J. Hyon4, 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, P.A. Legutko2, M.K. Daly1. 1Ophthalmology, Veterans Affairs Boston Healthcare System, Boston, MA; 2Ophthalmology, Massachusetts Eye and Ear Infirmary, Boston, MA; 3Semphonic, 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. Raipal1, R. Siou-Mermet2, T. Erb3, T.L. Comstock4. 1Cornea Consultants, PC, McLean, VA; 2European Pharmaceutical Clinical Science, Bausch & Lomb, Montpellier, France; 3Biostatistics, 4Medical Affairs, Global Pharmaceutical, Bausch & Lomb, Rochester, NY. *CR

6692 — D712 Effect of Modified Cyclosporine A on Lens Epithelial Cell and Corneal Endothelial Viability. Elizabeth A. Lutz1, D.A. Wilkie2, A.J. Gemenisky-Metzler3, H.L. Chandler4. 2Veterinary Clinical Sciences, 3Optometry, 4The Ohio State University, Columbus, OH.


6694 — D714 Incidence Of Postoperative Complications In Infants Undergoing Bilateral Simultaneous, Bilateral Sequential, Or Unilateral Cataract Surgery. Sheela Masiri1, E. Agabegi4, B. Schnell5, M.B. Yang1, A. Cherrie-Ann M. Mattis1, M. Gonzalez1, N.Z. Gregori4. 5Surgery—Glaucoma Services, 6Visual Sciences, Montefiore Medical Center/Albert Einstein, Bronx, NY. *CR


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


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


6706 — D726 Risk Factors For Developing Capsular Distension Syndrome. Maged Nessim1, P. Pandy2, M. Tahan3, P. Good4, A-J. Gharei5. 1Glaucoma Services, 2Visual Sciences, 3Birmingham & Midland Eye Centre, Birmingham, United Kingdom; 4Sandwell General Hospital, Birmingham, United Kingdom.


6708 — D728 Factors Influencing Retinal Image Contrast in Eyes with Retrductos(Relykjavik Eye Study). Kota Nagai1, N. Mita2, N. Hatusaka2, R. Honda3, H. Osada2, E. Kubo3, H. Sasaki1, K. Sasaki2, F. Jonasson3. 3Ophthalmology, Nagai Eye Clinic, Ibaraki, Japan; 2Department of Ophthalmology, 3Ophthalmology, University of Tokyo, Tokyo, Japan.

6709 — D729 Ultrastructural Changes In The Crystalline Lens Of Diabetic Patients Treated With Panretinal Argon Laser Photocoagulation. Zelilha Yizzar1, M. Kille2, E. Erdenli1, 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, Pediatrics

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. Greenberg2, E. Burstein1, C. Muhkopadhyay3, 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 Ohiuda1, Y. Sugirua1, T. Asano2, T. Hiroto3, M. Sawa1. 3Division of Ophthalmology, Department of Visual Sciences, Nihon University School of Medicine, Tokyo, Japan; 4Biophotonics Section, Research & Development Department, Electronics & Optics Division, Kowa Company Ltd., Tokyo, Japan.


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

Travel Grant Awardee


6719 – D739 Resident Cataract Surgery Outcomes with Toric Intraocular Lenses. Helen R. Moreira1,*, P.B. Greenberg, MD1,*. Division of Ophthalmology, *Section of Ophthalmology, Providence Veterans Affairs Medical Center, Providence, RI. *CR


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, J. Hernandez, S. Yoo, J-M. Parel. Biophysics Center, Dept. of Ophthalmology, Hospital de Clinicas, University of Buenos Aires, Argentina; *CR


6725 – D745 Validity of a Miniaturised Open-field Aberrometer with Surgical Application. James S. Wolfssohn,*, U.K. Bhalt, A.L. Sheppard;*, S. Shah;*, H. Du;*, T. Mihashi;*, T. Tamaguchi;*, 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

6726 – D746 Technical Requirements For Adapting A Corneal Femtosecond Laser Workstation To Perform A Lenticular Capsulotomy. Michael Brownell1,*, H. Fu2,*, J. Hill2,*, P. De Guzman1,*, Z. Hor2,*, S. Schanzlin1,*. Medical Physics, University of Heidelberg, Heidelberg, Germany; 2Physics, University of Heidelberg, Mannheim, Germany; 3Aaren Scientific Inc, Ontario, CA; 4R&D, Aaren Scientific Inc, Irvine, CA; 5Shiley Eye Center, UCSD, San Diego, CA. *CR

6727 – D747 In Situ Modification of Customized IOLs using the Phase Wrapping Algorithm. Ruth Sahler1,*, J.F. Bille1,*, R. Anguera2, S. Zhou1,*, D. Schanzlin1,*. Medical Physics, University of Heidelberg, Heidelberg, Germany; 2Physics, University of Heidelberg, Mannheim, Germany; 3Aaren Scientific Inc, Ontario, CA; 4R&D, Aaren Scientific Inc, Irvine, CA; 5Shiley Eye Center, UCSD, San Diego, CA. *CR


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

6730 – D750 A Comparison of the Cataract Extraction Operative Times When Using a Posterior Chamber Monofocal Versus Toric Intraocular Lens as Performed by Resident Surgeons. Solomon W. Ross1,*, B.A. Katz2,*, B.B. Markowitz2,*. Ophthalmology, University of South Carolina, Columbia, SC; 3Ophthalmology, University of South Carolina, Irmo, SC.


6737 – D757 Fluctuations in Corneal Curvature Limits Predictability of IOL Power Calculations. Sverker Norrby1,*, N. Hirnschall2,*, Y. Nishi1,*, O. Findt1,*. Pulab, Leek, The Netherlands; 2Moorfields Eye Hospital, London, United Kingdom; 3Moorfields Eye Hospital, London, United Kingdom. *CR


6739 – D759 Determining Femtosecond Laser Parameters for Clear Corneal Incisions. Roger F. Steinert1, P.S. Binder1,*, B. Gray1,*, Z. Bor2,*, M. Brownell1,*, J. Martiz2,*, A. Gwon2,*, J. Hill2,*, L.G. Vargas2,*. Ophthalmology, Gavin Herbert Eye Institute, Irvine, CA; 3Biological Sciences, Abbott Medical Optics, Santa Ana, CA. *CR

6740 – D760 Complication Rate and Corneal Endothelial Impact in Phacoemulsification Performed by Ophthalmology Residents at an Argentinian University Hospital. Enrique L. Nebot, Sr1,*, P.R. Ruiséhov Vazquez2,*, L. Fernández Abuyé1,*, H. Fernández Mendy2,*, J.D. Galletti2,*, P. Chiaradía1,*, J.G. Galletti1,*, 1Ophthalmology, Hospital de Clinicas, University of Buenos Aires, Buenos Aires, Argentina; 2ECOS (Clinical Ocular Studies) Laboratory, Buenos Aires, Argentina.


