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

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

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### Thursday, May 10

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**Thursday, May 10 • Posters**

### 8:30–10:15am

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<td>521 Stem Cells In Vivo and In Vitro: Fates and Functional Outcomes [RC, NT]</td>
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<td>523 Corneal Endothelium [CO]</td>
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<td>524 Keratoplasty II (Eye Banking, Substrates, Penetrating and Lamellar Grafts, Keratoprosthesis) [CO]</td>
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<td>529 AIDS-Related Ocular Disease [IM, RE,RC]</td>
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<td>531 Inflammation and Infection [PH]</td>
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### 10:15–11:15am: All Posters — authors will be present at poster boards.

**Poster board numbers indicate exhibit hall location:**
A = Hall A; D = Hall D

5574 — 9:45 Spherical Aberration change as a function of pupil size: a comparison between Small Incision Lenticule Extraction (SMILE) and non-linear aspheric LASIK in moderate to high myopia. Dan Z. Reinstein, T.J. Archer, M. Gobbe. London Vision Clinic, London, United Kingdom.*CR

5575 — 10:00 Femtosecond Laser Based Small Incision Lenticule Extraction For Moderate And High Myopia. Jesper Hjortdal, S. Asp, A. Ivarsen, A. Vestergaard. Ophthalmology, Aarhus University Hospital, Aarhus, Denmark. *CR, ²

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, E. Müller1, N. Overlack1, V. Belakhov2, T. Baasov1, U. Wolfrum1. ¹Cell and Matrix Biology, Johannes Gutenberg University of Mainz, Mainz, Germany; ²Edith and Joseph Fischer Enzyme Inhibitors Laboratory, Schullich Faculty of Chemistry, Technion-Israel Institute of Technology, Haifa, Israel.

5577 — 8:45 Gene Therapy For Choroideremia - Initial Report On A New Clinical Trial. Robert E. MacLaren1,2, M. Gropp1, A.R. Barnard1, T. Tolmachova1, M.J. During1, S.M. Downes1, A.J. Lotery1, G.C. Black2, A.R. Webster2, M.C. Seabrain2, 1Nuffield Laboratory of Ophthalmology, University of Oxford, Oxford, United Kingdom; 2Moorfields Eye Hospital NHS Foundation Trust, London, United Kingdom; 3Molecular Medicine, Imperial College London, London, United Kingdom; 4Ohio State University Medical Center, Columbus, OH; 5Oxford Eye Hospital, Oxford University Hospitals NHS Trust, Oxford, United Kingdom; 6Ophthalmology - Eye Unit, Southampton General Hospital, Southampton, United Kingdom; 7Genetic Medicine, University of Manchester, Manchester, United Kingdom; 8UCL Institute of Ophthalmology, London, United Kingdom. *CR, ²

5578 — 9:00 Adenoviral and Lentiviral Vectors for Efficient Gene Transfer to Mouse Retina. Agostina Puppo1, G. Cesì2, D. Palmer2, P. Piccolo3, R.J. Parks1, P. Ng4, N. Brunetti-Pierri1, A. Auricchio1,2. 1TIGEM- 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.


5581 — 9:45 Progeny Of Pronuclear Injections Of Mutant Human Mitochondrial Genes. Hong Ye1, T-H. Chou1, V. Porciattii, W.W. Hauswirth1, V. Chiodo1, S.L. Boye1, J. Guy1. ¹Ophthalmology, Bascom Palmer Eye Inst, Univ of Miami, Miami, FL; 2Bascom Palmer Eye Inst, Univ of Miami Miller Sch Med, Miami, FL; ³Ophthalmology, University of Florida, Gainesville, FL.

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 Roger

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. Peshekov1, E. V. Oshevikaya2, S. Lim3, J.B. Ames4, A.M. Dizhoor. ¹Pennsylvania College of Optometry, Salus University, Elkins Park, PA; ²Department of Chemistry, University of California, Davis, CA.
5584 – 8:45 Alzheimer Retina Pathology in a Novel Animal Model of Neuropathology in Diabetes. Peter Frederikse, R. Kaswala, W. Klein, C. Kastinathan. 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 Rdi Mice By Systemic Treatment With Valproic Acid. Kenneth P. Mitton, E.E. Guzman, D. Byrd, T. Tran, J. Sotzen. Eye Research Institute, Oakland University, Rochester, MI.


5589 – 10:00 Tet3 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 – 10:30 Deletion Of Cdk1 In The Ocular Lens Leads To A Disruption Of The Lens Epithelial Cell Proliferation, Differentiation, And Nuclear Retention. Blake R. Chaffee, M.L. Robinson, F. Shang, T. Clement, M. Eddy, B. Wagner, A. Taylor. 1Zoolology, Miami University, Oxford, OH; 2Human Nutrition Res Ctr on Aging, 3Nutrition & Vision Res-USD Alfred I. duPont Co, 4Tufts University, Boston, MA; 5National Institute of Environmental Health Sciences, NIH, Research Triangle Park, NC; 6National 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. Lui, S. Basu, Y. Yu, H. Wu, A. S. Menko. 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 Liu, A. Caceres, J. Peng, F. Shang, J. Gao, X. Sun, R.T. Mathias, A. Taylor. 1Human Nutrition Resrch 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 Dlg-1 and Scrib Are Modulators of Wnt/PCP in the Mouse Ocular Lens. Shalini Shatadal, R. Rachel, A. Griep. 1Department of Biomedical Sciences, Biophysical Sciences, University of Nebraska-Lincoln, Lincoln, NE; 2Department of Medical Genetics, BCell Biology, 1Albert Einstein College of Medicine, Bronx, NY; 2Institute of Pathological Science, 1University of Rochester, Rochester, NY; 3Systems Neurobiology Laboratories, Salk Institute for Biological Studies, La Jolla, CA. CR

5600 – 9:15 In Vivo Two-Photon Imaging Of Mouse Retina. Robin Sharma, Y. Geng, A. S. Roy, A. Quinlan. 1School of Physics, University College of Dublin, Dublin, Ireland; 2Institute of Optics, University of Rochester, Rochester, NY; 3Computational Optics Group, University of Rochester, Rochester, NY; 4Ophthalmology, Biophysics, 5Medical College of Wisconsin, Milwaukee, WI. CR

5601 – 9:30 Imaging The Living Human Cone Inner Segment. Ravi S. Jondral, O.P. Kocanoglu, Q. Wang, Z. Liu, D.T. Miller. 1Program in Vision Science, 1School of Optometry, 1Indiana University, Bloomington, IN. CR

5603 – 10:00 Adaptive Optics-Assisted Optical Coherence Tomography For Patient Imaging. Barry Cense, K. Sudi, K. Kurokawa, Y. Yasuno. 1Ctr for Optical Resrch & Education, University of Tsukuba, Japan; 2Institute of Applied Physics, Computational Optics Group, Tsukuba, Japan; 3Computational Optics Group, University of Tsukuba, Tsukuba, Japan. CR

5604 – 10:45 Coherence Angiography. Kazuhiro Kurokawa, S. Sasaki, S. Makita, Y. Yasuno. 1Computational Optics Group, University of Tsukuba, Tsukuba, Japan; 2Institute of Applied Physics, Computational Optics Group, Tsukuba, Japan; 3Computational Optics Group, University of Tsukuba, Tsukuba, Japan. CR

5605 – 11:00 In Vivo Optical Treatment From Mouse Retinal Ganglion Cells. Lu Yin, A.H. Cetin, Y. Geng, A. S. Roy, A. Quinlan. 1School of Physics, University College of Dublin, Dublin, Ireland; 2Department of Electronics and System, Universidade Federal de Pernambuco, Recife, Brazil; 3School of Physics, University College Dublin, Dublin, Ireland.


5607 – 8:30 In Vivo Optical Recording From Mouse Retinal Ganglion Cells. Lu Yin, A.H. Cetin, Y. Geng, A. S. Roy, A. Quinlan. 1School of Physics, University College of Dublin, Dublin, Ireland; 2Department of Electronics and System, Universidade Federal de Pernambuco, Recife, Brazil; 3School of Physics, University College Dublin, Dublin, Ireland.

5604 — 8:30  Optic Nerve Misprojections in the Zebrafish Mutant belladonna: A Disease Model for Infantile Nystagmus Syndrome. Sabina P. Hüber-Raggi1, C-C. Chen2, L. Holliger1, D. Strumann3, S.C. Neumann1, M-Y. Huang1,2,1 Institute of Molecular Life Sciences, University of Zurich, Zurich, Switzerland; 2Department of Neurology, University Hospital Zurich, Zurich, Switzerland.

5605 — 8:45 A Velocity Based Method For Measuring Optokinetic Nystagmus Using Off The Shelf Video Equipment. Jason Turuwhenua1,2, T-Y. Yu1, Z. Mazharullah1, B. Thompson1,2,1Department of Ophthalmology, London, United Kingdom; 2Human Communication Sciences, La Trobe University, Bundoora, Australia.

5606 — 9:00 Uncorrected Antisaccade Errors Predict Cognitive Problems After Mild Traumatic Brain Injury In Younger Children. Larry A. Abel1, A. Phillips2, J.M. Douglas2,1Optometry & Vision Sciences, University of Melbourne, Carlton, Australia; 2Human Communication Sciences, La Trobe University, Bundoora, Australia.

5607 — 9:15 Fatigue and Hypoglycemia Impair Saccade Velocity and Accuracy but not Visual Perception. Benjamin Thompson1,2, D. Duncan3, G. Kuhn4, J.M. Black5, N. Gant6,1 Optometry & Vision Sciences, University of Auckland, Auckland, New Zealand; 2Department of Optometry and Vision Science, University of Auckland, Auckland, New Zealand; 3Psychology, Brunel University, London, United Kingdom.

5608 — 9:30 Saccadic Adaptation In Amblyopia. Rana Arham Raashid1, M. Chandrakumar1, A. Blakeman2, H. Goltz4, A.M. Wong2, Neuroscience and Mental Health, 1Department of Ophthalmology and Vision Sciences, 2The Hospital for Sick Children, Toronto, ON, Canada; 3University of Toronto, Toronto, ON, Canada.

5609 — 9:45 Effect of Compliance to Glasses Wear on the Outcome of Visual Acuity after Refractive Adaptation. Gail Macconachie1, S. Farooq1, G. Bush1, F.A. Proudlock1, I. Gottlob1. 1Ophthalmology, University of Leicester, Leicester, United Kingdom; 2Bradford Teaching Hospitals, Bradford, United Kingdom; 3Medical Physics, University Hospitals of Leicester, Leicester, United Kingdom.

5610 — 10:00 Pre-operative Visual Acuity and Contrast Sensitivity Deficits in Children with Small, Partial, or Non-Central Cataraets. Eileen E. Birch1,2, V. Subramanian1, C.S. Cheng3, D. Stager, Jr.4,1 Retina Foundation of the Southwest, Dallas, TX; 2Ophthalmology, UT Southwestern Medical Center, Dallas, TX; 3Department of Ophthalmology & Adult Strabismus, Plano, TX.

5611 — 8:30 Predictors Of Ocular Surface Squamous Neoplasia Recurrence After Exisional Surgery. Carol L. Karp1, A. Galor2, W. Morrison3, T. El-Sawy4, S. Frank5, B. Esmaeli6,1 Section of Ophthalmology, Department of Head and Neck Surgery, 2Department of Radiation Oncology, 3The University of Texas MD Anderson Cancer Center, Houston, TX.

5612 — 8:45 Multi-disciplinary Management Of Eyelid Merkel Cell Carcinoma. Qasim J. Nasser1, A. Khan1, W. Morrison3, T. El-Sawy4, S. Frank5, B. Esmaeli6,1 Section of Ophthalmology, Department of Head and Neck Surgery, 2Department of Radiation Oncology, 3The University of Texas MD Anderson Cancer Center, Houston, TX.

5613 — 9:00 Mir211 Is Dysregulated In Conjunctival Melanocytic proliferations. Alexandre P. Moulin1, M. Nicolas1, A. Abdelaziz, W. Feuer , S. Dubovy. Ophthalmology, Bascom Palmer Eye Institute, Miami, FL.

5614 — 9:15 Lymphoid Enhancing Factor-1 Gene Mutation and Its Differential mRNA Expression in Eyelid Sebaceous Carcinoma. Perumal Jayaraj1, A. Rai2, N. Pushker3, M.S. Bajaj3, S. Ghose4, R. Azad5. 1Department of Ocular Pathology, 2Department of Ocular Microbiology, 3Ophthalmoplasty service, 4Dr.R.P.Centre, A.I.M.S, New Delhi, India; 5Division of Biochemistry and Biotechnology, National Centre for Disease Control, New Delhi, India.

5615 — 9:30 Primary Intraocular Lymphoma: A Twenty-year Review Of Incidence, Clinical Features, Treatment And Outcomes. Steve D. Lavasseur1,2, L.A. Wittenberg1, V.A. White8, 1Department of Ophthalmology & Visual Sciences, 2Department of Ophthalmology & Visual Sciences, 3Department of Pathology, 4University of British Columbia, Vancouver, BC, Canada.
5622 — 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. Cideciyan², A.S. Levitin³, S. Iwabe⁴, H. Khanna⁵, A. Swaroop⁶, W.W. Hauswirth⁷⁸, 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, ⁵University of Florida, Gainesville, FL; ⁶Ophthalmology, University of Massachusetts Medical School, Worcester, MA; ⁷N-NRL, Bldg 6, National Eye Institute, Bethesda, MD. *CR

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 Monoctye-Derived Macrophages Through CCL2 Secretion And Rescued Vessel And Photoreceptor With Retinal Degeneration. Shinichi Fukuda¹⁻²⁻³, M. Nagano⁴, T. Yamashita⁴, K. Kimura⁴, K. Akimoto³, J. Tsuboi⁴, S. Ueno¹, M. Kondo¹, T. Oshika⁴, O. Ohneda⁴. 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. Swaroop³, K. Jayasundera¹, J.R. Heckenlively¹. 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. Tanimoto³, M. Garrido³, F. Richard³, 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 Otani¹, C. Guo², A. Oshii², 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 – ¹Refer to Program Number in the Clinical Trial (CT) Registration Index – ²Travel Grant Awardee

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. Tatsuki Murakami¹, H. Matsumoto¹, M. Roh¹, J. Suzuki¹, K. Takeuchi¹, D. Mantopoulos², T. Hisatomi¹, Y. Ikeda¹, J.W. Miller¹, D. Vanvun¹. ¹Angiogenesis Laboratory, Massachusetts Eye and Ear Infirmary, Boston, MA; ²Ophthalmology, Kyushu University, Fukuoka, Japan.*CR

5626 — 8:45 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. Dul¹², J.K. Torbit¹, B.M. Sutton¹, R. Malik¹, 'School of Optometry, Indiana University, Bloomington, IN; ²Clinical Sciences, SUNY College of Optometry, New York, NY; ³SUNY Eye Institute, New York, NY; ⁴Glaucoma Research Unit, NIHR Biomedical Research Ctr for Ophthal, London, United Kingdom.

5623 — 9:45 Are Certain Eye Movement Patterns Linked To Better Face Recognition Performance In Patients With Central Glaucomatous Visual Field Loss? Fiona C. Glen¹, D.P. Crabb¹, N.D. Smith¹, R. Burton¹, D.F. Garway-Heath¹². ¹Department of Optometry & Visual Science, City University London, London, United Kingdom; ²NIHR Biomedical Research Centre for Ophthalmology, Moorfields Eye Hospital NHS Foundation Trust, London, United Kingdom; ³Institute of Ophthalmology, University College London, London, London, United Kingdom.

5624 — 10:00 Correlation of Brain Volumes and Functional Deficits in Glaucoma. Alice L. Williams¹, J. Luckey¹, S. Wizov¹, S. Gutta¹, R. Sergott¹, T. Chia¹, S. Lai¹, G.L. Spaeth¹. 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, ⁵Wills Eye Institute, Philadelphia, PA; ⁶Thomas Jefferson University School of Medicine, Philadelphia, PA. @

5628 — 9:15 Endothelial Progenitor Cells With Low Aldehyde Dehydrogenase Activity Recruited Monoctye-Derived Macrophages Through CCL2 Secretion And Rescued Vessel And Photoreceptor With Retinal Degeneration. Shinichi Fukuda¹⁻²⁻³, M. Nagano⁴, T. Yamashita⁴, K. Kimura⁴, K. Akimoto³, J. Tsuboi⁴, S. Ueno¹, M. Kondo¹, T. Oshika⁴, O. Ohneda⁴. 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. Swaroop³, K. Jayasundera¹, J.R. Heckenlively¹. ¹Ophthalmology and Visual Sciences, University of Michigan, Ann Arbor, MI; ²N-NRL, Bldg 6, National Eye Institute, Bethesda, MD.
Thursday – Posters – 5632 – 5650

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

511 Visual Impairment/Low Vision and Genetic Epidemiology

Moderator: Tracy B Hoeg

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

5633 — A29 Catastrophic Visual Impairment, Blindness And Risk Of Mortality In Rural Population Of The Andhra Pradesh Eye Disease Study. India, Rokhi C. Khanna1, G.V. Murthy2, S. Krishnasai1, H.B. Pan1, P. Giridhar1, C.E. Gilbert2, G.N. Rao1. 1Allen Foster Research Centre for Community Eye Health, LV Prasad Eye Institute, Hyderabad, India; 2National 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 Ryskulova1, R. Janiszewski2, 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, Cardif 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 Pseudosochromatic Color Vision Tests in Preschool Children. Michele E. Mercer1, R.J. Adams1. 1Psychology, 2Psychology/Pediatrics, 1Memorial 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 Hegsgaard2, D. Erngaard1, K. Klemp1, M. La Cour1, C. Ellervik1. 1Ophthalmology, 2Clinical Biochemistry, 1Naestved Hospital, University of Copenhagen, Naestved, Denmark; 2Naestved Hospital, Naestved, Denmark; 3Ophthalmology, 4Glostrup Hospital, Glostrup, Denmark; 5Ophthalmology, 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. Hou2, A. Norcia3. 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. Wong1,2, Y. Zheng1, W-L. Wong1, E.L. Lamoureux1, III1, J-J. Wong3, P. Mitchell4, N. Cheung4, T. Au1,4, S. Saw1,4, C. Cheng4. 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 Epidemiology of Chinese Patients in the Ophthalmology Clinic of a New York City Public Hospital. See H. Wong1, L.G. Chen1, C.C. Teng2. 1Ophthalmology, NYU School of Medicine, New York, NY; 2Einhorn Clinical Research Center, New York Eye and Ear Infirmary, New York, NY.

5642 — A38 Genetic Determinants of Serum Lutein and Zeaxanthin Levels in the Carotenoids in Age-Related Eye Diseases Study. Chitra K. Kariki1, S.K. Iyengar1, B. Truitt2, R.P. Igo, Jr1, E. Johnson3, L. Tinker4, K.J. Meyers1, J.A. Mares3. 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; 4‘Cancer Prevention Research Program, Fred Hutchinson Cancer Research Center, Seattle, WA.*CR

5643 — A39 Genetic Testing for Myotonic Dystrophy in Early-onset Cataract - 10 years data. Shiao Wei Wong, Ophthalmology, NHS, Aberdeen, United Kingdom.

5644 — A40 Heritability Of Ocular Biometry Parameters Using Structural Equation Modeling In A Study Of Angle-closure Glaucoma. Robert Wojciechowski1, P.Y. Ramula1, S. Kavitha1, P. Sureswaran2, R. Janaythen1, D.S. Friedman2, 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. Simpson2, R. Wojciechowski1, C. Motter3, S. Szymczak4, D. Stambolian2. 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 Complements Standard SD-OCT Imaging In Macular Diseases. Gibran S. Khurshid1, A. Boretsky2, P. Gupta1, C. Tung2, B.F. Godley3, M. Motamedi3, E.F. van Kuijk4. 1Ophthalmology & Visual Sciences, 2Ophthalm & Visual Sciences, 1Ophthalmology and Visual Sciences, Univ of Texas Medical Branch, Galveston, TX; 3Ctr for Biomed Engineering, Univ of Texas Medical Branch, Houston, TX; 4Ophthalmology MMC 493, Univ of Minnesota, Minneapolis, MN.

5649 — A45 Spectral and Phase Analyses Of Ocular Hemodynamics using Combined SD-OCT and Ultrasonographic Method. Monika E. Danielewska1, D. Szlag2, D. Iskander1, M. Wajtowski2. 1Institute of Physics, 2Institute of Biomedical Engineering and Instrumentation, 3Wrocław University of Technology, Wrocław, Poland; 4Institute of Physics, Nicolaus Copernicus University, Torun, Poland.


8:30 am – 10:15 am


5653 — A49 Improved Retinal Blood Flow Analysis Method Using Abnormal Frame Information Automatically Detected From AO SLO Image Sequence. Hiroshi Imamura1, P. Fletcher1, K. Nozato2, S. Ueda3, A. Ujii4, N. Yoshimura5. 1Canon Inc, Tokyo, Japan; 2Canon Information Systems Research Australia, Sydney, Australia; 3Optophthalmology, Kyoto University Graduate School of Medicine, Kyoto City, Japan. *CR

5654 — A50 Characterization of Diabetic Retinopathy Lesions Using Adaptive Optics Scanning Laser Ophthalmoscopy. Sonja M. Prager1, S.H. Radwan1, H. Kow1, P.S. Silva2, S.A. Burns3, L.P. Aiello4, J.K. Sun5. 1Beetham Eye Institute, Joslin Diabetes Center/Harvard Medical School, Boston, MA; 2Department of Ophthalmology and Optometry, Medical University Vienna, Vienna, Austria; 3Optophthalmology, Cairo University, Cairo, Egypt; 4School of Optometry, Indiana University, Bloomington, IN.


5657 — A53 In Vivo Investigation of the Retinal Microvasculature in Patients with Type 1 Diabetes Mellitus. Mariacristina Parrantano1, M. Lombardo2, G. Lombardo2, B. Boccazini1, S. Lioi1, M. Varano1. 1Ophthalmology, Fondazione GB Bietti-IRCCS, Rome, Italy; 2CRNP-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. Nakashima2, V. Krivovitch3, N. Chateau1, J.A. Sahel4, M. Puques5. 1Ophthalmology, Lariboisiere Hospital University Paris 7, Paris, France; 2Optophthalmology, Clinical Investigation Center 503 Quinze-Vingts Hospital, INSERM, Paris, France; 3Imagine Eyes, Orsay, France; 4Optophthalmology, UMR-S 968 Institut de la Vision, Paris, France. *CR


5661 — A57 Effectiveness In Detecting Area Of Photoreceptor Disruption By Dioptic Adaptive Optics Scanning Laser Ophthalmoscopy (d-aoos) With Wider Field Of View. Yoshiyuki Kitaguchi1, T. Fujikado2, H. Kandi3, T. Morimoto4, T. Yamaguchi5, T. Mikashi6, K. Nishida7. 1Ophthalmology, Sumitomo hospital, Osaka, Japan; 2Applied Visual Science, Osaka University, Suita, Japan; 3Topcon Research Institute, Itabashi, Japan; 4Optophthalmology, Osaka University, Osaka, Japan. *CR

5662 — A58 Foveal Microvasculature And Its Relationship To Retinal Thickness. Toco Y. Chui1, A.E. Elsner2, S.A. Burns3. 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. Serrao1, P. Ducoli1, G. Lombardo2. 1IRCCS Fondazione G.B. Bietti, Rome, Italy; 2CRNP-IPCF Unit of Support Cosenza, LiCryL Laboratory, University of Calabria, Rende, Italy.

5664 — A60 Distribution of Outer Nuclear Layer Thickness in SD-OCT Images. Joel A. Papay1, C.A. Clark1, T.Y. Chui1, L. Zhao1, A.E. Elsner1. Optometry, Indiana University, Bloomington, IN.

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

5666 — A62 In vivo Imaging of Photoreceptor Loss Associated with Dry Age-Related Macular Degeneration Using Adaptive Optics Scanning Laser Ophthalmoscopy. Adam Boretsky1, E. Khan1, G. Burnett2, R. Harris3, M. Stephens1, M. Toce1. 1Department of Ophthalmology, 2Flaum Eye Institute, 3Center for Visual Science, University of Rochester, Rochester, NY; 4Department of Ophthalmology, Flauem Eye Institute, 5University of Rochester, Rochester, NY.

5667 — A63 Adaptive Optics Scanning Laser Ophthalmoscopy With Amplitude Pupil Apodization. Itsufo N. Sutails1, A. Dubra2, A. P. Cideciyan3, A. Dubra4,5. 1The Institute of Optics, 2Flaum Eye Institute, 3University of Rochester, Rochester, NY; 4Optophthalmology, 5Biophysics, Medical College of Wisconsin, Milwaukee, WI.

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

5669 — A65 The Repeatability of Photoreceptor Reflectance Changes in the Living Human Retina. Robert F. Cooper1, J. Rha2, A.M. Dubis3, A. Dubra2, L. Latchney1, A. J. Carroll4,5, J. Carroll4,5. 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 Lao1, A.V. Cideciyan1, A. Samarok1, S.B. Schwartz2, A.J. Roman1, J.B. Goldberg3, B. Baumann1, B. Wissinger3, S. Koh4, 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. Cooper2, B.R. Hansen3, A.J. Carroll4,5. 1Cell Biology, Neurobiology and Anatomy, 2Ophthalmology, 3Medical College of Wisconsin, Wauwatosa, WI; 4Biomedical Engineering, Marquette University, Milwaukee, WI.

5673 — A69 Disrupted RPE and intact photoreceptors observed in vivo with Fluorescence Adaptive Optics Scanning Laser Ophthalmoscopy years following accidental laser exposures in humans. Jennifer J. Hunter1,2, E.A.Rossi3, W. Fischer4, A. Dubra4,5, M. Chung4,5. 1Flaum Eye Institute, 2Center for Visual Science, University of Rochester, Rochester, NY; 3Department of Ophthalmology, 4Biophysics, 5Medical 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. Fay, A. Faridi, A. Garg, M.E. Pennesi. Casey Eye Institute, Oregon Health and Science University, Portland, OR.

5675 — A71 Fluorescence Adaptive Optics Scanning Laser Ophthalmoscopy Demonstrates Intraretinal Spots and Low Cone Density in Fundus Albinus. Hongxi Song1, D.R. Williams2, L. Latchney1, A. Dubra1, M.M. Chung1,2. 1Center for Visual Science, 2Institute of Optics, 3Flaum Eye Institute, 4University of Rochester, Rochester, NY; 5Ophthalmology, Medical College of Wisconsin, Milwaukee, WI. *CR

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** Refer to Program Number in the Clinical Trial (CT) Registration Index  
*® Travel Grant Awardee
5676 — A72 Determinants Of Normal Human Cone Photoreceptor Density
Measured By Adaptive Optics Scanning Laser Ophthalmoscopy. Sang Pyo Park1,2, J. Chung1, F. Hirose1, S.H. Tjang1, S. Chang1. 1Department of Ophthalmology, Columbia university medical center, New York, NY; 2Department of Ophthalmology, Kangdong Sacred Heart Hospital, Seoul, Republic of Korea; *Canon INC., Tokyo, Japan. *CR

5677 — A73 Spatially-resolved Adaptive Optics Photopigment Densitometry for Assessing Photoreceptor Function. Benjamin D. Masella1,2, J.J. Hunter1,2, D.R. Williams1,2,3. 1The Institute of Optics, 2Center for Visual Science, 3Flaum Eye Institute, University of Rochester, Rochester, NY. *CR


5679 — A75 Light Radiated from Myoids for Oblique Incidences upon Foveal Cones. Jean-Marie Gorrand1, M. Doly2. 1Biophysique des Handicaps Sensoriels, School of Medicine, Clermont-Ferrand, France; 2Biophysique des Handicaps Sensoriels, Universite d’Auvergne, Clermont-Ferrand, France.

5680 — A76 Extending The Field Of View In Adaptive Optics Scanning Laser Ophthalmoscopy. Franz Felberer1, J.S. Kroisamer1,2, C.K. Hitzenberger1,2, M. Pircher1. 1Center for Medical Physics and Biomedical Engineering, 2Ophthalmology, Medical University of Vienna, Vienna, Austria.

5681 — A77 Optics Design For Confocal Scanning Laser Ophthalmoscopy. Chuahong Li1, H. Chen1, Y. Li1, Z. Tang2. 1School of Ophthalmology and Optometry, Wenzhou Medical College, Wenzhou, China; 2Suzhou Microlcra Instruments Co., Ltd, Suzhou, China.


5684 — A99 Oscillatory Potential Contribution to the ERG: A New Mean to Identify Disease Onset. Nataly Tran1, M. Gauvin1, R. Koenekoop2, J. Little1, J-M. Lina1, P. Lachapelle1. 1Department of Ophthalmology, Neurology and Neurosurgery, McGill University-Montreal Children’s Hospital Research Institute, Montreal, QC, Canada; 2École de technologie supérieure, Montreal, QC, Canada.

5685 — A100 Topographic Mapping Of Functioning Cone And Rod System In Inherited Retinal Degenerations With Confirmed Gene Mutations. Isaev Sliorsyan1, E. Troeger1, S. Kohl1, B. Wisstinger2, E. Zrenner2. 1Institute for Ophthalmic Research, University of Tuebingen, Tuebingen, Germany; 2Institute for Ophthalmic Research, Molecular Genetics Laboratory, Tuebingen, Germany; 3Molecular Genetics Laboratory, 4Institute for Ophthalmic Research, Centre for Ophthalmology, Tuebingen, Germany.


5687 — A102 Retinal Function Assessed By Full-field ERG In Ranibizumab Treated Neovascular AMD Patients. Karen B. Pedersen1, F. Moller1, A. Sjølie2, S. Andreassen3. 1Ophthalmology, Glostrup Hospital, Glostrup, Denmark; 2Ophthalmology, Odense University Hospital, Odense, Denmark; 3Ophthalmology, Lund University Hospital, Lund, Sweden.


5689 — A105 Discrete Wavelet Transform (DWT) Of The ERG More Accurately Predicts The End Stage Of Retinal Degenerative Disorders. Mathieu Gauvin1,2, J Racine1, J. Daloze1, R. Koenekoop2, 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, École de Technologie Supérieure, Montreal, QC, Canada; 3Ophthalmology, Laval University - Centre de recherche Université Laval Robert-Giffard, Quebec, QC, Canada.


5691 — A107 Two New Mutations in RPL11 Gene in Occult Macular Dystrophy Patients Associated with a Depolarizing Pattern of Focal Macular ERG. Shuhei Kameya1, T. Kabuto1, H. Takahashi1, Y. Goto-Fukuura1, T. Igarashi1, K. Yamaki1, A. Mizota1, Y. Miyake2, H. Takahashi1. 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.

5692 — A108 Cortical Impact of Genetic Retinal Degeneration of Ganglion Cell Origin and With Early Visual Loss. Catarina A. Mateus1, A.A. Reis1,2, J. Castelhano1, E. Silva2, M. Castelo-Branco3. 1Visual Neuroscience, IBIL-Faculty of Med-Univ of Coimbra, Coimbra, Portugal; 2Ophthalmology, University Hospital of Coimbra, Coimbra, Portugal.

5693 — A109 Phenotypic Characterization in Two Patients with Identified Rhodopsin Gene Mutation: Impact of Retinal Degeneration on Cortical Structure. Andrea C. Pereira1, C. Mateus1, A. Reis1,2, B. Quendera1, S. Ferreira1, M. Almeida1, E. Silva2, M. Castelo-Branco3. 1Visual Neuroscience Laboratory, IBIL-Faculty of Medicine-University of Coimbra, Coimbra, Portugal; 2Ophthalmology, University Hospital of Coimbra, Coimbra, Portugal; 3Center for Neuroscience and Cell Biology, University of Coimbra, Coimbra, Portugal.

5695 — A110 Environmental and Therapeutic Approaches to Limit the Consequences of Postnatal Hyperoxia. Allison L. Dorfman1, B. Campanaro2, K. Uy3, A. Polosa1,4, M. Djavari1, P. Wintermark5, S. Chemtob5, P. Lachapelle1,4. 1Ophthalmology, 2Neonatology, 3McGill University/ Montreal Children’s Hospital, Montreal, QC, Canada; 4Pediatrics & Pharmacology, Research Centre/ Ste. Justine Hospital, Montreal, QC, Canada.

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


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


5702 — A117 Effects of Nicotine on Flicker ERGs: Application of DFT and T-Circ. Stefanie B. Varghese1A, N. Naser1A, T.P. Than1B, D. McKeefry1,2. 1Department of Ophthalmology, University of Tuebingen, Tuebingen, Germany; 2Ophthalmic Oncology, Memorial Sloan-Kettering Cancer Center, New York, NY.

5705 — A120 Trichromatic And Dichromatic Electrocorticograms Using A Chromatic-Achromatic Temporal Compound Stimulus. Neil R. Parry1, J.H. Francis2, D.J. McKeefry1, B. Bee1, J.J. Kremer2. 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 Scleral Depression Depresses the Photopic ERG. Scott E. Brodie1,2, J.H. Francis2, B. Marr1, D.H. Abrams1. 1Ophthalmology, Mount Sinai School of Medicine, New York, NY; 2Ophthalmic Oncology, Memorial Sloan-Kettering Cancer Center, New York, NY.

5707 — A122 Reproducibility Of Visual Electrophysiology Recordings Between Laboratories: The Importance Of Regular Calibration. Richard P. Hagan1,2, K.J. Quinn1, L. Milner3, R.L. Robinson1,2, 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 Electrocorticograms Explained By Convolution of Transient Responses. Jonathan A. Toft-Nielsen1, J. Bohorquez1, V. Porciatti2, O. Ozdamar3. 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, J.K. Challis1, J.J. Kremer2, N.R. Parry1. 1Optometry, Bradford School of Optometry & Vision Science, Bradford, United Kingdom; 2Electrophysiology, L.V.Prasad Eye Institute, Hyderabad, India; 3Optometry & Vis Sci, FLS, Univ of Manchester, Manchester, United Kingdom; 4Dept of Ophthalmology, University of Erlangen, Erlangen, Germany; 5Vision Science Centre, Manchester Royal Eye Hospital, Manchester, United Kingdom.

