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

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

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**Thursday, May 10 • Posters**

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**10:15–11:15am: All Posters — authors will be present at poster boards.**

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. Reinstein¹, T.J. Archer¹, 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,  ▼

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. Goldman¹, F. Müller¹, N. Overlack¹, V. Belakho², T. Baasov², U. Wolfrum¹.  ¹Cell and Matrix Biology, Johannes Gutenberg University of Mainz, Mainz, Germany; ²Ophthalmology, University Hospital of Florida, Gainesville, FL.

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. Downie¹, A.J. Lottery¹, G.C. Black¹, A.R. Webster², M.C. Seabra³.  ¹Nuffield Laboratory of Ophthalmology, University of Oxford, Oxford, United Kingdom; ²Moorfields Eye Hospital NHS Foundation Trust, London, United Kingdom; ³Baylor College of Medicine, Houston, TX.

5578 — 9:00  Adenoviral and Lentiviral Vectors for Efficient Gene Transfer to Mouse Retina.  Agostina Puppolf, G. Cesì, D. Palmeri¹, P. Piccoli², R.J. Parks³, P. Nig¹, N. Brunetti-Pierri³, A. Auricirocchi¹, 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.


5580 — 9:30  A Novel Method To Transfect Retinal Pigment Epithelial Cells Without Detaching The Retina.  Francine F. Behar-Cohen¹, ², E. Touchard³, B. Marianne², M. Savoldelli³, M-C. Naud³, J-C. Jeanny¹, ².  ²Ophthalmology, Hotel Dieu de Paris, Université Paris Descartes, Paris, France; ³Physiopathologie oculaire diseases, ²Ophthalmology, Hôpital Dieu de Paris, Université Paris Descartes, Paris, France.

5581 — 9:45  Progeny Of Pronuclear Injections Of Mutant Human Mitochondrial Genes.  Hong Yu¹, T-H. Chou¹, V. Porciatti², W.W. Hauswirth³, V. Chiody¹, S.L. Boye¹, J. Guy¹.  ³Ophthalmology, Bascom Palmer Eye Inst, Univ of Miami, Miami, FL; ²Bascom Palmer Eye Inst, Univ of Miami Miller Sch Med, Miami, FL; ¹Ophthalmology, 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. Peshenko¹, E.V. Olshevskaya¹, S. Lim¹, J.B. Ames¹, A.M. DiZio², T. Banis³.  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 Neurodegeneration
Diabetes. Peter Frederikse1, R. Kaswali2, W. Kleint, C. Kasinathan1. 1Pharmacology & Physiology, UMD New Jersey Medical School, Newark, NJ; 2Oral Biology, UMD New Jersey Dental School, Newark, NJ; 3Neurobiology & Physiology, Northwestern University, Evanston, IL. *CR

5585 — 9:00 Rescue Of Photoreceptor Degeneration In Rd1 Mice By Systematic Treatment With Valproic Acid. Kenneth P. Mitton, E.E. Guzman, D. Byrd, T. Tran, J. Sozten. Eye Research Institute, Oakland University, Rochester, MI.


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

5590 — 10:15 Ten3 is an Essential Epigenetic factor for Eye development. Stephen P. Sugrue1, G. Xu1, Y. Kato1, Y. Xu1, Y. Shi1. 1Anatomy & Cell Biology, University of Florida, Gainesville, FL; 2Institute of Biochemistry and Cell Biology, Chinese Academy of Sciences, Shanghai, China; 3Department of Biomedical Sciences, Florida State University College of Medicine, Tallahassee, FL; 4Endocrinology Division, Brigham and Women’s Hospital, Boston, MA.


5592 — 9:00 Glutaredoxin (Gsr2) Gene Knockout Suppresses Fiber Cell Differentiation and Delays De-nucleation of the Mouse Lens. Marjorie F. Loi1,2, S. Basu1, Y. Yu1, H. Wu1, A. S. Menko1. 1Veterinary Medicine & Biomedical Sciences, University of Nebraska-Lincoln, Lincoln, NE; 2Department of Ophthalmology, University of Nebraska Medical Center, Omaha, NE; 3Pathology Anatomy & Cell Biology, Thomas Jefferson University, Philadelphia, PA.

5593 — 9:15 K6W Mutant Ubiquitin Activates Calpain In Lens. Ke Liu1, A. Caceres1, J. Peng2, F. Shang1, J. Gao1, X. Sun1, R.T. Mathias1, A. Taylor2. 1Human Nutrition Research 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 Shatala1, R. Rachel1, A. Griep1. 1Cell and Regenerative Biology, 2Anatomy, Univ of Madison-WI, Madison, WI.

5595 — 9:45 Post-translational Modifications of BFSP1. Roy A. Quinlan1, A. Tapodi1, E.W. Tate1, W. P. Heaf1, A.R. Prescott1. 1School of Biomedical/Biomedical Sciences, Biophysical Sciences Inst, Durham Univ, Durham, United Kingdom; 2Department of Chemistry, Imperial College, London, United Kingdom; 3School of Life Sciences, CHIPs and Division of Cell Biology and Immunology, Dundee University, Dundee, United Kingdom.

5596 — 10:00 Chromatin Remodeling Enzymes Snf2h/smarca5 And Brug1/smarca4 Are Independently Required For Mouse Lens Morphogenesis. Shuying He1, J. Sun1, J. Kokavec1, T. Stopka1, A. Skoultchi1, J. Zavadil3, A. Cvekl1. 1Ophthalmology & Visual Sciences and Genetics, 2Cell Biology, 3Albert Einstein College of Medicine, Bronx, NY; 4Institute of Pathological Physiology and Center of Experimental Hematology, First Faculty of Medicine, Charles University, Prague, Czech Republic; 5New York University Langone Medical Center, New York, NY.