6742 – D762 Comparison Between Objective And Subjective Assessment Of The Duration Of Cataract Surgery. Brivaël Le Du1,*, C. Temestr1,*, P-R. Rothschild2,*, O. Rostaquin2,*, J-B. Daumín1,*, D. Monnet, Sr1,*, S. Grabar1,*, A.P. Brevin, Sr1,*. *Hospital Eye Clinic, *Biostatistics and epidemiology, *Cochin Hospital, Paris, France.
554 Oculoplastics III

Moderator: Francisco H Andrade

6743 — D763 The Benefits of Ptosis Surgery. Richard A. Harrad1,2, F. Kalapesi1, H. Garrott1, H. Herbert1, H. Richards1, L. Jenkinson1, N. Rumsey2. 1Ophthalmology, Bristol Eye Hospital, Bristol, United Kingdom; 2Psychology, University of the West of England, Bristol, United Kingdom.

6744 — D764 Incidence of Deprivation Amblyopia and Systemic Associations in Congenital Ptosis. August L. Stein1, A.H. Weiss2, Congenital Ptosis. Amanda B. Salter1, Y. Enzer1, B. Aswad1, M. Chaump1. 1Ophthalmology, Oculoplastics; 2Pathology, Brown University, Providence, RI.


6748 — D768 Characterization of Adrenergic Receptor Subtype Gene Expression in Human Muller’s Muscle using Laser-Capture Microdissection and Quantitative Polymerase Chain Reaction. Joshua H. Hou1, R. Singo1, S.J. Green2, S. Jain1, V.K. Aakalu, P. Setabutr1. 1Ophthalmology & Visual Sciences, Univ of Illinois Eye & Ear Infirmary, Chicago, IL; 2DNA Services Facility, Univ of Illinois at Chicago, Chicago, IL.


6750 — D770 Outcomes And Complications Of Eyelid Gold Weight Implantation For Facial Paralysis. Preeti J. Thyparampil1, S. Lee2, M. Yen1. 1Ophthalmology, Baylor College of Medicine, Houston, TX; 2Ophthalmology, Cullen Eye Institute, Houston, TX.

6751 — D771 Modified Frontalis Sling with Lash Repositioning in Pediatric Ptosis Repair. Jacqueline K. Ng, J. Ng. Ophthalmology, Oregon Health and Science University, Portland, OR.

6752 — D772 Propranolol and Infantile Hemangioma: A Proposed Treatment Protocol. Margaret E. Phillips, J.C. Fleming. ophthalmology, University of Tennessee, Hamilton Eye Institute, Memphis, TN.

6753 — D773 Curled Lashes are Associated with Obstructive Sleep Apnea. Cara W. Snyder, Y. Enzer. Ophthalmology, Brown University, Providence, RI.

6754 — D774 Soft Tissue Periurethra Of The Lacrimal Gland: A Case Report. Amanda B. Salter1, Y. Enzer1, B. Aswad1, M. Chaump1. 1Ophthalmology, Oculoplastics; 2Pathology, Brown University, Providence, RI.


6756 — D776 Intraoperative Mitomycin C To Retard Future Cicatrix Formation During Severe Cicatricial Lid Retraction Repair. Renelle Pointdujoub1, J. Gutman1, J. Calderon1, P. Langer2, R. Shinder1. 1Ophthalmology, SUNY Downstate Medical Center, Brooklyn, NY; 2Ophthalmology, University of Medicine & Dentistry of New Jersey, Newark, NJ.

6757 — D777 Repair of pediatric canalicular lacerations using monocanicular Monoka stent. Scott W. Yeates, F. Orge. Ophthalmology, Univ Hosp Case Western Med Ctr, Cleveland, OH.

6758 — D778 Method for Measuring Lacrimal Drainage Resistance. Milap Mehta1, J.D. Perry2. 1Ophthalmology, Cleveland Clinic-Cole Eye Inst, Cleveland, OH; 2Ophthalmology, Cole Eye Institute, Cleveland, OH.


6760 — D780 Catheter Assisted Conjunctivodacryostenosis (CDCR) for Improved Surgical Efficiency. Charlene H. Crockett, S. Lee, M.T. Yen. Department of Ophthalmology, Baylor College of Medicine, Cullen Eye Institute, Houston, TX.

6761 — D781 Retrospective Review Of Records From A School Based Vision Clinic Serving The Chicago Community. Sandra S. Block, M. Suckow, S. Reed. School-Based Vision Clinic, Illinois College of Optometry, Chicago, IL.


6763 — D783 Outcomes Associated with Cataract Surgery in the Pediatric Medicaid Population. Michelle Tarver1, M.K. Replka1, H. Silverman1, R. Domurat2, N. Nordie1, T. Macurdy1. 1CDRH/ODE/DONED, Food and Drug Administration, Silver Spring, MD; 2Ophthalmology, Johns Hopkins Wilmer Eye Inst, Baltimore, MD; 3Acumen, LLC, Burlington, CA.

6764 — D784 Visual Signs And Symptoms Of Brain Tumours In Children. Maria L. Salvetat1, C. Stocco1, M. Zeppi1, F. Miai2, E. Passone3, M. Felletti4, C. Pilotto5, P. Brusini5. 1Ophthalmology, 2Pediatrics, 3Santa Maria della Misericordia Hospital, Udine, Italy.

6765 — D785 Coagulopathy and Retinal Hemorrhage in Pediatric Head Trauma. Aida Bounama1,2, B.J. Forbes1,2, C.W. Christian3,4, J. Huang1, G-S. Ying1, K.E. Romero1, J.P. Antigua1, G. Binenbaum1. 1Ophthalmology, 2Pediatrics, 3University of Pennsylvania Perelman School of Medicine, Philadelphia, PA; 4Ophthalmology, 5Pediatrics, 6Children’s Hospital of Philadelphia, Philadelphia, PA; 7Pediatrics, University of California San Diego, San Diego, CA.