5711 — A130 Mapping The Spatiotemporal (S-T) Domain And Gain Of Putative M- And P-dominated Limbs Of The Human Cortical Contrast Response Function (CRF) Using The Sweep Vep (svep). Russell D. Hamer1,2, G.S. Souza1, T.L. Cost1, B.D. Gomes1, L.C. Silva1, D.F. Ventura1. 1Departamento de Psicologia Experimental, Instituto de Psicologia, São Paulo, Brazil; 2Smith-Kettlewell Eye Research Institute, San Francisco, CA; 3Instituto de Ciencias Biológicas, Universidade Federal do Para, Belem, Brazil; 4Nucleo de Medicina Tropical, Universidade Federal do Pará, Belém, Brazil.

5712 — A131 Topographic maps of VEP Elicited By Pseudorandom Stimulation With The Swept Parameter Technique. Keiko Momose. Faculty of Human Sciences, Waseda University, Tokorozawa, Japan.

5717 — A132 Effects of the presentation mode and color contrast in visual evoked potential elicited by pseudo-random stimuli. Girago S. Souza1, V.R. da Silva, C.S. Araujo, B.B. Risuenho, B.D. Gomes1, L.L. Silveira1. 1Instituto de Ciencias Biológicas, Universidade Federal do Para, Belem, Brazil.

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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. Karus1. 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 Shi2, K. Zhao1. 1Ped Ophthalm & Strabismus, Tianjin Eye Institute and Hospital, Tianjin, China; 2Tianjin Key Laboratory of Ophthalmology and Visual Science, Tianjin, China. ☞

5724 — A139 Measuring The Spatial And Temporal Dynamics Of Frontal Eye Field Receptive Fields. Matthew A. Smith1,2,3, J. Mayo2,4, M.A. Sommer1, A. DiTomasso1,4. 1Ophthalmology, #Center for Neuroscience, University of Pittsburgh, Pittsburgh, PA; 2Neurobiology, Harvard Medical School, Boston, MA; 3Dept. 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, Daniella Amanda1, I. Ingster-Moati2, E. Albuissson1, C. Girard1, B. Delbosc1. 1Department of Ophthalmology, Orleans Hospital, Orleans, France; 2Ophthalmology, University Paris 7 Diderot, Necker Hospital, Paris, France; 3Biostatistics Department, University of Medicine, Vandoeuvre-les-Nancy, France; 4Department of Ophthalmology, University Hospital, Besancon, France.

5726 — A141 Full-field Electroretinogram Changes In Patients In Therapy With Chloroquine And Hydroxychloroquine: Time And Dosage Effect. Giulio Ruberto1, C. Tinelli1, P. Piccinni2, L. Bossoledi3, M. Raimondi4. 1Clinica Oculistica, 2Biometric Service, 3IRCCS 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. Reffker2, H. Drexler2, C. Erb2,3,4. 1Ophthalmology, Schloss Park Clinic, Berlin, Germany; 2Ophthalmology, 3Kardiologikum, 4Hanover Medical School, Hanover, Germany; 5Eye clinic, Wittenbergplatz, Berlin, Germany.

5729 — A144 Electrophysiology And Fluorescein And Indocyanine Green Angiography In Susac Syndrome. Julia M. Promesberger1, A.F. Alex1B, I. Kleffner1, J-M. Dörr2, N. Eter1B. 1Ophthalmology, 2Neurology, University Hospital of Muenster, Muenster, Germany; 3NeuroCure Clinical Research Center, Charité, University hospital of Berlin, Berlin, Germany.

5730 — A145 Flash Electroretinogram In Children With Mitochondrial Diseases. Frederic Nicot1, A. Bron1, C. Creuzet-Garcher1, F. Renaud1. 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. Anandhavalli Kumarappah1, M.T. McFarlane2, T. Wright1, C. Westall1. 1Institute of Medical Sciences, University of Toronto, Toronto, ON, Canada; 2Ophthalmology and Vision Sciences, Hospital for Sick Children, Toronto, ON, Canada.*CR

5733 — A148 Electroretinogram Anomalies In Psychiatric Disorders: The Possible Implication Of GSK3. Joelie Lavoie1, J-M. Beaulieu1, M. Hebert5. 1CRULRG, Quebec, QC, Canada; 2Ophthalmology, Laval University, Quebec, QC, Canada. ☞

5734 — A149 Habituation of the Ganglion Cell Response to Sustained Pattern Stimulation: Reduced by Multiple Sclerosis. Antonio Nadda1, A. Di Renzo1, F. Martelli1, D. Marangoni1, A. Batocchi1, D. Giannini1, B. Falsini1. 1Technologies and Health, Istituto Superiore di Sanita, Roma, Italy; 2Ophthalmology, GB Bietti Eye Foundation-IIRCCS, 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. Varghese1, I.T. Keyser3, E. Hartmann1,2. 1Vision Science, 2Department of Optometry, University of California at Berkeley, Berkeley, CA; 3Ferkau 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. Rubio2, M. Roldan1, L. Ayuso1. 1Departamento de Oftalmologia, HUGU, Sescam /UAH, Spain; 2Departamento de Oftalmologia, Universidad Alcalá, UAH, Spain; 3Departamento de Neurologia, Hospital Principe de Asturias, Alcal de Henares (Madrid), Spain; 4Departamento de Oftalmologia, Universidad de Alcalá, Alcal de Henares (Madrid), Spain.


*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures — ☞ Refer to Program Number in the Clinical Trial (CT) Registration Index — * Travel Grant Awardee
5342 — 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. Kasawaki2, T. Nicolau2, S. Sammangasundram2, J. Wang2, T. Wong2, E. Lamooreaux1. 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.

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. Elsner2B, T.J. Gast1. 1UC Berkeley School of Optometry, Berkeley, CA; 2School of Optometry, Indiana University, Bloomington, IN; 3AOE 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-Nwaobi1, 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. Waznaw1. 1Ophthalmology, UPMC Eye Center, Eye and Ear Institute, University of Pittsburgh School of Medicine, Pittsburgh, PA; 2Medicine, UPMC Mercy Hospital, Pittsburgh, PA.


5743 — A261 Telemedicine-based Digital Retinal Imaging Improves Diabetic Retinopathy Screening Compliance. Seema Garg1, B. King2, P. Jani3, S. Weir1, T. Karnowsk1, S. Li1, E. Chaum1. 1Dept of Ophthalmology, University of North Carolina, Chapel Hill, NC; 2Oak Ridge National Laboratory, Memphis, TN; 3Hamilton Eye Institute, University of Memphis, Memphis, TN. *CR


5745 — A263 Risk Factors for Proliferative Diabetic Retinopathy in a County Setting. B. Leiby2, Y. Dai2, L. Pizzi3. 1Research, Wills Eye Institute, Philadelphia, PA; 2Biostatistics, Jefferson Medical College, Philadelphia, PA; 3Pharmacy, Jefferson School of Pharmacy, Philadelphia, PA.

5746 — A264 An Edutainment Tool for Increased Compliance with DR Screening and Management, Part 2: Efficacy Study. Anne M. Edwards1, G. Zamora2, A. Maticiulli2, P. Soliz2. 1VisionQuest Biomedical LLC, Albuquerque, NM; 2The Fotonovela Production Company, Santa Fe, NM. *CR

5747 — A265 Efficient Early Diagnosis of Diabetic Retinopathy using zero-dilation Scanning Laser Ophthalmoscopy. Dirk De Brouwere1, P. van Etten2, J. Marti2, M. Mensink1, S. Sels1, M. de Weerdt1, A. Thiagalingam1, P. Kovoor1, P. Mitchell2. 1Ophthalmology, Centre for Vision Research, Sydney, Australia; 2University of Sydney, Sydney, Australia; 3Cardiology, Westmead Hospital, Sydney, Sydney, Australia.

5748 — A266 Diabetes and Diabetic Retinopathy in an Australian Cardiac Population: the Australian Heart Eye Study. Adam J. Plant1,2, G. Burlutsky1, J. Chiha3, J.A. Haller1, J.A. Malunda1, J.M. Snodderly1, J.A. Cuadros1, S. Ramaswamy2A, M.S. Muller3, B. Leiby4, H. Ho5, J-Y. Lin5, N-C. Liu5, Y-H. Hong5, H-C. Lam5. 1Ophthalmology, 2Department of Ophthalmology, 3Department of Endocrinology, 4Kaohsiung Veterans Gen Hospital, Kaohsiung, Taiwan; 5Ophthalmology, National Yang Ming University, Taipei, Taiwan.

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, J.A. Haller1, T.J. Gast1, J.A. Cuadros1, S. Ramaswamy2A, M.S. Muller3. 1Clinical Biochemistry and Pharmacology, 1Odense University Hospital, Odense, Denmark.

5750 — A268 Sight impairment certification amongst patients attending diabetic retinopathy screening in East London. Tunde Peto1, R. Bourkiza1, M. Subashi1, J. Da Costa1, D. Qatarneh2, 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. Shwu-Juan Shiu1, W-L. Ho1, J-Y. Lin1, C-W. Lee2, C. Chen1, Y-H. Hong1, H-C. Lam3. 1Ophthalmology, 2Department of Ophthalmology, 3Department of Endocrinology, Kaohsiung Veterans General Hospital, Kaohsiung, Taiwan.

5752 — A270 The Incidence Of Vitrectomy For The Complications Of Proliferative Diabetic Retinopathy. David H. Steel1,2, D. 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. Nwanyanwua1, N. Taiwar2, J.A. Kielkopf3, J.S. Wrobel2, J.D. Stein4. 1Ophthalmology and Visual Sciences, 2Internal Medicine, University of Michigan, Ann Arbor, MI.

5759 — A277  Angiopoietin-like Protein 6 (ANGPTL6) has Angiogenic Activity on Retinal Endothelial Cells under High Glucose Concentrations. Hikotaka Yokouchi, T. Oishi, S. Yamamoto. Ophthalmology, Chiba Univ Graduate School of Med, Chiba, Japan.

5760 — A278  Role of Nrfl2 in the regulation of diabetic retinopathy. Junsong Gong1, Z. Xu, Y. Wei, H. Huang, C. Eberhart, R. Thimmulapp, S. Biswal, E.J. Duh. 1Wilmer 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  Thioreredox Interacting Protein Is Required For S-glutathionylation And Redox Regulation Of VEGF Angiogenic Signal. Mohammed A. Abdelsaid1, A.B. El-Remessy2-4. 1Clin & Experimental Therapeutics, University of Georgia, Augusta, GA; 2Department of Ophthalmology, Aarhus University Hospital, Aarhus C, Denmark; 3Department of Ophthalmology, University of Iceland/Landspitali, University Hospital, Reykjavik, Iceland.


5764 — A282  Overexpression of IL-1 Receptor Antagonist in the Retin a Rat by Retina-medi ated Gene Transfer Prevents Capillary Loss in Experimental Diabeticretinopathy. Chiara Gerhardinger1, Y. Liu1, Z. Dagher1. 1Schepps Eye Research Institute Massachusetts Eye and Ear, Boston, MA; 2Harvard Medical School, Boston, MA.

5765 — A283  Lipoprotein-associated Phospholipase A2 Inhibits Regeneration Vasopermeability During Experimental Diabeticretinopathy. Alan W. Stitt1, P. Canning, P.J. Luther1, J.V. Glenn1, L.D. Allen1, V. Prise1, P.S. Adamson1. 1Centre 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. *CR

5766 — A284  HFD-induced Retinal Microvascular Degeneration: Suggested Role Of Thioreredox Interacting Protein (TXNIP). Islam N. Mohamed2-5, S. Hafez3-6, S. Abdelsaid2-6, S. Matragoon4,5, B. Pillai4, A. Ergul3-6, J.D. Imig4, A.B. El-Remessy2-6. 1Clinical 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. Rangasamy2, P. McGuire3. 1M2C10-5106 Surgery, 2Cell Biology & Physiology, 3Univ of New Mexico Sch of Med, Albuquerque, NM.

5769 — A287  Neural And Vascular Gene Expression Changes In The Diabetic Rat Retina. Jennifer C. Lau1A, R.A. Linsenmeier1B, J.R. Moskal1C, J.W. Bainbridge2, D.O. Bates1. 1School of Physiology and Pharmacology, University of Bristol, Bristol, United Kingdom; 2UCL Institute of Ophthalmology, London, United Kingdom.


5772 — A290  Intravitreal Anti-vegf Therapy Blocks Inflammatory Cell Infiltration And Re-entry Into The Circulation In Retinal Angiogenesis. Shintaro Nakao1, M. Arima1, K. Ishikawa1, R. Kohno1, S. Kawahara2, M. Miyazaki2, S. Yoshida2, H. Enaida2, T. Kono2, T. Ishibashi2. 1Department of Ophthalmology, Kyushu University, Fukuoka, Japan; 2Ophthalmology, Fukuoka University Chikusho Hospital, Chikushino, Japan.

5773 — A291  Vascular Alteration And Lipids Accumulation In The Retina And Choroid Of Non-insulin-dependent Diabetic Goto-Kakizaki Rats. Elivre Vacher1, M. Pouillot1, T.M. Boutin1, O. Fontaine1, R. Couture1. 1Optometry, 2Physiology, 3University of Montreal, Montreal, QC, Canada. *CR

5774 — A292  Endothelial Mesenchymal Transition in Human Diabetic Epiretinal Fibrosis. Ray Givani1, L.L. Zheng2. 1Ophthalmology, Scripps Clinic, La Jolla, CA; 2Ophthalmology, Stanford University School of Medicine, Palo Alto, CA.

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

5776 — A294  Anti-inflammation Of The Retinal Microvasculature To Oxidative Stress: Ion Channel-dependent Mechanisms. Atsuko Nakazumi1, M. Fukumoto1, D.G. Puro1, 2. 1Ophthalmology & Visual Sciences, 2Molecular & Integrative Physiology, 3University of Michigan, Ann Arbor, MI.


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


5781 — A299  Adult Endothelial Progenitor Cell Populations: Functional Differences in Diabetic Retinopathy. Sergio Caballero, Jr1, S. Hazda1, A. Bhatwadekar1, S. Li Calzi1, L.J. Paradiso1, L. Miller1, T.S. Kerr1, M.B. Grant1. 1Pharmacology & Therapeutics, University of Florida, Gainesville, FL; 2America Stem Cell, Inc., Helotes, TX; 3Department of Medicine, Case Western Reserve University, Cleveland, OH. *CR
5782 — A300 Loss of Neuronal Support to the Bone Marrow BM Promotes Increased Generation Of (C-C Motif) Receptor 2 (CCR2)-Monocytes And Reduced Endothelial Progenitors Cells (EPC): Implications For Diabetic Retinopathy (DR) Pathogenesis. Maria B. Grant1, A. Bhutwadakar1, F. Hu2, S. Haza1, S. Caballero1, S. Mohn1, S. F. Abu-couwer1, D. R. Saban1, T. Chan-Ling1. J.V. Buski2. 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 Megyerdi1, S. Ahmad1, S. Hsu1, Z. Gurel1, E.S. Shin1, N. Sheiban1, M. Al-Shabrawey1,2,4,5 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. Ramirez2, F. Ochoa3, J. Trujillo2. Clinica Ver Bien, Pereira, Risaralda, Colombia; 'Clinica Ver Bien, Armenia, Quindio, Colombia. 1Department of Ophthalmology, University Scientific Institute San Raffaele, Milan, Italy; 2Department of Ophthalmology, University of Florida, Gainesville, FL; 3Department of Ophthalmology, University of Sydney, Sydney, Australia.


5786 — A340 The Outcome of vitrectomy for chronic diabetic tractional retinal detachment. Munacea A. Abunajma1, H.N. Al-Shamsi2, H. Al-Dhiri, N.G. Ghaiz1. 1Ophthalmology Residency Program, King Saud University, Riyadh, Saudi Arabia; 2Vitreoretina, King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia.

5787 — A341 Evaluation of Retinectomy in the Treatment of Severe Retinal Detachment. Thais S. Mendes1, A.M. Gomez1, H.Y. Paxos1, A. Baptista2. 1Ophthalmology, Suel Abujama Institute, Sao Paulo, Brazil; 2Ophthalmology, University of Sao Paulo, Sao Paulo, Brazil.


5791 — A345 Triamcinolone-assisted Inferior Limiting Membrane Peeling During Primary Rhegmatogenous Retinal Detachment Repair Reduces Postoperative Macular Pucker Formation. Rajesh C. Rao1, K.J. Blinder1, G.K. Shah1. 1Ophthalmology and Visual Sciences, Washington University School of Medicine, The Retina Institute, Saint Louis, MO; 2The Retina Institute, Saint Louis, MO.

5792 — A346 Siluron 2000 Novel-generation Silicone Oil: Proof of Concept and One Year Clinical Results. Theodor Stappler1, L. Konstantinidis1, D.S. Wong1. 1St Paul's Eye Unit, Royal Liverpool University Hospital, Liverpool, United Kingdom; 'The Eye Institute, The University of Hong Kong, Hong Kong.

5793 — A347 Air as Tamponade for Retinal Detachments. Aranzazu Mateo Montoya1, M.D. de Smet2. 1Clinique de Montchoisi (Lausanne, Switzerland), Lausanne, Switzerland; 2Ophthalmology, Clinic of 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-rules2, Ulrich Thelen1, H. Gerdinger1. 1Private Practice, Munster, Germany; 'Clinic Pallas, Olten, Switzerland.

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; 2Department of Ophthalmology, University of Florida, Gainesville, FL; 3Department of Ophthalmology, University of Sydney, Sydney, Australia.

5798 — A352 The Effect Of Retinal Detachment On Retinal Oxygenation. Alexander Kyhnel, III1, S. Traustason1, J. Hajari1, J. Kilggaard1, E. Stefansson1, M. La cour1. 1Ophthalmology, Glorup University Hospital, Glorup, Denmark; 2Department of Ophthalmology, Landskapi University Hospital, Reykjavik, Iceland.

5799 — A353 Pockets of Subretinal Fluid after Retinal Reattachment Surgery: New Insights with SD-OCT. John B. Miller1, R.C. Rao1, N. Choudhury1, D.M. Wu1, G.K. Shah1, D. Vavvas1, S. Mukai1, D. Elliott1. 1Harvard Department of Ophthalmology, Massachusetts Eye and Ear Infirmary, Boston, MA; 'Department of Ophthalmology and Visual Sciences, Washington University School of Medicine/The Retina Institute, St. Louis, MO; 2Doheny Eye Institute, University of Southern California, Los Angeles, CA; 3Barnes 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, M. Falcão1, P. Brito1, A. Sousa1, P. Faria1, N. Gomes1, E. Brandão1, F. Falcão-Reis1. 1Ophthalmology, Hospital S Joao Porto, Porto, Portugal; 2Ophthalmology, Hospital S Joao Porto, Porto, Portugal.

*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
5828 — **A448** Implication of Gpx4 in Choroidal Neovascularization. Murilo F. Roggia1, T. Ueta1, I. Hiraoka1, T. Inoue1, Y. Tamaki1, Y. Yanagi1.

1Ophthalmology, University of Tokyo, Tokyo, Japan; 2Pharmaceutical Sciences, Kitasato University, Tokyo, Japan.

5829 — **A449** Different Mechanisms in Regulation of Laser Induced CNV by Arresten. Sudhakar A. Yakkanti1, V. Gundu2, R.K. Verma2, C.S. Boosani2. 1Genetics Retinal Cell Signaling, Boys Town Nati Res Hospital, Omaha, NE; 2Genetics, Boys Town Nt1 Research Hosp, Omaha, NE.

5830 — **A450** Topical NPD1 Promotes Microglia Ramification in Experimental CNV. Christophor G. Sheets1A, W.C. Gordon1B, N.G. Thouless1B. 1Ophthalmology, University of Maryland, Baltimore, MD; 2Department of Molecular/ Cell Biology, University of California, Los Angeles, CA.

5831 — **A451** Selective Cre/lox Flt-1 Ablation In RPE Induces CNV: A Novel Transgenic Murine CNV Model. Ling Luo1, T. Olsen1, X. Zhang1, S. Das1, 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 PLA, Beijing, China; 3Department of Medicine and Harold Hamm Oklahoma Diabetes Center, University of Oklahoma Health Sciences Center, Oklahoma City, OK.

5832 — **A452** Ikk2 Inhibition Attenuates The Laser Induced Choroidal Neovascularization. Qiutang Li, H. Lu, W. Wang, Q. Lu, H.J. Kaplan. Ophthal & Vis Science, University of Louisville, Louisville, KY.

5833 — **A453** Inhibitory Effect of CXCR4 Inhibitor (AMD3100) Combined with Anti-VEGF Antibody on Laser-induced Experimental Choroidal Neovascularization. Wenqiu wang, F. Wang, X. Sun. Shanghai Key Laboratory of Ocular Fundus, Shanghai First People’s Hospital, Shanghai, China.

5834 — **A454** Proton Beam Irradiation for Choroidal Neovascularization: Long-term Prevalence of Radiation Retinopathy. Rachel M. Huckfeldt, E. Shildkrot, A. Lane, E. Gragoudas, J.W. Miller. Retina Service, Department of Ophthalmology, Massachusetts Eye and Ear Infirmary and Harvard Medical School, Boston, MA.

5835 — **A455** Long Term Results of Photodynamic Therapy in Patients with Age Related Macular Degeneration. Amiy Chawla1, J.T. Thompson1, R.J. Gjonna1. 1Ophthalmology, University of Maryland, Baltimore, MD; 2Ophthalmology, Retina Specialist, Baltimore, MD.

5836 — **A456** Functional Recovery After Experimental RPE Debridement, mERG Studies in a Porcine Model. Jens F. Kiillgaard2, N. Sorensen1, M.V. Kyhr1, N. Lassote1, J.U. Frase1, M.D. de la Cour1. 1Dept of Ophthalmology, Rigshospitalet, Copenhagen, Denmark; 2Dept. of Ophthalmology, Glostrup Copenhagen Univ. Hospital, Glostrup, Denmark; 3Eye Pathology Inst, Copenhagen University, Copenhagen, Denmark.

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

5838 — **A458** Transplantation of Human ESC-derived RPE into Rodent Models of Retinal Degeneration. Madalena Carido1, Y. Zhu1, Benker1, T. Kurth1, T. Munch1, E. Tanaka1, M. Ader1. 1Center for Regenerative Therapies Dresden, Dresden, Germany; 2Werner Reichardt Center for Integrative Neurosciences, Tübingen, Germany.

5839 — **A459** Transplantation of Human Embryonic Stem Cell-Derived Retinal Cells into the Subretinal Space of a Non-Human Primate. Jennifer R. Chao1, D.A. Lamb1, T. Kleser1, K. Sternhagen1, R. Taylor1, A. Yanagida1, M. Neitz1, J. Neitz1, B.K. Ambati1. 1Ophthalmology, 2Bioengineering, Dept of Biological Structure, 3Ophthalmology, Univ of Washington, Medical School, Seattle, WA; 4Buck Institute for Research on Aging, Novato, CA; 5Ophthalmology, Univ of Washington, Medical School, Seattle, WA.

5840 — **A460** Characteristics Of Rat Iris Pigment Epithelial Cells Cultured On Modified Expanded-polytetrafluoroethylene (ePTFE) Substrates. Shen Nian1, C.M. Sheridan2, V. Kearns2, R. Williams2, D. Wong4, K. Yasi1, A. Bachluka1, A.C. Lo2, W.W. Lau1. 1Eye Institute, 2Research Centre of Heart, Brain, Hormone and Healthy Aging, 4The University of Hong Kong, Hong Kong, Hong Kong; 5Eye and Vision Science, University of Liverpool, Liverpool, United Kingdom; 6Mawson Institute and School of Advanced Manufacturing, University of South Australia, Mawson Lakes, Australia.

5841 — **A461** Cell-based Therapy In A Mouse Model Of Leber Congenital Amaurosis. Yi-Sheng Chang1, W. McIntosh Ambrose2, C. Lin1, H. Qian1, T. Li1, T. Cogliati1, A. S waroop1, 1National Eye Institute, National Institutes of Health, Bethesda, MD; 2Ophthalmology, National Cheng Kung University, Taiwan, Taiwan.


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

5844 — **A464** Repeated Ab-Externo Catheterization of the Sub-retinal Space Using a Microcatheter for Targeted Delivery of a Cell Therapy Product in a Pig Model. Marc D. de Smet1, S. Wyse1, M. Vejzina2, S. Conston3, C. Sachs2, S.H. Popma1. 1Ophthalmology, Clinic 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.

5845 — **A465** Correlation Of The Detection Of Blood Flow In An RPE-chorioid Graft With Phase-resolved Doppler OFDI, With The Revasculationization Steps Found On SD-OCT. Elsbeth J. Van Zeeburg1, B. Braaf2, M.G. Cereda2, J.C. van Meurs1, J.F. de Boer2. 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.

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

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

5848 — **A468** Autologous Bruch’s Membrane Rotation As A Potential Adjunct To Retinal Pigment Epithelium Cell Replacement Therapy For Age Related Macular Degeneration. Mandeep S. Singh1, E.J. Lee1, H.E. Jones2, B. Ahmed2, I.M. Andolina3, P.M. Munro4, K.L. Griewe5, G.W. Aylward1, A.M. Silbirt2, R.E. MacLaren1. 1University of Oxford & Oxford Eye Hospital NHIR Biomedical Research Centre, Oxford, United Kingdom; 2UCL Institute of Ophthalmology & Moorfields Eye Hospital NHIR Biomedical Research Centre, London, United Kingdom; 3Faculty of Life Sciences, University of Manchester, Manchester, United Kingdom.
5867 – 5877 – Thursday – Posters

5874 — A494 Description Of A Technique To Make Stereo Ocular Images And Retina Angiograms Using The Retcam II In Pediatric Patients. Victoria Gonzalez1, F. Schoonewolf2, Y. Morales-Canton3, M.A. Martinez-Castellanos4. 1Ophthalmology, Asociacion Para Evitar La Ceguera, Mexico, D.F., Mexico; 2Retina, Asoc Para Evitar La Ceguera en Mexico, Mexico, Mexico; 3Retina, Assoc para Evitar La Ceguera, Mexico, Mexico; 4Retina y Vitreous, Asociaacion Para Evitar La Ceguera, Mexico, Mexico. ©


5876 — A496 Digital Imaging Identification Of Skip Lesions In Laser Treatment Of Retinopathy Of Prematurity. Robison V. Chan8, K.B. Kang9, A. Orlis9, W.F. Chiang10, T.C. Lee11. 8Ophthalmology, Weill Cornell Medical College, New York, NY; 9Ophthalmology and Medical Informatics, Casey Eye Institute, Oregon Health & Science University, Portland, OR; 10Ophthalmology, 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. Stojanoff1A, M.E. Forniez-Paz1, R. Monti1, E. Collino2B. 1Ophthalmology, 2Eye Centre, City Hospital, Birmingham, United Kingdom; 3Pediatrics, 1Samsung Medical Center, Seoul, Republic of Korea.


5880 — A500 Screening for ROP:16 years experience. Lorenzo Orazi1, D. Lepore1, A. Baldascino1, S. Luceri1, P. Perrini1, G. D’Amico1, M.M. Pagliara2, F. Molle. Ophthalmology, Catholic University of the Sacred Heart, Rome, Italy.


5882 — A502 Arginase 2 Deficiency Limits Microglia/Macrophage Activation and Prevents Hyperoxia-induced Vascular Injury in the Mouse Retina. Jatamas Suwarnpradit1, Z. Xu1, S.P. Narayanan1, R.W. Caldwell2, R.B. Caldwell1,2,3. 1Vascular Biology Center, 2Department of Pharmacology and Toxicology, 3Georgia 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 Fu4, S-Y. Li1,3, S. Chung1, C. Du1, D. Wong1, A.C. Lo4,1C. 1Eye Institute, 2Anatomy, 3Research Center of Heart, Brain, Hormone and Healthy Aging, 4The University of Hong Kong, Hong Kong, Hong Kong.

5884 — A504 Systemic Safety After Intravitreal Bevacizumab Injection In Newborn Rabbit Eyes. Wei-Chi 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. Kozulin1, R. Maccarone1, S. Yun1, P. Hu1, S. Bisti1, J. Provits1, M.C. Madigan1, J. McColm1, T. Chan-Ling1. 1Department of Anatomy & Histology, The University of Sydney, Sydney, Australia; 2ARC Centre of Excellence In Vision Science, Australian National University, Canberra, Australia; 3Biomedical & Science Technology, University of L’Aquila, L’Aquila, Italy; 4School of Optometry & Vision Science, University of NSW, Sydney, Australia.

5887 — A507 Role of the Krebs Cycle Metabolites in Retinal Angiogenesis: Implication of α-KG and its Receptor GPR99. Francois Duhamel1, S. Tremblay1, K. Zanizol1, P. Sapieha1, S. Chentob1. 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.

*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
5888 — A508 Decreased IGF1 Expression Associated with Avascular Retina in Model of Retinopathy of Prematurity. Yunchao Jiang1,2, B. Numpang2, B. Yu1, H. Wang1, G. Smith1, M. McCloskey1, S. Patel1, R. DiGeromino1, M. Hartnett1, 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. Rivera1,2, N. Sitara1,2, D. Hamel1, A. Madaan1, J-C. Honore1, B. Nouiehed1, M. Blais2, C. Quintin1, P. Sapieha1, S. Chometob2. 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 Hypoxia Conditions With Fewer Oxygen Supply In The Rat. Umut Karaca1, T. Ozgurtas2A, A.H. Durukan2B, A511 Nitric Oxide and Signal Loss in the “ROP Rat” Retina. Tara L. Favazza1, DeWalt1, N. Zhang2, R.M. Hansen3, A.B. Fulton4, W.D. Eldred5, J.D. Akula6. 1Ophthalmology, Children’s Hospital Boston, Boston, MA; 2Biology, Boston University, Boston, MA; 3Ophthalmology, Harvard Medical School, Boston, MA; 4Ophthalmology, University of Southern California, Los Angeles, CA; 5Ophthalmology, Children’s Hospital Los Angeles, Los Angeles, CA; 6Ophthalmology, Children’s Hospital Of Los Angeles, Los Angeles, CA.

5891 — A512 The Retina and Retractive Outcome in the Rat Model of ROP. Nan Zhang2, T.L. Favazza1, A. Baglieri1, A.B. Fulton1, R.M. Hansen2, P.M. Ivovene1, J.D. Akula2. 1Ophthalmology, Children’s Hospital Boston, Boston, MA; 2Ophthalmology, Harvard Medical School, Boston, MA; 3Ophthalmology and Pharmacology, Emory University School of Medicine, Atlanta, GA.

5892 — A512 The Retina and Retractive Outcome in the Rat Model of ROP. Nan Zhang2, T.L. Favazza1, A. Baglieri1, A.B. Fulton1, R.M. Hansen2, P.M. Ivovene1, J.D. Akula2. 1Ophthalmology, Children’s Hospital Boston, Boston, MA; 2Ophthalmology, Harvard Medical School, Boston, MA; 3Ophthalmology and Pharmacology, Emory University School of Medicine, Atlanta, GA.

5893 — A572 Gene Expression and Immunogenicity of induced Pluripotent Stem Cell-Derived Retinal Pigment Epithelial Cells. Hironoiki Kamo1,2, M. Mandai1, A. Saga1, J. Kiyri1, M. Takahashi1. 1Laboratory for Retinal Regeneration, RIKEN Ctr for Dvlpmntl 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. Aparicio1, A. DiConti1. 1Ophthalmology, John Moran Eye Center, The University of Utah, Salt Lake City, UT; 2Division of Neonatology, The University of Utah, Salt Lake City, UT.

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. Askenasy3, N. Goldenberg Cohen4. 1The Krieger Eye Research, Sackler Faculty of Medicine, Tel Aviv University, Petchik Tikva, Israel; 2Frankel Laboratory, Center for Stem Cell Research, Petchik Tikva, Israel; 3Department of Pediatric Ophthalmology, Schneider Children’s Medical Center of Israel, Petchik Tikva, Israel.


5897 — A576 Optimizing Retinal Progenitor Differentiation of hESC - Effect of RPE Co-Culture. Magdalene J. Seiler1, D. Ferguson1, G. Nistor1, S. Rana1, I. Tuovets1, J. Almodovar1, J. Taylor1, N.A. Tuovets1, 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 Outgrowth of Human iPSC Cell-Derived Retinal Cell Types on a Biocompatible Membrane. Jessica M. Martin1,2, J. Phillips3, L.S. Wright1, C. Johnson2, N. Radke1, D.M. Gamm1. 1University of Wisconsin - Madison, Madison, WI; 2Cook Biotech, West Lafayette, IN; 3University of Louisville, Louisville, KY.


5901 — A580 Characterization Of Human Retinal Progenitor Cells. Petr Y. Baranova1, G.B. Melo1, M.J. Young1. 1Schepp Eye Research Institute, Boston, MA; 2Ophthalmology, Federal Univ of Sao Paulo/UNIFESP, Aracaju, Brazil; 3Schepp Eye Research Inst, Harvard Medical School, Boston, MA.

5902 — A581 Transdifferentiation And Molecular Characterization Of Bone Marrow-derived Progenitors In A Coculture system. Stefanie G. Lecade, I. Mathivanan, 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. Wang2, 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. Akhayalakshmi Sridhar1,2, M.M. Stewart1, M. Gupta1, J.S. Meyer1. 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. Melloh1, E. Sernagor2, D.H. Steel3, M. Lako4. 1Institute of Genetic Medicine, School of Neurology, Neurobiology and Psychiatry, University of Newcastle Upon Tyne, Newcastle, United Kingdom; 2Sunderland 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. Perez1, D. Kuai1, L.S. Wright1, B. Pattnaik1, D.M. Gamm1. 1Waismann Center, 2Depts. of Ophthalmology and Visual Sciences and Pediatrics, Eye Research Institute, 3Dept. of Ophthalmology and Visual Sciences and Eye Research Institute, University of Wisconsin, Madison, WI.

5907 — A586 Soluble Factors Secreted by Fibroblast Feeder Cells Induce Retinal Pigment Epithelium Differentiation from Human Pluripotent Stem Cells. Alexandra Mikhailova1, H. Hongisto1, H. Vaajasaari1, 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.
Thursday – Posters – 5928 – 5952

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 Trabectome™ Outcomes in Patients of African Decent. Ninita H. Neuburger1, L.S. Jones2. 1Ophthalmology, Howard University, Washington, DC; 2Ophthalmology, Howard University Hospital, Washington, DC.