5597 — 8:30 In Vivo Optical Recording From Mouse Retinal Ganglion Cells. Lu Yin1, A.H. Cetin1, Y. Geng1, B.R. Sharma2, B. Ahmad2, E.M. Callaway3, D.R. Williams4, W.H. Merigan3,4. 1Center for Visual Science, 2Institute of Optics, 3Flaum Eye Institute, University of Rochester, Rochester, NY; 4Systems Neurobiology Laboratories, Salk Institute for Biological Studies, La Jolla, CA. *CR


5599 — 9:00 Photoreceptor and RPE Disruptions Observed Outside Clinically Visible Geographic Atrophy Lesions in the Living Eye with Fluorescence Adaptable Optics Scanning Laser Ophthalmoscopy (FAOSLO). Ethan A. Rossi1, D.R. Williams2, A. Dubra3,4, H. Song4, M.A. Falwell4, L.R. Latchney2, M.M. Chang5,6, 1Center for Visual Science, 2Institute of Optics, 3Flaum Eye Institute, University of Rochester, Rochester, NY; 4Optophthalmology, Biophysics, 5Medical College of Wisconsin, Milwaukee, WI. *CR

5600 — 9:15 In Vivo Two-Photon Imaging Of Mouse Retina. Robin Sharma1, Y. Geng1, A.H. Cetin1, L. Yin1, W.H. Merigan3,4, D.R. Williams4, J.J. Hunter5,6, 1Institute of Optics, 2Center for Visual Science, 3Flaum Eye Institute, University of Rochester, Rochester, NY. *CR

5601 — 9:30 Imaging The Living Human Cone Inner Segment. Ravi S. Jonnal1, O.P. Kocaoglu2, Q. Wang3, Z. Liu1, D.T. Miller2, 1Program in Vision Science, 2School of Optometry, 3Indiana University, Bloomington, IN. *CR

5602 — 9:45 Measuring Individual Cone Directionalities Using Scanning Laser Ophthalmoscopy. Diego Rattia Millan1, B. Vohra2, 1School of Physics, University College of Dublin, Dublin, Ireland; 2Department of Electronics and Systems, Universidade Federal de Pernambuco, Recife, Brazil; 3School of Physics, University College Dublin, Dublin, Ireland.

5603 — 10:00 Adaptive Optics-Assisted Optical Coherence Tomography For Patient Imaging. Barry Cense1, K. Sudo1, K. Kurokawa1, Y. Yasono1. 1Ctr for Optical Resrch & Education, Utsunomiya University, Utsunomiya, Japan; 2Institute of Applied Physics, Computational Optics Group, Tsukuba, Japan; 3Computational Optics Group, University of Tsukuba, Tsukuba, Japan. *CR
5604 — 8:30  Optic Nerve Misprojections in the Zebrafish Mutant belladonna: A Disease Model for Infantile Nystagmus Syndrome. Sabina P. Huber-Reggi1, C-C. Chen2, L. Holliger1, D. Straumann2, S.C. Neuhauss1, M-Y. Huang2, 1Institute 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 Turuwihema4, T-Y. Yu5, Z. Mazarbullah4, B. Thompson5. 4Auckland Bioengineering Institute, 5Department of Optometry and Vision Science, University of Auckland, Auckland, New Zealand.

5606 — 9:00 Uncorrected Antisaccade Errors Predict Cognitive Problems After Mild Traumatic Brain Injury In Younger Children. Larry A. Abel1, A. Phillips1, J.M. Douglas1. 1Ophthalmology, 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, D. Welsbie, 1Ophthalmology, University of Cincinnati, Cincinnati, OH; 2Department of Ophthalmology & Visual Sciences, 3Casey Eye Institute, Portland, OR; 4Ophthalmology, Bascom Palmer Eye Institute, Miami, FL.

5608 — 9:30 Saccadic Adaptation In Amblyopia. Rana Arham Raashi4, M. Chandrakuma5, A. Blakeman4, H. Goltz4, 4A.M. Wong5. 4Neuroscience and Mental Health, 5Department of Ophthalmology and Vision Sciences, The Hospital for Sick Children, Toronto, ON, Canada; 2University of Toronto, Toronto, ON, Canada.

5609 — 9:45 Effect of Compliance to Glasses Wear on the Outcome of Visual Acuity after Refractive Adaptation. Gail Maconachie1, 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 Cataracts. Eileen E. Birch1, V. Subramanian1, C.S. Cheng1, D. Stager, Jr.2. 1Retina Foundation of the Southwest, Dallas, TX; 2Ophthalmology, UT Southwestern Medical Center, Dallas, TX; 3Pediatric Ophthalmology & Adult Strabismus, Plano, TX.


5612 — 8:45 Multi-disciplinary Management Of Eyelid Merkel Cell Carcinoma. Qasem J. Nasser1, A. Khan1, W. Morrison1, T. El-Sawy4, S. Frank5, B. Esmaeli1. 1Section of Ophthalmology, Department of Head and Neck Surgery, 2Department of Radiation Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX.

5613 — 9:00 Mir211 Is Dysregulated In Conjunctival Melanocytic proliferations. Alexandre P. Moudin1, M. Nicolas1, A. Schalenburg1, M. Hume1, Z. Leonidas1, L. Duncan1. 1Pathology, Ophthalmology, 2Jules Gonin Eye Hospital, Lausanne University, Lausanne, Switzerland; 3Dermatopathology, Massachusetts General Hospital, Harvard Medical School, Boston, MA.

5614 — 9:15 Lymphoid Enhancing Factor1-lef1 Gene Mutation and Its Differential mRNA Expression in Eyelid Sebaceous Carcinoma. Perumal Jayaraj1, S. Sen1, A. Sharma1, A. Kashyap1, A. Rai1, N. Pushker1, M.S. Bajaj2, S. Ghose3, R. Azad4. 1Department of Ocular Pathology, 2Department of Ocular Microbiology, 3Ophthalmoplasty service, 4Dr.R.P.centre, A.I.I.M.S, New Delhi, India; 3Division 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. Leveassure1, L.A. Wittenberg1, V.A. White1. 1Department of Ophthalmology & Visual Sciences, 2Department of Ophthalmology & Visual Sciences, Department of Pathology, 3University of British Columbia, Vancouver, BC, Canada.