6766 — D786 Evolution Of Axial Length In Congenital Glaucoma. Bruno Sautiere1, A. Duhamel1, A. Gallet2, J-F. Rouland1. 1Ophthalmology; 2Anesthesiology, 3Hiruzie Hospital, CHRU Lille, Lille, France; 4Biostatistics unit, CHRU Lille, Lille, France.

6767 — D787 Central Corneal Thickness and Intraocular Pressure in Moderate-Late Premature School Aged Children. Lina H. Raffa1, J. Dahlgren2, A-K. Karlsson1, M.A. Gronlund1. 1Department of Ophthalmology, Institute of Neuroscience and Physiology, Gothenburg, Sweden; 2Department of Pediatrics, Institute of Clinical Sciences,The Sahlgrenska Academy at the University of Gothenburg, Gothenburg, Sweden; 3Department of Ophthalmology, Institute of Neuroscience and Physiology, Gothenburg, Sweden.

6783 — D803 Barriers to Care Following Failure of Population Based Vision Screening. Kristin Raray, A. Summers, J. Vaughan, L. Reznick. Pediatric Ophthalmology, Casey Eye Institute, Portland, OR.

Hall B/C  
D948-D986
Thursday, May 10, 2012, 11:15 AM-1:00 PM
Cornea

556 Corneal Biomechanics II

Moderator: Cynthia J Roberts

6784 — D948 Corneal Biomechanical Properties and their Change with Conical UV-Riboflavin Cross-linking from 2D Flap-Extensionmetry. Sabine Klingt, H.S. Ginis1, 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 Rubinfeld1, W. Trattler2*. 1Department of Ophthalmology, University of Colorado, Aurora, CO. 2Cornea Associates of Texas, Dallas, TX; 3Miami, FL; 4Cornea Associates of Texas, Dallas, TX; 5Chicago, IL; 6Cleveland Eye Clinic, Cleveland, OH; 7University of Colorado, Aurora, CO.
Thursday – Posters – 6788 – 6817

6788 — D952 Lack Of Influence Of Corneal Thickness On Biomechanical Waveforms And How That Impact In Distinguishing Candidates For Lasik Or Prk. Marcey R. Sanhiago1,2, R. Ambrosio, Jr.,3, W.J. Dupp, Jr.,4, D. Smadja1, E.M. Espana1, S.E. Wilson5,6, Ophthalmology, Cleveland Clinic Foundation, Cleveland, OH; 7Ophthalmology, University of Sao Paulo and Rio Laser, Sao Paulo and Rio de Janeiro, Brazil; 3Ophthalmology, Instituto de Olhos Renato Ambrosio, Rio de Janeiro, Brazil; 4Cole Eye Inst and Lerner Rsch Inst, 5Cole Eye Institute, Cleveland Clinic, Cleveland, OH; 6Ophthalmology, Cole Eye Institute, Cleveland, OH.


6791 — D955 An Experimental Evaluation Of Know Computer Models Of The Porcine Cornea. Vito Romano1, M. Angellil1, A. Pandolf1. 2Second University of Naples, Napoli, Italy; 3University of Salerno, Salerno, Italy; 4Politecnico of Milan, Milano, Italy.

6792 — D956 Automated Measurement of Corneal Stromal Collagen Fiber Angular Distribution. Moritz Winkler1, K.R. Haxhir1, C.J. Murphy1, D.J. Brown1, J.V. Jester1. 2Ophthalmology, University of California, Irvine, Irvine, CA; 3Flaum Eye Institute, University of Rochester, Rochester, NY; 4Surgical Radiol Sci-Sch of Veterinary, Univ of California-Davis, Davis, CA.

6793 — D957 Biomechanical Response of Paired Donor Corneas To An Air Puff: Isolated Corneas vs Intact Whole Cornea. Kimberly Metzler1, A.M. Mahmoud2, J. Lui2,3, D. Lee1, S.J. Shiao1, C.J. Roberts4,5. 4Biomedical Engineering, 5Ophthalmology, 2College of Medicine, 1The 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. Huang1, B. Goldhagen1, A.N. Kuo2, N.A. Afshari2. 1Ophthalmology, Vanderbilt University, Nashville, TN; 2Ophthalmology, Duke University Eye Center, Durham, NC.


6800 — D964 In Vivo Corneal Elasticity Changes After Collagen Cross-linking Using Supersonic Shear Wave Imaging, David Toublot1, T. Nguyen2, J. Aubry2, J. Gennisson1, M. Tanter1, J. Bercov2, J. Colin1, 1CHU de Bordeaux, Bordeaux, France; 2Institut Langevin - espri, Paris, France; 3SuperSonic Imagine, Aix-en-Provence, France.

6801 — D965 Natural history of Intacs in keratoconus and corneal ectasia, Jasmin R. Desai1, P.S. Hersh1. 1Ophthalmology, Cornea 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.

6803 — D967 Biomechanical Modeling of the Applanation Tonometry after Refractive Surgery, Svetlana M. Bauer1, L.A. Karamshina1, A.B. Kachanov2, 1ECOS (Clinical Ocular Studies) Laboratory, Buenos Aires, Argentina; 2Ophthalmology, Cole Eye Inst and Lerner Rsch Inst, Cleveland Clinic, Cleveland, OH; 3ECOS (Clinical Ocular Studies) Laboratory, Buenos Aires, Argentina. *CR

6804 — D968 To Evaluate The Efficacy Of Riboflavin As A Cyto-Protectant For Limbal Epithelial Cells Exposed To UV-A Radiation. Debashish Das1, D. Kamesh2, S. Morali3, A.A. Vincent4, R. Shetty5, H. Matalia6. 1Stem Cell Research Lab, 2Cornea and Refractive Surgery, 3Narayana Nethralaya Post Grad Inst of Ophthalmolm, Bangalore, India. *CR

6805 — D969 Implications of New Absorption and Fluorescence Measurements of Riboflavin for Corneal Cross-linking, Pavel Kamaev5,6, R. Pertaub1, M. Friedman1, D. Muller1. 1Research, 1Avedro, Waltham, MA. *CR

6806 — D970 Ultrasound-enhanced Penetration of Topical Riboflavin into the Corneal Stroma. Ricardo Lamy1, E. Chan1, H. Zhang2, V. Salgaonkar3, C.J. Diederich4, J.M. Stewart5, 4Photophysics, 5Radiation/Oncology, 1University 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. *CR

6809 — D973 Treatment of Keratoconus Using Collagen Cross-linking, Vincent Imbrogno, M. Pihlblad. Ophthalmology, University at Buffalo/ Ross Eye Institute, Buffalo, NY.