5930 — A155 The Trabectome - First European Clinical Results and Subgroup Analysis. Matthias Neuburger1, C van Onzeronde1, T. Becker, D. Boehringer, T. Reinhard, J.F. Jordan. 1University Eye Hospital, Freiburg, Germany.

5931 — A156 Trabectome 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. Sewry1, C. Seery2, P. Emami-Naeimi2, A. Kolomeyer2, M. Zarbin2, R. Fetchner2, N. Bhagat1. 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. Iwao2, M. Kawai3, T. Inoue1, K. Iwao1, H. Tanihara1. 1Ophthalmal & 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.

5936 — A161 Time Course Of Induced Astigmatism After Canaloplasty. Anselm G. Junemann1, J. Schlimberg2, F.K. Horn1, R. Rejdak2, F.E. Kruse1, M.C. Moelle1. 1Ophthalmology, University of Erlangen Nurnberg, Erlangen, Germany; 2General Ophthalmology, Medical University of Lublin, Lublin, Poland.


5939 — A164 A Comparison Of Intracocular Pressure Reduction After Selective Laser Trabeculoplasty With The Co-administration Of Lopetrolde Versus None. Ronald L. Renbentsch1, N.R. Binder1, A. Jani2, P. Pikey2. 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. Riva2, G. Gambirasio1, I. De Simone2, E. Rulli1, E. Biagioli1, S. Credi2. 1Ophthalmology-Glaucoma Unit, University of Brescia, Brescia, Italy; 2Laboratory of Clinical Trials, Istituto di ricerche farmacologiche «Mario Negri», Milan, Italy.

5942 — A167 Faster Visual Recovery Following Ex-press Than Trabeculectomy: Results Of A Prospective study. Delan Jinjirapriya1, L. Beltran-Aguillo2, Y.P. Jiraross2, L.D. Wogschal3, G.E. Trope4, Y.M. Baus2. 1Ophthalmology, Queen’s University, Kingston, ON, Canada; 2Ophthalmology and Vision Sciences, 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. Abusleme1, C. Perez2, E. Mau1, E. Maul F3, A. Gerhard2, C. Triger1. 1Ophthalmology Department, Catholic University of Chile, Santiago, Chile; 2Ophthalmology Department, Sotero del Rio Hospital, Santiago, Chile.

5945 — A170 Success Rates And Risk Factors For Failure Of Bleb Needling Post Trabeculectomy. Andrew Torent1, S. Kulkarni2, L. Shuba1, M. Nicoleti1. 1Ophthalmology & Visual Sciences, Dalhousie University, Halifax, NS, Canada; 2Ophthalmology, University of Ottawa, Ottawa, ON, Canada.


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


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

5953 — A178 The Influence Of Sceral Flap Thickness, Shape, Suture Number And Position On Pressure Change And Aqueous Flow Direction In A New Trabeculectomy Model. Amir Samsudin1, 2, S. Broccini1, 2, P.T. Khaw3, L. Eames2. 1University of Malaya, Kuala Lumpur, Malaysia; 2NIHR Biomedical Research Centre, Moorfields Eye Hospital and UCL Institute of Ophthalmology, London, United Kingdom; 3UCL School of Pharmacy, London, United Kingdom; 4UCL Department of Mechanical Engineering, London, United Kingdom.


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. Repera1, C. Ho2, C.K. Leung3, D.V. Istiantoro4, A.S. Khouri5. 1Ophthalmology, Eye Unit, Ospedale “C. Cantu”, Department of Ophthalmology and Visual Sciences, University of Hong Kong, Hong Kong, Hong Kong; 2Glaucoma, Jakarta Eye Center, Jakarta, Indonesia; 3Ophthalmology, Princess Margaret Hospital, Hangchow, China; 4Drexel University, Philadelphia, PA; 5Ophthalmology, UMDNJ - New Jersey Medical School, Newark, NJ.

5957 — A182 Excimer Laser Trabeculostomy (ELT) combined with Phacoemulsification and Lens Implantation: 5 Year Post-OP Observations. Ulrich F. Giers1, L. Kleineberg1, R.P. Stodmeister2, M.S. Berlin1, L.E. Pillmann1. 1Dettmold Eye Clinic, Dettmold, Germany; 2Ophthalmology, University Hospital Carl Gustav Carus, Rodalben, Germany; 3Ophthalmology, UMDNJ-New Jersey Medical School, Newark, NJ; 4Drexel University, Philadelphia, PA.


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. Shah2, R.D. Fechtner2. 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. Miglieno2, L.F. Indira1. 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. Loo1, P.T. Chew1. 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. Mambu Shah, B. Eliaissi-Rad. Department of Ophthalmology, Boston University School of Medicine, Boston, MA.

5965 — A190 Selective Laser Trabeculoplasty Energy Dose Response - Long Term Results. Larissa A. Gregory, T.L. Berezina1, S. Prasertsit1, R.D. Fechtner, A.S. Khouri. Ophthalmology, UMDNJ - New Jersey Medical School, Newark, NJ.

5966 — A191 The Cost Effectiveness And Duration Of Effectiveness Of SLT As Primary And Secondary Therapy Relative To Medications In The Treatment Of Primary Open Angle Glaucoma. Ernesto D. Golez, III1, T.A. Shazly2, A. Anchala1. 1Glaucoma, Hospital Medicina dos Olhos, Sao Paulo, Brazil; 2Glaucoma, Complexo Hospital Padre Bento, Sao Paulo, Brazil.


5969 — A194 Baseline Intraocular Pressure Strongly Predicts Response to Selective Laser Trabeculoplasty for Open Angle Glaucoma. J.D. Nussdorf1, A.C. Janot1, D.W. Hanson2, P.J. DeMarco3. 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. Sauden2, R. Thomas3, W. Chan4. 1Ophthalmology, Princess Royal University Hospital, Orpington, United Kingdom; 2Ophthalmology, University Hospitals Coventry Warwickshire & Warwick Medical School, Coventry, United Kingdom; 3Ophthalmology, Croydon University Hospital, Croydon, United Kingdom; 4Ophthalmology, Great Ormond Street Hospital, London, United Kingdom.


5972 — A197 Quantification of Short-Term Endothelial Cell Loss and Intraocular Pressure Reduction Following Laser Peripheral Iridotomy. Gabriela C. 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. Anchala1, T.D. Patrnikakov2. 1University of Chicago, Chicago, IL; 2John H. Stroger Jr. Hospital of Cook County, Chicago, IL.


5975 — A200 Change in Lens Vault after Laser Iridotomy in Asian Indian Eyes with Angle Closure. Dhwal Haria1, R. Sasikumar2, S. A V2. 1Ophthalmology, Ivey Eye Institute, Schulich School of Medicine, Bronx, NY; 2Floral Park Ophthalmology, Floral Park, NY.


*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures – ^ Refer to Program Number in the Clinical Trial (CT) Registration Index – 9 Travel Grant Awardee
5977 — A202 A Qualitative and Quantitative Analysis of Filtering Blebs with Optical Coherence Tomography in Patients after Primary Trabeculectomy. Pietro E. Napoli, I. Zucchi, M. Fossarell. Eye Clinic, University of Cagliari, Cagliari, Italy.


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


5981 — A206 Scanning Electron Microscopy Findings In Rabbit Eyes Undergoing Ultrasonic Cyclocoagulation. Florent Apfel1,2, A. Béglé1, T. Charrel1,3, C. Lafon1, J-Y. Chapelon1, P. Denis1, D. Romano1. 1Grenoble University Hospital, Grenoble, France; 2Inserm U1032, Lyon, France; 3Ophthalmology, Bascom Palmer Eye Institute, University of Miami, Miami, FL.

5982 — A207 The Effects Of Combined Endoscopic Cyclophotocoagulation (ECP) And Phacoemulsification In The Treatment Of Mild to Moderate Glaucoma. Michael J. Siegel1, W-S. Shieh1, O.S. Faridi2, C.K. Gupta3, M.S. Juzeh1, M.E. Citron4, M.J. Siegel1, L.I. Siegel1. 1Ophthalmology, Kresge Eye Institute, Detroit, MI; 2School of Medicine, Wayne State University, Detroit, MI; 3Ophthalmology, William Beaumont Hospital, Royal Oak, MI; 4Ophthalmology, Beaumont, Bloomfield Hills, MI; 5Glucoma Center of Michigan, Southfield, MI.

Hall B/C D804-D848

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

Cornea

523 Corneal Endothelium

Moderator: Ula V Jarkunas

5983 — D804 Analysis of the Role of ZEB1 in the Pathogenesis of Posterior Polymorphous Corneal Dystrophy. Vivek S. Yeong1, R.K. Gangalani2, S.A. Rayner1, C.K. Nguyen2, Z. Jing3, S.P. Bhat1, A.J. Aldave1. 1Jules Stein Eye Institute, Univ of California-Los Angeles, Los Angeles, CA; 2Ophthalmology, Jules Stein Eye Institute, UCLA, Los Angeles, CA; 3Jules Stein Eye Institute, University of California, Los Angeles, Los Angeles, CA; 4Ophthalmology, Jules Stein Eye Institute UCLA, Los Angeles, CA; 5Cornea Service, CHS/ UCLA, Los Angeles, CA.


5987 — D808 Genetic screen of African-Americans with Fuchs endothelial corneal dystrophy. Natalie A. Afshari1, M.A. Minear2, J. McLaren1A, K. Kittleson1A, S. Patel1A. 1A Department of Ophthalmology, National Taiwan University Medical Center, Taipei Medical University, Taipei, Taiwan; 2Institute of Pathology, School of Public Health, National Taiwan University Medical Center, Taipei, Taiwan.

5988 — D809 Successful Culture Of Human Corneal Endothelial Cells Isolated From Patients With Fuchs Endothelial Corneal Dystrophy. Marie-Claude Perron1, K. Zaninolo1, C. Bostan1, O. Rochette Droux1, A. Deschambeault1, I. Brunette1, S. Proulx2. 1Maisonneuve-Rosemont Hospital Research Center, Montreal, QC, Canada; 2Centre LOEX de l’Univesite Laval, Genie tissulaire et regeneracion; Centre de recherche FRSQ du CHA universitaire de Quebec and Department of ophthalmology and ORL, Laval University, Quebec, QC, Canada; 3Department of ophthalmology, University of Montreal, Montreal, QC, Canada.

5989 — D810 Relationship between Central and Peripheral Corneal Thickness in Fuchs Endothelial Dystrophy. Daniel Repp1, D. Hodge1, K. Baratz1, J. Mclaren1, K. Kittleson1, S. Patel1. 1Ophthalmology, Health Sciences Research, Mayo Clinic, Rochester, MN. *CR

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


5992 — D813 Reconstruction of a Corneal Endothelium Using Cells From Patients With Fuchs Endothelial Corneal Dystrophy. Stephanie Proulé1, M. Haydari2, B. Guyer3, O. Roy4, S. Laprise5, O. Rochette Droux1, I. Brunette1. 1Centre LOEX de l’Universite Laval, Gene tissulaire et regeneracion; Centre de recherche FRSQ du CHA universitaire de Quebec and Departement d’ophtalmologie, Universite Laval, Quebec, QC, Canada; 2Departement d’ophtalmologie, Universite de Montreale and Centre de Recherche de l’H´e´pital Maisonneuve-Rosemont, Montreale, QC, Canada.

5993 — D814 Sulforaphane Decreases Endothelial Cell Apoptosis in Fuchs Endothelial Corneal Dystrophy: A Novel Treatment. Alireza Ziae1, U.V. Jarkunas. Schepens Eye Research Institute, Massachusetts Eye and Ear, Department of Ophthalmology, Harvard Medical School, Boston, MA.

5994 — D815 Fabricating Bioengineered Corneal Endothelial Cell Sheet Through Chitosan-polycaprolactone-blended Membranes. Tsang-Jen Wang1, I-J. Wang4, T-H. Young. 1Department of Ophthalmology, Taipei Medical University Hospital, Taipai, Taiwan; 2Institute of Biomedical Engineering, College of Medicine and College of Engineering, National Taiwan University, Taipai, Taiwan; 3Department of Ophthalmology, National Taiwan University Hospital, Taipai, Taiwan; 4Department of Ophthalmology, National Taiwan University College of Medicine, Taipai, Taiwan.


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

*CR

Travel Grant Awardee

Thursday – Posters – 5977 – 5995

Thursday Posters

8:30 am – 10:15 am

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D817 Kinetics of Intracellular Pro-apoptotic Bax Protein Inducing Cell Death in Corneal Endothelial Cells. Marko Pastak1, B.B. Singer2, A. Kovtun2, M. Czagala3, B. Seitz4, M. Epple5, K.-P. Stuhl6, S. Ergün2, T.A. Fuchsbluger3,4, 5. Institute of Anatomy, 1Department of Ophthalmology, Essen University Hospital, Essen, Germany; 2Institute of Inorganic Chemistry, University of Duisburg Essen, Essen, Germany; 3Department of Ophthalmology, Saarland University Hospital, Homburg/Saar, Germany; 4Department of Ophthalmology, Düsseldorf University Hospital, Düsseldorf, Germany.


D820 Rock Inhibitor Eye Drops Accelerate Corneal Endothelium Wound Healing In A Primate Model. Naoki Okumura1,2, N. Koizumi2, M. Ueno1, Y. Sakamoto1, H. Takahashi1, K. Yasumaki1, R. Torii1, J. Hamuro1, S. Kinoshita2. 1Biomedical Engineering, Doshisha University, Kyotanabe, Japan; 2Ophthalmology, Kyoto Prefectural Univ of Med, Kyoto, Japan; 3Research Center for Animal Life Science, Shiga University, Otsu, Japan.

D821 Culture of Human Corneal Endothelial Cells (HCECs) for therapeutic purposes. Jesinta Navaratnam1, J.K. Slettedal2, E. Gullicksen3, S. Boye4, M.C. Moe4, L. Drolsum4, B. Nicolaissen5, A. Shahdadfar6, 7. Center for Eye Research, 1Oslo University Hospital, Oslo, Norway.

D822 Increased Proliferation and Replicative Lifespan of Isolated Human Corneal Endothelial Cells with L-Ascorbic acid 2-phosphate. Satoru Yamagami1,2, N. Shima1, M. Kimoto2, M. Yamaguchi2. 1Department of Ophthalmology, University of Tokyo Graduate School of Medicine, Bunkyo-ku, Japan; 2Foundation for Biomedical Research and Innovation, Kobe, Japan.


D824 In Vitro Expansion Of Corneal Endothelial Cells On Biomimetic Substrates. Rachelle Palchesko1, J.L. Funderburgh2, A. Feinberg3. 1Ophthalmology, University of Pittsburgh School of Medicine, Pittsburgh, PA; 2Biomedical Engineering, Carnegie Mellon University, Pittsburgh, PA.


D826 Functional Study of SLC4A11 in HEK293 cells. Diego G. Ogando1, S.S. Jalimarada2, E.N. Vithana3, J.A. Bonanno4, 5. School of Optometry, Indiana University, Bloomington, IN; 6Singapore Eye Research Institute, Singapore, Singapore.

D827 Functional Characterization of the Zebrafish Corneal Endothelium. J. Heur1, S. Jiao1, G. Crump4. 1Ophthalmology, 6Cell and Neurobiology, University of Southern California, Los Angeles, CA.


D829 Over-representation Preliminary Analysis Between Expressed Genes In Corneal Endothelium And Mesenchymal Stem Cells. Jorge E. Valdez1, J. Zavala1, V. Treviño2, E. Martinez3. 1Dean’s Office, Tecnologico de Monterrey School of Medicine, Monterrey, Mexico; 2Cátedra de Oftalmologia - Tecnologico de Monterrey, Monterrey, Mexico; 3Cátedra de Bioinformatica - Tecnologico de Monterrey, Monterrey, Mexico.

D830 CD147 Expression Required for Lactate Transporters MCT1 and MCT4 in Rabbit Corneal Endothelium. Shinmin Li, T.T. Nguyen, J.A. Bonanno. School of Optometry, Indiana University, Bloomington, IN.

D831 Cultivation of Human Corneal Endothelial Cells on a Periocular Matrix Prepared from Human Decidual-Derived Mesenchymal Cells. Ryohsei Numata1, N. Okumura1, M. Nakahara2, M. Ueno2, S. Kinoshita2, Y. Kanemura2, T. Sawai2, N. Koizumi2. 1Biomedical Engineering,Faculty of Life and Medical Sciences, Doshisha University, Kyotanabe, Japan; 2Ophthalmology, Kyoto Prefectural Univ of Med, Kyoto, Japan; 3Division of Regenerative Medicine, Institute for Clinical Research Osaka National Hospital, National Hospital Organization, Osaka, Japan; 4Center for Developmental Biology, Riken, Kobe, Japan.

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

D833 NF-κB is the Transcription Factor of FGF-2 that Causes Endothelial Mesenchymal Transformation in Cornea. JeongGoo Lee1, 2, J.M. Heur1, 2, E.P. Kay1, 2. 1Ophthalmology, University of Southern California, Los Angeles, CA; 2Doheny Eye Institute, Los Angeles, CA.

D834 Isolation and Propagation of Human Corneal Endothelial Cells Using a Dual Media Culture System. Gary S. Peh1, K.-P. Toh1, D. Balehosur2, H-P. Ang2, M-X. Lee3, D.T. Tan4, 5, J. Mehta1, 6, 7. 1Singapore Eye Research Institute, Singapore, Singapore; 1Singapore National Eye Centre, Singapore, Singapore; 2Department of Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore; 3Department of Clinical Sciences, Duke-NUS Graduate Medical School, Singapore, Singapore.

D835 Apoptosis And Viability Of Human Corneal Endothelial Cell Cultures Following Photodynamic Therapy (pdt). Tanja Stachen1, J. Wung1, 2, T. Eppig3, A. Langenbucher4, B. Seitz5, N. Szentmár4. 1Department of Ophthalmology, 2Experimental Ophthalmology, 5Saarland University Hospital, Homburg/Saar, Germany; 6Department of Ophthalmology, Renmin Hospital of Wuhan University, Wuhan, China.


D838 Study of Effect of Donor Age and Death Neculation Time on in-vitro Culture of Human Corneal Endothelial Cells. Hini Singh1, R. Tandon1, 2, S. Mohanty3, 4, A. Kumar1, 4. 1Ophthalmology, 2Dr.R.P Centre for Ophthalmic Sciences, 3Stem Cell Facility, 4All India Institute of Medical Sciences, New Delhi, India.
Cultured Human Corneal Endothelial Cells. Liverpool, United Kingdom. 4Eye Institute, 5Research Centre of Heart, Brain, Hormone and Healthy Aging; 6The University of Hong Kong, Hong Kong, Hong Kong; 7Department of Eye and Vision Science, University of Liverpool, Liverpool, United Kingdom. 8CR

6020 — D841 Cytotoxicity of Ganciclovir on Cultured Human Corneal Endothelial Cells. Young Joo Shin1, J. Kol1, T. Chung2, J. Hyon5, W. Wei4. 1Ophthalmology, Hallym University College of Medicine, Seoul, Republic of Korea; 2Ophthalmology, Chosun University School of Medicine, Kwangju, Republic of Korea; 3Ophthalmology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Republic of Korea; 4Ophthalmology, Seoul National University College of Medicine, Seoul, Republic of Korea. 9CR

6021 — D842 Cytoplasmic Localization Of P120ctn And N-cadherin In Ex Vivo Expansion Of Human Corneal Endothelial Cells On Amniotic Membrane. Ray J. Tsai1, R. Y. Tsai1. 1Ophthalmology, Taipei Eye Center/Taipei Medical University, Taipei, Taiwan; 2Ophthalmology, Taipei Eye Center, Taipei, Taiwan. 8CR


6023 — D844 Endothelial Keratoplasty: The Relationship Between Six Month Postoperative Endothelial Cell Density And Graft Survival. Asem A. Algudah1, M.A. Terry2, M. Strako3, M. Greiner4, D. Davis-Boozer5. 1Cornea, 2Conel Services, 3Inder Eye Institute, Portland, OR; 4Lions Eye Bank of Oregon, Portland, OR. 8CR

6024 — D845 Effect Of Air Fill Pressure And Graft Thickness On Interface Fluid Dispersion In An Okt Model Of Descemets Stripping Automated Endothelial Keratoplasty. Maninder S. Bhogal, Fernando C. Abib, D. S. Abib1A, D.S. Abib1A, A. Gomez1, A. Jimenez-Corona2, E.O. Baskon1,2, A. Gomez1,3, A. Jimenez-Corona2, E.O. Baskon1,2, A. Gomez1,3, A. Jimenez-Corona2, E.O. Baskon1,2

6025 — D846 Corneal Endothelial Reserve and Corneal Endothelial Reserve Factor for Intraocular Surgeries. Fernando C. Abib4, D.S. Abib1A. 1Anatomy, 2Anesthesiology, 3Federal University of Paraíba, Curitiba, Brazil. 8CR

6026 — D847 Long-Term Endothelial Cell Density with Phakic Foldable Iris-Claw Intraocular Lens (VeriFlex®). Natalie Kaplan1, H. Dick1, W. Sekundo1, N. Pfeiffer1, U. Vosmerbaeumer1. 1Department of Ophthalmology, Mainz University Medical Center, Mainz, Germany; 2Department of Ophthalmology, Ruhr University Bochum, Bochum, Germany; 3Department of Ophthalmology, Marburg University Medical Center, Marburg, Germany.

6027 — D848 Improvement Of Endothelial Keratoplasty Lamellar Dissection By Combined Use Of Femtosecond And Eximer Lasers. Lien Trinh1,2, B. Saubamanie1,3, A. Faurin1, T. Duong1, A. Denoyer1,4, R. Lai-Kuen1, M. El Hamdaoui1,4, A. Labbé1, M.-C. Despiau2, F. Brignole-Baudouin3, C. Bardouin2,4. 1Ophthalmology III, 2Clinical Investigation Center (CIC) 503, 3Pharmacy, 4INSERM U705, UMR CNRS 8206, Paris, France; 5Plateau Technique d’Imagerie Cellulaire et Moléculaire, 6Toxicology, 7Faculty of Biological and Pharmacological Sciences, University of Paris 5 René Descartes, Paris, France; 8Vision Institute, UMRS 968, University Pierre et Marie Curie Paris 6, Paris, France.

Hall B/C

D849-D896 Thursday, May 10, 2012, 8:30 AM-10:15 AM

Cornea

524 Keratoplasty II (Eye Banking, Substrates, Penetrating and Lamellar Grafts, Keratoprosthesis)

Moderator: Vincent M Borderie

6028 — D849 Main indications for admission to a corneal transplant program in Mexico: Analysis of the National Transplant Registry. Jose A. Claros1, A.J. Ramirez-Miranda2, R. Vargas2, A. Navas3, A. Gomez4, A. Jimenez-Corona5, E.O. Grae6. 1Cornea And Refractive Surgery, Instituto de Oftalmologia de Céde de Valencia, Mexico City, Mexico; 2Instituto Nacional de Salud Publica, Cuernavaca, Mexico.

6029 — D850 Evolution of Corneal Transplantation in the Province of Quebec from 2000 to 2011. Louis-Pierre Gauvin Meunier1, J. Lapointe1, M.-É. Choronzy2, S. Dubuc3, M. Germain3, M. Mabon1,4, I. Brunette1,2. 1Ophthalmology, 2University of Montreal, 3Montreal, QC, Canada; 4Maisonneuve–Rosemont Hospital Research Center, Montreal, QC, Canada; 5Héma-Québec, Québec, QC, Canada; 6Quebec Eye Bank, Quebec, Canada.

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

6031 — D852 Comparison Of Single Versus Multiple Field Endothelial Cell Counts Of Donor Corneas Using A Large Field Specular Microscope. Bennie H. Jeng1, B. Hiknes, C. Ulrickson2. 1Ophthalmology, University of California San Francisco, San Francisco, CA; 2SightLife, Seattle, WA.

6032 — D853 European Study On Reliability Assessment Of Endothelial Cell Count In Eye Banks: The Eurokeratostest Study. Gilles Thuret1,2, Z. He1, N. Campolmi1,2, B. Ha Thir1, J. Dumollard2, M. Pec3, N. Delesalle1, A. Bernard3, F. Gain4,5. 1Ophthalmology, 2Pathology, 3University Hospital of St-Etienne, Saint-Etienne, France; 4Conical Graft Biology, Engineering and Imaging Laboratory, EA2521, Federative Institute of Research, Faculty of Medicine, Jean Monnet University, Saint-Etienne, France; 5The French Health Products Agency (Afssaps), Saint-Denis, France.


6035 — D856 Downs Syndrome Donor Tissue: Suitability and Outcomes of Stromal Replacement Corneal Transplantation. Syed Mahmood A. Shah1, M. Moshirfar2, M. Mifflin3, Y. Khalifa4,5. 1 Flaum Eye Institute, University of Rochester Medical Center, Rochester, NY; 2Moran Eye Center, University of Utah, Salt Lake City, UT.

6036 — D857 Preparation and Evaluation of Decellularized Porcine Cornea. Jenin J. Chae1, Q. Lu1, J. Choi1, Q. Guo6, O.D. Schein1, J.H. Elisseef7. 1Biomedical Engineering, Johns Hopkins University, Baltimore, MD; 2Ophthalmology, Johns Hopkins Wilmer Eye Inst, Baltimore, MD.

6037 — D858 Cross-linked Variants Of A Novel Semi-synthetic Collagen Substitute For The Reconstruction Of The Surface. Corinna Petsh1, U. Schlotzer-Schrehardt1, M. Frey2, F.E. Kruse3, B. Bachmann4. 1Ophthalmology, University Hospital Erlangen, Erlangen, Germany; 2Department of Ophthalmology, University of Erlangen-Nürnberg, Erlangen, Germany; 3RESORBA Wundversorgung GmbH & Co. KG, Nuremberg, Germany; 4Department of Ophthalmology, University of Erlangen Nurnberg, Erlangen, Germany. 8CR

6038 — D859 A Biocornea Of Fish Scales - First Results Of A Research Model. T. H. Van Essen1, C. C. Lin2, H.J. La1, A.K. Hussain1, M.J. Jager1, G.P. Loyen5. 1Department of Ophthalmology, Leiden University Medical Center, Leiden, The Netherlands; 2Department of Research, Aeon Astron Europe B.V., Leiden, The Netherlands. 8CR


6042 — D863 The Fate Of Collagen-based Hydrogels As Corneal Substitutes In “High Risk” Graft Recipients. Lucia Kuffova1, R. Fordyce1, M. Robertson1, M. Griffith2, J-J. Ahn1, K. Merritt3, R.L. Hendricks4, J.V. Forester1. 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. Borderie1,2, J. Bullet1, O. Touzeau1,2, P. Goldschmidt3, L. Laroche4,5. 1Laboratory, 2CHNO des Quinze-Vingts, Paris, France.

6049 — D870 Graft Failure And Intraocular Pressure Control After Keratoplasty In Iridocorneal Endothelial Syndrome. Desmond T. Quek1, S. Han2, T. Wong3, D. Tan2, J. Mehta3. 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 Djougarian1, 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. Perone, A. Agapie, O. Gheorge, A. Ferte, I. Botez, P-J. Bertaux. Ophthalmology, Regional Hospital Center of Metz Bon-Secours, Metz, France.


6058 — D879 Femtosecond Laser-Assisted Mushroom Configuration Penetrating Keratoplasty And Deep Anterior Lamellar Keratoplasty In Advanced Keratoconus. Simon S. Fung1, F. Aiello2,1, A. Iovieno1, C. Nicoli3, V. Maurino. 1Cornea and External Disease Service, Moorfields Eye Hospital, London, United Kingdom; 2Department of Biophatology, Ophthalmology Unit, University of Rome Tor Vergata, Rome, Italy.


6060 — D881 Optical Functional Properties Of The Osteo-odontokeratoprosthes (ookp). Richard M. Lee1, G. Ong2, J. White3, F. Lam2, C.S. Liu2, C.C. Hallf. Ophthalmology, Susse Eye Hospital, Susse Eye Hospital, United Kingdom; 2Optometry & Visual Science, City University, London, United Kingdom.


6062 — D883 Field of View of Modified Osteo-odontokeratoprossthes. Victor M. Hernandez1,2, C. de Freitas1,2, G.C. Falchetti1,2, Y. Sawatari1, V. Perez1,2, D. Sathija1, F. Mantis1,2, E.C. Alfonso1,2, J-M.A. Pare1,2,4. Ophthalmic Biophysics Center, 1Department of Ophthalmology, Bascom Palmer Eye Institute, Miami, FL; 2Department of Biomedical Engineering, Biomedical optics and Laser Laboratory, University of Miami, Coral Gables, FL; 3Department of Maxillofacial Surgery, University of Miami Miller School of Medicine, Miami, FL.

6063 — D884 Poly(ethylene glycol diacrylate) - Poly(2-hydroxyethyl methacrylate) (PEGDA-PHEMA) Based Keratoprosthesis. Amelia L. Zellander1, M. Makhous1, 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

6064 — D885 Boston Type I Keratoprosthes: Microbial Colonization and Antibacterial Resistance. Elle P. Eld1, M-C. Robert1, P. Saint-Antoine2, M. Harissi-Dagher1,2. 1Ophthalmology, 2Microbiology, Centre Hospitalier de l’Université de Montréal (CHUM), Hôpital Notre-Dame, Montréal, QC, Canada.

*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures -  Refer to Program Number in the Clinical Trial (CT) Registration Index -  Travel Grant Awardee
6065 — D886 Light-induced Maculopathy After Keratoprosthesis Surgery - True Or False? Borja Salvador Calla1, I. Behlau1, R.R. Sayegh1, F. Delori2, C.H. Dohlman1. 1Cornea - Keratoprosthesis, Massachusetts Eye & Ear Infirmary, Boston, MA; 2Schepens Eye Research Institute, Boston, MA.


6067 — D888 Prospective Evaluation of the International Boston Keratoprosthesis Project in Ethiopia. Roberto Pineda, I1, A. Cruzat1, I. Behlau1, Y. Tilahun1, J. Ament1, C. Dohlman1. 1Ophthalmology, Mass 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. Kapitha R. Sivaraman, 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 Shukla1, A. Cruzat1, J.-C. Abad1, C.H. Dohlman1, K.A. Colby1. 1Ophthalmology, Massachusetts Eye & Ear Infirmary, Boston, MA; 2Ophthalmology, Clinica Oftalmica de Medellin, Medellin, Colombia.


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-Daghet1. 1Ophthalmology, 1Medicine, University of Montreal, Montreal, QC, Canada.

6072 — D893 Cross-linking Donor Corneas for the Boston Keratoprosthesis: A Method of Increasing Resistance to Collagenolytic Degradation. Sameer N. Arafat1, A.N. Shukla1, C.H. Dohlman1, J. Chodos1, J.B. Cibis1. 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.


6074 — D895 Monitoring Of Glaucoma After The Implantation Of A Keratoprosthesis. Riccardo Scotto1, M. Papadiaz, A. Bagniz, A. Macr1, C.E. Traversoz. 1Ophthalmology, DiNOG, University of Genoa, Genova, Italy; 2Di NOG, 3Eye Clinic, 4Clinica Oculistica - Di NOG, 5University of Genova, Genova, Italy; 6Azienda Ospedaliera Universitaria San Martino, Genova, Italy.


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

525 Contact Lens II (Basic Research)

Moderators: Nicole A Carnt and Nancy J Keir

6076 — D897 Effect of Contact Lens Solutions on the Antimicrobial Efficacy of Human Tear Proteins during Lens Disinfection. Bianca L. Price1, B.P. Morgan1, C. Maldonado-Codina2, C.B. Dobson1. 1Faculty of Life Sciences, 2EuroLens Research, Faculty of Life Sciences, University of Manchester, Manchester, United Kingdom.

6077 — D898 Effects Of Multi-purpose Solutions On The Viability And Encystment Of Clinical Isolates Of Acanthamoeba Determined By Flow Cytometry. Masaki Imayasu1, K.T. Tchedre1, H.D. Cavanagh1. 1R&D Center, Menicon Co Ltd, Kasugai, Japan; 2Ophthalmology, Univ Texas Southwestern Med Ctr, Dallas, TX.

6078 — D899 Evaluation Of Commercially Available Novel Multi-purpose Contact Lens Care Solutions Effect On Membrane-associated Mucin Expression In The Rat Cornea. Kissoua T. Tchedre1, M. Imayasu1, Y. Horii1, H.D. Cavanagh1. 1R&D and Innovation Center, Menicon LTD, Kasugai, Japan; 2Ophthalmology, Toho University Sakura Medical Center, Sakura, Japan; 3Ophthalmology, Univ Texas Southwestern Med Ctr, Dallas, TX.

6079 — D900 Comparison of Disinfection Efficacies of Four Contact Lens Care Regimens Against Pseudomonas aeruginosa on Orthokeratology Lenses. Yoshiie Ito1, N. Miyata2, T. Kawagoe1, M. Nobuhsiga, E. Okada1. 1Okada Eye Clinic, Okada Eye Clinic, Yokohama, Japan; 2Department of Ophthalmology and Visual Science, Yokohama City University, Yokohama, Japan.


6081 — D902 Antimicrobial Properties Of Selenium Covalently Incorporated Into The Polymer Of Contact Lens Case Material. Ted W. Reid1, F. Tran2, M. Buis1, J. Thomas2, K. Tran2, T. Mosley2, R. Hanes1, A. Hamood7. 1Ophthalmal & Visual Science, 2Microbiology, 3Texas Tech University Health Sciences Center, Lubbock, TX; 4Selenium Ltd., Lubbock, TX; 5Selenium Ltd., Austin, TX.


6085 — D906 Antimicrobial Efficacy of Melamine Covalently Bound to Contact Lenses. Debarun Dutta1, N. Cole1, M. Willcox2. 1Brien Holden Vision Institute, Sydney, Australia; 2School of Optometry and Vision Science, University of New South Wales, Sydney, Australia.

6086 — D907 Organo-Selenium Coated Contact Lenses: Effect Upon Bacterial Biofilm Attachment. Phu Tran1, A. Hamood2, C. Jarvis1, B. Lackey1, T. Reid2, K. Tran1. 1Ophthalmology and Visual Sciences, 2Microbiology, 3Ophthalmology, Texas Tech University Health Sciences Center, Lubbock, TX; 4Selenium Ltd., Lubbock, TX.