5617 — 10:00 Molecular Histopathology Using Gold Nanorods And Optical Coherence Tomography. Jared L. Matthews1, S. Prabhukkar2, A. de la Zerda3, S. Gambhir3, R. Awdel1. 1Bascom Palmer Eye Institute, Coral Gables, FL; 2Ophthalmology, Bascom Palmer Eye Institute, University of Miami, Miami, FL; 3Electrical Engineering and Radiology, 4Bioengineering & Materials Science and Engineering, Stanford University, Palo Alto, CA; 5Ophthalmology, Bascom Palmer Eye Institute, Miami, FL.
5622 — 9:30 Agreement Between Contrast Sensitivity Perimetry (CSP) and Clinical Measures of Glaucomatous Damage: Validation of a Neural Model for A Longitudinal Study. William H. Swanson¹, V.E. Malinovsky¹, M.W. Duł²,³, J.K. Torbit³, B.M. Sutton³, R. Malik¹. ¹School of Optometry, Indiana University, Bloomington, IN; ²Clinical Sciences, SUNY College of Optometry, New York, NY; ³SUNY Eye Institute, New York, NY; ⁴Glaucoma Research Unit, NIH Biomedical Research Center for Ophthalmal, London, United Kingdom.


5624 — 10:00 Correlation of Brain Volumes and Functional Deficits in Glaucoma. Alice L. Williams¹, J. Lackey¹, S. Wizov¹, S. Gatlin²,³ R. Sergott¹, T. Chia¹, S. Lai¹, G.L. Spafe³,³. ¹Temple University School of Medicine, Philadelphia, PA; ²Department of Radiology, Thomas Jefferson University, Philadelphia, PA; ³William A. and Anna V. Goldberg Glaucoma Service, Wills Eye Institute, Philadelphia, PA; ⁴Thomas Jefferson University School of Medicine, Philadelphia, PA. © 

Grand H

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

Retina

510 Retinitis Pigmentosa II

Moderator: John R Heckenlively

5625 — 8:30 Inhibition of Receptor Interacting Protein Kinase Delays Necrotic Cone Photoreceptor Cell Death in a Mouse Model of Inherited Retinal Degeneration. Ysuke Murakami¹, H. Matsumoto¹, M. Roh¹, J. Suzuki¹, K. Takeuchi¹, D. Mantopoulos¹, T. Hisatomi¹, Y. Ikeda¹, J.W. Miller¹, D. Vanvass¹. ¹Angiogenesis Laboratory, Massachusetts Eye and Ear Infirmary, Boston, MA; ²Ophthalmology, Kyushu University, Fukuoka, Japan. ©

5626 — 8:45 Successful Photoreceptor-Directed Gene Therapy with AAV2/5-hRPGFR Reverses Post-Receptorial Remodeling in Canine Models of X-linked RP. Gustavo D. Aguirre¹, A.V. Cideciyan², A.S. Levtin³, S. Iwabe¹, H. Khanna¹, A. Swaroop⁴, W.W. Hauswirth⁵, 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; ⁷New York Eye & Ear Infirmary, National Eye Institute, Bethesda, MD. ©

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

5628 — 9:15 Endothelial Progenitor Cells With Low Alddehyde Dehydrogenase Activity Recruited Monocyte-Derived Macrophages Through CCL2 Secretion And Rescued Vessel And Photoreceptor With Retinal Degeneration. Shinichi Fukuda¹,²,³, M. Nagano¹,²,³, Y. Hamashita¹,²,³, K. Kimura¹,²,³, K. Akimoto¹,²,³, I. Tsuboi³,²,³, S. Ueno¹,²,³, M. Kondo¹,²,³, T. Oshita¹,²,³, O. Ohneda¹.⁶ ¹Ophthalmology, ²Regenerative Medicine and Stem Cell Biology, ³Tsukuba University, ⁴SUNY Upstate Medical University, ⁵Mie University, ⁶University of Florida, Gainesville, FL. ©

5629 — 9:30 Phenotypic conservation in RPRG mutations. Kari E. Branham¹, S. Zahid¹, N.W. Khan¹, M.I. Othman¹, A. Moncrieff¹, P.A. Sieving⁴, A. Swaroop⁵, K. Jayasundara¹, 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. Sunz Sanz¹, S. Beck², G. Huber², N. Tanimoto², M. Garrido², F. Richard³, J. Wijnholds³. ¹Neuromedical Genetics, Netherlands Inst for Neuroscience, Amsterdam, The Netherlands; ²Ocular Neurodegeneration Centre for Ophthalmology, Institute for Ophthalmic Research, Tubingen, Germany; ³Ingenieur 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. Gao¹, A. Oishi¹, N. Yoshimura¹. ¹Ophthalmology, Japanese Red Cross Wakayama Med Ctr, Wakayama, Japan; ²Ophthalmology, Kyoto University, Kyoto, Japan.
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. Dagnew1, M. Khan2, A.K. Bittner2. 1Ophthalmology, Johns Hopkins University, Baltimore, MD; 2Civil Hospital Karachi, Karachi, Pakistan.

5633 — A29  Cataract, Visual Impairment, Blindness And Risk Of Mortality In Rural Population Of The Andhra Pradesh Eye Disease Study, India. Rohit C. Khanna1, G.V. Murthy2, S. Krishnasai3, H.B. Pan4, P. Giridhar1, C.E. Gilbert2, G.N. Rao1. 1Allen Foster Research Centre for Community Eye Health, LV Prasad Eye Institute, Hyderabad, India; 2International Centre for Eye Health, London School of Hygiene & Tropical Medicine, London, United Kingdom; 3Indian Institute of Public Health, Hyderabad, India.