6813 — D977 Rapid Collagen Photo-crosslinking Method to Increase Cornea Mechanical Strength. Irene E. Kocheva1, D. Cherfar2, T.E. Gisel3, E.E. Verter3, R.W. Redmond4, S. Melki5. 1Wellman Center for Photomedicine, Massachusetts General Hospital, Boston, MA; 2Medical Sciences Program, Boston University, Boston, MA; 3Boston Eye Group, Boston, MA. *CR


6816 — D980 Model Of Corneal Cross-linking Photochemical Kinetics With Riboflavin. David Muller, P. Kamaev, M.D. Friedman, E. Sherr. Avedro, Waltham, MA. *CR

6817 — D981 Contralateral Eye Long-term Follow-up Of Prophylactic High-fluence Collagen Cross-linking Combined With Lasik For High Myopia, Kathy M. Treat, S.L. Wang, A.J. Kanellopoulos1, 2New York University School of Medicine, New York, NY; 3Laservision.gr Institute, Athens, Greece.

*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
11:15 am – 1:00 pm

6818 – 6842 – Thursday – Posters

Hall B/C  D1153-D1196
Thursday, May 10, 2012, 11:15 AM-1:00 PM

Physiology & Pharmacology

557 Blood Flow

Moderator: Leopold Schmetterer

6823 – D1153  Coronary And Retinal Reactivity To Hyperoxia In Prediabetes And Type 2 Diabetes. Mary E. Lotti1A, B. Smith1A, J.E. Slocumb1B, V. Shikhvarka1B, K. Bettermann1A. Heart and Vascular Institute, 1Neurology, 1Penn State Milton S Hershey Med Ctr, Hershey, PA.


6825 — D1155  The Diameter Response To L-lactate And The Prostaglandin Analogue U46619 Is Different In Porcine Retinal Arterioles And Capillaries In Vitro. Simon M. Pedersen, T. Bek. Dept of Ophthalmology, Aarhus University Hospital, Aarhus, Denmark.

6826 — D1156  Effect of Nitric Oxide Inhalation on Retinal Arteriolar Diameter in Minipigs. Ioannis K. Petropoulos1A, A.L. Martin1B, G. Mangiort1A, E. Mendrinos1A, P.C. Rimensberger1B, C.J. Pournaras1B. 1Laboratory of Neurobiology and Physiology of the Retinal Circulation, Department of Ophthalmology, 1Department of Pediatrics, 1Geneva University Hospitals, Geneva, Switzerland.


6828 — D1158  Measurement of retinal blood flow using dual beam bi-directional Fourier domain Doppler OCT - comparison with laser Doppler velocimetry. Rene M. Werkmeister1A, N. Dragostinoff1A, S. Palkovits1A, R. Told1A, L. Schmetterer1A. 1Med Physics and Biomed Eng, 1Clinical Pharmacology, 1Center for Medical Physics and Biomedical Engineering, 1Medical University of Vienna, Vienna, Austria.

6829 — D1159  Role of Endothelin-1 in Optic Nerve Head Blood Flow Regulation during Isometric Exercise in Healthy Humans. Agnes Boltz1A, D. Schmidl1A, M. Lasta1A, S. Kaya1A, S. Palkovits1A, R. Told1A, G. Fuchsjaeger-Mayrl1A, 1O. 1Ophthalmology, University of Vienna, Vienna, Austria.


6831 — D1161  In Vivo Adaptive Optics Imaging Of Retinal Pericytes And Capillary Blood Velocity In Mice. Jesse B. Schallek1A, Y. Geng1A, B.D. Williams1A, 1Center for Visual Science, 1The Institute of Optics, 1Flaum Eye Institute, University of Rochester, Rochester, NY. 1CR

6832 — D1162  Changes in Choroidal and Optic Nerve Head Blood Flow Regulation During an Experimental Increase in Ocular Perfusion Pressure. Doreen Schmidt1A, A. Boltz1A, S. Kaya1A, R.M. Werkmeister1A, N. Dragostinoff1A, M. Lasta1A, E. Polska1A, G. Garhofer1A, L. Schmetterer1A,1B. 1Department of Clinical Pharmacology, 1Center for Medical Physics and Biomedical Engineering, 1Department of Ophthalmology and Pharmacology, 1Medical University of Vienna, Vienna, Austria.

6833 — D1163  Retinal Blood Flow In Healthy Young Subjects. Gerhard Garhofer1A, L. Schmetterer1A,1B. 1Department of Clinical Pharmacology, 1Biomed Engineering & Physics, 1Medical University of Vienna, Vienna, Austria.

6834 — D1164  Hemodynamic and Hemodynamic Response of Conjunctival Microcirculation to Acute Hypotension in Rabbits. Bruce I. Gaynes1, P-Y. Teng1, J.M. Wanek1, M. Shahidi1. 1Ophthalmology, Loyola University Medical Chicago, Maywood, IL; 1Ophthalmology and Visual Sciences, University of Illinois, Chicago, IL.

6835 — D1165  Evaluation Of Retinal Vasomotor Reactivity During Changes In Arterial Blood Oxygen Content. Helene Kergoat, C. Dutrisac, J.F. Lovasik. School of Optometry, University Montreal, Montreal, QC, Canada.

6836 — D1166  Effect Of Breathing Pure Oxygen And A Mixture Of 92% O2 + 8% CO2 On Flicker Induced Vasodilatation. Stefan Palkovits1A, M. Lasta1A, R. Told1A, G. Garhofer1A, L. Schmetterer1A1B, 1Clinical Pharmacology, 1Center for Medical Physics and Biomedical Engineering, 1Medical University of Vienna, Vienna, Austria.