6087 — D908 Non-Cultivable Bacterial Biofilm Communities in Used Contact Lens Cases. Judith L. Flanagan, M. Allgeier, M.D. Willcox3, P. Hugenholz4. 1Brien Holden Vision Institute, Sydney, Australia; 2Joint Genome Institute, Walnut Creek, CA; 3Brien Holden Vision Institute, Unive of New South Wales, Sydney, Australia; 4Australian Centre for Ecogenomics, School of Chemistry and Molecular Biosciences & Institute for Mol, University of Queensland, Queensland, Australia.


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

*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures — Refer to Program Number in the Clinical Trial (CT) Registration Index — Travel Grant Awardee
6090 — D911 Comparison Of Two Dual-Disinfection Systems For Ocular Comfort, Corneal Staining And Corneal Infiltrative Events. Daniel Tilia1, P. Lazón De La Jara2, N. Peng1, H. Zhu1, M.D. Wilcox1, B.A. Holden1.
1Brien Holden Vision Institute, Sydney, Australia; 2School of Optometry and Vision Science, University of New South Wales, Sydney, Australia; 3Brien Holden Vision Institute, Vision Cooperative Research Centre, Sydney, Australia. *CR, ▶

6091 — D912 Ocular Cytotoxic Potential Assessment Of Contact Lens Care Solutions And Evidence For A Useful Rinse Step With Unpreserved Solution. Melody Dutot1, J. Vincent1, I. Fabre1, C. Grasmick2, R. Fagon1, P. Rat2.
1Toxicology, 2Research & Development, YSLAB, Paris, France; 3Direction des Laboratoires et des Contrôles, Agence Française de Sécurité Sanitaire des Produits de Santé, Vendargues, France; 4Chemietoxicologie 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 Ozkan1, M.D. Wilcock2, P. Lazón De La Jara1, Y.M. Rathi1, B.A. Holden1.
1Clinical Research & Trials Centre, 2Brien Holden Vision Institute, Sydney, Australia; 3Brien Holden Vision Institute, Univ of New South Wales, Sydney, Australia; 4Corna, Contact lens, Refractive Surgery, LV Prasad Eye Institute, Banjara Hills, Hyderabad, India; 5Brien Holden Vision Institute, Vision Cooperative Research Centre, Sydney, Australia. ▶

6093 — D914 Qualitative and Quantitative Lubricity of Experimental Contact Lenses. Robert C. Tucker1, B. Quinter1, D. Patel1, J. Pruitt1, J. Nelson1. R&D, Alcon, Johns Creek, GA.*CR

6094 — D915 Effect of Soft Contact Lens Storage Solutions on Lens Wettability In-Vitro. Raised Fageh1, A. Tomlinson1, V. Manahilos1. Vision Sciences, Glasgow Caledonian University, Glasgow, United Kingdom.

6095 — D916 Robust Contact Lens Lubricity using Surface Gels. W. G. Sawyer1, A.C. Dunn1, J.M. Uruena1, H.A. Ketelson2. 1Mechanical and Aerospace Eng, University of Florida, Gainesville, FL; 2R & D, Alcon Research Ltd, Fort Worth, TX. *CR


6097 — D918 Protoglycan 4 (lubricin) Enhances the Wettability Of Model Conventional And Silicone Hydrogel Contact Lenses. Lakshman N. Subbaraman1, T.A. Schmidt1, H. Sheard1. 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. Keir1, T.L. Simpson1. 1CCLR, School of Optometry, 2School of Optometry, 3University of Waterloo, Waterloo, ON, Canada.

6099 — D920 Hyaluronan Release from Contact Lenses in vitro and in vivo. Krista M. Fridman1, C.A. Scheuer1, S. Su1, L. Zhang1, S.E. Burke1. Bausch + Lomb, Rochester, NY. *CR, ▶


6101 — D922 Ocular Delivery Of Ketotifen Fumarate By Silicone Hydrogel And Conventional Hydrogel Contact Lens Materials. Anthony Soluri1, A. Hui1, L. Jones1. 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. Matsuura1, K. Kikutomi1, Y. Yamazaki1, T. Sato1, T. Tsuchak1. 11st Dept of Ophthalmology, Toho University, Tokyo, Japan; 2SEED Co Ltd, Kousuoi, Japan. *CR


6104 — D925 Understanding Lens Shape Dynamics During Off-Eye Dehydration of Contact Lens Materials with Varying Water Content. Ian G. Cox1, R.H. Lee1. 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. Compa1, S. Moya1, J. Jorge1, J.M. Gonzalez-Meijome1. 1Center of Physics, University of Minho, Braga, Portugal; 2Applied Thermodynamics, Universidad Politecnica de Valencia, Valencia, Spain. *CR

6106 — D927 Rapid Measurement of Tear Oxygen Tension Underneath Soft Contact Lenses by Frequency-Domain Phorpirometry. Sangly P. Srinivas1, G. Guidoboni2, L. Carichino2. 1Optometry, Indiana University of Pennsylvania, Indiana, IN; 2Chemistry, IUPUI, Indianapolis, IN.

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


6109 — D930 Design and Development of an In Vitro Tear Replenishment System. Saman Mohammadi1, M. Gorbet2. Systems Design Engineering, University of Waterloo, Waterloo, ON, Canada.


6111 — D932 Interfacial Interactions Of Cationic And Anionic Artificial Tears With Ionic Hydrogel Contact Lens Surface. Muhammad Abdulaziz1, S. Benita1. 1Ophthalmology/Innovative Interventions, East Jerusalem Biomedical Institute, East Jerusalem, Palestine; 2Institute of Drug Research, Hebrew University of Jerusalem, Jerusalem, Israel. *CR

6112 — D933 Contact Lens/Contact Lens solution Combinations Determine the Inflammatory Changes on the Ocular Surface: A Laser In Vivo Confocal Microscopy Study. Bernardo M. Cavalcanti1, A. Cruz1, Y. Qazi1, N. Baniassad1, M. Trinidad2, A. Watts2, D. Critser3, C. Leahy4, C.W. Sind1, P. Hamrah1. 1Cornea/Ophthalmology, Harvard Medical School/ MEEI, Boston, MA; 2Cornea / Ophthalmology, Harvard Medical School MEEI, Boston, MA; 3Ophthalmology, Cornea Research, 4Contact Lens, Massachusetts Eye and Ear Infirmary, Boston, MA; 5Cornea/Ophthalmology, MA Eye & Ear Infirmary/ Harvard Med Sch, Boston, MA; 6Contact Lens, 7Ophthalmology, University of Iowa, Iowa City, IA. *CR, ▶

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


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

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

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

6118 — D939 Cytotoxic and Inflammatory Effects of Contact Lens Multipurpose Solutions on Human Corneal Epithelial Cells. Nir Erodin, A. Groussman, R. Harari, H. Ovadia. 1Hadassah Hebrew University Medical Center, Jerusalem, Israel.

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


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


6124 — D945 Study Of Novel Chitosan-coated Contact Lens As An Equivalent Substrate For The Therapeutic Delivery Of Rabbit Limbal Epithelium. Xiao-Wei Tan, D. Tan, R.W. 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 Hall, L. Jones, J.A. Forrest. 1School of Optometry, 2Department of Physics & Astronomy, University 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


6128 — D988 Pseudomonas aeruginosa Small Protease (PASP), a Keratitis Virulence Factor. Richard J. O’Callaghan, A. Tang, M. Marquart, A. Caballero. Dept of Microbiology, Univ of Mississippi Med Ctr, Jackson, MS.

6129 — D989 Cxcl Contributions To Host Resistance Following Pseudomonas Aeruginosa Corneal Infection But Not To Herpes Simplex Virus Type 1. Katie M. Hudson, D.J. Carr. 1Microbiology, Immunology, University of Oklahoma Health Sciences Center, Oklahoma City, OK.

6130 — D990 Vasoactive Intestinal Peptide Regulates Toll-like Receptors in the Infected Cornea. Xiaoyu Jiang, R.P. Barrett, Y. Zhang, L.D. Hazlett. Department of Anatomy and Cell Biology, Wayne State Univ 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. Goldenkour, 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 Suecke, J. Shankar, T. Neal, S. Aldwinckle, C. Winstanley, S. Tuffi, S.B. Kaye. 1Microbiology Ophthalmic Group, 2Ophthalmology, 3Microbiology, University of Liverpool University Hospital, Liverpool, United Kingdom; 4Microbiology, University of Liverpor, Liverpool, United Kingdom; 5Ophthalmology, Moorfields Eye Hospital, London, United Kingdom.

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

6135 — D995 Characterization Of Pseudomonas Aeruginosa Type Three Secretory System (TTSS) Effector Molecules (Exo U/S/T) From Human Corneal Ulcer. Jeganathan lakshmi priya, R. Sivagnana Karthikeyan, V. Venkatesh Prajna, E. Pearson, A. Rietsch, P. Lalitha. 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 Elsawi, C. Heath, M. Christodoulides, P. Rossaint. 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 Suzuki, 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 Maestre, E. Perez, M. Diaz, E. Alfonsio, D. Miller. 1Ophthalmology, 2Bascom Palmer Eye Institute, 1University of Miami, Miami, FL.
6141 — D1001 Involvement of Corneal Epithelial Cells in the TLR7 Response in an In Vitro Bacterial Inflammation Model. Isabel Aranza-Valsarro1, U. Schultz2, L. Contreras-Ruiz3, L. Garcia-Possadas4, A. Lopez-Garcia4, F. Pausen5, Y. Diebold6, F. Paulsen6, Y. Diebold6. Ocular Surface Group, IOBA-University of Valladolid, Valladolid, Spain; 2Networking Research 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 Escherichia coli. Satya Sree N. Kolar1, H. Baidouri1, A. McDermott2. University of Houston College of Optometry, Houston, TX.

6143 — D1003 Reprogramming Induced by TLR2/4 Agonists Regulates Corneal Immune Responses to Fungal Infection. Xinyi Wu1, J. Wang1, L. Wang1, Y. Li2. Ophthal QlU Hosp/ophthal, Shandong University, Jinan, Shandong, China.

6144 — D1004 Analysis of Acanthamoeba cysts isolated from contact lenses with the Raman spectroscopy microscope. Pablo L. Goldschmidt1,2, D. Di Cave3, S. Degorge2, D. Benallaoua1, E. Borsali1, A. Le Bouter1, L. Batellier1, J.O. Borderie1. Laboratoire de Virologie Moleculaire et Structurale, Gif sur Yvette, France; 2Hospital Bichat AP-HP Cornea, Foundation A de Rothschild, Paris, France; 3Institut de la Vision, Paris, France; 4Genomic Vision, Bagneux, France; 5Celltech therapeutics SAS, Paris, France. *CR

6145 — D1005 Acanthamoeba Associated Microbial Communities. Darlene Miller1, J. Maestre-Mesa1, M. Díaz1, E. Perez1, V. Shestopalov1, R. Van Gelder1, E.C. Alfonso1. Bascom Palmer Eye Institute, Univ of Miami Miller Sch of Med, Miami, FL; 2Ophthalmology, Univ of Washington School of Medicine, Seattle, WA.

6146 — D1006 Experimental Induction of Acute Acanthamoeba castellanii Keratitis in Cats. Eric C. Ledbetter1,2,3, E.C. da Silva1, L. Dong1, S.P. McDonough1. 1Clinical Sciences, 2Biomedical Sciences, Cornell University, Ithaca, NY. *CR

6147 — D1007 The Herpes Simplex Virus Type 1 Latency Associated Transcript Inhibits Phenotypic and Functional Maturation of Dendritic Cells. Lbachir BenMohamed1, A.A. Chentoufi1, G. Dasgupta1, C. Nguyen2, K.K. Kabbara1, S.L. Wechsler1, A.B. Nesburn1. Gavin Herbert Eye Institute, Univ of California, Irvine, Irvine, CA; 2University of Southern California, Los Angeles, CA.

6148 — D1008 Gene Transfer Of Hsv1-specific Megasenese To The Murine Cornea Using Electroporation. Antoine Rousseau1,2, A. Ergani1, E.E. Gibson1, M. Corral1, N. Huo2, M. Gaillodrat1, C. Desseaux1, B. Chapelleler, Jr1, P. Roy1, M. Labetoulle1. 1Ophthalmology, Hospit Bicetre, South Paris University, Le Kremlin Bicetre, France; 2Laboratoire de Virologie Molécule et Structurale, Centre National de la Recherche Scientifique, Gif-sur-Yvette, France; 3Institut de la Vision, Paris, France; 4Celltech Therapeutics, Paris, France; 5OPIA therapeutics SAS, Paris, France. *CR

6149 — D1009 Bilateral Herpetic Keratoconjunctivitis in Cancer Patients. Elvia Canseco1, J. Modak2, A. Kingham2, Y. Arevalo2, S.K. Kim3. Ophthalmology, UT Houston Health Science Center (UHSC), Houston, TX; 2Ophthalmology Section/Head and Neck Surgery, UT MD Anderson Cancer Center, Houston, TX. *CR

6150 — D1010 HSV-1-specific Megasenese May Reduce Ocular Infection In A Mouse Model Of Herpes Keratitis. Marc Labetoulle1,2, E.E. Gibson1, N. Huo2, A. Rousseau2, S. Barraud2, C. Mahier1, M. Gaillodrat1, C. Desseaux1, B. Chapelli, A. Ergani1. Ophthalmology, Hospital Bicetre, South Paris University, Le Kremlin Bicetre, France; 2Curs, upr 3296, Laboratoire de Virologie Moleculaire et Structurale, Gif sur Yvette, France; 3Hospital Bichat AP-HP Cornea, Foundation A de Rothschild, Paris, France; 4Institut de la Vision, Paris, France; 5Genomic Vision, Bagneux, France; 6Celltech Sthapeutics SAS, Paris, France. *CR

6151 — D1011 CD8+ T Cells Inhibit Viral Replication but Become a Source of VEGF Expression During Corneal Herpes Simplex Type I Infection. Christopher D. Conrady1, M. Zheng1, D. U. Stone2, D.J. Carr2. 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. Nesburn1, X. Dervillez2, A.A. Chentoufi1, G. Dasgupta1, K.W. Kabbara1, M.C. Villacres1, C. Nguyen1, S.L. Wechsler1, L. BenMohamed1. 1Gavin Herbert Eye Institute, University of California, Irvine, 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. Thessierc E Antoine1,2, R. Shukla1,2. 1Ophthalmology and Visual Sciences, University of Illinois at Chicago, Chicago, IL; 2Shandong University, Jinan, Shandong, China.

6154 — D1014 Corneal Dendritic Cells Suppress Local Corneal Damage and Mediate Systemic Viral Dissemination in Herpes Simplex Keratitis. Kai Hu1, H. Ghiasi1. 1Ophthalmology, Massachusetts Eye & Ear Infirmary, Boston, MA; 2Surgery/Ophthal Research, Cedars-Sinai Medical Center, Los Angeles, CA; 3Immune Disease institute, Boston, MA; 4Immune Institute, Boston, MA.


6157 — D1017 Mistyping of Human Adenovirus Type 19 Associated with Epidemic Keratoconjunctivitis. Xiaohong Zhou1, C.M. Robinson1, J. Rajayia2, D. Seto2, M.S. Jones3, D.W. Dyer4, J. Choado5. 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, Patrick M. Stuart, D. West. Ophthalmology, St Louis University, St Louis, MO.

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

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. Vinoya1, E. Esterberg1, N. Acharya1. 1F.I. Proctor Foundation, Unioiversity 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 Malgorati1, E. Misserocchi1, I. Bianchi1, A. Colucci, F. Bandello. Dept of Ophthalmology, Univ Hospital San Raffaele, Milan, Italy.


6166 – D1026 Findings In Detection Of Herpesviridae By Real-time Polymerase Chain Reaction And Intraocular Antibody Production In A Case-series Of Anterior Uveitis. Marie-Helene Erreira1, P. Goldschmidt1, L. Matellier1, S. Degorge2, E. Heriot1, L. Larche1, J.-A. Sahel1, M. Westcott1, C. Chauvel1. 1Ophthalmology Department IV, 2Laboratory, 3Internal Medicine, 4Ophthalmology Department V, 5Hôpital des Quinze-Vingts, Paris, France; 6Moorsfield Eye Hospital, London, United Kingdom.

6167 – D1027 The Immune Response To 3 Different Therapies In Herpetic Stromal Keratitis. Mauricio Cédillo Sarabia, Sr.1, R. Velasco Ramos, Il1, S. Perez Tapia, Il1, A. Babayyan Sosa, Iv1, O. Baca Lozada, V1, O. Fernando Vásquez, V1, R. Suárez Velasco, V1, 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, I. 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. Montwich1, M. Bordon1, D. Sánchez di Martino1, A. Ruiz Cumpazano1, W. Martinez Torres2, S. Lichi1, M. Samudio2, N. Fariña2, F. Laspina1, H. Mino de Kaspar1. 1Department of Ophthalmology, Ludwig-Maximilians-University, Munich, Germany; 2Fundacion Banco de Ojos “Fernando Oca del Valle”. Instituto de Investigaciones en Ciencias de la Salud, 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 Kivlinton1, J.P. Shovlin1, 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 Qi1, K. E. Thomas1, M. Eugenia Vola1, A.-C. Roch-Devezeq1, Y-K. Wu1, T.L. Purcell2, 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. Schwartzkopff1. 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. Steinkasserer1, C. Cursiefen1, E. Zinner1. 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 Allogenic Penetrating Keratoplasty. Qihua Le1, X. Wang1, W. Wang1, J. Xu1. Ophthalmology, Eye & ENT Hospital of Fudan University, Shanghai, China; 2Ophthalmology, Eye & ENT Hospital of Fudan University, Shanghai, China.

6179 – D1039 Clinical Similarities among Meibomitis-Related Keratoconjunctivitis, Phlyctenular Keratitis and Ocular Rosacea in Childhood. Tomo Suzuki1, Y. Sano1, N. Yokoi1, S. Kinoshita1. 1Department of Ophthalmology, Kyoto Prefectural University of Medicine, Kyoto, Japan; 2Kyoto City Hospital, Kyoto, Japan.

6180 – D1040 1CAM-1 is Necessary for Efficient Accumulation of CD11c+ Cells in Healing Corneal Epithelium. Yuan Gao1, Z. Li1, C.W. Smith1. 1Leukocyte Biology, 2Ped-Children’s Nutrition Rsrch Ctr, 3Baylor College of Medicine, Houston, TX.

6181 – D1041 Expression Of Adhesion Molecules During Development Of Conjunctiva-Associated Lymphoid Tissue. Uta Gehlsen1, S. Siebelmann1, M.E. Stern1, J.Y. Niederkorn1, P. Steiner1. 1Ophthalmology, University Hospital of Cologne, Cologne, Germany; 2Biological Sciences, Allergen, Inc, Irvine, CA; 3Department of Ophthalmology, UT Southwestern Medical Center, Dallas, TX. *CR


6183 – D1043 Peripheral Antigen Presenting Cells Are Differentially Distributed in Normal and Inflamed Murine Corneas. Albert H. Alattarn1, U.H. von Andrian2, P. Harms1. 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.

Thursday Posters 8:30 am – 10:15 am

6185 — D1045 In Vivo Confocal Microscopy Of Corneal Langerhans Cells In Systemic Lupus Erythematosus (SLE) Without Ocular Surface Manifestation. Miklos D. Resch1, L. Marsovszky, E. Medgyessi2, 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 Leonardi1, D. Faggian1, A. La Gloria Valerio2, F. Piliego3, L. Motterle4, M. Plebani4. 1Neuroscience, Ophthalmology, 2Department of Laboratory Medicine, 4University of Padova, Padova, Italy.

6187 — D1047 Inhibitory Role of Icos in Antigen-specific T cell-mediated Ocular Tissue Damage. Misao Terada1, H. Taniguchi1, R. Abe, J. Hori1. 1Division of Lab Animal Science, 2Ophthalmology, 3Nippon Medical School, Bunkyo-ku, Japan; 4Research Institute for Biological Science, Tokyo University of Science, Noda, Japan.


6190 — D1050 Etiology Diversity Of Atypical And Severe Anterior Uveitis. Audrey Fel1, M. Bojanova1, V. Touteou1, P. Le Hoang1, F. Rozenberg2, B. Bodaghi1. 1Ophthalmology, Hopital la Pitié Salpêtrière, Paris, France; 2Virology, Hopital 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.

Hall B/C D1052-D1077

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

Immunology & Microbiology / Cornea / Retina / Retinal Cell Biology / Biochemistry & Molecular Biology

528 Anti-Infectives and Ocular Disease

Moderator: Ellen J Lee


6194 — D1054 Emergence Of Pan-drug Resistant Pseudomonas Aeruginosa As A Cause Of Microbial Keratitis. Merle Fernandez1, A. Pathengay1, N. Kumar1, A. Cornea and Anterior Segment, 2Ocular Microbiology Service, L. V Prasad Eye Institute, Visakapatnam, India; 3Retina, Bascom Palmer Eye Institute, Miami, FL.


6197 — D1057 Heterogeneous Venocyanin-Intermediate Staphylococci Isolates from Endophthalmitis. Paulo J. Bispo1, D. Miller1. Ophthalmology, Bascom Palmer Eye Institute, Miami, FL; 2Universidade Federal de São Paulo, São Paulo, Brazil.

6198 — D1058 Microbiological Eradication Rates with BID or TID Dosing of Besifloxacin Ophthalmic Suspension, 0.6% in Bacterial Conjunctivitis Clinical Trials from 2004 - 2010. Kirk Bateman, T.L. Comstock, L.S. Gearinger, C.K. O’Brien, C. Polage, W. Smith, M.J. Mannis. UC Davis Eye Center, Sacramento, CA.

6199 — D1059 Moxifloxacin Superior To Cefuroxime In Reducing Early-phase Adherence Of Staphylococcus Epidermidis To Hydrophobic Intracorneal Lenses. Fathalah Benbouzid, S.A. Baille1, F. Renaud1, D. Hartmann3, P. Denis1, L. Motterle1. 1Ophthalmology, Lyon Croix-Rousse Hospital, Lyon, France; 2Ophthalmology, Saint Roch Hospital, Nice, France; 3Microbiology laboratory, Department of biometrics and biological interactions, Claude Bernard University, Lyon, Lyon, France.

6200 — D1060 N-chloroatutaurine, n-monochloro-deimethylataurine and N,n-dichloro-dimethylataurine Are Safe And Effective Bacterialidal Agents In Cornea Models. Barbara Teuschner1, E. Schmidt1, M. Nag1, N. Bechrankis1. Ophthalmology, Microbiology, Innssbruck Medical University, Innsbruck, Austria.

6201 — D1061 Therapeutic Effects of Topical Bacteriophage KPP12 Administration on Pseudomonas aeruginos Keratitis in Mice. Ken Fukuda1, W. Isihida1, J. Uchiyama1, T. Morita, Y. Harad1, T. Sumi1, S. Matsuzaki1, M. Daibata1, A. Fukushina1. 1Ophthalmology, 2Microbiology and Infection, Kochi Medical School, Nankoku, Japan; 3Kochi Medical School Hospital, Nankoku, Japan.


6204 — D1064 Long-term oral Therapy with Ganciclovir in Patients with Postner-Schlossman Syndrome. Manfred Zierdt, C.M. Deuter; D. Doycheva, B. Sobolewska. Centre for Ophthalmology, University of Tuebingen, Tuebingen, Germany.

6205 — D1065 Treatment of Numular Keratitis with Intracorneal Ganciclovir. Eduardo Arenas1, A. Miel1. 1ophthalmology, Santa Fe Foundation, BOGOTA, Colombia; 2Asocornea, Bogota, Colombia.

6206 — D1066 In Vitro Effectiveness Of Photodynamic Therapy Against Multi-resistant Pathogens. Katrin Winkler1, M. Finke1, J. Wang2, N. Szentmárty3, T. Eppig1, H.-J. Foth2, D. Hüttenberger1, A. Langenbucher4, B. Seitz5, M. Bischoff1. 1Department of Microbiology, 2Department of Ophthalmology, 3Experimental Ophthalmology, 4Saarland University, 5Saarland University, Homburg, Germany; 6Physics Department, University of Kaiserslautern, Kaiserslautern, Germany; 7Apoare Pharma GmbH, Bielefeld, Germany; 8Experimental Ophthalmology, 9Department of Ophthalmology, Saarland University, Homburg/Saar, Germany.*CR

6207 — D1067 Efficacy of photodynamic antimicrobial chemotherapy on Staphylococcus aureus. Taichiro Chikama1, L.M. Akhyar1, M. Shibasaki1, T. Sasaki1, J-A. Ko1, Y. Kiuchi1, T. Sasaki1, J-A. Ko1, Y. Kiuchi1, T. Sasaki1, J-A. Ko1, Y. Kiuchi1. 1Dept of Ophthalmology, 2Physics Department, University of Tokyo, Tokyo, 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

378

6210 — D1070 In Vitro Investigation of Riboflavin/UVA-mediated Elimination of Acanthamoeba Castellanii. Karim Maktoun1,2, A. Backman1,2, J. Mortensen1, S. Crafoord1, S. Yeh2. Treatment Using Riboflavin/UV-A (365nm) from Acanthamoeba by Corneal Crosslinking. Acanthamoeba-Orebro, Sweden.


6214 — D1074 The Effect of Low Concentrations of Benzalkonium Chloride on Acanthamoeba survival. Elmer Y. Tu1, M.E. Shoff2, C.E. Joslin3. 1Ophthalmology, Casey Eye Institute, OHSU, Portland, OR; 2Microbiology, Abbott Medical Optics, Santa Ana, CA; 3Ophthalmology, Doheny Eye Institute, Los Angeles, CA.


6216 — D1076 Systemic vs. Combination Antiviral Therapy and Retinal Outcomes in Acute Retinal Necrosis. Stephanie K. crenner1, C. Flaxel2, S. Yeh2. 1Ophthalmology, Casey Eye Institute, Portland, OR; 2Ophthalmology, Emory Eye Center, Decatur, GA.

6217 — D1077 Organo-selenium Coatings Inhibit Multiple Species Of Biofilm Formation On Different Types Of Ophthalmic Device Material. Kelly T. Mitchell1, P. Tran1, A. Arnett1, T. Mosley1, R. Hanes1, C. Jarvis1, A. Hamood2, L. Dominguez1, T. Reid2. 1Ophthalmology, 2Microbiology and Immunology, 3Texas Tech University HSC, Lubbock, TX; 4Selenium 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. Sugar1,2, A.T. Lyon1, R.A. Lewis3, D.A. Jabs4, M-H. Heinemann6, J.P. Dunn2, J.H. Kemper2. 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, Ophthalmology, The Johns Hopkins University School of Medicine, Baltimore, MD; 3Ophthalmology, Northwestern University, Chicago, IL; 4Ophthalmology, Internal Medicine, Mount Sinai School of Medicine, New York, NY; 5Ophthalmology, Weill Cornell Medical College, New York, NY; 6Ophthalmic Oncology Service, Department of Surgery, Memorial Sloan Kettering Cancer Center, New York, NY.

6219 — D1079 The Best Functional Predictor of HIV Status in Relation to the Retinal Damage. Afsana Karim1,2, I. Kosak3, D-U.G. Bartsch2, H. Lemus1, L. Dussin1, J. Chhablani2, G. Barteselli2, H. Wang2, S.P. Azen5, W.R. Freeman6. 1UCSD Jacobs Retina Center, Ophthalmology, University of California San Diego, La Jolla, CA; 2Ophthalmology-Shiley Eye Ctr, Univ of California-San Diego, La Jolla, CA; 3Graduate School of Public Health, San Diego State University, san diego, CA; 4Biostatistics, University of Southern California, Los Angeles, CA; 5Vitreo-Retina, Shiley Eye Center, UCSD, La Jolla, CA; 6Preventive Medicine, USC Keck School of Medicine, Los Angeles, CA; 7Ophthalmology, UCSD Jacobs Retina Center, La Jolla, CA.


6221 — D1081 Association between HIV Microangiopathy and Systemic Complications in Patients with AIDS. Yuko Iwasaki2, N. Yamamoto2, T. Kawaguchi2, N. Ozaki3, M. Mochizuki3, K. Murakami3. 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. Nkomazana2, S.H. Forster1, R.A. Adelman1. 1Ophthalmology and Visual Science, Yale University School of Medicine, New Haven, CT; 2University of Botsswana School of Medicine, Gaborone, Botswana.


6225 — D1085 The Caspase-1-induced Pyroptotic Cell Death Pathway (Pyroptosis) Is Upregulated During Progression Of Experimental Murine Cytomegalovirus (MCMV) Retinitis in Mice With Retrovirus-induced Immunosuppression (MAIDS). Hsin Chien1, E.L. Blalock2, L.R. Bush1, C.L. 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.
### 530 Autoimmune Ocular Disease

**Moderator:** Dale Gregerson

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<td>Intraocular Th1/Th17 Cells Coexpressing IL-10: Tregs that Prevent Recurrent EAU?</td>
<td>Ulrike Kaufmann, M. Diedrichs-Moehring, G. Wildner. Section of Immunobiology, Ophthalmology, Clinic of the Ludwig-Maximilians-University, Munich, Germany.</td>
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<td>6231</td>
<td>Regulatory T-Cells In Peripheral Blood of Patients With Birdshot Retinonchoroidopathy.</td>
<td>Sara S. Siddique, L. Amorese, L. Almulki, A. Suelves, C. Foster.</td>
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<td>Clinical Course of Patients with Behcet's Uveoretinitis that Discontinued Infliximab Therapy.</td>
<td>Tatsushi Kiwaguchi, Y. Iwasaki, S. Kanda, S. Sugita, M. Mochizuki.</td>
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<td>6234</td>
<td>Monocyte-derived Macrophages in EAU Resolution.</td>
<td>Inbal Benhar, A. London, R.R. Caspi, M. Schwartz. Neurobiology, Weizmann Institute of Science, Rehovot, Israel; Laboratory of Immunology, National Eye Inst/NIH, Bethesda, MD.</td>
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<td>6235</td>
<td>Alpha-1 Adrenergic Stimulation Exacerbates Acute Ocular Inflammation Through A Mechanism Mediated By Transforming Growth Factor Beta (TGF).</td>
<td>Paola A. Durand, Y. Tani, D. Fatmii, X. Xia, E. Suarez, V.L. Perez, J.L. Vega. Neurology, Herbert Wertheim College of Medicine-Florida International University, Miami, FL.; Ophthalmology, Bascom Palmer Eye Institute, Miller School of Medicine, Miami, FL.</td>
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<td>6238</td>
<td>Temporal Expression of mir-155 Correlates with the initiation and development of Experimental Autoimmune Uveitis (EAU).</td>
<td>Bernadette Marrero, Y. Chen-Rong, C. Nagniener, C. Egwaugwu. Immunology, NEI, Bethesda, MD.</td>
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<td>6239</td>
<td>DAP-12, a Major Immunomediator, Either Promotes or Suppresses EAAU Development.</td>
<td>Barbara P. Vistica, V. Montalvo-Reddin, G. Shi, L. Nugent, L. Quigley, D.W. McVicar, J. Gery. Lab of Immunology, National Eye Institute, Bethesda, MD; Cancer and Inflammation Program, NCI-Frederick, Frederick, MD.</td>
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<td>6240</td>
<td>Inhibition of CdK5 Attenuates Experimental Autoimmune Uveitis.</td>
<td>Zili Zhang, J. Duan, J.T. Rosenbaum. Neurology, Oregon Health &amp; Science University, Portland, OR.; Ophthalmology, Casey Eye Institute-OHSU, Portland, OR.</td>
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<td>6241</td>
<td>Immunological Inhibition of Pigment Epithelium-Derived Factor (PEDF)?</td>
<td>Charles E. Thirkill. Ocular Immunology Research Lab 1220 Surge III, UC Davis, Davis 95616, CA.</td>
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*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures – Refer to Program Number in the Clinical Trial (CT) Registration Index – Travel Grant Awardee*
Hall B/C  D1117-D1152
Thursday, May 10, 2012, 8:30 AM-10:15 AM
Physiology & Pharmacology

531 Inflammation and Infection

Moderators: Regis P Kowalski and Franz H Grus

6250 — D1110  Posterior Scleritis and Orbital Mass Associated to Positive Antineutrophil Cytoplasmic Autoantibodies Without Systemic Involvement. Maríà de los Angeles Ramos Cadena1, G. Aguilera Montes2, M. Ruiz Cruz2. 1Ophthalmology, Hospital General Dr. Manuel Gea Gonzalez, Mexico City, Mexico; 2Ophthalmology, Centro de Investigación de Enfermedades Infectiosas del Instituto Nacional de Enfermedades Respiratorias, Mexico City, Mexico.

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

6252 — D1112  Risk Factors Associated with the Relapse of Uveitis in Patients with Juvenile Idiopathic Arthritis. Ujwala H. Baheti1, A. Radwan2, C. Arcinue1, R. Parikh1, A. Mohamed1; 1Department of Ophthalmology, Massachusetts Eye Research and Surgery Institute, Cambridge, MA; 2Hyderabad Eye Research Foundation, L V Prasad Eye Institute, Hyderabad, India.


6254 — D1114  In Search Of Intracellular Biomarkers In Uveitis Associated With Juvenile Idiopathic Arthritis (jia). Viera Kalinina Ayuso1A, Viera Viera Kalinina Ayuso1B, Viera Viera Kalinina Ayuso2. 1Department of Cell Biology, University of Tampere, Tampere, Finland; 2Biology, University of Duisburg-Essen, Essen, Germany.


6256 — D1116  Inhibition Of The Acid Sphingomyelinase/ceramide System Prevents Hallmarks Of Graves Ophthalmopathy. Melissa Meyer zu H.Ayse2, E. Stroheer, Y. Zhang1, K. Roeck3, J. Fischer4, U. Bercher-Pfannschmidt, A.K. Eckstein, E. Gulbins. 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 Dueseldorf, Dueseldorf, Germany.


6259 — D1119  In Vitro Activity of ACH-0139586, a Novel Isothiazoloquinazolinone, Moffizoxacin and Gatifloxacin Against Clinical Isolates, Including Methicillin and Fluoroquinolone Resistant. Aron Shapiro1, L. Bolen1, A. Whillock1, D. Suhm1. 2Ora, Inc., Andover, MA; 3Eurofins Medinet, Chantilly, VA. *CR

6260 — D1120  A Novel Antiviral Protein RC28. Naibong Yan1, F. Piraino1, X. Liu1. 2Ophthalmic Laboratories, Chengdu, China; 3Department of Ophthalmology and Visual Sciences, University of Wisconsin Medical School, WI.