5634 — A30  Determining National Vision Health Priorities: Healthy People 2020 Vision Objectives. Axel Ryskulov1, R. Janiszewski1, R. Hines1. 1Office of Analysis and Epidemiology, National Center for Health Statistics, CDC, Hyattsville, MD; 2National Eye Institute, National Institutes of Health, Bethesda, MD.

5635 — A31  Uncorrected refractive errors and ocular pathology found in outreach clinics in Malawi and Ethiopia. Rachel V. North1A, R.J. Washko1A, A32. 1AOffice of Optometry and Visual Sciences, BGraduate School of Professional Psychology, University of South Florida, Tampa, FL; 2Office of Research, University of South Florida, Tampa, FL.

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 Pseudoachromatous Color Vision Tests in Preschool Children. Michele E. Mercer1A, R.J. Adams1A. 1APsychology, BPsychology/Pediatrics, 1A1Memorial University, St John’s, NL, Canada.

5638 — A34  Danish Rural Eye Study (DRES): Preliminary Data on Visual Impairment in Randomly Selected Adults of Denmark. Tracy B. Hoeg1, B. Moldow2, H. Buch Hæsgaard3, D. Erngaard1, K. Klempt1, M. La Cour1, C. Ellervik1. 1Ophthalmology, 2Clinical Biochemistry, 3Naestved Hospital, University of Copenhagen, Naestved, Denmark; 4Ophthalmology, Naestved Hospital, Naestved, Denmark; 5Ophthalmology, 6Glostrup Hospital, Glostrup, Denmark; 7Ophthalmology, 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. Norcia2. 1Smith-Kettlewell Eye Research Institute, San Francisco, CA; 2Department of Psychology, Stanford University, Stanford, CA.

5640 — A36  The Prevalence and Causes of Visual Impairment and Blindness in a Multi-Ethnic Asian Population: The Singapore Epidemic of Eye Disease (SEED) Study. Tien Y. Wong1, Y. Zheng1, W-L. Wong1, E.L. Lamoureux2, J-J. Wang3, P. Mitchell1, N. Cheung1, T. Aung4, S. Saw1A, C. Cheng1. 1Singapore Eye Research Institute, Singapore National Eye Centre, Singapore, Singapore; 2Centre for Eye Research Australia, University of Melbourne, Melbourne, Australia; 3Centre for Vision Research, University of Sydney, Sydney, Australia; 4Department of Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore; 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. Sze H. Wong1, L.G. Chen1, C.C. Teng1. 1Ophthalmology, NYU School of Medicine, New York, NY; 2Einhorn Clinical Research Center, New York Eye and Ear Infirmary, New York, NY.

5642 — A38  Genetic Determinants of Serum Lutein and Zeaxanthin Levels in the Carotenoids in Age-Related Eye Diseases Study. Chitra K. Karki1, S.K. Iyengar1, B. Truitt1, R.P. Igo1, E. Johnson1, L. Tinker1, K.J. Meyers1, J.A. Mares1. 1Ophthalmology and Visual Sciences, University of Wisconsin-Madison, Madison, WI; 2Epidemiology & Biostatistics, Case Western Reserve University, Cleveland, OH; 3Jean Mayer USDA Human Nutrition Research Center on Aging, Tufts University, Boston, MA; 4Cancer Prevention Research Program, Fred Hutchinson Cancer Research Center, Seattle, WA.*CR

5643 — A39  Genetic Testing for Myotonic Dystrophy in Early-onset Cataract - 10 years data. Shaio 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. Sundaresan1, R. Jayanthi1, D.S. Friedman1, R. Venkatash1. 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. Wojciechowski1A, C. Motter3, S. Szymczak1, D. Stambolian1. 1National Human Genome Research Inst, National Institutes of Health, Baltimore, MD; 2Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD; 3Ophthalmology-Stellar Chance Lab, University of Pennsylvania, Philadelphia, PA.

Hall B/C  A43-A79

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

512 Novel Imaging, Photoreceptors, Vasculature and Disease

Moderator: Nancy J Coletta


5648 — A44  High Resolution Adaptive Optics Imaging Compliments Standard SD-OCT Imaging in Macular Diseases. Gibran S. Khurshid1, A. Boretsky1, P. Gupta1, C. Tung1A, B.F. Godley1B, M. Motamedi1A, E.C. van Kuijk1A. 1Ophthalmology & Visual Sciences, 2Ophthalm & Visual Sciences, 1Ophthalmology and Visual Sciences, 1Univ of Texas Medical Branch, Galveston, TX; 3Ctr for Biomedical 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 STD-OCT and Ultrasonic Method. Monika E. Danielewska1, D. Szlag1, D. Iskander1B, M. Wojtkowski1. 1Institute of Physics, 2Institute of Biomedical Engineering and Instrumentation, 3Wroclaw University of Technology, Wroclaw, Poland; 4Institute of Physics, Nicolaus Copernicus University, Torun, Poland.

5650 — A46  High-resolution Imaging Of The White Dot Structure Observed In Fundus Albinopunctatus. Yasuko Makiyama1, S. Ooto1, K. Hangaiz1, K. Takayama1A, A. Otishi1, K. Ogino1, S. Nakagawa1, K. Yonezawa1, Y. Sato1A, N. Yoshimura1. 1Ophthalmology and Visual Science, Kyoto University Grad School of Med, Kyoto, Japan; 2CANON INC., Tokyo, Japan.*CR

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

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5653 — A49 Improved Retinal Blood Flow Analysis Method Using Abnormal Frame Information Automatically Detected From AO-SLO Image Sequence. Hiroshi Imanura1, P. Fletcher2, K. Nozato3, S. Ueda4, A. Uji5, N. Yoshimura6. 1Canon Inc, Tokyo, Japan; 2Canon Information System Research Australia, Sydney, Australia; 3Ophthalmology, Kyoto University Graduate School of Medicine, Kyoto City, Japan. *CR