6837 — D1167  Quantitative Choroidal Blood Flow Measurement Using Doppler Optical Coherence Tomography With Pulse Synchronization. Masahiro Miura1A, S. Makita1A, T. Iwasaki1A, Y. Yasuno1A. 1Dept of Ophthalmology, Tokyo Med Univ, Ibaraki Med Ctr, Inashiki, Japan; 1Computational Optics Group, University of Tsukuba, Tsukuba, Japan. 1CR


6839 — D1169  Bloodflow Regulation In The Optic Nerve Head During Prolonged Elevation Of The Intraocular Pressure. John V. Lovasik1A, H. Kergoat1A, M. Parent1A, M.G. Quigley1A. 1School of Optometry, University of Montreal, Montreal, QC, Canada; 1Department of Ophthalmology, McGill Univ/Univ of Montreal, Montreal, QC, Canada.


6842 — D1172  Basal Blood Flow And Autoregulation Changes Within the Optic Nerve Head Of Rhesus Monkey With Idiopathic Bilateral Optic Atrophy. Chelsea Piper1A, B Fortune1A, G. Cull1A, C.F. Burgoyne1A, C.A. Cioffi1A, L. Wang1A. 1Optic Nerve Head Research Lab, 1Optical-Discoveries in Sight, 1Deves Eye Institute, Portland, OR; 1Deves Institute, Legacy Health, Portland, OR; 1Deves Eye Institute, Legacy Research Institute, Portland, OR. 1CR
6843 — D1173 Innervation Pattern Of NG2 Positive Pericytes In The Rat Choroid. Herbert A. Reitsamer1A, A. Trost4, B. Bogner4, C. Strohmair-Devers, C. Runge4, G. Grabner4, L. Aigner4, F. Schroedl4,5A. 1Ophthalmology, University of Dresden, Dresden, Germany; 2Department of Ophthalmology, University Hospital Carl Gustav Carus, Dresden, Germany; 3Paracelsus University Salzburg, Salzburg, Austria.

6844 — D1174 Retinal Arteriolar Reactivity Response Characteristics Assessed Using a Sinusoidal Hyperoxic Provocation. Richard W. Cheng4, J.A. Fisher1, J. Duffin1, J.G. Flanagan1, T. Wong1, M. Jong4, S.R. Patel1, A. Adlemann4, C. Hudson4. 1Physiology, 2Ophthalmology and Vision Sciences, University of Toronto, Toronto, ON, Canada; 3Department of Ophthalmal & Vision Sci, Univ of Toronto,Toronto Western Hosp, Toronto, ON, Canada; 4School of Optometry, University of Waterloo, Waterloo, ON, Canada.

6845 — D1175 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. Potts1, L. Kuo1, W. Xu2, T.W. Hein3. 1BTM, Texas A&M Health Science Ctr, Temple, TX; 2Surgery, Scott & White Memorial Hospital, Temple, TX.

6846 — D1176 Correlation Of Retinitis Pigmentosa Disease Stage With Orbital Color Doppler Imaging. Amani S. Albakri, E. Al-Shahwan, S.R. Nowilaty. Vitreoretinal Division, King Khaled Eye Specialist Hospital, P.O Box 7191, Riyadh 11462, Saudi Arabia.

6847 — D1177 Theoretical Analysis Of Myogenic And Metabolic Responses In Retinal Blood Flow Autoregulation. Julia Arciero1, A. Pickrell1, B. Siesky1, A. Harris1. 1Mathematics, Indiana University-Purdue University Indianapolis, Indianapolis, IN; 2St. George’s University School of Medicine Grenada West Indies, Great River, NY; 3Ophthalmology, Indiana University School of Medicine, Indianapolis, IN.


6856 — D1186 Intracocular Vascular Communication Through Collateral Vessels In An Experimental Pig Model. Hakan Moren1, B. Gesslein1, P. Undren1, S. Andreasson1, M. Malmqvist1. 1Ophthalmology, Retinal Vascular Research, Lund University, Lund, Sweden; 2Department of Neuroradiology, Skåne University Hospital, Lund, Sweden.

6857 — D1187 Dorzolamide-induced Vasorelaxation of Porcine Ciliary Arteries Is Mediated by Nitric Oxide, Sidse Krøgelholt1, U. Simonsson2, T. Beck1. 1Department of Ophthalmology, Aarhus University Hospital, Aarhus C, Denmark; 2Department of Biomedicine, Aarhus University, Aarhus C, Denmark.


6859 — D1189 Relationship between Subfoveal Choroidal Thickness and Choroidal Circulation in Response to Increased Systemic Blood Pressure Induced by Cold Pressure Test. Kenji Sogawa1, T. Nagaoaka1, T. Tani1, T. Tanano1, T. Omae1, A. Yoshida1. 1Ophthalmology, Asahikawa Medical University, Asahikawa, Japan; 2Ophthalmology, Asahikawa Medical College, Asahikawa, Japan.

6860 — D1190 Retinal Blood Flow Velocity in Patients with Active Uveitis Using the RFI. Sanjay R. Kedar1, X. Feng1, R.B. Rosen1, C. Samson1. 1Ophthalmology, New York Eye & Ear Infirmary, New York, NY; 2Ophthalmology, Beijing Tongren Eye Center, Beijing, China.

6861 — D1191 Time of Collapse of Spontaneous Venous Pulsation. Fabrice Moret1, W.A. Lagrèe2, C.M. Poloschek1, M. Bach3. 1Sect. Visual Function and Electrophysiology, 2Sect. Neuroophthalmology, 3Eye Hospital, University of Freiburg, Freiburg, Germany.

6862 — D1192 Manometric Investigation Of The Relationship Between Pulsatile Ocular Blood Flow And Intracocular Pressure In Living Human Eyes. Nikolaos Karyotakis1, H.S. Ginis1, A.I. Dastiridou1, M.K. Tsilimbaris1, I.G. Pallikaris1. 1Medicine School, University Of Crete, Heraklion, Greece; 2Institute of Vision & Optics, 3Ophthalmology-Research Acct, University Of Crete, Heraklion, Greece; 4Medicine School, University Of Larisa, Larisa, Greece; 5School Of Medicine, University Of Crete, Heraklion - Crete, Greece.