6261 — D1121  Clinical utility of Ophthalmic Antimicrobial Susceptibility Measurement Plate. Norihiko Tou1, R. Nejima2, Y. Ikeda3, Y. Horii1, K. Sasaki1, M. Sakamoto1, K. Miyata2, Y. Inoue2, A. Tawara1, H. Fujivara2. 1Ophthalmology, University of Hokkaido, Sapporo, Japan; 2Department of Ophthalmology, Tottori Univ Faculty of Medicine, Yonago, Japan; 3Department of Ophthalmology, Toho University Sakura Medical Center, Sakura Medical Center, Sakura, Japan; 4Ideta Eye Hospital, Kumamoto, Japan; 5Ophthalmology, The Research Foundation for Microbial Diseases of Osaka University, Osaka, Japan; 6Department of Ophthalmology, Tottori Univ Faculty of Medicine, Yonago, Japan; 7Ophthalmology, Toho University Sakura Medical Center, Sakura, Japan; 8Department of Ophthalmology, University of Wisconsin Medical School, WI.


6263 — D1123  A Comparative Study in the Clinical and Microbial Efficacy of Topical Besifloxacin 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 Coculture. Diana Gabriela Ponce-Angulo, J. Martinez-Rivera, Sr, V. Bautista-de Lucio, Sr, A. Rodriguez-Tovar, Sr, C. Sancetrac-Valdez, Sr, A. Climent-Flores, Sr, A. Robles-Contreras, Jr, C. Diaz-Godinez, Jr, E. Felix Diaz-Parga, Jr, H. Mejia-Lopez, Sr. *Research Unit / Microbiology and Proteomics, *Cornea service, 1Institute of Ophthalmology, Mexico, D.F., Mexico; 2Laboratory 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 Hosseini, F.A. Lattanzio, Jr, S.S. Samudre, J.D. Sheppard, Jr, G.W. Laurie, R.L. Mckown, P.B. Williams, 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 Staphylococci Clinical Isolates To Neltimicin And Other Antibiotics Commonly Used In Ophthalmic Therapy. Anna Rita Blanco1, A. Sudano Roccavo1, V. Papa1, M. Mazzone2. 1Pharmaco Biology Unit - BU Pharma, 2Medical Marketing - BU Pharma. *Product Portfolio Development - BU Pharma, *SIFI 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. Chiamaretti2, H. Nezzar2, B. Marmouque1, C. Speeg-Schatz3, S. Milazzo1. 1Azithromycin Study Group. *Ophthalmology, St Victor Center, CHU Amiens, Picardie University, Amiens, France; 2Ophthalmology, CHU Clermont Ferrand, Clermont Ferrand, France; 3Ophthalmology, CHU Bordeaux, Bordeaux, France; 4Ophthalmology, CHU Strasbourg, Strasbourg, France; 5Ophthalmology/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. Weisbrod1, E. Mandelcorn1, C. Schwartz2, R. Kohly3, K. Eng1, W-C. Lam1, P. Kertes1,2,3. 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 Prednisilone Acetate 1% in Patients Post-Phacoemulsification with IOL implants. Carlos Buznego1, A. tamborini, F. Casellato1, C. Bautista2, E. Paschalis1. 1Ophthalmology, Cornea Unit - Eye Repair Lab, BOphthalmic Research and Surgery Institute, Cambridge, MA; 2Ocular Surface Center, Ocular Regenerative Medicine, 1University Hospital and Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan. *CR

6271 — D1131 Prostaglandin E2 Sensitive Receptors Reduce Leukocyte Infiltration And Protein Exudation In Lps Induced Uveitis In Mice. Britta Wachsmuth1,2,3, I. Zirgl1,2, T. Zhou1,2, S. Zawadzki1, L. Hofmann1, G. Blumenstock1,2, C. Auer1,2,3, J. Bitter5. 1Institute of Clinical Pharmacology, Charité-Universitätsmedizin Berlin, Campus Virchow Klinikum, Berlin, Germany; 2Center for Clinical Research, University of Leipzig, Leipzig, Germany; 3Department of Ophthalmology, Charité-Universitätsmedizin Berlin, Berlin, Germany; 4Department of Pain Medicine, University of Leipzig, Leipzig, Germany; 5Department of Ophthalmology, University of Leipzig, Leipzig, Germany. *CR

6272 — D1132 Retinal Damage in Severe Chemical Burn and the Use of Inflitoxim Therapy. Fabiano Cade1,2, E. Paschalis1, C.V. Regattieri2, R. Dana3, C.H. Dohllman1. 1Cornea and Refractive Surgery, Massachusetts Eye & Ear Infirmary, Harvard Medical School, Boston, MA; 2Cornea, Federal Sao Paulo University, Sao Paulo, Brazil; 3Scheepens Eye Research Institute, Harvard Medical School, Boston, MA.

6273 — D1133 Topical Treatment With A Selective COX-2 Inhibitor Promotes Retinal Ganglion Cell Survival After Optic Nerve Crush. Oliver W. Gramlich1,2, H.D. von Pein1, A. Ziegler1, K. Bitt1, N. Pfeiffer2, F.H. Grützmann1. 1Experimental Ophthalmology, Department of Neuroophthalmology, 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, lmd-0354 In Rats. Anton Lennikov1, K. Namba1A, R. Ando1,2, Z. Dong2, K. Namba1A, K. Namba1A, S. Ohno1A, S. Ishida1A. 1Laboratory of Ocular Cell Biology and Visual Science, Department of Ophthalmology, 2Department of Ocular Inflammation and Immunology, Hokkaido University, Sapporo, Japan; 3Department of Ophthalmology, Keio University School of Medicine, Tokyo, Japan; 4Wakasa Seikatsu Co., Ltd., Kyoto, Japan. *CR

6277 — D1137 Lutein-rich Marigold Extract Induces Gene Expression Of Phase II Antioxidants In The PC12D Neuronal Cells. Seiji Miyake1,2, N. Takahashi1, M. Sasaki1,2, S. Kobayashi1, T. Tsutobu1, Y. Otsawa1. 1Laboratory of Retinal Cell Biology, Department of Ophthalmology, Keio University School of Medicine, Tokyo, Japan; 2Wakasa Seikatsu Co., Ltd., Kyoto, Japan. *CR

6278 — D1138 Ocular and Systemic Pharmacokinetics of Loteprednol Etabonate Gel (0.5%) following Topical Ocular Administration to Rabbits. Shellsie Glogowski1, J.W. Proksch. Drug Metabolism & Pharmacokinetics, Global Pharmaceutical R&D, Bausch & Lomb, Rochester, NY. *CR

6279 — D1139 Topical Application Of Inflimix Remicade In The Treatment Of Corneal Caustication. Fabio Bignami1A,2, E. Paschalis1, C.V. Regattieri2, C. Giammarini2, F. Marchesini2, P. Rama2. 1Cornea Unit - Eye Repair Lab, BOphthalmic Research and Surgery Institute, Cambridge, MA; 2Ocular Surface Center, Ocular Regenerative Medicine, 1University Hospital and Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan. *CR

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. Samia Yazid1, A. Leonard2, V. Calder1, R. Flower3. 1Molecular Therapy, UCL, Institute of Ophthalmology, London, United Kingdom; 2School of Medicine, University of Padua, Padua, Italy; 3Biochemical Pharmacology, QMUL, William Harvey Research Institute, Cambridge, MA.

6281 — D1141 HC-HA but not High Molecular Weight HA Polarizes LPS-Activated Macrophages toward M2 Phenotype via CD44-Mediated Suppression of TLK4 Signaling. Hua He1, S.C. Tseng1,2,3, T. Tsuchiya1,2,3, Y. Ueda1,2,3. 1TissueTech and Ocular Surface Center, Miami, FL; 2Ocular Surface Center, Ocular Surface Res & Edu Fdn, Miami, FL. *CR

6282 — D1142 Genetically Engineered IL-30 (IL27p28) Suppresses Experimental Autoimmune Uveitis. Ren-Xi Wang, C-Y. Yu, R. Dentone, B. Pearlman, P. Asbell. 1Ophthalmology, Mount Sinai School of Medicine, New York, NY. *CR


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


6286 — D1146 Clinical Experience With Sustained-Release Intravitreal Corticosteroid Implants: A Comparison Between The Fluocinolone Acetonide (Retisert) And Dexamethasone (Ozurdex) Implants In Uveitis. Cheryl A. Arcinue1, C. Foster1, O. Cerem1, L. Almukhi2. 1Uveitis and Ocular Immunology, Massachusetts Eye Research & Surgery Institute, Cambridge, MA; 2Ophthalmology, Massachusetts Eye and Ear Infirmary, Cambridge, MA.

6287 — D1147 Cytokine Levels In The Vitreous Fluid Of Patients With Ocular Sarcoidosis And Patients With Diabetic Retinopathy. Kenji Nagata1, K. Maruyama1, K. Yoneda1, T. Yosimura2, K-H. Sonoda1, S. Kinosita1. Ophthalmology, Kyoto Prefectural Univ of Med, Kyoto, Japan; 2Ophthalmology, Kyushu University, Fukuoka, Japan; 3Ophthalmology, Yamaguchi University, Ube, Japan; 4Ophthalmology, Kyoto Prefectural Univ of Med, Kamigyo-Ku, Japan.

6288 — D1148 Human Tears Reveal Insights Into Corneal Neovascularization. Nadia Zakaria1, S. Van Grassendorf1, K. Wouters1, J. Rozema1, N. Cools2, V. Van Tendeloo2, Z. Berneman1, M-J. Tassignon2. 1Ophthalmology, Statistics, Hematology, 2Center 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. Fuyuno2, Y. Yang3. Ophthalmology, Tokyo KoseiNenkin Hospital, Tokyo, Japan; 2Ophthalmology, University of Tokyo, Tokyo, Japan.


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

Moderators: John Flannery and Faizah N Bhatti


Robert C. Symons1, R.S. White, B.E. O’Bryhim. 
1Ophthalmology, Kansas University Medical Center, Prairie Village, KS; 2Ophthalmology, Kansas University Medical Center, Kansas City, KS; 3Pediatrics & Molecular and Integrative Physiology, Univ of Kansas 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’Bryhim1, R. White1, A. Symons1. 
1Pediatrics & Molecular and Integrative Physiology, Univ of Kansas Medical Center, Kansas City, KS; 2Ophthalmology, Univ of Kansas Medical Center, Prairie Village, KS.

1Pediatrics & Ophthalmology, Casey Eye Institute-OHSU, Portland, OR; 2Vollum Institute-Oregon Health & Science University, Portland, OR.

6296 — 12:00 Activation of the Endothelin System in Models of Ischemic Retinopathy. N. Natarajan1, W. Zhang2, S.P. Narayanan3, N-T. Tsai1, W. Caldwell1, R.B. Caldwell1. 
#Pharmacology & Toxicology, Georgia Health Sciences University, Augusta, GA; 2Ophthalmology, The University of Texas Medical Branch, Galveston, TX.

6297 — 12:15 Progressive Central Photoreceptor Damages and Retinal Pigment Epithelium Abnormalities in Oxygen Induced Retinopathy. J. Rivera1, J. Zhou2, P. Sapieha1, P. Lachapelle1, S. Chenrot1. 
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; 5Pediatrics & Pharmacology, Research Ctr/Hosp Ste Justine, Montreal, QC, Canada.

6298 — 12:30 Netrin-1 Promotes Vascular Regeneration in a Mouse Model of Ischemic Retinopathy. Francois Binet1, G-S. Mawambo-Tagne, S. Favret2, N. Sitaras3, N. Téreault1, A. Cerani1, E. Lapalme1, F. Rezende1, T. Kennedy4, P. Sapieha1. 
1Research Center, Maisonneuve Rosemont Hospital, Montreal, QC, Canada; 2Montreal Neurological Institute, McGill University Montreal, QC, Canada.

6300 — 11:15 Decreasing Peripheral Hyperopia With Distance-centre Relatively-plus Powered Periphery Contact Lenses Reduced The Rate Of Progression Of Myopia: A 5 Year Vision Crc Study. B. J. Toth1, P. R. Sankaridurg1, P. Lason De La Jara1, T. Naduvilath2, A. Ho3, D. F. Sweeney4, M. Markoulli1, E. L. Smith5, J. G. Bhatti1, J. Ge1. 
1Vision CRC Myopia Clinical Study, University of New South Wales, Sydney, Australia; 2College of Health and Science, University of Louisville, KY, USA; 3Vision Cooperative Research Centre, University of Queensland, Australia; 4College of Optometry, University of Houston, Houston, TX; 5Zhongshan Ophthalmic Center, Guangzhou, China.*CR, #CR

1College of Optometry, University of Houston, Houston, TX; 2Vistakon, Columbus, OH; 3Vistakon, Jacksonville, FL.*CR

#Ocular Surface Research Group, Singapore Eye Research Institute, Singapore, Singapore; 2School of Engineering, Ngee Ann Polytechnic, Singapore, Singapore; 3Singapore Institute of Technology, University of Glasgow, Glasgow, United Kingdom; 4School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore, Singapore; 5Cornea and External Eye Disease Service, Singapore National Eye Centre, Singapore, Singapore.

6303 — 12:00 Keratoconus Detection by Corneal Epithelial Thickness Mapping with Fourier-Domain Optical Coherence Tomography. Z. Li1, O. Tan1, R. Brass3, J.L. Weiss1, D. Huang1. 
1Ophthalmology, Oregon Health and Science University, Portland, OR; 2Albany Med Coll/Brass Eye Ctr, Latham, NY; 3Gordon & Weiss Vision Institute, San Diego, CA.*CR

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.*CR

6305 — 12:30 Mechanical Corneal Sculpting As New Technique For Refractive Surgery. A. Bachmann1, U. Schlötzer-Schrehardt1, M. Börger2, F.E. Kruse1. 
1Ophthalmology, University hospital Erlangen, Erlangen, Germany; 2Deutsche Gesellschaft für Gewebetransplantation (DGFG), Hannover, Germany.

533 New Technologies in Corneal Disease

Moderator: Thomas J Millar

6306 — 12:45 A Novel Method to Generate Precut Tissue for Descemet Membrane Endothelial Keratoplasty (DMEK). Bjoern O. Bachmann1, U. Schlötzer-Schrehardt1, M. Börger2, F.E. Kruse1. 
1Ophthalmology, University hospital Erlangen, Erlangen, Germany; 2Deutsche Gesellschaft für Gewebetransplantation (DGFG), Hannover, Germany.

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

6312 — 12:30 In vivo Imaging of Experimental Autoimmune Uveitis disease progression in Cx3cr1-GFP and CD11c-YFP mice. Xiangting Chen1, H.R. Chinery2, J. Kezie1, M. Sidhu1, C. Bernard1, J.V. Forrester1, P.G. McMenamin1A. 1Anatomy and Developmental Biology, BMonash University, Clayton, Australia; 2School of Medicine and Stem Cell Laboratories, 1Monash University, Clayton, Australia; 2School of Medicine (Optometry) Deakin University, Geelong, Australia; 3Anatomy and Developmental Biology, Monash University & Centre For Eye Research Australia, Clayton, Australia; 4Centre for Ophthalmology and Vision Sciences, University of Western Australia, Perth, Australia.

6313 — 12:45 The Elevation Of Cd14high16+ Monocytes In Uveitis Patients. Diamond Ling, B. Liu, H.N. Sen, M. Casady, Z. Li, L. Wei, S. Jawad, R.B. Nussenblatt. Laboratory of Immunology, NEI, Bethesda, MD.

6317 — 12:00 Amyloid Fibril Formation By The Olfactomedin 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, 2School of Chemistry & Biochemistry, 3School of Biology, Georgia Institute of Technology, Atlanta, GA; 4Department of Genetics, Stanford University School of Medicine, Palo Alto, CA.

6318 — 12:15 Clusterin in Age-Related Ocular Exfoliation Syndrome. Jorge Ghio21, I. Doudnevski2, M. Cowman2, J. Liebmann1, C. Tello1, C. Teng1, R. Ritch1, A. Rostagno1. 1Pathology, New York University School of Medicine, New York, NY; 2Chemical and Biological Sciences, Polytechnic Institute of New York University, New York, NY; 3Einhorn Clinical Research Center, New York Eye and Ear Infirmary, New York, NY.

6319 — 12:30 LOXL-1-Associated Pathomechanisms in Exfoliation Syndrome. Katalin Csizsar1, R. Laczko1, K. Molnarne Szauter1, R. Ritch1. 1John A. Burns School of Medicine, University of Hawaii, Honolulu, HI; 2Einhorn Clinical Research Center, New York Eye and Ear Infirmary, New York, NY.

6320 — 12:45 Analysis Of HSP70B’S As A Potential Direct Target Gene Of The FOXC1 Transcription Factor. Yoko Ito1, F. Berry2, M. Walter1, M. Liu1B. 3Medical Genetics, Surgery, 1Univ of Alberta, Edmonton, AB, Canada.


6332 — 12:15 Dopaminergic 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.

6337 — 12:45 Genetic Modulation of the Ratio of Cholinergic Amacrine Cells in the GCL and INL of the Mouse Retina. Irene E. Whitney1A, B. Raven1A, B.E. Reese1C, 1A Molecular, Cellular, and Developmental Biology, 1B Neuroscience Research Institute, 1C Psychological and Brain Sciences, 1University 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 Bifocality, Multifocality and Restoration of Accommodation

Moderators: Jim Schwiegerling and Sanjeev Kasthurirangan

6328 — 11:15 Optimizing Modified Monovision to Improve Binocular Through-Focus Visual Performance. Len Zheleznyakov1, R. Sabesan21, S. MacRae3, G. Yoon4. 1The Institute of Optics, 2Flaum Eye Institute, 3University of Rochester, Rochester, New York, CR.

6329 — 11:30 Depth Of Field With Induced Coma At Different Orientations. Christina Schwarz1, C. Canovas2, S. Manzanera1. 1P.M. Prieto1, H.A. Weeber, P.A. Piers1, P. Aital1. 1Laboratorio de Optica, Universidad de Murcia, Murcia, Spain; 2RD & Abbott Medical Optics, Groningen, The Netherlands. CR.

6330 — 11:45 Visual Outcomes Following Bilateral Implantation of a Trifocal Intraocular Lens. Sunil Shah1, A.L. Sheppard2, U. Bhatt2. 1Eye Research Institute, Oakland University, Rochester, MI; 2School of Life and Health Sciences, Aston University, Birmingham, United Kingdom. CR.

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


6334 — 12:45 Range of Vision Provided by Dual-Optic Accommodating Intraocular Lens, Sanjeev Kasthurirangan1, L.G. Vargas2, V. Bohorquez3, R. Alarcon3. 1R&D, Abbott Medical Optics, Milpitas, CA; 2R&D, Abbott Medical Optics, Santa Ana, CA; 3Department of Ophthalmology, ServioIftalmos, Bogota, Colombia. CR

Grand A
Thursday, May 10, 2012, 11:15 AM-1:00 PM
Eye Movements, Strabismus, Amblyopia & Neuro-Ophthalmology
538 Strabismus II

Moderators: Vallabh E Das and Linda K McLoon


6337 — 11:45 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.

6341 — 12:45 Sustained IGF-I Treatment Improves Eye Alignment in Adult Strabismic Monkeys. Linda K. McLoon1, C.L. Willoughby1, S.P. Christiansen3, V.E. Das1, M.J. Mustard1. 1Ophthalmology, University of Minnesota, Minneapolis, MN; 2Ophthalmology, Boston University School of Medicine, Boston, MA; 3College of Optometry, University of Houston, Houston, TX; 4Ophthalmology, University of Washington, Seattle, WA.

Grand B
Thursday, May 10, 2012, 11:15 AM-1:00 PM
Clinical & Epidemiologic Research
539 Diabetes and Retinal Disease

Moderators: Tunde Peto and Gavin S Tan

6342 — 11:15 Retinal Microvascular Signs and 5-year Incidence of Stroke: The Singapore Malay Eye Study. Carol Y. Cheung3, W. Tay4, M. Ikrham3, E. Tai3, T.Y. Wong4. 1Singapore Eye Research Institute, Singapore, Singapore; 2Department of Ophthalmology, 3Department of Medicine, 4Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore.


6344 — 11:45 Prevalence, Causes and Risk Factors for Visual Impairment in a Multi-ethnic Asian Population with Diabetes. Gavin S. Tan1, Y. Zheng1, W-L. Wong1, M.K. Ikrham1, E.L. Lamoureux, III1, P. Mitchell1, J.J. Wang1, T.Y. Wong1. 1Singapore Eye Research Institute, Singapore National Eye Centre, Singapore; 2Singapore Eye Research Institute, Singapore, Singapore; 3Department of Ophthalmology, 4Department of Medicine, 5Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore.

6345 — 12:00 RAAB+DR - Rapid Assessment of Blindness Including Diabetes: Results of a New Population-based Survey Method in Chiapas (Mexico), Cape Town (South Africa), and Taif (Saudi Arabia). David B. Yorston1,2, S. Polack1, H. Kuper1, N. Cockburn1, P. Gomez1, M. Rabiu1, R. Alarcon3, R. Torp1, R. Alarcon3. 1Tennent Institute of Ophthalmology, Gartnavel Hospital, Glasgow, United Kingdom; 2London School of Hygiene & Tropical Medicine, International Centre for Eye Health, London, United Kingdom; 3University of Cape Town, Cape Town, South Africa; 4Instituto de la Vision Universidad de Montemorelos, Montemorelos, N.L., Mexico; 5Prevention of Blindness Union, Riyadh, Saudi Arabia.


6347 — 12:30 Longitudinal Changes In Retinal Vascular Caliber Measurements In Children And Its Relationship With Cardiovascular Risk Factors. Emil D. Kurniawan1, N. Cheung1, W. Tay1, C.Y. Cheung2, P. Mitchell3, S-M. Saw1, 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
Glucoma / 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 Trabeculoplasty In The Medicare Population. Henry D. Jampel3, S.D. Cassard3, D.S. Friedman3, H.A. Quigley3, E.W. Gower3. 1Glucoma 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.
Thursday – Papers – 6350 – 6362

6350 — 11:30 Transient Corneal Endothelial Changes Associated With Selective Laser Trabeculectomy. Andrew J. White1,2, A. Mukherjee1, I. Hanspal1, N. Sarkies1, K.R. Martin1,2, P. Shah1,2. 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 Pseudoxfoliation. Francie F. Si, S. Kent2, C.M. Hutnik1, K. Damji1, P. Harasymowycz2, W.G. Hodge1, Y.J. Pav1, A. Crichton1. 1Ophthalmology, University of Western Ontario, London, ON, Canada; 2Ophthalmal & Vis Sciences, University of Toronto, Toronto, ON, Canada; 3Ophthalmology, University of Alberta, Edmonton, AB, Canada; 4Ophthalmology, University of Montreal, Montreal, QC, Canada; 5Ophthalmology, University of Calgary, Calgary, AB, Canada.

6352 — 12:00 Targeting Placental Growth Factor (PIGF) with an Inhibitory Monoclonal Antibody (5D11D4): New Therapeutic Approach for Glaucoma Filtration Failure. Tine Van Bergen1,2, B. Jonckx1, S. Van de Velde1, K. Hollanders1,2, D. Stijns1,4, E. Vandewalle1,4, L.K. Moons1,2, J-M. Stassen2, I. Stalmans1. 1Lab of Ophthalmology, 2Biology Dept, Zoological Inst, 3KU Leuven, Leuven, Belgium; 4ThromboGenics NV, Leuven, Belgium. *CR, ©


6355 — 12:45 Three Year Results of the Ahmed Baerveldt Comparison (ABC) Study. Donald L. Budenz1, K. Barton1, W.J. Feuer1, J.C. Schiffman1, V.R. Costa1, D. Godfrey2, Y.M. Buys3, Ahmed Baerveldt Comparison Study Group. 1Ophthalmology, University of North Carolina, Chapel Hill, NC; 2Glaucome Service, Moorfields Eye Hospital, London, United Kingdom; 3Biostatistics, Univ of Miami-Bascom Palmer, Miami, FL; 4Ophthalmology, Bascom Palmer Eye Institute, Miami, FL; 5Ophthalmology, University of Campinas, Sao Paulo, Brazil; 6Glaucoma Associates of Texas, Dallas, TX; 7Ophthalmology & Vision Sciences, University of Toronto, Toronto, ON, Canada. *CR, ©

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

541 Retinal Detachment III

Moderators: Stanislao Rizzo and Howard F Fine


6359 — 12:00 Postoperative Retinal Function After Recent-onset Retinal Detachment In Relation To The Topography Of The Affected Quadrants. Marcos J. Rubio Casol, M. Martin-Baranera, N. Vila Grane, I. Arias Barquet, J. Caminal Mitjana, E. Catala Mor, P. Garcia Bru, O. Pujol Gayta, J. Arruga Ginebreda, J. Garcia-Arumi. 1Ophthalmology, Hospital Universitari de Bellvitge, Barcelona, Spain; 2Epidemiology, Consorci Sanitari Integral, Barcelona, Spain; 3Ophthalmology, Hospital Vall d’Hebron, Barcelona, Spain.
**Moderator:** Nathan G Congdon

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**636 — A1** Intraocular pressure and ocular perfusion pressure among 10-year incident glaucoma cases in the Age-Related Eye Disease Study (AREDS). Thassarat S. Vajaranant1, J.A. Hallak1,2, C.E. Joslin1,3, 4. Ophthalmology and Visual Sciences, 5Epidemiology and Biostatistics, 1University of Illinois at Chicago, Chicago, IL.  

**636 — A2** Evaluation of a Novel Optic Disc Grading Software for use in Population-based Studies. Yih Chung Thant1,2, C-L. Cheung3, T. Wong4, M. Baskaran4, J. Liu5, B-H. Lee6, J. Wang7, P. Mitchell8, T. Aung9, C-Y. Cheng10. Singapore Eye Research Institute (SERI), Singapore National Eye Centre, Singapore, Singapore; 2Department of Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore; 3Centre for Quantitative Medicine, National University of Singapore, Singapore, Singapore; 4Department of Biostatistics, 1All India Institute of Medical Sciences, New Delhi, India; 5Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*Star), Singapore, Singapore; 6Department of Ophthalmology (Centre for Vision Research), Westmead Hospital, University of Sydney, Sydney, Australia.  

**636 — A3** Evaluation of Depression in Newly Diagnosed Patients of Glaucoma Before and After Starting Ocular Hypotensive Therapy. Neelima Aron1,2, V. Arora1, R. Sagar2, V Sreenivas3, A. Rathi1, S. Kumar4, M. Wadhwan1,2, T. Dada1,2. Dr RP Centre for Ophthalmic Sciences, BCentre for Quantitative Medicine, National University of Singapore, Singapore, Singapore; 3Centre for Quantitative Medicine, National University of Singapore, Singapore, Singapore; 4Department of Biostatistics, 1All India Institute of Medical Sciences, New Delhi, India; 5Department of Ophthalmology, Government Medical College, Chandigarh, India.  

**636 — A4** Metabolic Syndrome and the Risk of Developing Normal Tension Glaucoma. Mijin Kim1, J. Jeoung1, W. Oh2, H. Choi3, M. Kim4, K. Park1, S. Kim1, T-W. Kim1, D. Kim1. Department of Ophthalmology, Seoul National University Hospital, Seoul, Republic of Korea; 2Department of Ophthalmology, Seoul National University Bundang Hospital, Seongnam, Republic of Korea; 3Kong Eye Clinic, Seoul, Republic of Korea; 4Department of Ophthalmology, Healthcare System Gangnam Center, Seoul National University Hospital, Seoul, Republic of Korea; 5Department of Ophthalmology, Seoul National University Boramea Hospital, Seoul, Republic of Korea.  

**636 — A5** Clinical Characteristic Of Normal Tension Glaucoma In Young Patients. Jin Young Rhew, K. Choi. Ophthalmology, Ewha Womans University School of Medicine, Seoul, Republic of Korea.

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**636 — A6** Relationship of Structural and Functional Asymmetry to Sleep Position in Primary Open Angle Glaucoma. Eberechi Nwogu1, S. Thomas2, C. Hamill1, J. Marcus1, N.A. Loewen2, 3. Ophthalmology, 4Ophthalmology and Visual Science, 1Ophthalmology & Visual Science, 5Yale University School of Medicine, New Haven, CT; 6Ophthalmology, Yale School of Medicine, New Haven, CT.  


**636 — A8** Blindness Profile in Glaucoma patients in a Tertiary Eye-care hospital in India. Dewang Angmo, Y. bhadange, V Arora, V Srinivas, A. Baddari, A. Panda, M. Wadhwan, M. Mehdni. Ophthalmology, Dr R P Centre for ophthalmic sciences, AIIMS, New Delhi, India.  

**636 — A9** Profile of Patients Assisted During the 2011 World Glaucoma Week in Araguari - Minas Gerais - Brazil. fabia f. nogueira, G. E. Carlos1, D.R. Martins1, G.R. Cunha1, M.S. Arcieri1, N.B. Ramos1, P.E. Rosa1, R.S. Arcieri1, R.L. Pereira1, E.S. Arcieri4, 5. School of Medicine, Presidente Antonio Carlos University (UNIPAC), Araguari, Brazil; 6School of Medicine of Ribeirao Preto, University of Sao Paulo (USP), Ribeirao Preto, Brazil; 7Ophthalmology, University of Campinas (UNICAMP), Campinas, Brazil.  


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

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**637 — A13** Ordinal Measurement Error Model for Assessing Agreement Among Raters for Glaucoma Progression. Yun Ling1, R.A. Bilionick1, H. Ishikawa2, G. Wollstein1, J.S. Schuman1, 2. UPMC Eye Center, Eye & Ear Institute, Ophthalmology and Visual Science Research Center, Dept. Ophthalmology, U. Pittsburgh School of Medicine, Pittsburgh, PA; 3Dept. Biostatistics, U. Pittsburgh Graduate School of Public Health, Pittsburgh, PA; 4Dept. Bioengineering, Swanson School of Engineering, U. Pittsburgh, Pittsburgh, PA. *CR  


**637 — 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 Dada1,2, V. Arora1, S.K. Gupta2, V. Sreenivas2, P. Vashist1, T. Agarwal2, A. Pande3. 4RP Centre for Ophthalmic Sciences, 5Centre for Community Medicine, 6Department of Biostatistics, 7All India Institute of Medical Sciences, New Delhi, India.  

**637 — A16** Risk Factors for Four-year Incidence of Open-angle Glaucoma: The Los Angeles Latino Eye Study. Xuejuan Jiang1, S. Wu1, M. Torres1, S.P. Azeni, B.A. Francis1, V. Chopra1, B.B. Nguyen1, R. Varma1, Los Angeles Latino Eye Study Group. 1Ophthalmology, Doheny Eye Institute, Univ. of Southern California, Los Angeles, CA; 2Preventive Medicine, USC Keck School of Medicine, Los Angeles, CA.  

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

**638 — A18** Prevalence Of Glaucomatous Optic Neuropathy In A Telemedicine Population. Hana L. Takusagawa1, C. Sheppler1, C. VanAlstine1, S.K. Gardiner1, S.L. Mansberger1. 1Discoveries In Sight Laboratories, 2Devers Eye Institute, Portland, OR.  


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.


6385 — A23 The Association Between Compliance with Recommended Follow-up and Glaucomatous Disease Severity in a County Hospital Population. Yoko Murakami1, C. Ung1, E. Zhang1, T. Affaro1, M.J. Seider1, K. Singh1, S.C. Lin1. Ophthalmology, Stanford University, Stanford, CA; Ophthalmology, University of California, San Francisco, San Francisco, CA. *CR

6386 — A24 Systemic Illnesses In Glaucoma: A Possible Link Between Glaucoma And Breast Cancer? Felse May Barte1, S. Mahalnab1, B. Adams-Huet1B, K. Kooner1A. *CR


6388 — A26 Direct Cost Of Glaucoma Treatment For Patients With Primary Angle Closure Glaucoma Over 10 Years. Kailing Yoon1, H.M. Hoorn1, D.T. Quack1, V.W. Wang1, E.L. Lamoureux, H.P.1, T. Aung2. *CR


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. Smith1, S. Kunnur2. *TASC, Inc, Ft Sam Houston, TX; 2Air Force Research Laboratory, Ft Sam Houston, TX.


6396 — A86 Color Discrimination Task Using Pseudoisochromatic Stimulus: Luminance Noise Variation Provides Better Sensitivity Than Noise Mean Luminance. Bruno D. Gomes2, T.L. Carmichael1B, M.M. Jacob1, E.C. Lacerda1, G.S. Souza1, M.E. Fitzgerald1, L.L. Silveira1. 1Instituto de Ciencias Biologicas, 2Nucleo de Medicina Tropical, 3Universidade Federal do Para, Belem, Brazil; 4Natural Science, 5Biology, 6Christian Brothers University, Memphis, TN; *Anat & Neurobiol & Ophthalmol, UTHSC, Memphis, TN.

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

6398 — A88 Binocular Enhancement of Color Contrast Sensitivity. Jeff C. Rabin1, A. Stewart1, A. Sheen2, J. Boster3, E. Gonzalez, S. Wright1. *Optometry, UIW Rosenberg School of Optometry, San Antonio, TX; *Ophthalmology, USAF School Aerospace Medicine, Dayton, OH.


6400 — A90 Cone Isolating Electroretinograms In Individuals With A Mutant Opsin Allele Associated With Cone Dystrophy. James A. Kuchenbecker, S.H. Greenwald, C. Carroll1, C. Price1, A. Faber1, G.A. Fishman1, M.A. Genead2, T.B. Connor, Jr3, 1Neitz, J. Neitz1. Ophthalmology, University of Washington, Seattle, WA; Ophthalmology, 2Cell Biology, 3Medical College of Wisconsin, Milwaukee, WI; Chicago Lighthouse for People Who Are Blind or Visually Impaired, Chicago, IL; Ophthalmology and Vision Sciences, University of Illinois - Chicago, Chicago, IL; 1The Pangere Center for Hereditary Retinal Diseases, Chicago, IL.