5654 — A50 Characterization of Diabetic Retinopathy Lesions Using Adaptive Optics Scanning Laser Ophthalmoscopy. Sonja G. Prager1, S.H. Radwan1, H. Kwo1, P.S. Silva2, S.A. Burns2, L.P. Aiello3. 1Beetham Eye Institute, Joslin Diabetes Center/Harvard Medical School, Boston, MA; 2Department of Ophthalmology and Optometry, Medical University Vienna, Vienna, Austria; 3Optometry, University of Wisconsin, Milwaukee, WI. *CR

5655 — A51 Structural analysis of small vessels In The Human Retina: an adaptive optics study. Michel Paques1, K. Nakashima2, F. Rossant3, J.A. Sahel4. 1Clinical Investigation Center 503, Quinze-Vingts Hospital, INSERM, Paris, France; 2ISEP, Paris, France; 3UMR-S 968, Institut de la Vision, Paris, France. *CR


5657 — A53 In Vivo Investigation of the Retinal Microscopy in Patients with Type 1 Diabetes Mellitus. Mariacristina Parravano1, M. Lombardo1, G. Lombardo2, B. Boccassini3, S. Lioi1, M. Varano1. 1Ophthalmology, Fondazione GB Bietti-IRCCS, Rome, Italy; 2CNR-IPCF Unit of Support Cosenza, LiCryL Laboratory, University of Calabria, Rende, Italy.


5659 — A55 Adaptive Optics and SD OCT in Macular Telangiectasia Type 2. Alain Gaudric1, K. Nakashima2, V. Kivrangi2, N. Chateau3, J.A. Sahel4, M. Paques1. 1Ophthalmology, Lariboisiere Hospital University Hospital Paris 7, Paris, France; 2Ophthalmology, Clinical Investigation Center 503 Quinze-Vingts Hospital, INSERM, Paris, France; 3Imagery Eyes, Orsay, France; 4Ophthalmology, UMR-S 968 Institut de la Vision, Paris, France. *CR


5661 — A57 Effectiveness In Detecting Area Of Photoreceptor Disruption By Dioptic Adaptive Optics Scanning Laser Ophthalmoscopy (d-aoslo) With Wider Field Of View. Yoshiyuki Kitaguchi1, T. Fujikado1, H. Kandai2, T. Morimoto2, T. Yamaguchi3, T. Mihashi2, K. Nishida4. 1Ophthalmology, Sumitomo hospital, Osaka, Japan; 2Applied Visual Science, Osaka University, Suita, Japan; 3Topcon Research Institute, Itabashi, Japan; 4Ophthalmology, Osaka University, Osaka, Japan. *CR

5662 — A58 Foveal Microvasculature And Its Relationship To Retinal Thickness. Toco Y. Chiu1, A.E. Elser2, S.A. Burns2. 1Optometry, Indiana University, Bloomington, IN; 2Optometry, School 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. Lombardo1. 1IRCSC Fondazione G.B. Bietti, Rome, Italy; 2CNR-IPCF Unit of Support Cosenza, LiCryL Laboratory, University of Calabria, Rende, Italy.

5664 — A60 Distribution of Outer Nuclear Layer Thickness in SD-OCT Images. Joel A. Papay1, C.A. Clark2, T.Y. Chui3, L. Zhao4, A.E. Elser4. 1Optometry, Indiana University, Bloomington, IN.

5665 — A61 Perifoveal Retinal Thickness and Temporal Contrast Sensitivity in Axial Myopia. Nancy J. Coletta1, Y. Pilz2, A. Ciepiela1. 1Vision Science, New England College of Optometry, Boston, MA; 2School of Optometry, University of California, Berkeley, CA.

5666 — A62 In vivo Imaging of Photoreceptor Loss Associated with Dry Age-Related Macular Degeneration Using Adaptive Optics Scanning Laser Ophthalmoscopy. Adam Boretsky1,2, F. Khan1, G. Burnett2, R. Harris2, M. Stephens2, M. Motamedi3, E.V. van Kluijk2. 1Center for Biomedical Engineering, School of Medicine, Univ of Texas Medical Branch, Galveston, TX; 2Optophthalmology MMC 493, Univ of Minnesota, Minneapolis, MN.

5667 — A63 Adaptive Optics Scanning Laser Ophthalmoscopy With Amplitude Pupil Apodization. Tsuyu N. Saito1,2, A. Dubra2,3. 1The Institute of Optics, 2Fluam Eye Institute, 3University of Rochester, Rochester, NY. *CR

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. Rha1,2, A.M. Dubis2, A. Dubra2,3,4, J. Carroll1,2,5. 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 Luer1, A.V. Cideciyan2, A. Samarako1, S.B. Schwartz1, A.J. Romani1, J.B. Goldberg1, B. Baumler1, B. Wissinger5, S. Kohle6, S.G. Jacobson1. 1Department of Ophthalmology, Scheie Eye Institute, Philadelphia, PA; 2Center for Ophthalmology, Institute for Ophthalmic Research, Molecular Genetics Laboratory, Tuebingen, Germany.

5672 — A68 Assessing the Relationship Between Cone Density and Foveal Morphology. Adam M. Dubis3,4, S.O. Hansen1, R.F. Cooper1, B.R. Hansen1, J. Carroll1,2,5. 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. Hunter1,2,3, E.A. Ross1, W. Fischer4, A. Dubra2,3,4, M.M. Chung1,2,3. 1Flaum Eye Institute, 2Center for Visual Science, 3University of Rochester, Rochester, NY; 4Ophthalmology, 5Biophysics, 6Medical College of Wisconsin, Milwaukee, WI.