6864 — D1194 Optic Nerve Head Capillaries Blood Oxygenation Following Dynamic Exercise In Human. Vasile Diaconu, P. Sauvageau, V. Vucea. Ecole D’optometrie, University of Montreal, Montreal, QC, Canada.

6865 — D1195 Age Effects on Retinal Blood Flow Assessed Using Spectral-Domain Optical Coherence Tomography Doppler. Firdaus Yusof2, F. Tayari3, J.G. Flanagan1, C. Hudson2,3. 1School of Optometry and Vision Sciences, University of Waterloo, Waterloo, ON, Canada; 2Department of Optometry and Vision Science, International Islamic University of Malaysia, Bandar Indera Mahkota, Kuantan, Malaysia; 3Department of Ophthalmology and Vision Sciences, University of Toronto, Toronto, ON, Canada.

6866 — D1196 Effect Of Slow Releasing Hydrogen Sulphide Donor GY4137 On Isolated Bovine Ciliary Artery. Madhura S. Kulkarni1, A.P. Pharmaceutica Sciences, BProvost/Academic Affairs, 1Texas Southern University, Houston, TX; 2Pharmacy Sciences, Creighton University, Omaha, NE; 3University 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
6867 — 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. Vasilli Poulaki1, S. Chew1, B. He2, V. Eedourri1, D. Bedoya3, M.J. Jager4, B.W. O'Malley5, N. Mitsiades3. 1Ophthalmology, VA Boston Healthcare System, Boston University, Boston, MA; 2Medicine/Molecular and Cellular Biology, 3Molecular and Cellular Biology, 5Department of Ophthalmology, 4Baylor 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 Propranolol after Delivery with a Gel-forming Solution. Michael B. Yang1,2, R. Jia1,2, H. Liu1,2, S. Li2. 1Abrahamson Pediatric Eye Institute/ Ophthalmology, Cincinnati Children's Hospital, College of Medicine, 2Division of Pharmaceutical Sciences/Winkle College of Pharmacy, University of Cincinnati, Cincinnati, OH. *CR


6876 — D1206 Therapeutic Efficacy By Targeting Correction Of Notch1-induced Aberrants In Uveal Tumors. Xiaolin Huang1, L. Wang1, H. Zhang, R. Jia1, H. Wang2, X. Zhao2, G. Qian1, A.D. Singh2, S. Ge1. 1Dept of Ophthalmology, 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 Gαs. Timothy W. Corson, K. Sishtha. Glick Eye Institute, Department of Ophthalmology, Indiana University School of Medicine, Indianapolis, IN.

Florian BCD
Thursday, May 10, 2012, 1:15 PM-3:00 PM
Cornea

560 Corneal Biomechanics III

Moderators: Jodhbir S Mehta and James V Jester

6891 — 2:45 Cell Death in rd2/rds Retina: An Apoptotic Process? Francoise Paquet-Durand1, S. Bernhard-Kurz2, B. Arango-Gonzalez1, E. Zrenner2, M. Ueffing1. 1Experimental Ophthalmology, Institute for Ophthalmic Research, Tuebingen, Germany; 2Experimental Ophthalmology, 3Institute for Ophthalmic Research, 3Centre for Ophthalmology, Tuebingen, Germany; 4Institute for Ophthalmic Research, University Eye Hospital, Tuebingen, Germany.

6897 — 2:30 Quantification of Changes in Optical Properties of Corneas with Stress In Vitro. Ashutosh Richhariya1, V.S. Sangwan2, S. Punjabi3, G. Yoon1,2, 4Fraun Eye Institute, 3The Institute of Optics, 4University of Rochester, Rochester, NY; 5Cornea & Ocular Immunology, LV Prasad Eye Institute, Hyderabad, India; 6Mechanical Engineering, Uijjain Engineering College, Ujjain, India.

6898 — 2:45 Fibrin Glue Provides Structural Rigidity And Inhibits Folding Propensity of Descemet’s Membrane. Shyam S Chaurasia1, R. Champakalakshmi1, R. Pohl2, X.W. Tan3, D.T. Tan4, J.S. Mehta1. 1Tissue Engineering and Stem Cell Group, Singapore Eye Research Inst, Singapore, Singapore; 2Ophthalmology, Singapore National Eye Centre, Singapore, Singapore; 3Cornea Refractive Tissue Engineering, SNEC / SERI, Singapore; 4Cornea, Ophthalmology, University of Oklahoma, Oklahoma City, OK.

Room 114
Thursday, May 10, 2012, 1:15 PM-3:00 PM

Immunology & Microbiology / Cornea / Retina / Retinal Cell Biology

561 Inflammatory Tissue Damage and Immunoregulation

Moderators: Justine R Smith and Henry J Kaplan

6899 — 1:15 Corneal Transplant Rejection In Nhim Miniature Swine Is Associated With Donor-recipient Mismatches In A Region Containing The Homologue Of The Mouse Zfp106 Gene. Theodora Chou1,2,3,4,5, Jun Chen, R. Horai, P. Silver. 1Institute for Genomic Medicine and Shiley Eye Center, University of California, San Diego, La Jolla, CA.

Thursday – Papers – 6885 – 6901

1:15 pm – 3:00 pm Thursday Papers

* CR — Travel Grant Awardee

Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures — Refer to Program Number in the Clinical Trial (CT) Registration Index — 411
6902 — 2:00 Different Subsets Of Tumor-infiltrating Lymphocytes Correlate With Macrophage Influx And Monosomy 3 In Uveal Melanoma. Inge H. Brunkhorst1, T. Vu1, E.S. Jordanova1, G.P. Layton1, S.H. van der Burg2, M.J. Jager. 1Ophthalmology, 2Pathology, 3Clinical Oncology, University Medical Center, Leiden, The Netherlands; 4Ophthalmology, Leiden University Medical Center, Leiden, The Netherlands.

6903 — 2:15 IL-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. Nicholson1A, A.D. Dick1B.


6905 — 2:45 Decreased Interleukin-27 Expression is Associated with Active Uveitis in Behcet’s Disease. Peizeng Yang1, C. Wang1, Y. Tian2, Z. Ye3, A. Kijlstra2. 1Ophthalm, The 1st Hosp, Chongqing Medical University, Chongqing, China; 2Ophthal, University Hospital Maastricht, Maastricht, NL; 3Ophthalmology, Leiden University Medical Center, Leiden, The Netherlands.