6401 — A91 Color vision of female carriers and color vision deficiency subjects evaluated with the Cambridge Color Test. Daniela M. Bonci1, M. Neitz1, J. Neitz1, M. Gaullier1, M.T. Barboni1, T.L. Costa1, L.L. Silveira1, D.F. Ventura1. Experimental Psychology, University of Sao Paulo, Sao Paulo, Brazil; Ophthalmology, University of Washington, Seattle, WA; *Nucleo 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. Hori1, Y. Kato1. Ophthalmology, Social Insurance Chukyo Hosp, Nagoya Aichi, Japan; *Faculty of Engineering, Shinshu University, Nagano, Japan; 1Chukyo Eye Clinic, Nagoya Aichi, 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 389

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.


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


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

6415 — A308 Subretinal Electrical Stimulation Preserves Visual Acuity In Dystrophic RCS Rats. Vincent T. Ciavatta', M.H. Aung', T.S. Obertone', J.K. You', M.T. Pardue'. 1Rehab R&D Center of Excellence, Atlanta VA Medical Center, Decatur, GA; 2Ophthalmology, 3Neuroscience, Emory University, Atlanta, GA.


6417 — A310 Increased Susceptibility to Retinal Stress in Mice Lacking Sigma Receptor 1 (σR1). Youn Ju Ha', A. Saul', C. Williams', E. Zorrilla', V. Ganapathy', S.B. Smith. 1Department of Ophthalmology, BNeuroscience, 2Emory University, Atlanta, GA; 3Ocular Biology and Therapeutics, 4Vascular Biology Center, 5Department of Pharmacology and Toxicology, 6Georgia Health Science University, Augusta, GA; 7Department of Molecular and Cellular Biology, 8Baylor College of Medicine, Houston, TX; 9VA Medical Center, Augusta, GA.

6418 — A311 Arginase2 Deficiency Reduces Hypoxia-induced Retinal Neurodegeneration through the Regulation of Polyamine Metabolism. S. P. Narayan', J. Sawanpradit', Z. Xie', T. Lentiatsi', N. Patluri', A. Seekumar', R.W. Caldwell', R.B. Caldwell'. 1Vascular Biology Center, 2Department of Pharmacology and Toxicology, 3Georgia Health Science University, Augusta, GA; 4Department of Molecular and Cellular Biology, 5Baylor College of Medicine, Houston, TX; 6VA Medical Center, Augusta, GA.


6421 — A314 Recombinant RdCVF Protein Promises Cone Photoreceptor Survival in S334ter Rat. Jiyun Li, L. Luo, X. Xia, Z. Wang, P. Chen, R. Won. Bascom Palmer Eye Institute, University of Miami, Miami, FL.

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

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


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 Calandria

6409 — A302 Activation of the Aldosterone/Mineralocorticoid Receptor System and Protective Effects of Mineralocorticoid Antagonism in Retinal Ischemia-Reperfusion Injury. Kazuyuki Hirooka', Y. Liu', T. Fujita', F. Shiraga'. 1Ophthalmology, Kagawa Univ Faculty of Medicine, Kita-gun, Japan; 2Ophthalmology, The Fourth Affiliated Hospital of China Medical University, Shenyang, China.

**Thursday – Posters – 6425 – 6444**


6426 — A319 DHA Restores HNE And PEDF By Inhibiting Oxidative Damage In RPE At High Glucose Levels. Emma Arnal1, S. Johnsen-Soriano1, M. Miranda2, A. Navea1, J. Romero1,2, Y. Courtois2, F.F. Behr-Cohen1. INRS 872 team 17, INSERM, Paris, France; INRS 872 team 17, Université Pierre et Marie Curie et Université Descartes, Paris, France; Ophthalmology, Hotell Dieu de Paris, Universite Paris Descartes. INSERM UMR872, Paris, France.

6427 — A320 Transferrin Delivery In The Eye Protects Photoreceptors From Light-Induced Retinal Degeneration. Emilie Picardi1, M. Berdugo2, M. El Sanharawi1, J-C. Jeanny1, Y. Courtois2, Y. Li3, S. Grieco4, S. Chu1A, J. Connelly4, M. Spino4. Martin-Nieto1, P. Lax1, N. Cuenca1.


6429 — A322 Iron Accumulation In Animal Models Of Genetic Retinal Degeneration: Human Transferrin As A Protector For Photoreceptors. Jean-Claude P. Jeanny1, L. Jone1, M-H. Vesvres1, C. Sergeant1, F. Guillon1, F.F. Behr-Cohen1, C. Yves1, F. Picard2. INRS 872 team 17, INSERM Centre des Cordeliers, Paris, France; INRS 872 team 17, Université Pierre et Marie Curie et Université Descartes, Paris, France; UMR 5084, Nuclear and Bio-environmental Chemistry, CNRS, Bordeaux, France; UMR 6175, Physiologie de la Reproduction et des Comportements, INRA, CNRS, Universite 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. Cuenca1. 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. Volterelli3, K.V. Messias4, R.S. Arcieri5, R. Jorge6. 1Retina, 2Bone Marrow Transplantation, 3Sao Paulo University, Ribeirao Preto, Brazil. *


6434 — A327 A Submicrovolt Focal ERG Technique for Evaluating Macular Function in Stargardt/FF Dystrophy: Clinical Assessment of Test Reliability. Benedetto Falsini1, M. Piccardi1, D. Marangoni1, A. Minnella1, M. Bertelli1, S. Bisti1, 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.


6437 — A330 Retinal Degeneration and Microglial Activation in Mouse Models of Neuronal Ceroid Lipofuscinoses. Myriam Mirza1, C. Vol1, L. Woltering1, C. Schaller1, H. Jägle1, T. Langmann1. 1Institute of Human Genetics, University of Regensburg, Regensburg, Germany; 2Department of Ophthalmology, University Eye Clinic Regensburg, Regensburg, Germany.

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. Haverkamp2, K. Stieger3. 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 Scholz1A, M. Fuchs2A, J. Atorff1, R. Enz1, J.H. Brandstatter1A. 1Anatomy, 2Biologic, 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, A.B. Bell1, M.J. Marino1, G.J. Pauer1, C.D. Beight1, E.J. Traboulsi2, R. Allikmets1, J.G. Haggstrom1, J.G. Hogglefield1. 1Ophthalmology, 2Center for Genetic Eye Diseases, 3Cone Eye Inst/Cleveland Clinic Lerner Coll Med, Cleveland, OH.

6444 — A337 Retinal Histopathology from a Patient with Autosomal Recessive Retinitis Pigmentosa caused by EYS Mutations. Meghan J. Marino1, V.L. Bonilha1, M.E. Rayborn1, B.A. Bell1, G.J. Pauer1, C.D. Beight1, J. Jiang2, E.J. Traboulsi1, S.A. Haggstrom1, J.G. Hogglefield1. 1Ophthalmal Research, Cone Eye Institute, Cleveland Clinic, Cleveland, OH; 2Casey Eye Institute Molecular Diagnostics Laboratory, Oregon Health Science University, Portland, OR.

*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures – -indent Refer to Program Number in the Clinical Trial (CT) Registration Index – Travel Grant Awardee
545 Retinitis Pigmentosa III

Moderator: Hendrik P Scholl


6446 — A372 Role of ER Stress-Induced Caspase in Retinal Degeneration of T17M Rhodopsin Transgenic Mice. Shreyasi 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 Rosa, N. Forns, M. Marchena, A. Hernandez-Pinto, R. Steel, C. Isiegas, E. Ayuso, F. de Pablo, F. Bosch, P. de la Villa. "Cell & Molecular Medicine, Centro de Investigaciones Biologicas, Madrid, Spain; 2Physiology, University of Alcalá, Alcalá de Henares, Spain; 3ProRetina Therapeutics SL, Madrid, Spain; 4CBATEG, Universitat Autònoma 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, M.S. Gorbatyuk1, B. Rossomiller2, W.W. Hauswirth1, A.S. Levin23. "Molecular Genetics & Microbiology, Molecular Genetics & Microbiology, Ophthalmology, University of Florida, Gainesville, FL; 2Department 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. Jacobs J. Dudo1, A. Sanz Sanz1, D. Lundvig, V. Sothilingam1, M. Garcia Garrido1, N. Tanimoto1, J. Klooster1, M. Janrich1, M. Seeliger1, J. Wijnholds1. "Neurogenetics, Neuroethics Inst for Neurosci, Amsterdam, The Netherlands; 2Division of Ocular Degeneration, Cr Ophthal Inst Ophthalic Resch, Tuebingen, Germany; 3Cell and Developmental Biology, Baylor College of Medicine, Houston, TX."

6450 — A376 Altered Fractalike Homeostasis In Rd10 Degenerating Mouse Retina. Marina Ziegler1,4, C. Schuber1,4, P. Uhrin1,4, P.K. Ahniet1,4. "Neurophysiology and Neuropharmacology, Vascular Biology and Thrombosis Research, Medical University of Vienna, Vienna, Austria."

6451 — A377 Characterization of a humanized Mouse-Model for X-linked Retinitis Pigmentosa caused by a point mutation in the Rprgr gene. Jutta U. Schlegel1, D. Röll1, M. Bergmann2, B. Lorenz4, K. Stieger4. "Department of Ophthalmology, 2Department of Veterinary Anatomy, 3Justus-Liebig University Giessen, Giessen, Germany; 4Cell and Developmental Biology, Experimental Psychology, University of Sao Paulo, Sao Paulo, Brazil; 5Structural Biology, University of Pittsburgh, Pittsburgh, PA."


6453 — A379 ER Stress Is Involved in Retinal Degeneration Induced by Human T17m Mutant Rhodopsin. Mansi M. Kunte1, S. Choudhury1, V.M. Shinde1, J.F. Manhion1, M. Miura1, O.S. Gorbatyuk1, M.S. Gorbatyuk1. "Cell Biology and Anatomy, UNT Health Science Center, Fort Worth, TX; 1Laboratory for Cell Recovery Mechanisms, Brain Science Institute, RIKEN, Tokyo, Japan; 2Department 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 Esquiva1, P. Lasa1, L. Fernandez-Sanchez1, A. Noailler1, J. Pinilla1, N. Cuenca1. "Physiology, 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. Lundvig1, M. Garcia Garrido1, V. Sothilingam1, N. Tanimoto1, F. Richards1, A. Le Bivic3, M. Seeliger1, J. Wijnholds1. "Neurogenetics, Neuroethics Inst for Neurosci, Amsterdam, The Netherlands; 2Division of Ocular Neurodegeneration, Institute for Ophthalic 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. "Cell Biology and Anatomy, University of North Texas Health Science Center, Fort Worth, 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. Loshimoto4, B.V. Nagy5, D.F. Ventura5, J. Klein-Seetharaman5, D. Hammack3,4. "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. Rossomiller14, H. Mao15,2, A.S. Levin16,17. "Molecular Genetics & Microbiology, Molecular Genetics & Microbio, University of Florida, Gainesville, FL; 1Department of Molecular Genetics and Microbiology, 2Department of Molecular Genetics and Microbiology, 3University 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 Lini1, K. Wang1, M.B. Youdim3. "Anatomy, Eye Institute, 4Anatomy, University of Hong Kong, Hong Kong; 5Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel."

6462 — A388 Analysis Of Photoreceptor Abnormality In Gucy2d1/1 Transgenic Pigs. Corinne Kostic1, T. King1, C. Sylvain1, S. Philippe1, S. Lillo2, C. Sarks1, J. Mallet1, Y. Arsenijevic1, B. White2. "Gene Therapy & Stem Cell Biol, Jules-Gonin Eye Hosp, Univ Lausanne, Lausanne, Switzerland; 2Division of Developmental Biology, The Roslin Institute, University of Edinburgh, Scotland, United Kingdom; 3New Vectors, 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. "Ophthalmology, Emory University, Atlanta, GA; 2Ophthalmology, University of Minnesota, Minneapolis, MN."

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594 — A420 Ginseng Mediated Improvement In The Hydraulic Conductivity Of Human Bruch’s Membrane: Potential For Preventive Therapy In AMD. Cheul Muu Sim1, J. Seok1, M. Kang1, Y. Shin1, H. Shin1, Y. Lee1, A. Hussain1. 1Neuron Science Department, Korea Atomic Energy Research Institute, Daejeon, Republic of Korea; 2Physics, JeonBuk University, Jeonju, Republic of Korea; 3Division of Molecular Therapy, UCL Institute of Ophthalmology, London, United Kingdom.*CR

595 — A421 The Kinetics of Retinal Gene Expression Profile of Col2/Cx3cr1 Double Deficient Mice on rdh8 Background. De Fen Shen1, Y. Wang1, K. Jin1, J. Tu2, M. Xiang1, C-C. Chan1. 1Laboratory of Immunology, National Eye Inst/NIH, Bethesda, MD; 2Center for Advanced Biotechnology and Medicine, University of Medicine and Dentistry of New Jersey, Piscataway, NJ.

596 — A422 Oxidative Stress Causes Activation of the ERK Signaling Pathway in Cultured Human Retinal Pigment Epithelial Cells. Piyush C. Kohathy1, M. Crofoot1, A-M. Nae1, N. Lpes1, T. Patel1, N.B. Shah2, N. Shah3, C. Yang3, M.A. Del Monte. Ophthalmology, Univ of Michigan-Kellogg Eye Ctr, Ann Arbor, MI.


598 — A424 Understanding The Mechanism Behind Enhancing Survival Of Photoreceptors In Culture And Regulation Of Photoreceptor Metabolism. Ken Lindsay1, A.T. Reh1, J.B. Hurley1, D. Lamb2, J. Gust2. 1Biological Structure, University of Washington, Seattle, WA.


602 — A428 Diet Can Influence Human Retinal n-3/n-6 VLC-PUFA Ratios. Aihua Liu1, R. Terry2, K. Nelson1, X. Sheng1, P.S. Bernstein1. Ophthal & 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.


605 — A431 Modifications Of Glycoproteins In The Bruch’s Membrane Via Glycolaldehyde Or Nitration: A Model For Aging And Inflammation. Mai T. Thao1, J.P. Dillon1, E.R. Guillard1. 1Chemistry and Biochemistry, Northern Illinois University, Sycamore, IL; 2Chemistry and Biochemistry, 3Northern Illinois University, DeKalb, IL.


607 — A433 Arms2 In/del Polymorphism Predicts Response To Intra Vitreal Anti-vegf Therapy For Choroidal Neovascular Age-related Macular Degeneration (amd). Alan J. Franklin1, M.F. Slater1, S. Gupta1, J. Myers1, W.B. Luten2. 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

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Thursday Posters

11:15 am – 1:00 pm
6508 — A434 Conditional Knock-Out of Rann-binding protein 2 (RanBP2)/Nucleoporin 358 (NUP358) in the Retinal Pigment Epithelium Results in the Activation of Membrane to Nuclear Signaling Pathways and Hallmark Features of Age-Related Macular Degeneration (AMD). Paulo A. Ferreira1, A. Saha1, E. Haque1, Y-Z. Le1, M. Webb1.

1Ophthalmology, Duke University Medical Center, Durham, NC; 2Medicine, Univ of Oklahoma Hlth Sci Ctr, Oklahoma City, OK.


1Ophthalmology, Duke University Medical Center, Durham, NC; 2Medicine, Univ of Oklahoma Hlth Sci Ctr, Oklahoma City, OK; 3University, Cleveland, OH.

6510 — A436 Genetically-related Inflammatory Priming and Failing Retinal Maintenance Predispose to Age-Related Retinal Degeneration in Mice. Debarshi Mustafi1, K. Kohno1, K. Palczewski1, T. Maeda1, R. Kawasaki2, A. Uchida1, T. Koto1, H. Mochimaru1.

1Ophthalmology, Hopital Maisonneuve-Rosemont, Montreal, QC, Canada; 2Ophthalmology, University Eye Clinic Maastricht, Maastricht, The Netherlands; 3Gynecology, Medical University of Vienna, Vienna, Austria; 4Institute for Laboratory Medicine/ SMZ-East, Vienna, Austria; 5GynecoHel, Medical University of Vienna, Vienna, Austria.

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, Mariko Sasaki1,2, K. Ninios1, A. Chiquet1, J. Romanet1, J. Le Bas1,4.

1Ophthalmology, Hopital Maisonneuve-Rosemont, Montreal, QC, Canada; 2Ophthalmology, University Eye Clinic Maastricht, Maastricht, The Netherlands; 3Ophthalmology, University Medical Center Utrecht, Utrecht, The Netherlands; 4Université de Sherbrooke, Sherbrooke, QC, Canada; 5Clinique ChirurgiVision, Drumondville, QC, Canada; 6Health Sciences Centre-Eye Clinic St-John’s, St-John’s, NL, Canada; 7Everest Clinical Research Services, Inc., Markham, ON, Canada; 8Novartis Pharmaceuticals Canada Inc., Dorval, QC, Canada.

6512 — 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. Ahed1, M.C. Gillies2, J.E. Kefee3, R.H.

1Centre for Eye Research Australia, Melbourne, Australia; 2Save Sight Institute, Sydney, Australia.

6513 — A515 Do Ultraviolet Radiations Induce Earlier Aged Occular Pathologies Among Mountaineer Guides? Hussam El Chehab1, C. Dot2, J. Blein1, J. Herry2, J. Giraud2, F. May2, J. Renard1.

1Department of Ophthalmology, Val de Grace Military Hospital, Paris, France; 2Desgnettes Military Hospital, Lyon, France; 3Ophthalmologist, Chamonix Mont-Blanc, France; 4Ecole Nationale de Ski et d’Alpinisme, Chamonix Mont-Blanc, France.

6514 — A516 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. Krugluger2, J. Huber1, S. Binder1.

1Ophthalmology, Rudolf Foundation Clinic, Vienna, Austria; 2Institute for Laboratory Medicine/ SMZ-East, Vienna, Austria; 3GyneHel, Medical University of Vienna, Vienna, Austria.

6515 — A519 Plasma Homocysteine And Extracellular Soluble Receptor For Advanced Glycation End Products (esRage) In Aqueous Humor Of Patients With Age-related Macular Degeneration. Pinio Matoula1,2, K. Ninios3,4, N. Szentmary1, R. Obeid1, B. Seitz1.

1Department of Ophthalmology, 2Department of Clinical Chemistry and Laboratory Medicine, 3University of Saarland, Homburg, Germany.

6516 — A520 Visual Impairments In Age-related Macular Degeneration To Process Spatial Frequencies During Natural Scene Categorization. Ruxandra Hera1, B. Maseu1, S. Chokron1, C. Chiquet1, J. Romanet1, J. Le Bas1, P. Carole2.

1Ophthalmology, Hospital Albert Michallon, Grenoble, France; 2Laboratoire de Psychologie et Neurocognition, CNRS UMR 5105, Grenoble, France; 3Fondation Ophthalmologique Rothschild, Unité Fonctionnelle Vision et Cognition, Paris, France; 4Université Joseph Fourier - Institut des Neurosciences, INSERM U836, Grenoble, France.


1Ophthalmology, VitreoRetinal Surgery, PA, USA; 2Ophthalmology, University Eye Clinic Maastricht, Maastricht, The Netherlands; 3Ophthalmology, University Medical Center Utrecht, Utrecht, The Netherlands.

6518 — 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. Giunta1, P. Saurel1, M. Bensie1, B. Rebel1, F. De Takacsy2, R. Li1.

1Ophthalmology, Hospital Maisonneuve-Rosemont, Montreal, QC, Canada; 2Polyclinic de Troyes-Rivières, Troyes-Rivières, QC, Canada; 3Université de Sherbrooke, Sherbrooke, QC, Canada; 4Clinique ChirurgiVision, Drumondville, 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.


1Ophthalmology, University Eye Clinic Maastricht, Maastricht, The Netherlands; 2Ophthalmology, VU University Medical Center, Amsterdam, The Netherlands; 3Ophthalmology, University Medical Center Utrecht, Utrecht, The Netherlands.

6520 — A525 One year’s treatment with intravitreal Ranibizumab (lucentis®) and Verteporfin PDT combination therapy at Month 2 for Neovascular Age-related Macular Degeneration (AMD). Eric Fourmaux, M. Dominguez, L. Rosier, L. Velasque.

Retina
6526 — A528 Clinical Features Of Self-resolving Sub-foveal Choroidal Neovascularisation in ‘Wet’ Age-Related Macular Degeneration. Sharmin Badiei1, N. Patel2, S. Walker1. 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. Shah1, H. Fine1, J. Prendergast1, W. Feuer1. 1ophthalmology, Robert Wood Johnson Medical School, New Brunswick, NJ; 2Bascom Palmer Eye Institute of the University of Miami School of Medicine, Miami, FL.

6528 — A530 A French Version Of Skread To Identify Reading Difficulties Related To Central Scotoma. Anne Catherine Scherlen1, G. Faure2, M. Goldschmidt3, D. Raffort1, F. Vital-Durand4, 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; 3Acucela, Inc., Seattle, WA.

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, F. A. O’Connell1, F. A. Folgar1, J.G. Christenbury1, J.G. Chandler3, J.S. Werner3. 1ophthalmology, William Harvey Hospital NHS trust, Ashford, United Kingdom; 2Bascom Palmer Eye Institute of the University of Miami School of Medicine, Miami, FL; 3Duke University, Durham, NC; 4Ophthalmology, East Melbourne, Australia.

6530 — A532 Hyporeflective Wedge-Shaped Band in Geographical Atrophy Secondary to Age-Related Macular Degeneration: An Under-reported Finding. Jordi M. Mone1, M. Biarnes1, F.M. Trindade1. Centro Medico Teknon, Instituto de la Macula i de la Visió, Barcelona, Spain.

6531 — A533 Optical Coherence Tomography Characterization of Apparent Foveal Swelling in Patients with Foveal Sparing Secondary to Geographic Atrophy. Fabio M. Trindade1, J. Mone1, M. Biarnes1. Instituto de la Macula i de la Retina, Barcelona, Spain.

6532 — A534 Reproducibility of Fundus Autofluorescence Patterns in Geographic Atrophy Secondary to Age-Related Macular Degeneration. Marc Biarnes1, J. Mone1, F.M. Trindade1. Instituto de la Macula i de la retina, Barcelona, Spain.


Hall B/C A540-A571
Thursday, May 10, 2012, 11:15 AM-1:00 PM Retinal Cell Biology / Visual Neurophysiology 548 Retina and RPE Cell Biology

Moderator: Peter F Hitchcock

6534 — A536 Evaluation of Peripher al Fundus Autofluorescence Changes in Patients with Wet ARMD: The OTELLO Study. Anita Zenger1, M.B. Rougier1, II, P.E. Stanga2, S. Schmitz-Valkenburg3, L. Reznicek4, U.E. Wolf-Schnurrbusch5,6, 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.

6535 — A537 Significance of Small Dense Particles During Treatment of Exudative Age-related Macular Degeneration. Randhir Chavan1, A.F. Ambrósio3, C. Cavadas1,2. 1ophthalmology, William Harvey Hospital NHS trust, Ashford, United Kingdom; 2Service d’Ophthalmologie, CHU-Bordeaux Unis de Bordeaux, Bordeaux, France; 3Acucela, Inc., Seattle, WA.

6536 — A538 Bilateral Multifocal Electroretinogram Changes After Nanosecond Laser In Subjects With Early Age-related Macular Degeneration. Chi D. Luu1, R. Fleming1, R. Li1, H. Enaide2, T. Ishibashi3,4. 1ophthalmology, 2Dept of Ophthalmology, Kyushu University, Fukuoka, Japan; 3Department of Ophthalmology, Kyushu University, Higashi-ku, Japan.

6537 — A539 Within-visit And Between-visit Repetitability 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, J. Chandler3, J. M. Klein1, D. G. Birch1, J. Chandler3, J. Chandler3, J. Chandler3, J. Chandler3, J. Chandler3. 1Ophthalmology, University of Coimbra, Coimbra, Portugal; 2Faculty of the Southwest, Dallas, TX; 3Ophthalmology, UT Southwestern Medical Center, Dallas, TX; 4Acucela, Inc., Seattle, WA.

6538 — A540 Neuropeptide Y Protects Retinal Neural Cells From Glutamate-induced Toxicity Through The Activation Of NPY Y5 Receptor. Ana Santos-Carvalho1,2, A.F. Ambrósio3,1. 1Center for Neuroscience and Cell Biology, University of Coimbra, Coimbra, Portugal; 2Center of Ophthalmology and Vision Sciences, IBILI, Faculty of Medicine, University of Coimbra, Coimbra, Portugal.

6539 — A541 AMDA-induced Calcium Dynamics Are Altered In Retinas Of Adult Mice Deficient In The Neural Cell Adhesion Molecule (NCAM). Jeremy A. Murphy1,2, B.A. Daniels3, B.C. Chauhan1, W.H. Baldridge2. 1Retina and Optic Nerve Research Laboratory, Ophthalmology & Visual Sciences, 2Retina and Optic Nerve Research Laboratory, Ophthalmology & Visual Sciences, 3Anatomy & Neurobiology, 4Retina and Optic Nerve Research Lab, Ophthalmology & Visual Sciences, Physiology & Biophysics, Dalhousie University, Halifax, NS, Canada.

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. Ikeda2, H. Enaide2, T. Ishibashi3,4. 1ophthalmology, 2Department of Ophthalmology, Kyushu University, Fukuoka, Japan; 3Department of Ophthalmology, Kyushu University, Higashi-ku, Japan.

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

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

6543 — A545 Intercellular Ca2+ Wave and Calcium Oscillation in Human Retinal Pigment Epithelium Cells Induced By Mechanical Stimulation. Anna E. Abu Khadikhal1, K. Juuti-Uustialo1, K. Larsson2,1, H. Skottman2,1, J. Hytinen1. 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. Costa1,4, M.K. Shigetomi1,2, K. Fujita-Uustialo1,2, K. Larsson1,2, H. Skottman1,2, J. Hytinen1. 1Department of Ophthalmology, Bascom Palmer Eye Institute of the University of Miami, Miami, FL; 2Department of Ophthalmology, University of Rochester, Rochester, NY; 3Department of Ophthalmology, University of Rio 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. Marin 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 Gnaana Prakasam1, R. Veeraran-Karmegam2, V. Cothankenadavasamy3, S.K. Reddy4, P.M. Martin5, M. Thangaraju6, S.B. Smith7, V. Ganapathy8,9. 1Biochemistry and Molecular Biology, 2Cellular Biology and Anatomy, 3Georgia Health Sciences University, Augusta, GA.
Thursday — Posters — 6549 — 6571

6549 — A551 Therapeutic Inhibition Of Retinoblastoma By Nanoceria. Kathryn E. Klump1, S.V. Kissova2, S. Seal1, M.A. Dyer3, J.F. McGinnis4,5,6. "Oklahoma Center for Neuroscience, 3Department of Ophthalmology, 7University of Oklahoma Health Sciences Center, Oklahoma City, OK; 1Mechanical Materials Aerospace Engineering, Nanoscience, and Technology Center, University of Central Florida, Orlando, FL; 2Department of Developmental Neurobiology, St. Jude's Children's Research Hospital, Memphis, TN; 3Howard Hughes Medical Institute, Chevy Chase, MD. © CR

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

6551 — A553 Absorption Of Spic Nanoparticles Using Different Media On Arpe-19 And Hec Cell Cultures. Gustavo T. Grottone1, R.R. Loureiro1, J. Couvre2, L. Gamarra1, P. Cristovam1, J.P. Gomez1. "Ophthalmology, UNIFESP/Santa Casa de Santos, Santos, Brazil; 2Ophthalmology, UNIFESP, Santos, Brazil; 3Oncology, Instituto Israelita de Pesquisas Albert Einstein, São Paulo, Brazil.


6553 — A555 CEP290 is Required for Photoreceptor Ciliogenesis and Ventricular Ependymal Cilia Function. Erin Yamamoto1, R. Rachel1, M. Dewanjee1, J. Munasinghe1, T. Lyberg1B. "Department of Ophthalmology, 1University of California-Davis, Davis, CA; 2Department of Ophthalmology, 1University of California-Davis, Davis, CA.

6554 — A556 Rapid Photoreceptor Degeneration Occurs In Zebrafish arl13b Mutants Following Suppression Of Pep Signaling. Brian P. Perkins, L. Dudiinsky. Biology, Texas A & M University, College Station, TX.


6556 — A558 Effect of Storage Temperature on the Viability of Cultured Retinal Pigment Epithelial Cells. Laura Pasovic1, J.R. Elden1, P. Aaleb1, T. Lysberg1, X. Chen2, T.P. Utheim1. "Center for Clinical Research, 3Department of Ophthalmology, 1Oslo University Hospital, Oslo, Norway; 2SynsLaser Kirurgi Oslo/Tromso, Oslo, Norway. © CR


6559 — A561 Changes In The Expression Of Genes Related To Oxidative Stress In Rd1 Mice. Violeta Sanchez-vallejo1, M. Flores-Bellver1, R. Alvarez-Nöling1, S. Johnsen-Soriano1, M. Miranda1, F. Romero Gómez1, 3. "Physiology, Univ CEU Cardenal Herrera, Valencia, Spain; 2Fundación Oftalmológica del Mediterráneo, Valencia, Spain; 3Universidad Católica ‘San Vicente Mártir’, Valencia, Spain.

6560 — A562 The Cysteine Prodrug L-2-Oxohexaazolinedione-4-Carboxylic Acid (OTC) Elicits Potent Antioxidant and Anti-inflammatory Effects in RPE: Relevance to Treatment of Age-Related Macular Degeneration. Wuwina Promsote1, S. Ananth1, R. Veeranjan-Karmegani1, N. Lambert1, C-C. Chan1, V. Ganapathy1, P.M. Martin1. "Biochemistry and Molecular Biology, 2Pharmacology and Toxicology, 1Georgia Health Sciences University, Augusta, GA; 3Immunopathology Section, National Eye Institute, Bethesda, MD.


6562 — A564 Whole Number And Spatial Distribution Of The Pou4f Family Of Transcription Factors In The Adult Rat Retina. Francisco M. Nadal-Nicolas1, J. Jimenez-Lopez1, M. Salinas-Navarro2, L. Nieto-Lopez1, A. Ortín-Martínez2, C. Galindo-Romero1, M. Sánchez-Migéllot1, P. Sobrado-Calvo1, M. Vidal-Sanz1, A. Agudo-Barriuso1. "Cysteine Prodrug L-2-Oxohexaazolinedione-4-Carboxylic Acid (OTC) Elicits Potent Antioxidant and Anti-inflammatory Effects in RPE: Relevance to Treatment of Age-Related Macular Degeneration. Wuwina Promsote1, S. Ananth1, R. Veeranjan-Karmegani1, N. Lambert1, C-C. Chan1, V. Ganapathy1, P.M. Martin1. "Biochemistry and Molecular Biology, 2Pharmacology and Toxicology, 1Georgia Health Sciences University, Augusta, GA; 3Immunopathology Section, National Eye Institute, Bethesda, MD.


6564 — A570 Synergistic interaction of Tubby and Tubby-like Protein 1 (Tulp1). Gabriela S. Alvarado, N.B. Cabrera, Y. Zhou, W. Li. Ophthalmology, Bascom Palmer Eye Inst, Univ of Miami, Miami, FL.

6565 — A571 Retinoblastoma By Nanoceria. Kathryn E. Klump1, S.V. Kissova2, S. Seal1, M.A. Dyer3, J.F. McGinnis4,5,6. "Oklahoma Center for Neuroscience, 3Department of Ophthalmology, 7University of Oklahoma Health Sciences Center, Oklahoma City, OK; 1Mechanical Materials Aerospace Engineering, Nanoscience, and Technology Center, University of Central Florida, Orlando, FL; 2Department of Developmental Neurobiology, St. Jude's Children's Research Hospital, Memphis, TN; 3Howard Hughes Medical Institute, Chevy Chase, MD. © CR

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

6567 — A508 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, R. Koide1, N. Vannaman1, A. Lim1, T. Lyberg1B. "Center for Eye Research Australia, University of Melbourne, Melbourne, Australia; 2School of Veterinary Medicine, Auburn University, Auburn, AL.

6568 — A509 Subretinal gene therapy in Bbs1 mice. Arlene V. Druck, S. Bhattachari, S. See, D. Gratte, E.M. Stone, R. Mullins, V. Sheffield. Ophthalmology, Univ of Iowa Hospitals, Iowa City, IA.

6570 — A508 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, R. Koide1, N. Vannaman1, A. Lim1, T. Lyberg1B. "Center for Eye Research Australia, University of Melbourne, Melbourne, Australia; 2School of Veterinary Medicine, Auburn University, Auburn, AL.

6571 — A509 Increased Neuro-retinal Injury After Intracocular Pressure Elevation In Xenotomochondrial Mice And Compensation By Ophox Complex IV. Ian A. Trounce1, N. Van Bergen1, G. Kong1, V. Chrysostomou1, C.A. Pinkert1, J.G. Crowston1. "Center for Eye Research Australia, University of Melbourne, Melbourne, Australia; 2School 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. Shravan 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. Lihin Jiang, F. Chen, N. Wang. Eye Center, Beijing Tongren Hospital, Beijing, China.


6577 – A215 Down Regulation of BM88 after Optic Nerve Crush. Ashraf 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. Leclere1, B. Buteau1, A. Brout1, C-G. Catherinot1. 1INRA, University of Burgundy, Eyewear, 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. Park2, M. Kim3, M. Kim4, D. Kim5, J. Jeoung1, T-W. Kim2, K. Park3. 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. Shenghui Zhang, X. Sun, J. Wu. Eye & ENT Hospital, Fudan University, Shanghai, China.

6584 – A222 Acid Phosphoglyminelase Plays a Role in IR-induced Retinal Degeneration. Jie Fan1, B.X. Wei1, Y.A. Hamman1, C.E. Crosson1. 1Ophthalmology-Storm Eye Inst, 2Biochemistry and Molecular Biology, 3Ophthalmology, 4Medical Univ of South Carolina, Charleston, SC.

6585 – A223 Soluble IL-6R and Neuroprotection of Retinal Ganglion Cells in Glaucoma. Heather M. Callcarth, R.M. Sappington. Vanderbilt Eye Institute, Vanderbilt Univ Medic 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. Tham1, D.G. Vavvas1, L. Benowitz1, J.W. Miller1. 1Ophthalmology, MEEI, Angiogenesis Research Centre, Children’s Hospital Boston, MA.