5674 — A70 Measuring the Performance of an Adaptive Optics Flood Illuminated Camera for Imaging the Cone Mosaic in the Clinical Setting. Jonathan D. 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 Albinotatus. Hongxun Song1, D.R. Williams1,2, L. Latchney1, A. Dubra2, 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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Thursday – Posters – 5676 – 5695

Hall B/C  A99-A125
Thursday, May 10, 2012, 8:30 AM-10:15 AM
Visual Neurophysiology

513 Clinical Electrophysiology and Retinal Disease

Moderator: Stefanie B Varghese

5676 — A72  Determinants Of Normal Human Cone Photoreceptor Density Measured By Adaptive Optics Scanning Laser Ophthalmoscope. Sang Pyo Park1,2, J. Chung1, F. Hirose1, S.H. Tseng1, S. Chang1, 1Department of Ophthalmology, Columbia university medical center, New York, NY; 2Department of Ophthalmology, Kangdong Sacred Heart Hospital, Seoul, Republic of Korea; 3Canon INC., Tokyo, Japan. *CR

5677 — A73  Spatially-resolved Adaptive Optics Photopigment Densitometry for Assessing Photoreceptor Function. Benjamin D. Masella1,2,3,4, J.J. Hunter5,6, D.R. Williams7,8,9, 1The Institute of Optics, 2Center for Visual Science, 3Flaum Eye Institute, 4University of Rochester, Rochester, NY. *CR

5678 — A74  Photoreceptor Analysis using Entrance-Pupil Structuring and Motorized Confocal Scanning. Brian Vohnsen, D. Rativa Millan, B. Lochocki, C. Vela-Garcia. School of Physics, University College Dublin, Dublin, Ireland. (CR

5679 — A75  Light Radiated from Myoids for Oblique Incidences upon Foveal Cones. Jean-Marie Gorrand, M. Doly. 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 Felberer1,2, J.S. Kroisamer2,3, C.K. Hitzenberger4,1, 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. Li2, Z. Tang1. 1School of Ophthalmology and Optometry, Wenzhou Medical College, Wenzhou, China; 2Suzhou Microclear Instruments Co., Ltd, Suzhou, China.

5682 — A78  Spectral-domain Optical Coherence Tomography In Acute Macular Neoretinopathy. Imen Chitouni1,2, V. Martinez1, G. Azar1, B. Wolff3, P-L. Cornut1, J-A. Sahel1, 1Fondation Ophtalmologique Adolphe de Rothschild, Paris, France; 2hôpital Edouard Herriot, Lyon, France.

5683 — A79  Simulation Of Fundus Image Measurements - One Step Toward Virtual Clinical Trial. Ying-Ling Chen1, L. Shi2, J.L. Lewis1, M. Wang1, 1Univ of Tennessee Space Inst, Tullahoma, TN; 2University of Tennessee Space Institute, Tullahoma, TN; 3E-Vision Technologies, Inc, Tullahoma, TN; 4Wang Vision Institute, Nashville, TN. *CR

5684 — A99  Oscillatory Potential Contribution to the ERG: A New Mean to Identify Disease Onset. Nataly Trang1, M. Gauvin1, R. Koenekoop1, 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. Ieva Sliesoraityte1, E. Troeger1, S. Kohl1, B. Wissinger1, E. Zrenner1, 1Institute for Ophthalmic Research, University of Tuebingen, Tuebingen, Germany; 2Institute for Ophthalmic Research, Molecular Genetics Laboratory, Tuebingen, Germany; 3Molecular Genetics Laboratory, 4Institute for Ophthalmic Research, 5Centre for Ophthalmic Research, 6Institut de Physiologie de l’Eyes, Tübingen, Germany.

5686 — A101  Molecular Modeling of RS1 Structure Indicates Two Classes of Missense Variants With Mild and Severe XLRS Phenotypes. Yuri V. Sergeev2,3, P.A. Steving1, A. Vincent1, A.G. Robson1,2, A.R. Webster3,4, G.E. Holder4, 1National Eye Institute, Bethesda, MD; 2Electrophysiology, Moorfields Eye Hospital, London, United Kingdom; 3Institute of Ophthalmology, University College, London, United Kingdom.

5687 — A102  Retinal Function Assessed By Full-field ERG In Ranibizumab Treated Neovascular AMD Patients. Karen B. Pedersen1, F. Moller1, S. Adjouie1, 1Department of Ophthalmology, 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 Racine3, J. Daloze4, R. Koenekoop1, 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, 3École de Technologie Supérieure, Montreal, QC, Canada; 4Ophthalmology, 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-Fukaura1, T. Igarashi1, K. Yamaki1, A. Mizota1, Y. Miyake1, H. Takahashi1, 1Ophthalmology, Chiba Hokusoh Hosp Nippon Med Sch, Inzai, Japan; 2Ophthalmology, Nippon Medical School, Bunkyo-Ku, Japan; 3Ophthalmology, Teikyo University, Itabashi-ku, Japan; 4Ophthalmology, National Institute of Sensory Organs, National Hospital Organization Tokyo Medical Center, Tokyo, Japan; 5Aichi Medical University, Aichi-gun, Japan.

5693 — 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. Silva1, M. Castelo-Branco1. 1Visual Neuroscience, IBIL-Faculty of Med-Univ of Coimbra, Coimbra, Portugal; 2Ophthalmology, University Hospital of Coimbra, Coimbra, Portugal.

5694 — A109  Phenotypic Characterization in Two Patients with Identified Rhodopsin Gene Mutation: Impact of Retinal Degeneration on Cortical Structure. Andreia C. Pereira1, C. Mateus1, A. Reis2, B. Quendera, S. Ferreira1, M. Almeida1, E. Silva1, M. Castelo-Branco1, 1Visual Neuroscience Laboratory, IBIL-Faculty of Medicine-University of Coimbra, Coimbra, Portugal; 2Ophthalmology, University Hospital of Coimbra, Coimbra, Portugal; 3Center for Neuroscience and Cell Biology, University of Coimbra, Coimbra, Portugal.