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. Dawes2.

6911 — 2:30 Cataract EPHA2 SAM Domain Mutations Alter Receptor Stability and Function. Jeong Eun Park1, A.I. Son1, R. Hua1, 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-pel Nanoparticle For Prevention Of Posterior Capsular Opacification. Aditya Konar1, R. Guha1, S. Chowdhary1, H. Palai1, M. Mishra1, G.K. Venuganti1, S. Basak1, T.K. Mandal1, S. Hazra2. 1IIICB, Kolkata, India; 2Veterinary Surgery & Radiology, Veterinary Pharmacology & Toxicology, West Bengal University of Animal & Fishery Sciences, Kolkata, India; 3Dean, School of Medical Sciences, University of Hyderabad, Hyderabad, India; 4Eye Bank, Disha Eye Hospital, Barrackpore, India.

6913 — 1:15 Light Adaptation At Distinct Intensity Levels within the Photopic Regime. Alexandra Tidijii-Hamburyan, T.A. Münch. Centre for Integrative Neuroscience, University Tuebingen, Tuebingen, Germany.

6914 — 1:30 What Information Does The Eye Send To The Brain? Recording The Entire Visual Output At A Single Retinal Location. Tom Bader1, P. Berens1, M. Bethge1, T. Eiler1. 1BCCN / CIN, 2BCCN / CIN / MPI, University of Tuebingen, Tuebingen, 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 NMBA 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; 2Ophthalmology & Visual Sciences, Yale University, New Haven, CT.


Room 305
Thursday, May 10, 2012, 1:15 PM-3:00 PM

562 Signaling and PCO

Moderators: John W McAvoy and Alec Cvekl

563 Ganglion Cells: Types, Modulation and Development

Moderators: Maureen McCall and William R Taylor

564 Myopia IV: Clinics

Moderators: Thomas T Norton and Jane E Gwiazda

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

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. Yazari1, C. Pennelli1, J. Mountain2, T.L. Young2, A.W. Hewitt2, D.A. Mackey1, F.K. Chen1, 2Lions Eye Institute, 3Telethon Institute for Child Health Research, 4University of Western Australia, Perth, Australia; 2Ophthalmology, Duke University Eye Center, Durham, NC; 3Department of Ophthalmology, Centre for Eye Research Australia, Surrey Hills, Australia.

Eyes Affected by Choroidal Neovascularization. 2:15

By Orthokeratology. Accommodation In Childr

Choroidal Changes in Myopic Eyes Affected by Choroidal Neovascularization. Mario R. Romano1, M. Rinaldi2, F. Chiosi3, E. dell’Omo2, F. Parmeggiani4, F. Semeraro5.

Long Term Evaluation of the Visual Prognosis in Patients Treated With Dexamethasone Intravitreal Implant (Ozurdex) for Macular Edema Due to Retinal Vein Occlusion. Elad Moisseiev1, M. Goldstein2, M. Waisbord3, A. Barak4, A. Loewenstein5.

Peripheral Refraction During Accommodation In Children Treated By Orthokeratology. Zhi Chen, X. Zhou.

Association of Paired Box 6 gene with High Myopia in Japanese. Masahiro Miyake1, K. Yamashiro1, H. Nakashii1, H. Hayashi1, I. Nakata1, Y. Akagi-Kurashige1, A. Tsujikawa1, K. Ohno-Matsui1, M. Mochizuki1, N. Yoshimura1.


6938 — 2:15 Prevalence of Functional Low Vision and Need for Annualized Eye Evaluation in Adult Malays and Indians Living in Singapore. Tingfeng Zheng1,2, C-Y. Cheng3, E.L. Lamoureux, III1, P. Chiang1, A. Anuar4, T. Aung5, S-M. Saw1, T.Y. Wong1. 1Singapore Eye Research Institute, Singapore National Eye Centre, Singapore, Singapore; 2State Key Laboratory of Ophthalmology, Zhongshan Ophthalmic Center, Sun Yat-sen University, Guangzhou, China; 3Department of Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore; 4Ophthalmology, University of Melbourne, Melbourne, Australia; 5University of Malaya, Kuala Lumpur, Malaysia; 6Saw Swee Hock School of Public Health, National University of Singapore, Singapore, Singapore; 7Centre for Eye Research Australia, University of Melbourne, Melbourne, Australia; 8University of Melbourne, Melbourne, Australia.

6939 — 2:30 Excess Expenditures, Excess Informal Care Days, and Quality of Life Decrement Associated with Self-Reported Visual Impairment and Blindness. Kevin D. Frick1, L.L. Grover2, E. Wehler3. 1Health Policy and Management, Johns Hopkins Bloomberg Sch of Public Hlth, Baltimore, MD; 2Ophthalmology, Johns Hopkins Univ Wilmer Eye Inst, Baltimore, MD; 3Singapore Eye Research Institute, Singapore National Eye Centre, Singapore, Singapore; 4Ophthalmology, University of Melbourne, Melbourne, Australia; 5University of Toronto, Toronto, ON, Canada; 6University of Malaya Eye Research Centre, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia; 7Saw Swee Hock School of Public Health, National University of Singapore, Singapore, Singapore; 8Centre for Eye Research Australia, University of Melbourne, Melbourne, Australia.

6940 — 2:45 Lack of Government-Insured Annual Eye Examinations Increases The Risk Of Vision Problems Amongst Low-income Elderly. Yaping Jin1, Y.M. Buyu2, J. Xiong2, G.E. Trope3. 1Ophthalmology & Vision Sciences, University of Toronto, Toronto, ON, Canada; 2University of Waterloo, Waterloo, ON, Canada; 3Ophthal/Toronto Western Hosp, University Toronto, Toronto, ON, Canada.

6941 — 1:15 Increased Immune Response Against Ocular Tissue After Immunization With An Optic Nerve Antigen. Stephanie C. Joachim1, O.W. Gramlich1, P. Lasparas2, S. Kuehn3, H.D. von Pein1, B. Dick4, F.H. Grus5. 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. Behrad Garmarsi, J.F. Robertson, A.K. Ball, J.A. West-Mays. 1Department of Ophthalmology, 2Glaucoma Research Unit, Centre for Eye Research Australia, East Melbourne, Australia; 3Ophthalmology, University of Auckland, Auckland, New Zealand; 4Glaucoma Research Unit, Centre for Eye Research Australia, Melbourne, Australia; 5University of Melbourne, Center for Eye Research Australia, Melbourne, Australia.