6587 – A225 α2-adrenergic Receptor Agonist Restorest Mitochondrial Transcription Factor A and Antioxidative Phosphorylation, And Protects Retinal Ganglion Cells Against Retinal Ischemic Injury. Won-Kyu Ju1, D. Lee1, K.Y. Kim1, Y. Noh1, R.N. Weinreb1. 1Hamilton Glaucoma Center, University of California San Diego, La Jolla, CA; 2Ophthalmology, 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. Luo2, R. Wen1. 1Bascom Palmer Eye Institute, University of Miami, Miami, FL; 2Department of Ophthalmology, Shanghai First People’s Hospital, Jiaotong University, Shanghai, China.


6591 – A229 Effect Of γ-Synuclein Antibody On Rge5 And Mitochondrial Apoptosis Pathways. Corina Wilding, K. Bell, F. Grus, N. Pfeiffer. Experimental Ophthalmology, Mainz, Germany.

6592 – A230 Down Regulation Of 14-3-3 Ab In Glaucoma Patients Could Lead To Loss Of Protective Effects. Katharina Bell, C. Wilding, N. Pfeiffer, E.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. Sidourova, D.J. Calkins. Ophthal & Vis Sciences, Vanderbilt Eye Institute, Nashville, TN.

6594 – A232 Stretch-activated IL-3 Release From Retinal Ganglion Cells Is Protective And Involves The P2X7 Receptor. Jason C. Lim1, W. Lu1, J.M. Beckel1, M. Buell1, J. Xia1, E.J. Macarak1, A.M. Laties1, C.H. Mitchell1, C. Wilding1. 1Anatomy and Cell Biology, 2Ophthalmology, 3Physiology, 4University of Pennsylvania, Philadelphia, PA.


6596 – A234 ShH10, A Novel Müller Glia Cell-specific AAV Vector, Expressing GDNF Promotes Retinal Ganglion Cell Survival Following Neuronal Injury In Thy-1-YFP Mice. Chendong Pan1, L. Guo1, S. Gu1, T.W. Chalberg, J. Schaffer1, J.G. Flannery1, A.M. Demetriades1. 1Glaucoma Research Laboratory, Dyson Institute, Weill Medical College of Cornell University, New York, NY; 2Avalanche Biotechnologies, Inc, Redwood City, CA; 3Helen Wills Neuroscience Institute, University of California, Berkeley, Berkeley, CA.

6597 – A235 Membrane Attack Complex Induces Apoptosis In Retinal Ganglion Cells In Chronic Ocular Hypertension Model. Purushottam Jha, V.V. Lyszogubov, P.S. Bora, N.S. Bora. Ophthalmology, Jones Eye Institute - UAMS, Little Rock, AR.

*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
1Vanderbilt Eye Institute, 2Interdisciplinary Graduate Program, 3Vanderbilt University Medical Center, Nashville, TN.

1Department of Neurology, 2Department of Cell Biology and Pharmacology, 3Herbert Wertheim College of Medicine, Miami, FL; 4Ophthalmology, Schepens Eye Research Institute, Boston, MA; 5Department of Biologolgy, Florida International University, Miami, FL.*CR


6601 — A239 Slt2 Delays The Death Of Retinal Ganglion Cells After Optic Nerve Crush Injury. Thomas F. Sabljic, A. Ball. Pathology & Molecular Medicine, McMaster University, Hamilton, ON, Canada.

1Ophthalmology, Northwestern University, Chicago, IL; 2Biomedical Engineering, 3Neurobiology, 4Northwestern University, Evanston, IL.

6603 — A241 Mechanosensitive Channels In Isolated Rat Retina Ganglion Cells: Response To Strain From Within Neurons. Jingsheng Xia1, A. Ball. Pathology & Molecular Medicine, McMaster University, Hamilton, ON, Canada.

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. Cone1, M. Steinhart1, M. Pease1, H. Quigley1.
1Ophthalmology, University of Eastern Finland, Kuopio, Finland; 2Ophthalmology, Johns Hopkins School of Med, Baltimore, MD.


6606 — A244 Alteration Of Lymphocyte Levels In An Autoimmune Model Of Retinal Ganglion Cell Loss. Sandra Kuehn1, R. Noristani1, M. Kuehn1, J. Schiwek2, F. Gras3, B. Dick4, S. Joachimi5. 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. Williams2, W. Kong3, 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. Böklund, M.D. de La Cour2, J.U. Praz1e, S. Hanamn3, S. Heegaard4. 1Dept. of Neuroscience & Pharmacology, University of Copenhagen, Copenhagen, Denmark; 2Dept of Ophthalmology, Aarhus University Hospital, Aarhus C, Denmark; 3Dept. of Ophthalmology, Glostrup University Hospital, Copenhagen, Denmark; 4Dept. of Biomedicin, University of Aarhus, Aarhus, Denmark.

6610 — A248 Pre-degenerative Astrocyte Modifications in the optic Projection of Glaucomatous Mice. Caroline C. Benoist1, J.D. Dapper1, S.D. Crish2, D.J. Calkins3. 1Ophthalmology, Vanderbilt Univ Medical Center, Nashville, TN; 2Ophthalmology, University of Illinois at Chicago, Chicago, IL; 3Ophthalmology, Northwestern University Medical School, Chicago, IL.

6611 — A249 Stress-Induced Upregulation and Translocation of TRPV1 in Retinal Astrocytes. Karen W. Ho, D.J. Calkins. Ophthalmology, University of Eastern Finland, Joensuu, Finland; 2Department of Ophthalmology, Glostrup University Hospital, Copenhagen, Denmark.

6612 — A250 Enhancement Of Stem Cell Integration Into The Retina By Modulating Glii Reactivity In An In-vitro Stem Cell Transplantation Model. Alessia Tassoni1, N.D. Bull2, K.R. Martin3,4. 1Clinical Neurosciences, Centre for Brain Repair, University of Cambridge, Cambridge, United Kingdom; 2Department of Ophthalmology, University of Cambridge, United Kingdom.*CR

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

6614 — A252 Is Transforming Growth Factor Beta 2 (TGF-B2) An Inhibitor Of Cross-Linked Actin Networks (CLANs) In Cultured Optic Nerve Head Cells (ONH)? Laura M. Currie1, N. Pollock2, L. Parauan1, A.F. Clark1, J. Grierson1. 1Eye and Vision Science, University of Liverpool, Liverpool, United Kingdom; 2Cell Biology & Anatomy, University of North Texas HSC, Fort Worth, TX.*CR

6615 — A253 TLR-4 Inmate Immune Differential Response To Three Dietary Fatty Acids Challenged With Low Molecular Weight Hyaluronic Acid, a TLR-4 Ligand. Algis Grybauskas1, E. Wagner1, R. Burdi2, L. Walker1, P.A. Kneppe2. 1Ophthalmology and Visual Sciences, University of Illinois at Chicago, Chicago, IL; 2Ophthalmology, Northwestern University Medical School, Chicago, IL.

6616 — A254 Hemopexin: An Inhibitor for Hyaluronidase-2. Robert A. Burdi1, E. Wagner1, L. Walker1, A. Grybauskas1, R.D. McCarty2, J.P. Mayer3, P.A. Kneppe1,2. 1Ophthalmology and Visual Sciences, University of Illinois at Chicago, Chicago, IL; 2Ophthalmology, Northwestern University Medical School, Chicago, IL.

6617 — A255 Effect Of Coenzyme Q10 On Mitochondrial Fission And Cellular ATP Reduction In Purified Rat Optic Nerve Head Astrocytes Exposed To Hydrogen Peroxide. You Huan Noh1, 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.

Hall B/C A607-A640
Thursday, May 10, 2012, 11:15 AM-1:00 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. Streink1, B.S. Tiant1, L. Werner1, N. Mamalis1, L.M. Streink1, K.L. Lu1. 1MRI Research Inc, Middleburg Heights, OH; 2Psychology, University of Southern California, Los Angeles, CA; 3Ophthalmology, University of Utah/Moran Eye Center, Salt Lake City, UT; 4MRI Research Inc, Middleburg Heights, OH; 5Ophthalmology, University of Southern California/Doheny Eye Institute, Los Angeles, CA.*CR

Thursday – Posters – 6598 – 6618
6619 — A608 Aravind Pseudoexfoliation Study (APEX) I: Intraoperative Results. Alan L. Robin1,2, R. Venkatesh1, A. Hariripara1, C. Shivas Kumar2, V. Prabhu1, M. Sehkar1, B. Talwar1, P. Sathyam1, D. Ramskrishnam1. 1Aravind Eye Hospitals and Post Graduate Institute of Ophthalmology, Madurai, India; 2Ophthalmology and International Health, Johns Hopkins University, Baltimore, MD.


6621 — A610 Reduced Laser Pulse Width Improves Cutting Efficiency in Laser Refractive Cataract Surgery. Simone Schneider1, H. Uy1, K. Edwards1, T. Olsmstead1, V. Teum1, S. Botn1. 1Clinical and Regulatory Affairs, 2Research & Development, 3Wavelight, Orlando, FL; 4Asian Eye Institute, Makati, Philippines. *CR, ∆

6622 — A611 Morphology of Femtosecond Intrastromal Arcuate Incisions. Percy S. Binder1, B. Gray2, M. Brownell2, P. Marti1, MD1, A. Gwon1, MD1, J. Hill1. 1Gavin Herbert Dept of Ophthalm, Univ of California Irvine, CA, San Diego, CA; 2Biological Sciences, 3& 4Abbott Medical Optics, Santa Ana, CA; 5Comea, International Refractive Consultants, Spring, TX; 6University of California Irvine, Newport Beach, CA; 7Abbott Medical Optics Inc., Santa Ana, CA. *CR

6623 — A612 Posterior Capsule Opacification of a 1-piece and a 3-piece Microincision Intraocular Lens - 1 year Comparison. Ana Prinz1, B. Weingessel1, O. Fend1, P.V. Vecsei-Marlovits1. 1Department of Ophthalmology, Hietzinger Hospital, Vienna, Austria; 2Department of Ophthalmology, Hanusch Hospital, Vienna, Austria. ∆


6625 — A614 Corneal And Total Optical Quality After 2.2mm Coaxial Mini-incision Cataract Surgery Combined With Bimanual Irrigation-aspiration. Corinne Dot1, H. El Chehab1, P. Savary1, E. Agard1, A. Malcles1, N. Chave1, G. Ract-Madoix1, J. Giraud1. 1Ophthalmology, Hospital Desgenettes, Lyon Cedex 03, France; 2Department of Ophthalmology, Hospital Desgenettes, Lyon, France.


6627 — A616 Major Breed Distribution and Common Histopathologic Findings in Canine Globes Enucleated as a Result of Glaucoma Following Cataract Surgery. Erin M. Scott1, D.W. Esson1, K.J. Fritz1, R.R. Dubielzig1. 2Pathobiological Sciences, UW-Madison School of Veterinary Medicine, Madison, WI; 3Eye Care for Animals, Tustin, CA.

6628 — A617 Correlation Of Subjective Nuclear Sclerotic Cataract Grading And Intraoperative Cumulative Dispersed Energy During Phacoemulsification. Nakul Shekhawat1, A. Chomskey2, 1Vanderbilt University School of Medicine, Nashville, TN; 2VA Tennessee Valley Healthcare System, Nashville, TN.

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


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

6632 — A621 Quantitative Evaluation Of The Effect Of Oral Propranolol And Sublingual Prazosin On Intraocular Pressure. A. Giangrande1, C. Paolino1, A. Tosti1, T. Conforti2. 1Eye Care for Animals, Tustin, CA; 2Institute of Medical and Pharmaceutical Sciences, University of California Irvine, Newport Beach, CA.

6633 — A622 Postoperative Refractive Error After Simultaneous Vitrectomy and Phacoemulsification with Sulcus Fixation of Intraocular Lens, eok soo suh, S. LEE, J. Chun. 1Department of Ophthalmology, Dongguk University Gyeongju Hospital, Gyeongju, Republic of Korea.

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

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

6636 — A625 Continuous Intraocular Pressure Measurements During Small Incision Phacoemulsification Surgery In Porcine Eyes. Seung Youn Jeu1, M. Son1, T. Baek1, J. Lee2. 1Ophthalmology, GM St. Mary’ eye center, Busan, Republic of Korea; 2Ophthalmology, Haendae Paik Hospital, Inje University College of Medicine, Busan, Republic of Korea.

6637 — A626 Silicone Sleeve Polishing Of Posterior Capsule, A Safe And Costless I/A Technique. Jean-Marie Giraude, H. El Chehab1, J-R. Fenoll1, M. Francoz1, D. Sendoni1, F. El Asrl1, C. Denier1, C. Dot1, F. May1, J-P. Renard1. 1Ophthalmologie, Hopital d’Instruction des Armees du Val de Grace, Paris, France; 2Ophthalmologie, Hopital d’Instruction des Armees Desgenettes, Lyon, France.

6638 — A627 Intracameral Anesthesia For Cataract Surgery, A Population-based Study On Patient Satisfaction And Outcome. Inger M. Westborg1, E. Moneustam1. 1Ophthalmology, Eye Clinic, Sunderby Hospital, Lulea, Sweden; 2Clinical Sci & Ophthalm, UMEA University, Umea, Sweden.

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

6640 — A629 Viscoat Versus Visithex During Phacoemulsification Cataract Surgery: Corneal And Foveal Changes. Marilitsa M. Moschos1, E.P. Chatziris1, T.N. Sergentanis1, I. Ladas1. 1First Department of Ophthalmology, 2Department of Epidemiology and Biostatistics, 3University of Athens, Athens, Greece.


6642 — A631 A Comparative Study of Phacoemulsification With the Ozil Intelligent Phaco(IP) handpiece and OZil handpiece:retrospective clinical study. Yoshinao Setoguchi1, H. Ito1, H. Nakanishi1, K. Kuroda1, K. Anemiy1, M. Taniguchi1, Y. Okamoto1, A. Ootani1, Y. Tanaka1. 1Japanese Red Cross Wakayama Medical Center, Wakayama, Japan; 2Tanaka Eye Clinic, Wakayama, Japan.

6643 — A632 Balancing the Small Angle Domain (Acuity) and the Large Angle Domain (Straylight of the Point-Spread-Function for Cataract Surgery. Thomas J. Van Den Berg1. 2CD6-Optica i Optometria, Universitat Politecnica Catalunya, Terrassa, Spain. *CR, ∆
6644 — A633 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.


6646 — A635 The Effect Of Anterior Capsulorhexis Optic Capture Of A Sulcus Fixed Axial Implant On Refractive Outcome. Eoghlan R. Millar+, K. Merchant+, D. Steel+. 1Royal Victoria Infirmery, Newcastle upon Tyne, United Kingdom; 2Sunderland Eye Infirmery, Sunderland, United Kingdom.

6647 — A636 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.

6648 — A637 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.


6650 — A639 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

6651 — A640 Refractive Outcomes Of Combined Cataract And Glaucoma Surgery At A VA Hospital. Christopher T. Shah+, J. Tzu, A. Galor+, A.K. Junk+, C.W. See+, S.R. Wellik+. 1College of Human Medicine, Michigan State University, Grand Rapids, MI; 2Bascom Palmer Eye Institute, University of Miami Miller School of Medicine, Miami, FL; 3Ophthalmology, Miami Veterans Affairs Medical Center, Miami, FL; 4Columbia University, New York, NY; 5Bascom Palmer Eye Institute, University of Miami Miller School of Medicine, Plantation, FL.

Half B/C A641-A670

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

Lens

551 Cataract Surgery II

Moderator: Alen Cvekl


6654 — A643 Clinical Outcomes at a VAMC after the Introduction of Universal NSAID Therapy Perioperatively in Cataract Patients. Cameron C. Johnson+, R.A. Rombola, P.J. Kral+. 1Ophthalmology, College of Medicine, 2University of Florida, Gainesville, FL.


6656 — A645 Sutureless transcleral Intraocular Lens implantation after ocular trauma. Malek Khouna+, D. Gaucher+, T. Bourcier+, C. Speeg+, M. Montard+, B.Y. Delbos+, M. Saleh+. 1ophthalmology, University Hospital of Besancon, Besancon, France; 2Ophthalmology, Hopital Civil de Strasbourg, Strasbourg, France; 3Ophthalmology Dept SMOH Pole, University Hospital, Strasbourg, France; 4ophthalmology, University Hospital, Strasbourg, France; 5ophthalmology, Centre Hospitalier Universitaire, Besancon, France; 6ophthalmology, Unip Hosp, Besancon, France. *CR


6658 — A647 Change In Central Corneal Volume After Cataract Surgery. Melissa M. Wong+, A. Shukla+, W.M. Moon+. 1ophthalmology, Boston Univ School of Med, Boston, MA; 2ophthalmology, Massachusetts Eye and Ear Infirmary, Boston, MA.


6661 — A650 Central Corneal Thickness Related to the Volume of BSS Plus used during Phacoemulsification. Erin Lessner, B. Markowitz, K. Banks. Ophthalmology, University of South Carolina, Columbia, SC.

6662 — A651 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 Oftalmologia CONVAL, Mexico City, Mexico; 2Cornea and refractive Surgery, Instituto de Oftalmologia Conde de Valenciana, Mexico City, Mexico.


6664 — A653 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. Parel+. 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


6666 — A655 Improvement in Quality of life following Monocular or bilateral cataract extraction with lens implantation in patients in Lima Peru. Andrea P. Dryeufias. adeyita@stanford. edu, Stanford School of Medicine, Stanford, 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 – 6644 – 6668

11:15 am – 1:00 pm

Thursday Posters

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


6679 — A669 Morgagnian Cataract Simulating Iris Neoplasia: Case Report. Alessandra Protti, S.A. Gandolfi, P. Moro, L. Zografos. University, University of Parma, Parma, Italy; Ophthalmology, 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 Preoperative Application Of Topical Levofloxacin 0.3%. Herminia Mino de Kaspar, L.E. Hoffmann, L. He, B. Li, M.M. Nentwich, C. Haritosgou, D. Kook, M. Grueterich, A. Kampik. Department of Ophthalmology, Ludwig-Maximilians-University, Munich, Germany; Department 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. Tung, G. Vizzieri, B. Luu, T.C. Pruger, J.M. George, O.J. Alsheikh. Ophthalmology and Visual Sciences, University of Texas Medical Branch, Galveston, TX; Ophthalmology and Visual Science, University of Texas Health Science Center at Houston, Houston, TX.


6688 — D708 Management Of Vitreall Loss From Posterior Capsular Rupture During Cataract Operation: Posterior Versus Anterior Vitrectomy? Chaerin Park, S. Wool, J. Hyon, T. Kim, K. Park. Department of Ophthalmology, Seoul National University Hospital, Seoul, Republic of Korea; Seoul Artificial Eye Center, Institutes for Biomedical Research, Seoul National University Hospital, Seoul, Republic of Korea; Department 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 Tiefel, P.A. Legoutko, M.K. Daly. Ophthalmology, Veterans Affairs Boston Healthcare System, Boston, MA; Ophthalmology, Massachusetts Eye and Ear Infirmary, Boston, MA; *Emphonic, Novato, CA; Ophthalmology, 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. Raijpal, R. Siou-Mermet, T. Erb, T.L. Comstock. *Cornea Consultants, PC, McLean, VA; European Pharmaceutical Clinical Science, Bausch & Lomb, Montpellier, France; *Bios tastics, Medical Affairs, Global Pharmaceutical, Bausch & Lomb, Rochester, NY. *CR, *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
6716 – D736 The accuracy of intraocular lens formulas in children ages 2 to 18 at Children’s Medical Center of Dallas, Zachary Vest, S. Wang. Ophthalmology, UT Southwestern, Dallas, TX.

6717 – D737 Risks Factors and Regression Model for Risk Calculation of Anesthesiologic Intervention in Routine Cataract Surgery. Javier Moreno-Montanes, Sr1, A. Sabater1, J. Barrio-Barrio2, J. Pérez-Valdivieso3, E. Cacho Asenjo4, M. García-Grarnera. 2Ophthalmology, 3Anesthesiology, Clinica Universidad de Navarra, Pamplona, Spain; 4Genetica, Universidad de Navarra. Unidad de Estadistica, Pamplona, Spain, TX.


6719 – D739 Resident Cataract Surgery Outcomes with Toric Intraocular Lenses. Helen R. Moreira1, P.B. Greenberg, MD1, 2Division of Ophthalmology, 3Section of Ophthalmology, Providence Veterans Affairs Medical Center, Providence, RI.


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


6723 – D743 Relation between some IOL Injectors and Clear Cornea incision size in the rabbit model. Esdras Arrieta, D. Nankivil, E. Hernandez, S. Yoo, J-M. Parel. Biophysics Center, Dept. of Ophthalmology, Bascom Palmer Eye Institute, University of Miami Miller School of Medicine, Miami, FL. *CR


6725 – D745 Validity of a Miniatrusted Openfield Aberrometer with Surgical Application. James S. Wolfssohn1, U.K. Bhatt1, A.L. Sheppard2, S. Shak1, H. Dua2, T. Mihashi1, T Yamaguchi1. 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


6727 – D747 In Situ Modification of Customized IOLs using the Phase Wrapping Algorithm. Ruth Sahler1, J.F. Bille2, R. Aguilera1, S. Zho1, D. Schanzlin1. 1Medical 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. 1Ophthalmology, University of South Carolina, Columbia, SC; 2Ophthalmology, University of South Carolina, Irmo, SC.


6733 – D753 Evaluation Of A Warm-up Effect In Resident-performed Cataract Surgery. Mohsin Chowdhury1, J.B. Rosenbaum2, J.G. Lee1, L.A. Eisen1, A.A. Madu1. 1Albert Einstein College of Medicine, Bronx, NY; 2Department of Ophthalmology and Visual Sciences, Division of Critical Care Medicine, Department of Medicine, Montefiore Medical Center/Albert Einstein College of Medicine, Bronx, NY; 3Department of Ophthalmology and Visual Sciences, Case Western Reserve University, Cleveland, OH.


6735 – D755 IOL Formula Accuracy and Precision in Three Mono Focal Aspheric Lenses. Stephanie Wise1, J. Wang, A. Rathod1, N. K. Wade1. 1Faculty of Medicine, 2Ophthalmology and Visual Sciences, University of British Columbia, Vancouver, BC, Canada; 3Office of Dr. N Kevin Wade, Vancouver, BC, Canada.


6737 – D757 Fluctuations in Corneal Curvature Limits Predictability of IOL Power Calculations. Sweert Norby1, N. Hirschnall, Y. Nishi1, O. Findl2. 1Pulab, Leck, 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. Steiner1, P.S. Binder1, B. Gray2, Z. Bor3, M. Brownell2, J. Martiz2, A. Gwon1, J. Hill1, L.G. Vargas3. 1Ophthalmology, Gavin Herbert Eye Institute, Irvine, CA; 2Biological 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. Ruiséhor Vazquez1, L. Fernández Aboy1, H. Fernández Mendy1, J.D. Galletti1, P. Chiariad1, 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. Brivael Le Du1, C. Temset1, P-R. Rothschild1, O. Rostaqui1A, J-B. Ciralsky. 1Hospital Eye Clinic, Biostatistics and epidemiology, ‘Cochin Hospital, Paris, France.
Hall B/C  D763-D780

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

Eye Movements, Strabismus, Amblyopia & Neuro-Ophthalmology

554 Oculoplastics III

Moderator: Francisco H Andrade

6743 — D763 The Benefits of Ptosis Surgery. Richard A. Harrad1,2, F. Kalapesi1, H. Garrott1, H. Herbert3, H. Richards1, L. Jenkinson1, N. Rumssey1. 1Ophthalmology, Bristol Eye Hospital, Bristol, United Kingdom; 2Psychology, University of the West of England, Bristol, United Kingdom.


6746 — D766 Evaluation of Modified Levator Plication as Compared to Frontalis Sling for Severe Congenital Ptosis. Abhishek Dave1,2, F. Kalapesi1, M. Bajaj1, N. Pushker1, M. Chandra1, S. Ghose1. Ophthalmology, Dr RP Centre, AIIMS, New Delhi, India.

6747 — D767 Muller’s Muscle-Conjunctiva Resection Outcomes and Phenylephrine Predictability In Ptosis From Horner’s Syndrome. Senad Osmanovic1, J. Hou1, V. Aakalu2, P. Setabutr1, A.M. Patterson1. Ophthalmology, University of Illinois at Chicago, Chicago, IL.

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. Singo2, S.J. Green1, S. Jain1, V.K. Aakalu1, 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. Thygapumpill1, S. Lee2, M. Yen1. 1Ophthalmology, Baylor College of Medicine, Houston, TX; 2Ophthalmology, Cullen Eye Inst, Baylor Coll of Med, Houston, TX.
6768 — D788 Access To Government-insured Vision Care Versus Privatized Dental Care Amongst Canadian Adolescents: Is Cost The Sole Barrier? Kunyong Xie1, G. E. Trope2, K. Thavorn3, J-P. Jin4,2,5. 1Michael G DeGroote Sch of Med, McMaster University, Hamilton, ON, Canada; 2Department of Ophthalmology and Vision Sciences, 3Institute of Health Policy, Management and Evaluation, 4Dalhousie School of Public Health, 5University of Toronto, Toronto, ON, Canada.

6769 — D789 IOLunder2: Outcomes Following Surgery With And Without Primary Intraocular Lens Implantation In Children under 2years Old. Lola A. Soleybo1, J.S. Rahi1,2, British Isles Congenital Cataract Interest Group. 1MRC Centre Epidemiology (Child Health), Institute Child Health, UCL, London, United Kingdom; 2Kingston Eye Hospital, London, United Kingdom; 3Moorefields Eye Hospital, London, United Kingdom.

6770 — D790 Eye Injuries in US High School Athletes: Results of a Six-Year Epidemiologic Study. Andrew W. Stacey1, C.N. Czyz2, J.A. Foster1, D. Comstock2, 1Department of Medical Education, Riverside Methodist Hospital, OhioHealth, Columbus, OH; 2Division of Ophthalmology, Section Oculofacial Plastic and Reconstructive Surgery, Ohio University, Doctor’s Hospital, Columbus, OH; 3Nationwide Children’s Hospital, Columbus, OH; 4Center for Injury Research and Policy, The Research Institute at Nationwide Children’s Hospital, Columbus, OH; 5Division of Epidemiology, The Ohio State University College of Public Health, Columbus, OH.

6771 — D791 Investigation on the reading ability in the hyperopic children at the Nishikasai Inouye Pediatric Eye Clinic. Mieko tsurukoa1, O. katsumi1, M. miyata1, M. suzuki2, Y. aoki1, Y. miyanaga1, K. Inoue1, K. oda1. 1Nishikasai Inouye Eye Hospital, Tokyo, Japan; 2Nishikasai Inouye Pediatric Eye Clinic, Tokyo, Japan; 3Tokyo Woman’s Christian University, Tokyo, Japan; 4Inouye Eye Hospital, Tokyo, Japan.


6776 — D796 Natural History And Risk Factors Analysis For Retinopathy Of Prematurity In Premature Infants In Taiwan: A Prospective Study At The Post Beavicaum Era. Yi hsing Chen, W-C. Wu. 1Ophthalmology department, Chang Gung Memorial Hospital, Taoyuan county, Taiwan; 2Ophthalmology, Chang Gung Memorial Hosp, Taoyuan county, Taiwan.


6779 — D799 The Impact Of Amblyopia And Strabismus On Child Development And Quality Of Life In Young Chinese Children. Audrey Chia1, Y. Chan1, E. Lamoureux1, J. Thumboo1, T. Wong1, S. Saw1. 1Pediatric Services, Singapore National Eye Centre, Singapore; 2National University Singapore, Singapore; 3University of Melbourne, Melbourne, Australia; 4Singapore General Hospital, Singapore; 5Singapore Eye Research Institute, Singapore.

6780 — D800 Sibling Motivation Cards - New Screening Initiative in South India for Pediatric Eye Disease. Brinda Mathusamy, B. Dey, V. Kannusamy, P. Moutuppaa, H.J. Park. 1Pediatric Ophthalmology & Strabismus, The Wilmer Eye Institute, Johns Hopkins Hospital, Baltimore, MD; 2Pediatric Ophthalmology & Strabismus, Aravind Eye Hospital, Pondicherry, India.


6783 — D803 Barriers to Care Following Failure of Population Based Vision Screening. Kristin Rarey, 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-10:00 PM
Cornea

556 Corneal Biomechanics II

Moderator: Cynthia J Roberts

6784 — D948 Corneal Biomechanical Properties and their Change with Corneal UV-Riboflavin Cross-linking from 2D Flap-Extensometry. Sabine Klings1, H.S. Ginis2, S. Marcos Celestino1. 1Instituto de Optica, Consejo Superior de Invest Cientificas, Madrid, Spain; 2Institute of Vision & Optics, University of Crete, Heraklion, Greece; 3Instituto de Optica, Consejo Sup de Invest Sci, Madrid, Spain.


6786 — D950 To Evaluate Patient Outcomes Following Epithelium-on CXL In Patients Who Received The Treatment In One Or Both Eyes. Ray Rubinfeld, W. Trattler1, G. Perez, C.J. Kaiser, A. Koreishi, P. Majmudar, R.J. Epstein, S. Bajna, R. Malhotra. 1Washington Eye Physicians and Surgeons, Chevy Chase, MD; 2Cornea, Center For Excellence in Eye Care, Miami, FL; 3Ctr for Excellence in Eye Care, Miami, FL; 4Cornea Associates of Texas, Dallas, TX; 5Chicago Cornea, Chicago, IL; 6Cleveland Eye Clinic, Cleveland, OH; 7Ophthalmology Associates, St. Louis, MO. *CR, T

6787 — D951 Early Results Of Laser-assisted Collagen Cross-linking (laser CXL) Suggest That Patients Achieve Better-uncorrected Acuity At 6 Months Compared To Mechanical Debridement Of The Epithelium In Patients With Progressive Keratoconus. Taon S. Rabinowitz, R. Gaster. Ophthalmology, Cornea Eye Institute, Cedars-Sinai Medical Center; Beverly Hills, CA. *T
6788 — D952 Lack Of Influence Of Corneal Thickness On Biomechanical Waveforms And How That Impact In Distinguishing Candidates For Lasik Or Phr. Marcony R. Sanhiago2, R. Ambrosio, Jr., W.J. Dupp, Jr., D. Smadja2, E.M. Espana, S.E. Wilson. 4 Ophthalmology, Cleveland Clinic Foundation, Cleveland, OH; 1Ophthalmology, University of Sao Paulo and Rio Laser, Sao Paulo and Rio de Janeiro, Brazil; 3Ophthalmology, Instituto de Olhos Renato Ambrosio, Rio de Janeiro, Brazil; 4Cleveland Clinic, Cleveland, OH; 1Sao Paulo Eye Institute, 4Cleveland Clinic, Cleveland, OH; 2Refractive Surgery, Cole Eye Institute, 4Cleveland Clinic, Cleveland, Paris, France; 3Ophthalmology, Cole Eye Institute, Cleveland, OH.


6791 — D955 An Experimental Evaluation Of Known Computer Models Of The Porcine Cornea. Vito Romano1, M. Angellillo1, A. Pandolfi2. 1Second University of Naples, Napoli, Italy; 2University of Salerno, Salerno, Italy; 3Politecnico di Milan, Milano, Italy.

6792 — D956 Automated Measurement Of Corneal Stromal Collagen Fiber Angular Distribution. Moritz Winkler1, K.R. Huldie1, C.J. Murphy, D.J. Brown1, J.V. Jester1. 1Ophthalmology, University of California, Irvine, Irvine, CA; 2Flam Eye Institute, University of Rochester, Rochester, NY; 3Surgical Radiol Sci-Sch of Veterinary, Univ of California-Davis, Davis, CA.

6793 — D957 Biomechanical Response Of Paired Donor Corneas To An Air Puff: Isolated Cornea vs Intact Whole Cornea. Kimberly Metzler1, A.M. Mahmoud1, J. Liu1, D. Lee1, J.S. Shiao1, C.J. Roberts1, A.M. Mahmoud1, A.M. Mahmoud1. 1Biomedical Engineering, 2Ophthalmology, 3College of Medicine, 4The Ohio State University, Columbus, OH.*CR

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. Afshari1. 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 Toubl2, T. Nguyen1, J. Aubry1, J. Gennisson2, M. Tanter2, J. Verbiest1, J. Colin1. 1CHU de Bordeaux, Bordeaux, France; 2Institut Langevin - espci, Paris, France; 3SuperSonic Imagine, Aix-en-Provence, France.*CR

6801 — D965 Natural history of Intacs in keratoconus and corneal ectasia. Jasmin R. Desai1, P.S. Hersh1A. 1Ophthalmology, 1Cornea and Laser Eye Institute, Teaneck, NJ.*CR

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, E.B. Voronkova1. 1Theoretical & Applied Mechanics, St Petersburg State University, St Petersburg, Russian Federation; 2St-Petersburg Branch R&TC, St Petersburg, Russian Federation.

6804 — D968 To Evaluate The Efficacy Of Riboflavin As A Cyto-Protectant For Limbal Epithelial Cells Exposed To UV-A Radiation. Debashish Das1, D. Kamesh1A, S Murali1A, Pavel Kamaev1A, R. Pertaub1, M. Friedman1A, D. Muller1. 1Research, 1Avedro, Waltham, MA.*CR

6805 — D969 Implications of New Absorption and Fluorescence Measurements of Riboflavin for Corneal Cross-linking. Pavel Kamae1, R. Pertaub1, M. Friedman1A, D. Muller1. 1Research, 1Avedro, Waltham, MA.*CR


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


6811 — D975 Beam Profile Calculations To Increase The Volume Of Cross-linked Of Corneal Tissue. Michael C. Mrochen, S. Schumacher, B.C. Verbiest, D. Simon, T. Seiler: IROC, IROC, Zurich, Switzerland.*CR


6813 — D977 Rapid Collagen Photo-crosslinking Method to Increase Cornea Mechanical Strength. Irene E. Kochneva1, 2, D. Chervat, T.E. Gisel1, E.E. Vetter1, R.W. Redmond3, S. Melki1. 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 Crosslinking Combined With Lasik For High Myopia. Kathy M. Tran1, S.L. Wang, A.J. Kanellopoulos1, 2. 1New York University School of Medicine, New York, NY; 2Lasersvision.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

6818 — D982 Atopy, Floppy Eyelid Syndrome, Obstructive Sleep Apnea Syndrome, Eye Rubbing And Keratoconjunctivitis. Ines Tran1, J. Harque1, A. Sauer1, D. Gardiner1, E. Schatz1, P. Bourgin1, T. Bourcier1, 1Service d'Ophthalmologie, 2Service sommeil, 1CHU de Strasbourg, Strasbourg, France.