5695 — A110  Environmental and Therapeutic Approaches to Limit the Consequences of Postnatal Hyperoxia. Allison L. Dorfman1,2, B. Campanaro1, K. Uy3, A. Polosa1,2, M. Djavari2, P. WIntermark1, S. Chenot1, P. Lachapelle1, 1Ophthalmology, 2Neonatology, 3McGill University/Montreal Children’s Hospital, Montreal, QC, Canada; 4Département de Sciences Biomédicales, Université de Montréal, Montreal, QC, Canada; 5Pediatrics & Pharmacology, Research Centre/ Ste. Justine Hospital, 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

5697 — A112 Focal Macular Electoretinogram Elicited By Hemicircular Stimuli In Eyes With Branch Retinal Vein Occlusion. Shunsuke Yasuda1, S. Ueno1, C-H. Piao1, M. Kondo1, 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 Lisbon, Portugal; 2Univ of Porto, Portugal.


5703 — A118 The Characteristics Of Cone-driven Oscillatory Potentials In Human Electoretinogram. Bo Lei1, H. Peng1, J. You1, Q. Li1. 1Ophthalmology, The First Affiliated Hospital of Chongqing Medical University, Chongqing, China; 2Ophthalmology, University of Florida, Gainesville, FL.


5705 — A120 Trichromatic And Dichromatic Electoretinograms Using A Chromatic-Achromatic Temporal Compound Stimulus. Neil R. Parry1, J.H. Francis2, D.J. McKeefry3, B.B. Lee1, J.J. Kremers2. 1Vision Science Centre, Manchester Royal Eye Hospital, Manchester, United Kingdom; 2Department of Ophthalmology, University of Bradford, Bradford, United Kingdom; 3School of Optometry and Vision Science, University of Birmingham, Birmingham, United Kingdom; *Biological Sciences, SUNY College of Optometry, New York, NY; 4Dept of Ophthalmology, University of Erlangen, Erlangen, Germany.

5706 — A121 Sternal Depression Depresses the Photopic ERG. Scott E. Brodie1, J.H. Francis2, B. Marr3, D.H. Abramsor1. 1Ophthalmology, Mount Sinai School of Medicine, New York, NY; 2Ophthalmic Oncology, Memorial Sloan-Kettering Cancer Center, New York, NY.

5707 — A122 Reproducibility Of Visual Electrophysiology Recordings Between Laboratories: The Importance Of Regular Calibration. Richard P. Hagan1,2, K.J. Quinn1, L. Milner1,2, 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 Electoretinograms Explained by Convolution of Transient Responses. Jonathan A. Toft-Nielsen1, J. Bohorquez1, V. Porciatti2, O. Ozdamar1. 1Biomedical Engineering, University of Miami, Miami, FL; 2Department of Ophthalmology, Univ of Miami Sch of Medicine, Miami, FL; 3Bassein Eye Inst, Univ of Miami Miller Sch Med, Miami, FL.

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

5710 — A125 Characterising Human L- and M-cone ERGs Using a Four Primary System. Declan J. McKeefry1, N.K. Challal2, J.H. Francis3, J.J. Kremers1, N.R. Parry1. 1Ophthalmology, Bradford School of Optometry & Vision Science, Bradford, United Kingdom; 2Electrophysiology, L.V.Prasad Eye Institute, Hyderabad, India; 3Optometry & Vis Sci, FLS, Univ of Manchester, Manchester, United Kingdom; 4Dept of Ophthalmology, University of Erlangen, Erlangen, Germany; 5Vision Science Centre, Manchester Royal Eye Hospital, Manchester, United Kingdom.

5711 — A126 Clinical Verification of Input-Lag Correction for Comparison of pVEP signals acquired using CRT and TFT displays. Balazs L. Varsanyi1, B.V. Nagy1, A. Magyar1, A. Farkas1, J. Nemeth2. 1Department of Ophthalmology, Semmelweis University, Budapest, Hungary; 2Experimental Psychology, University of Sao Paulo, Sao Paulo, Brazil.

5712 — A127 The Limited Ability Of Neurons In Visual Area 2 (v2) To Integrate Contour Elements Over Extended Space In Infant Macaque Monkeys. Bin Zhang1, G. Shi2, X. Tao1, E.L. Smith3, J.M. Chino1. 1College of Optometry, Nova Southeastern University, Plantation, FL; 2College of Ophthalmology, University of Houston, Houston, TX.


5715 — A130 Mapping The Spatiotemporal (S-T) Domain And Gain Of Putative M- And P-dominated Limbs Of The Human Cortical Contrast Response Function (CRF) Using The Sweep Vep (svep). Russell D. Hamer1,2, G.S. Souza1,2, T.L. Cost1, B.D. Gomes1, L.C. Silva1,4, D.F. Ventura1. 1Departamento de Psicologia Experimental, Instituto de Psicologia, São Paulo, Brazil; 2Smith-Kettlewell Eye Research Institute, San Francisco, CA; 3Instituto de Ciencias Biologicas, Universidade Federal do Pará, Belém, Brazil; 4Nucleo de Medicina Tropical, Universidade Federal do Pará, Belém, Brazil.

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


5720 — A135 The Step VEP has a Consistent VA Relationship with Psychophysics for all VA, Age, and Aetiology and Increases the Completion Rate of Paediatric VA Assessment to 96%. Alison M. Mackay1,2, M. Carvalho1,2. 1Biomedical Sciences, Allergan Inc, Irvine, CA; 2Medical Physics, Leeds Teaching Hospitals, Leeds, United Kingdom; 3Clinical 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. Kurose2. 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 Poststimulus Subthreshold Depolarizations. Xuefeng Shi1,2, K. Zhao1,2. 1Ped Ophthalm & Strabismus, Tianjin Eye Institute and Hospital, Tianjin, China; 2Tianjin Key Laboratory of Ophthalmology and Visual Science, Tianjin, China. ✔

5724 — A139 Measuring the Spatial and Temporal Dynamics of Frontal Eye Field Receptive Fields. Matthew A. Smith1,2, J. Mayo1,2, M.A. Sommer1, A. DiTommaso1. 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.