6944 — 2:00 Overstimulation of TRPV4 in vivo Induces Selective Apoptosis of Retinal Ganglion Cells. An Acute in vivo Experimental Model for Glaucoma. Abbot F Clark1,2, E. Wehler3,4. 1Institute for Health Policy & Management, Johns Hopkins Bloomberg Sch of Public Health, Baltimore, MD; 2Ophthalmology, Johns Hopkins Univ Wilmer Eye Inst, Baltimore, MD; 3Singapore Eye Research Institute, Singapore National Eye Centre, Singapore, Singapore; 4Ophthalmology, University of Melbourne, Melbourne, Australia.

6945 — 2:15 Anti-Connective Tissue Growth Factor Antibody Therapy Combats Expression of Fibrotic Genes in Glaucoma. Deborah M. Wallace1,2, A.F. Clark3, N. Oliver4, J.K. Cream4, C.J. O’Brien4. 1School Medicine & Medical Science, 2School of Biomolecular & Biomedical Science, Conwy Inst., 3University College Dublin, Dublin, Ireland; 4Dept. Of Ophthalmology, Mater Misericordiae University Hospital, Dublin, Ireland; 5Cell Biology & Anatomy, University of North Texas Health Science Center, Ft. Worth, TX; 6FibroGen Inc, San Francisco, CA; 7Ophthalmology, Mater Misericordiae Univ Hospital, Dublin, Ireland; 8School of Medicine and Medical Science, University College Dublin, Ireland. *CR

6946 — 2:30 Crossed Linked Actin Networks are Formed in Human Trabecular Meshwork Cells after treatment with Latrunculin B. Paul Russell1, K. Murphy2, A.J. Wood3, C.T. McKeel4, C.J. Murphy5. 1School of Veterinary Medicine, 2School of Biomedical Engineering, 3School of Medicine and School of Veterinary Medicine, 4University of California Davis, Davis, CA.

6947 — 2:45 Defects In Whole Cell Respiration In POAG Lymphoblasts. Jonathan G. Crowston1, L. Shek2, N.J. Van Berghen3, S. Lee4, V. Chrysostomou5, A.L. Vincent6, I.A. Tronc7. 1Department of Ophthalmology, 2Glaucoma Research Unit, Centre for Eye Research Australia, East Melbourne, Australia; 3Ophthalmology, University of Auckland, Auckland, New Zealand; 4Glaucoma Research Unit, Centre for Eye Research Australia, Melbourne, Australia; 5University of Melbourne, Center for Eye Research Australia, Melbourne, Australia.

6948 — 1:15 Seeing With Subretinal Electronic Implants: Study in Ten Patients With Wireless Implant Alpha-IMS. Eberhart Zrenner1, K-U. Bartz-Schmidt1, F. Gekeler1, U. Greppmaier2, H. Tsigaras1, S. Hippi3, G. Hoerdt-Becker1, C. Kernstock4, A. Kussy2, H. Sachs2, K. Stingl5. 1Institute for Ophthalmic Research, Centre for Ophthalmology, Tuebingen, Germany; 2Retina Implant AG, Reutlingen, Germany; 3Mobility Training, Tuebingen, Germany; 4Semmelweis University, Budapest, Hungary; 5Städtisches Klinikum Dresden-Friedrichstadt, Dresden, Germany. *CR

6949 — 1:30 Cortical Responses to Repetitive Electrical Stimulation of the Retina using Suprachoroidal Visual Prostheses. Sam E. John1, M.N. Shivasanam1, J.B. Falloni1, G. Rathbome1, C.E. Williams1. 1Bionics Institute/Latrobe University, East Melbourne, Australia; 2Bionics Institute, East Melbourne, Australia.

6950 — 1:45 Low Contrast Trip Hazard Avoidance using Simulated Prosthetic Vision. Chris McCarthy1, P. Lieby2, J.G. Walker1. 1Institute for Health Policy & Management, Johns Hopkins Bloomberg Sch of Public Health, Baltimore, MD; 2Bionics Institute/Latrobe University, East Melbourne, Australia.

6951 — 2:00 The influence of visual information on walking behaviour in the Graz Mobility Test. Thomas Georgi1, D. Ivastinovic1, M. Brandner1, R. Hornig1, M. Velikay-Parel1. 1Ophthalmology, Medical University of Graz, Graz, Austria; 2IM Intelligent Medical Implants GmbH, Bonn, Germany.

Grand D
Thursday, May 10, 2012, 1:15 PM-3:00 PM
Glucoma / Anatomy & Pathology
567 Molecular and Cellular Mechanisms

Moderators: Abbot F Clark and Rebecca M Sappington

Grand H
Thursday, May 10, 2012, 1:15 PM-3:00 PM
Retina
568 Retinal Prosthesis II

Moderator: Eberhart Zrenner

*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
Patients blinded by outer retinal dystrophies are able to perceive simultaneous colors using the Argus® II Retinal Prosthesis System. Paulo E. Stanga1,2, J.A. Sahel, Jr.3, L. da Cruz4, F. Hafezi5, F. Merlini6, B. Coley7, R.J. Greenberg8, 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.

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. Eliott7, 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’Ophtalmologie des Quinze-Vingts, Paris, France; 5Manchester Royal Eye Hospital, Manchester, United Kingdom; 6Retina Foundation of the Southwest, Dallas, TX; 7Ophthalmology, Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston, MA; 8University of California, San Francisco School of Medicine, San Francisco, CA; 9Second Sight Medical Products, Sylmar, CA.

An Eye-surface Conformable Retinal Prosthesis using Liquid Crystal Polymers. Joonsoo Jeong1A,1B, S. Lee2, K. Min1A,1B, S. Shin1A,1B, S. Bae3, J-M. Seo1A, H. Chung3, S. Kim1A,1B. 1Electrical Engineering & Computer Science, 2Inter-University Semiconductor Research Center, 1Seoul National University, Seoul, Republic of Korea; 2Department of Neurosurgery, Massachusetts General Hospital, Boston, MA; 3Ophthalmology, Seoul National University Hospital, Seoul, Republic of Korea.