6820 — D984 Long-term Results Of Cross-linking Treatment For Progressive Keratoconus. Dan Epstein1, E. Albè2, R. Vinciguerra2, P. Vinciguerra1. 1Ophthalmology, Universitaets Spital Zurich, Zurich, Switzerland; 2Ophthalmology, Istituto Clinico Humanitas, Milan, Italy.

6821 — D985 The use of Sub-Tenon Ranibizumab to Control Pterygium Recurrences. Linda Rose, S. Rivera, J. Byrd. Surgery, University of New Mexico, Albuquerque, NM. *CR, ^


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. Lott1, B. Smith1, J.E. Slocomb1, V. Shkivkara2, K. Betterman2. 1Heart and Vascular Institute, 2Neurology, 1Penn State Milton S Hershey Med Ctr, Hershey, PA.

6824 — D1154 Changes Of Plasma Nitrate Level And Ocular Blood Flow In Patients With Retinal Vein Occlusion After Treatments. Teruyuki Kamiya, T. Nagaoka, T. Omae, Takayuki Kamiya, T. Iwasaki1, Y. Yasuno2. 1Dept of Ophthalmology, Nagoya City Univ, Nagoya, Japan; 2Department of Ophthalmology, Osaka Medical University, Asahikawa, Japan.

6825 — D1155 The Diameter Response To L-lactate And The Prostaglandin Analogue U46619 Is Different In Porcine Retinal Arterioles And Capillaries In Vivo. 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. Petropoulos1, A-L. Martin1, G. Mangioci1, E. Mendrinos1, P. Riemensberger1, C.J. Pournaras1. 1Laboratory of Neurobiology and Physiology of the Retinal Circulation, Department of Ophthalmology, 2Department of Pediatrics, 1Geneva University Hospitals, Geneva, Switzerland.


6829 — D1159 Role of Endothelin-1 in Optic Nerve Head Blood Flow Regulation during Isometric Exercise in Healthy Humans. Agnes Boltz1,2, D. Schmidli1, M. Lasta1, S. Kaya1, S. Palkovits3, R. Todd1, G. Fischer-Jæger-Mayrl1,2, G. Garhofer1, L. Schmetterer1,2. 1Department of Ophthalmology, 2Medical University of Vienna, Vienna, Austria.

6830 — D1160 Evaluation of Ultrasound-Assisted Thrombolyis Using Nontargeted Ultrasound Contrast Agents in a Model of Retinal Vein Occlusion. Walid F. Abdallah1,2, H. Patel1, E. Grant1, G.J. Chader1, M.S. Humayun1. 1Ophthalmology, Doheny Eye Institute, Los Angeles, CA; 2Ophthalmology, Faculty of Medicine, Zagazig University, Zagazig, Egypt; Radiology, Keck School of Medicine, University of Southern California, Los Angeles, CA. *CR

6831 — D1161 In Vivo Adaptive Optics Imaging Of Retinal Pericellular And Capillary Blood Velocity In Mice. Jesse B. Schallek1, Y. Geng1,2, D.R. Williams1,2. 1Center for Visual Science, 2The Institute of Optics, 1Flaum Eye Institute, 2University of Rochester, Rochester, NY. *CR

6832 — D1162 Changes in Choroidal and Optic Nerve Head Blood Flow Regulation During an Experimental Increase in Ocular Perfusion Pressure. Doreen Schmidt1, A. Boltz1, S. Kaya1, R.M. Werkmeister1, N. Dragostinoff2, M. Lasta1, E. Polski1, G. Garhofer1, L. Schmetterer1,2. 1Department of Clinical Pharmacology, 2Center for Medical Physics and Biomedical Engineering, 3Medical University of Vienna, Vienna, Austria.

6833 — D1163 Retinal Blood Flow In Healthy Young Subjects. Gerhard Garhofer1, R.M. Werkmeister1, N. Dragostinoff2, L. Schmetterer1,2,3. 1Department of Clinical Pharmacology, 2Biomed Engineering & Physics, 3Medical University of Vienna, Vienna, Austria.

6834 — D1164 Hemodynamic and Microrheologic Response of Conjunctival Microcirculation to Acute Hypotension in Rabbits. Bruce I. Gaynes1, P-Y. Tong1, J.M. Wanek1, M. Shahidi1. 1Ophthalmology, Loyola University Chicago, Maywood, IL; 2Ophthalmology 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.V. 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 Palkovits1, M. Lasta1, R. Todd1, G. Garhofer1, L. Schmetterer1,2,3. 4Clinical Pharmacology, 5Center for Medical Physics and Biomedical Engineering, 6Medical University of Vienna, Vienna, Austria.


6838 — D1168 Assessment of Oxygen Saturation in Retinal Vessels of Normal Subjects and Diabetic Patients without Retinopathy using the Johns Hopkins Flow Oximetry System. Rachel E. Annami1, M.A. Ibrahim1, L. Lué1, Y.J. Sepah1, M.G. Bittencourt2, O. Aghedua1, H.S. Jang1, J. Yohannan1, J. Ramella-Roman1, Q.D. Nguyen1. 1Johns Hopkins University, Wilmer Eye Institute, Baltimore, MD; 2Biomedical Engineering, Catholic University of America, Washington, DC; 3Diseases of the retina, and Uveitis, Johns Hopkins Univ,Wilmer Eye Inst, Baltimore, MD.

6839 — D1169 Bloodflow Regulation In The Optic Nerve Head During Prolonged Elevation Of The Intraocular Pressure. John V. Lovasik1, H. Kergoat1, M. Parent1, M.G. Quigley1. 1School of Optometry, University of Montreal, Montreal, QC, Canada; 2Department 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 Piper1, B. Fortune1, G. Cull1, C.F. Burgoyne1, G.A. Cioffi2, L. Wang3. 1Optic Nerve Head Research Lab, 2Ophthalmal-Discoversies in Sight, 3Deves Eye Institute, Portland, OR; 4Deves Eye Institute, Legacy Health, Portland, OR; 5Deves Eye Institute, Legacy Research Institute, Portland, OR. *CR

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

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

**558 Tumors: New Drugs, Delivery Systems and Mechanisms of Action**

**Moderators:** Martine J Jager and David H Abramson

**6867 — D1197** Intra-arterial Chemotherapy for the Management of Retinoblastoma in Eyes with Extensive (>50%) Retinal Detachment. Sotiria Palioura1,2, Y. Gobin3, S.E. Brodie4, I. Dunke1, B. Marr1, D. Abramson1. 1Ophthalmic Oncology Service, Memorial Sloan-Kettering Cancer Center, New York, NY; 2Currently, Department of Ophthalmology, Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston, MA; 3Division of Interventional Neuroradiology, Departments of Radiology, Neurosurgery and Neurology, Weill Cornell Medical College, New York Presbyterian Hospital, New York, NY; 4Department of Ophthalmology, Mount Sinai School of Medicine, New York, NY. ©

**6868 — D1198** Effects Of Zeaxanthin On Cell Viability Of Cultured Human Uveal Melanoma Cells And Normal Ocular Cells In Vitro. Dan-Ning Hu1A, R.B. Rosen1B, M. Chen1C, T. Granner1D, J.C. Blanks1C. 1Florida Atlantic University, Boca Raton, FL; 2Center For Cellular and Molecualr Biology, Johns Hopkins Medical School, Baltimore, MD; 3University of Florida, College of Medicine, Gainesville, FL; 4University of San Diego, School of Pharmacy, San Diego, CA.


**6870 — D1200** RXRG Agonist Bexarotene Suppresses Retinoblastoma Growth by Enhancing TRB1 and p53 Tumor Suppressor Activity. Xiaoliang L. Xu1A, R. Jia1A,2, H. Huang1A, W. Joseph1A, N. Zhou1A, D.H. Abramson1B, X. Fan1A, S.C. Jhanwar1A. 1Department of Pathology, 2Ophthalmic Oncology Service, 3Memorial Sloan Kettering Cancer Center, New York, NY; 4Department of Ophthalmology, Shanghai Jiaotong University, Shanghai, China.

**6871 — D1201** The Protein Kinase C (PKC)/Protein Kinase D (PKD)/Steroid Receptor Coactivator (SRC)-3 pathway is an important therapeutic target in Gu-mutant Uveal Melanomas. Vassiliki Panoulaki1, S. Chew2A, B. He3A, Y. Eedumuri1A, D. Bedoya4B, M.J. Jager5, B.W. O'Malley5A, N. Mitsuhasi5A. 1Ophthalmology, VA Boston Healthcare System, Boston University, Boston, MA; 2Medicine/Molecular and Cellular Biology, 3Molecular and Cellular Biology, 4Baylor College of Medicine, Houston, TX; 5Adrien Helis Malvin Medical Research Foundation, New Orleans, LA. ©

**6872 — D1202** Periocular Tissue Concentration of Propranolol after Delivery with a Gel-forming Solution. Michael B. Yang1A, J. Hao1B, H. Liu1B, S. Li1A. 1Abrahamson Pediatric Eye Institute/ Ophthalmology, Cincinnati Children's Hospital, College of Medicine, 2Division of Pharmaceutical Sciences/Winkle College of Pharmacy, 3University of Cincinnati, Cincinnati, OH. *CR


**6875 — D1205** Two Years Report: New Experience With Ranibizumab Against Choroidal Melanoma. Peter E. Liggitt1A, V.A. Kon Jara2A,3, G. Haffner1A,4. 1Ophthalmology, 2Retina, 3New England Retina Associates, Hamden, CT, 4Center for Ocular Research and Education—CREF.

**6876 — D1206** Therapeutic Efficacy By Targeting Correction Of Notch1-induced Aberrants In Uveal Tumors. Xiaolin Huang1A, L. Wang2A, H. Zhang3, R. Jia1A, H. Wang2B, X. Zhao1,2A, G. Qian4A, A.D. Singh5A, S. Ge1A. 1Ophthalmology, 2Department of Ophthalmology, Ninth People’s Hospital, Shanghai Jiaotong University School of Medicine, Shanghai, P.R., China; 3Department of Ophthalmology and Molecular Biology, Shanghai Jiaotong University School of Medicine, Shanghai, P.R., China; 4Cole Eye Institute, Cleveland, OH.

**6877 — D1207** Towards a Novel Therapy for Uveal Melanoma: Targeting Oncogenic Gα12/13. Timothy W. Corson, K. Sishtla. Glick Eye Institute, Department of Ophthalmology, Indiana University School of Medicine, Indianapolis, IN.


**6879 — D1209** Association Of Ocular Findings And Preventive Therapy With Onset Of Cerebral Involvement In Patients With Primary Intraocular Lymphoma. Noriyasu Hashida1, K. Nakai1, N. Oohara1, K. Nishida1. 1Dept of Ophthalmology, Osaka University, Suita, Japan; 2Dept of Ophthalmology, Osaka Koseinenkin Hospital, Osaka, Japan.


**6881 — D1211** Precise Modeling of the Eye for Proton Beam Radiotherapy of Intraocular Tumors. Michael B. Rueegsegger1A,2, J.H. Kowa1A, S. Wolf2A. 1ARTORG Center Ophthalmic Technologies, 2Department of Ophthalmology, 3University of Bern, Bern, Switzerland.

**6882 — D1212** In Vivo Confocal Microscopy Study Of Conjunctival Intraepithelial Neoplasia Treated With Interferon-alpha2b. Hyunjoo J. Lee1A, R. Dunphy1A, M. Daly2A, D. Siracuse-Lee3A. 1Ophthalmology, Boston Medical Center / Boston University School of Medicine, Boston, MA; 2Ophthalmology, 3Optometry, 4Veterans Affairs Boston Healthcare System, Boston, MA.

**6883 — D1213** Expression Of N-glycoly Gm3 In Retinoblastoma, A Promising Candidate For Targeted Therapies. Ana Vanesa Toribdoni, A. Scorsoni, S. Camarero, C. Sampor, G. Chantada, M.T. de Davila. Hospital de Pediatria Prof. Dr. Juan P. Garrahon, Capital Federal, Argentina.

**6884 — D1214** Sulindac Protects RPE Cells Against Oxidative Damage but Enhances the Killing of Retinoblastoma Cells Exposed To Oxidative Stress. Arunodoy Sur4A, H.M. Prentice4A, H. Weissbach4A. 1Integrative Biology PhD Program, Dept of Biology, 2Charles E Schmid College of Medicine, 3Center for Complex Systems & Brain Sci, 4Florida Atlantic University, Boca Raton, FL; 5Center For Cellular and Molecular Biology, Florida Atlantic University, Jupiter, FL.
**Moderators:** Jodhbir S Mehta and James V Jester

**Cornea**

**560 Corneal Biomechanics III**

**Moderators:** Justine R Smith and Henry J Kaplan

**Cornea**

**561 Inflammatory Tissue Damage and Immunoregulation**

**Thursday – Papers – 6885 – 6901**

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**Floridan BCD**

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

**Retina**

**559 AMD/Retinal Degeneration Models**

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**Floridan A**

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

**Retinal Cell Biology / Genetics Group**

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**6899 — 1:15**

**Corneal Transplant Rejection In NIH Miniature Swine Is Associated With Donor-recipient Mismatches In A Region Containing The Homologue Of The Mouse Zfp106 Gene Encoding The H3a Antigen, Susan M. Nicholls, L.K. Mitchell, R. Pang-Wong, R. Harley, A.D. Dick, A.L. Archibald, M. Bailey, Unit of Ophthalmology, School of Clinical Sciences, School of Veterinary Sciences, University of Bristol, Bristol, United Kingdom; Division of Genetics and Genomics, The Roslin Institute and R(D)SVS, University of Edinburgh, Edinburgh, United Kingdom.

**6900 — 1:30**

**In Vivo Imaging Of T Cell Trafficking In Eyes During Spondyloarthritis, Ellen J. Lee, H. Kim, S.R. Planck, J.T. Rosenbaum, H.L. Rosenzweig, Casey Eye Institute, Oregon Health & Science Univ, Portland, OR; Ophthalmology, Inje University, Pusan, Republic of Korea.**

**6901 — 1:45**

**Ifn-γ Is Critical For Disease Pathogenesis In A Spontaneous Mouse Model Of Autoimmune Uveitis, Jun Chen, R. Horai, P. Silver, C-C. Chan, R. Caspi, Lab of Immunology, National Eye Inst/NIH, Bethesda, MD.**

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**6897 — 2:30**

**Quantification of Changes in Optical Properties of Corneas with Stress In Vitro, Ashutosh Richhariya, Y.S. Sangwan, S. Punjabi, G. Yoon, A. Sackler School of Graduate Biomedical Sciences, Tufts University, Boston, MA; AFlaum Eye Institute, The Institute of Optics, University of Rochester, Rochester, NY; Cornea & Ocular Immunology, LV Prasad Eye Institute, Hyderabad, India; Mechanical Engineering, Uijjain Engineering College, Uijjain, India.**

**6898 — 2:45**

**Fibrin Gel Provides Structural Rigidity And Inhibits Folding Propensity of Descemet’s Membrane, Shyam S. Chaurasia, R. Champakalakshmi, R. Pohl, X.W. Tan, D.T. Tan, J.S. Mehta, Tissue Engineering and Stem Cell Group, Singapore Eye Research Inst, Singapore, Singapore; Ophthalmology, Singapore National Eye Centre, Singapore, Singapore; Cornea Refractive Tissue Engineering, SNEC / SERI, Singapore.**

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**6891 — 2:45**

**Cell Death in rd2/rds Retina: An Apoptotic Process?, Francois Puquet-Durand, S. Bernhard-Kurz, B. Arango-Gonzalez, E. Zrenner, M. Ueffing, Experimental Ophthalmology, Institute for Ophthalmic Research, Tueningen, Germany; Experimental Ophthalmology, Institute for Ophthalmic Research, Centre for Ophthalmology, Tueningen, Germany; Institute for Ophthalmic Research, University Eye Hospital, Tueningen, Germany.**

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**6889 — 2:00**

**Canine Bystrophinopathies: Lesion Morphology and Molecular Pathology, Karina E. Gueizewicz, A.V. Cideciyan, W.A. Lesion Morphology and Molecular Pathology. Nicole Arend, S. Koenig, A. Cidcyian, W.A. Beltran, Bernhard-Kurz, B. Arango-Gonzalez, E. Zrenner, M. Ueffing, Experimental Ophthalmology, Institute for Ophthalmic Research, Tueningen, Germany; Institute for Ophthalmic Research, Centre for Ophthalmology, Tueningen, Germany; Institute for Ophthalmic Research, University Eye Hospital, Tueningen, Germany.**

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**6888 — 2:00**

**Integration, Survival and Function of Transplanted RPE Stem Cells into Mouse Models of Geographical Atrophy, C. Nathanial Roybal, S.S. Sarfare, C.X. Ruan, J. Hu, S. Habib, J. Kong, G. Fan, S. Nusinowitz, D. Bok, G.H. Travis, Jules Stein Eye Institute, Human Genetics, UCLA School of Medicine, Los Angeles, CA.**

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**6887 — 1:45**

**Idebenone Prevents Retinal Pigmentepithelium (RPE) Cells from Oxidative Stress and Senescence, Nicole Arend, S. Koenig, A. Cidcyian, W.A. Beltran, Bernhard-Kurz, B. Arango-Gonzalez, E. Zrenner, M. Ueffing, Experimental Ophthalmology, Institute for Ophthalmic Research, Tueningen, Germany; Institute for Ophthalmic Research, Centre for Ophthalmology, Tueningen, Germany; Institute for Ophthalmic Research, University Eye Hospital, Tueningen, Germany.**

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**6886 — 1:30**

**Acid Sphingomyelinase Deficiency Induces Age-related Degeneration In The Mouse Retina, Bill X. Wu, J. Fan, J.W. Jenkins, Y. Koutalos, R.K. Crouch, C.E. Crosson, M. Kono, Y.A. Hanno, Biochemistry and Molecular Biology, Medical University of South Carolina, Charleston, SC; Ophthalmology, Medical Univ of South Carolina, Charleston, SC.**

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**6885 — 1:15**

**Modeling Wet AMD Using Patient-Specific iPSC-Derived RPE Cells, Martin Krupa, X. Zhu, H. Du, J. Luo, G. Hughes, J. Zhu, X. Wei, P. Shav, J. Zhao, K. Zhang, Institute for Genomic Medicine and Shirley Eye Center, University of California, San Diego, La Jolla, CA.**

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**6884 — 1:00**

**Modeling the Stress-Related Apoptotic Process during Macular Degeneration, Abhijit Sinha Roy, B. Fant, K. Rocha, John B. Smiddy, A.G. Jester, Department of Ophthalmology, School of Medicine, Washington University in St. Louis, St. Louis, MO; Department of Ophthalmology, University of Pennsylvania, Philadelphia, PA; Department of Ophthalmology, Mount Sinai School of Medicine, New York, NY.**

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**6883 — 1:30**

**Conservation of Arclength in Keratoconic and Normal Corneas with Air Puff Induced Deformation, Cynthia J. Roberts, A.M. Mahmoud, L. Litt, Z. Sharalaya, T.F. Mauger, R.G. Lambach, A.J. Henderson, R. Kuennert, S.D. Kyler, Ophthalmology, Biomedical Engineering, College of Medicine, The Ohio State University, Columbus, OH; Ophthalmology, Mount Sinai School of Medicine, New York, NY.**

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**6882 — 1:15**

**Patient Specific Finite Element Cornea Model, David Vargas, R. Asgher, E. Moisseieiev, A. Gfen, Ophthalmology, Tel Aviv Medical Center, Tel Aviv, Israel; Sackler School of Medicine, Dept. of Biomedical Engineering, Tel Aviv University, Tel Aviv, Israel.**

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**6881 — 1:00**

**Induced Deformation. Keratoconic and Normal Corneas with Air Puff**, Maria A. del Buey, E. Lanchares, Mechanical Engineering, University of Zaragoza, Zaragoza, Spain.

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**6880 — 10:45**

**Pressure on the Corneal Transplant Rejection In Vivo, Ellen J. Lee, H. Kim, S.R. Planck, J.T. Rosenbaum, H.L. Rosenzweig, Casey Eye Institute, Oregon Health & Science Univ, Portland, OR; Ophthalmology, Inje University, Pusan, Republic of Korea.**

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**6879 — 10:30**

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

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**6878 — 10:15**

**Apoptotic Process During VLC-PUFA Biosynthesis, Sreenath Loganathan, M-P.G. Aghagha, M.D. Chani, R.S. Brush, R.E. Anderson, Cell Biology, Ophthalmology, University of Oklahoma HSC, Oklahoma City, OK; Dean A. McGee Eye Institute, Oklahoma City, OK.**

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**6877 — 10:00**

**Numerical analysis of the influence of Intracorneal Pressure on the photorefractive keratectomy for myopia correction, Maria A. del Buey, E. Lanches, J.A. Cristóbal, B. Calvo, F.J. Ascaso, L. Lavilla, C. Palomino, N. Cruz, P. Casas, Ophthalmology, Lozano Blesa University Clinic Hospital, Zaragoza, Spain; Quiron Hospital, Zaragoza, Spain; Mechanical Engineering, University of Zaragoza, Zaragoza, Spain; Ophthalmology, Quiron Hospital, Madrid, Spain.**

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**6876 — 9:45**

**Estimation Of Modulus Change After Corneal Crosslinking (cxl) Using Multiple Post-cxl Topographies And Inverse Finite Element, Abhijit Sinha Roy, B. Fant, K. Rocha, W. Dupps, John B. Smiddy, A.G. Jester, Ophthalmology, Cleveland Clinic Cole Eye Inst, Cleveland, OH; Clinical Research Consultants, Cincinnati, OH.**
6902 — 2:00 Different Subsets Of Tumor-infiltrating Lymphocytes Correlate With Macrophage Influx And Monosomy 3 In Uveal Melanoma. Ingemar H. Bronkhorst1, T. Vu1, E.S. Jordanova2, G.P. Layten3, S.H. van der Burg4, M.J. Jager1. 1Ophthalmology, 2Pathology, 3Clinical Oncology, Leiden University Medical Center, Leiden, The Netherlands; 4Ophthalmology, Leiden University Med 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. Nicholson2, A.D. Dick3. 1School of Cellular and Molecular Medicine, 2School of Clinical Sciences, 3University of Bristol, Bristol, United Kingdom.


6905 — 2:45 Decreased Interleukin-27 Expression is Associated with Active Uveitis in Behcet’s Disease. Peizeng Yang1, C. Wang2, Y. Tian3, Z. Ye1, A. Kijlstra1. 1Ophthal, The 1st Hosp, Congqing Medical University, Congqing, China; 2Ophthal, University Hospital Maastricht, Maastricht, 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. Dawes3. 1School of Biological Sciences, University of East Anglia, Norwich, United Kingdom; 2Biological Sciences, Oakland University, Rochester, MI; 3Save Sight Institute, University of Sydney, Sydney, Australia.

6911 — 2:30 Cataract EPHA2 SAM Domain Mutations Alter Receptor Stability and Function. Jeong Eun Park1, A.I. Son2, R. Hua3, X. Zhang4, R. Zhou4. 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 Doxurubicin Loaded Mepeg-pcl Nanoparticle For Prevention Of Posterior Capsular Opacification. Aditya Konar1, R. Guha1, S. Chowdhary1, H. Palai2, A. Mishra2, G.K. Venuganti1, S. Basak3, T.K. Manda2, S. Haza4. 1ICCB, Kolkata, India; 2Veterinary Surgery & Radiology, 3Veterinary Pharmacology & Toxicology, 4West Bengal University of Animal & Fishery Sciences, Kolkata, India; 5Dean, School of Medical Sciences, University of Hyderabad, Hyderabad, India; 6Eye Bank, Disha Eye Hospital, Barrackpore, India.


6916 — 2:00 Nicotinic Block REDuces Direction Selectivity to Moving Gratings by Increasing Amplitude and Shifting Phase of Null Direction Excitation. Mikhail Y. Lipin3, W.R. Taylor3, R.G. Smith. 1Department of Biomedical Sciences, Colorado State University, Fort Collins, CO; 2Casey Eye Institute, Ophthalmology, Oregon Health Sciences University, Portland, OR; 3Dept of Neuroscience, University of Pennsylvania, Philadelphia, PA.


6918 — 2:30 Developmental Characterization Of NMDA Receptor Expression In Identified Retinal Ganglion Cells Of The Mouse Retina. Ben Stafford1, K.Y. Wong1, J.B. Domb2. 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

Lens

562 Signaling and PCO

Moderators: John W McAvoy and Ales Cvekl


6907 — 1:30 ERK1/2 Signaling is Required for Lens Cell Survival and Fiber Cell Differentiation during Development. Dinesh Upadhya, L. Reneker. Ophthalmology, Mason Eye Institute, Columbus, MO.

6908 — 1:45 Genome-wide Identification Of Genes And MicroRNAs Regulated By Fgf2 During In Vitro Lens Fiber Cell Differentiation. Louise V. Wolf1, C.C. Gao1, K. Gueta2, N. Podduturi3, P.S. Zelenka2, R. Ashery-Padan1, J. Zavadin1, A. Cvekl1. 1Ophthalmology & Visual Sciences and Genetics, Albert Einstein College of Medicine, Bronx, NY; 2LMDDB, NEI, Bethesda, MD; 3Sackler School of Medicine, Tel Aviv University, Tel Aviv, Israel; 4Langone Center, NYU, New York, NY.

6913 — 1:15 Light Adaptation at Distinct Intensity Levels within the Photopic Regime. Alexandra Tikidji-Hamburyan, T.A. Münch. 1University of Tuebingen, 2BBCCN / CIN / MPI, 3Department of 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 Baden1, P. Berens1, M. Bethge1, T. Eiler1. 1BCCN / CIN, 2BCCN / CIN / MPI, University of Tuebingen, Tuebingen, Germany.
Grand A

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

**Retina**

### 565 Macular Edema

**Moderators:** Frank G Holz and Edoardo Midera


- **6928 — 1:30** 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. Goldstein1. *Ophthalmology, Tel Aviv Medical Center, Tel Aviv, Israel; 2Ophthalmology, Tel-Aviv Medical Center, Tel-Aviv, Israel; 3Ophthalmology, Tel-Aviv Medical Center, Tel Aviv, Israel.

- **6929 — 1:45** Intravitreal Afibercept Injection for Macular Edema in Central Retinal Vein Occlusion: 1-year Results of the Phase 3 GALILEO Study. Frank G. Holz1, Y. Ogura2, J. Roider3, J-F. Korobelnik4, B. Stemper5, R. Vitt6, A.J. Berliner7, F. Hiemeyer8, R. Sandbrink9, O. Zeit10. *1Ophthalmology, University of Bonn, Bonn, Germany; 2Ophthalmology, Nagoya City University Graduate School of Medicine, Nagoya, Japan; 3Ophthalmology, Klinik fur Ophthalmologie, University of Kiel, Kiel, Germany; 4Service d’Ophthalmologie, Hopital Pellegrin, Bordeaux, France; 5GCD TA NOHI, 6Bayer HealthCare, Berlin, Germany; 7Ophthalmology, Regeneron, Tarrytown, NY; 8Bayer Health Care, Berlin, Germany; 9Global Clinical Development, Bayer HealthCare AG, Berlin, Germany.*

- **6930 — 2:00** Macular Edema After Uneventful Phacoemulsification Detected By Ocular Coherence Tomography (OCT). Luiz Felipe Q. Silveira1, G.A. Pellegrini2, M. Harasawa3, G.A. Carlos1, J.C. Souza1, T. Leite1, G.S. Pierozzi1, A.F. Bordon2. *1Retina, Hospital Oftalmologico de Sorocaba, Sorocaba, Brazil; 2Hospital Oftalmologico de Sorocaba, Itabaita, Brazil; 3Retina, Hospital de Olhos de Sorocaba, Sorocaba, Brazil; 4Ophthalmology UNIFESP-EPM, Federal Univ of Sao Paulo, Sao Paulo, Brazil.


- **6932 — 2:30** Incidence Of Macular Edema (ME) In Fingolimod (FTY720) Multiple Sclerosis (MS) Clinical Program. Marco A. Zarbin1, A. Reder2, W. Collins3, G. Francis4, X. Zhang5, L.Y. Kappos6, J. Cohen1. *1Inst. of Ophthalmology & Visual Science, UMDNJ-New Jersey Medical School, Newark, NJ; 2Neurology, University of Chicago, Chicago, IL; 3Novartis Pharm AG, Basel, Switzerland; 4Novartis Pharma AG, Basel, Switzerland; 5University of Basel, Basel, Switzerland; 6Neurology, Cleveland Clinic Foundation, Cleveland, OH.

**Clinical and Epidemiologic Research**

### 566 Health Care Delivery and Economic Research II

**Moderators:** Astrid E Fletcher and Vaping Jin

- **6934 — 1:15** Socioeconomic Disparity in Access to Eye Care Services among U.S. Adults with Age-related Eye Diseases Emerging during 2002 and 2008. Xinxi Zhang1, P. Naik2, G. Beckles3, C-F. Chou1, L. Geiss1, A. Ryskulova4, J. Saaddine5. *1Inst. of Ophthalmology, 2Human Genetics, 3Radboud University Nijmegen Medical Center, 4Ophthalmology, 5American Optometric Association.*

- **6935 — 1:30** Affordability of Cataract Surgery using the Big Mac Index. Jan C. Lingscheid1, M.J. Carter2, K.L. Winthrop3, J.M. Furtado4. *1Agency for the Prevention of Blindness/VISION 2020, Weston, FL; 2Strategic Solutions, Inc, Cody, WY; 3Casey Eye Institute, Portland, OR; 4Casey Eye Institute, Oregon Health & Science Univ, Portland, OR.

- **6936 — 1:45** After Multiple Rounds of Mass Drug Administration for Trachoma, are there only “Trachoma families” left? Sheila K. West1, B.E. Munoz1, B. Mochel1, C. Goydos2, T. Quinn3. *1Ophthalmology, Johns Hopkins Wilmer Eye Inst, Baltimore, MD; 2Kongwa Trachoma Project, Kongwa, Tanzania, United Republic of; 3Department of Infectious Diseases, Johns Hopkins University, Baltimore, MD; 4National Institute of Allergy and Infectious diseases, National Institute of Allergy and Infectious diseases, NIH, Bethesda, MD.

Prevalence of Functional Low Vision and Need for Annualized Eye Evaluation in Adult Malays and Indians Living in Singapore. Yingfeng Zheng, C-Y. Cheng, E.L. Lamoureux, III, P. Chiang, A. Anuar, T. Aung, S-M. Saw, T.Y. Wong. Singapore Eye Research Institute, Singapore National Eye Centre, Singapore, Singapore; State Key Laboratory of Ophthalmology, Zhongshan Ophthalmic Center, Sun Yat-sen University, Guangzhou, China; Department of Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore; Ophthalmology, University of Malaya, Kuala Lumpur, Malaysia; Saw Swee Hock School of Public Health, National University of Singapore, Singapore, Singapore; Centre for Eye Research Australia, University of Melbourne, Melbourne, Australia.


Lack Of Government-insured Annual Eye Examinations Increases The Risk Of Vision Problems Amongst Low-income Elderly. Yaping Jin, Y.M. Buys, J. Xiong, G.E. Trope. Ophthalmology & Vision Sciences, University of Toronto, Toronto, ON, Canada; University of Waterloo, Waterloo, ON, Canada; Ophthalm/ Toronto Western Hosp, University Toronto, Toronto, ON, Canada.

Increased Immune Response Against Ocular Tissue After Immunization With An Optic Nerve Antigen. Stephanie C. Joachim, O.W. Gramlich, P. Laspas, S. Kuehn, H.D. von Pein, B. Dick, F.H. Grus. Experimental Eye Research Institute, Ruhr University, Bochum, Germany; Experimental Ophthalmology, University Medical Center, Mainz, Germany; Experimental Ophthalmology, Department of Neuropathology, Mainz, Germany.


Anti-Connective Tissue Growth Factor Antibody Therapy Combats Expression of Fibrotic Genes in Glaucoma. Deborah M. Wallace, A.F. Clark, N. Oliver, J.K. Cream, C.J. O’Brien. School Medicine & Medical Science, School of Biomolecular & Biomedical Science, Conway Inst., University College Dublin, Dublin, Ireland; Dept. Of Ophthalmology, Mater Misericordiae University Hospital, Dublin, Ireland; Cell Biology & Anatomy, University of North Texas HSC, Fort Worth, TX; FibroGen Inc, San Francisco, CA; Ophthalmology, Mater Misericordiae Univ Hospital, Dublin, Ireland; School of Medicine and Medical Science, University College Dublin, Ireland. CR

Crossed Linked Actin Networks are Formed in Human Trabecular Meshwork Cells after treatment with Latrunculin B. Paul Russell, K. Murphy, J.A. Wood, C.T. McKee, C.J. Murphy. School of Veterinary Medicine, School of Biomedical Engineering, School of Medicine and School of Veterinary Medicine, University of California Davis, Davis, CA.

Defects In Whole Cell Respiration In POAG Lymphoblasts. Jonathan G. Crowston, L. Sheek, N.J. Van Bergen, S. Lee, V. Chrysostomou, A.L. Vincent, L.A. Troncze. Department of Ophthalmology, Glaucoma Research Unit, Centre for Eye Research Australia, East Melbourne, Australia; Ophthalmology, University of Auckland, Auckland, New Zealand; Glaucoma Research Unit, Centre for Eye Research Australia, Melbourne, Australia; University of Melbourne, Centre for Eye Research Australia, Melbourne, Australia.


Lack Of Government-insured Annual Eye Examinations Increases The Risk Of Vision Problems Amongst Low-income Elderly. Yaping Jin, Y.M. Buys, J. Xiong, G.E. Trope. Ophthalmology & Vision Sciences, University of Toronto, Toronto, ON, Canada; University of Waterloo, Waterloo, ON, Canada; Ophthalm/ Toronto Western Hosp, University Toronto, Toronto, ON, Canada.
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. daCruz4, 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. *CR, TP

Results Update from Second Sight’s Argus II Retinal Prosthesis Study.
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An Eye-surface Conformable Retinal Prosthesis using Liquid Crystal Polymers.
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