5725 — A140 Monitoring Of Patients On Hydroxychloroquine For At Least Five Years: A follow-up Of 21 Patients. Danielle Amana1, L. Ingster-Moati1, E. Albuissou2, C. Girard1, B. Delbos1. 1Department of Ophthalmology, Orleans Hospital, Orleans, France; 2Ophthalmology, University Paris 7 Diderot, Neckher Hospital, Paris, France; 3Biostatistics Department, University of Medicine, Vandoeuvre-les-Nancy, France; 4Department of Ophthalmology, University Hospital, Besancon, France.

5726 — A141 Full-field Electoretinogram Changes In Patients In Therapy With Chloroquine And Hydroxychloroquine: Time And Dose Effect. Giulio Ruberto1,2, C. Tinelli1,2, P. Piccinni1, L. Bossolesi1, M. Raimondi1. 1Clinica Oculistica, Biometric Service, 1IRCCS Policlinico San Matteo, Pavia, Italy.

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

5728 — A143 Ganzfeld-electroretinogram In Patients With Coronary Heart Disease. Katja Goebel1, A. Reffken1, H. Drexler2, C. Erb1,2. 1Ophthalmology, Schloß Park Clinic, Berlin, Germany; 2Ophthalmology, Kardiologie, Hannover Medical School, Hannover, Germany; 3Eye clinic, Wittenbergplatz, Berlin, Germany.

5729 — A144 Electrophysiology And Fluorescein Angiography In Susac Syndrome. Julia M. Prometheus1, A. F. Alex1, I. Kleffner1, J-M. Dör1, N. Eter1. 1Ophthalmology, University hospital of Muenster, Muenster, Germany; 2NeuroCure Clinical Research Center, Charité, University hospital of Berlin, Berlin, Germany.

5730 — A145 Flash Electoretinogram In Children With Mitochondrial Diseases. Frederic Nicol1, A. Bron1, C. Creutz-Garcher1, F. Renault2. 1Ophthalmology, CHU Dijon, Dijon, France; 2Neurophysiology Unit, Hôpital Armand Trousseau, Paris, France.

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

5733 — A148 Electoretinogram Anomalies In Psychiatric Disorders: The Possible Implication Of GSK3. Joelle Laviole1, J-M. Beauvieu1, M. Hebert1. CRULRG, 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. Antonello Fadda1, A. Di Renzo1, F. Martelli1, M. Marangoni1, A. Batocchi2, A. Giannini2, B. Falsini2. 1Technologies and Health, Istituto Superiore di Sanita, Roma, Italy; 2Ophthalmology, GB Bietti Eye Foundation-IRCCS, Roma, Italy; 3Ophthalmology, *Neurology, *Catholic University, Rome, Italy.

5735 — A150 Effects of Nicotine on Processing in the Visual Pathways. Naser T. Naser1,2, V.M. Zemón1, S.B. Varghese1, K.T. Kelsey1, E. Hartmann1,2. 1Vision Science, Department of Optometry, University of Alabama at Birmingham, Birmingham, AL; 2Ferkau Grad School of Psychology, Yeshiva University, Bronx, NY. *CR

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


Hall B/C A140-A152

Thursday, May 10, 2012, 8:30 AM–10:15 AM
Visual Neurophysiology

515 Visual Electrophysiology in Disease and Drug Toxicity

Moderator: Carol A Westall, III

5725 — A140 Monitoring Of Patients On Hydroxychloroquine For At Least Five Years: A follow-up Of 21 Patients. Danielle Amana1, L. Ingster-Moati1, E. Albuissou1, C. Girard1, B. Delbos1, J-M. Dör1, N. Eter1. 1Department of Ophthalmology, Orleans Hospital, Orleans, France; 2Ophthalmology, University Paris 7 Diderot, Neckher Hospital, Paris, France; 3Biostatistics Department, University of Medicine, Vandoeuvre-les-Nancy, France; 4Department of Ophthalmology, University Hospital, Besancon, France.

5726 — A141 Full-field Electoretinogram Changes In Patients In Therapy With Chloroquine And Hydroxychloroquine: Time And Dose Effect. Giulio Ruberto1,2, C. Tinelli1,2, P. Piccinni1, L. Bossolesi1, M. Raimondi1. 1Clinica Oculistica, Biometric Service, 1IRCCS Policlinico San Matteo, Pavia, Italy.

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

5728 — A143 Ganzfeld-electroretinogram In Patients With Coronary Heart Disease. Katja Goebel1, A. Reffken1, H. Drexler2, C. Erb1,2. 1Ophthalmology, Schloß Park Clinic, Berlin, Germany; 2Ophthalmology, Kardiologie, Hannover Medical School, Hannover, Germany; 3Eye clinic, Wittenbergplatz, Berlin, Germany.

5729 — A144 Electrophysiology And Fluorescein Angiography In Susac Syndrome. Julia M. Prometheus1, A. F. Alex1, I. Kleffner1, J-M. Dör1, N. Eter1. 1Ophthalmology, University hospital of Muenster, Muenster, Germany; 2NeuroCure Clinical Research Center, Charité, University hospital of Berlin, Berlin, Germany.

5730 — A145 Flash Electoretinogram In Children With Mitochondrial Diseases. Frederic Nicol1, A. Bron1, C. Creutz-Garcher1, F. Renault2. 1Ophthalmology, CHU Dijon, Dijon, France; 2Neurophysiology Unit, Hôpital Armand Trousseau, Paris, France.

5731 — A146 Flicker Electoretinogram - 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.
5738 – 5757 Thursday – Posters

Hall B/C A256-A271
Thursday, May 10, 2012, 8:30 AM-10:15 AM
Clinical & Epidemiologic Research

516 Diabetic Retinopathy Epidemiology

Moderator: Robin D Hamilton

5738 — A256 Efficacy of Diabetic Retinopathy Screening for Patients Who Were at High-Risk for Sight-Threatening Retinopathy in a County Healthcare System. Glen Y. Ozawa1, T. Litvin2, J.A. Cuadros3, S. Ramaswamy4, M.S. Muller5, A.E. Elser6, T.J. Gast1. 1UC Berkeley School of Optometry, Berkeley, CA; 2School of Optometry, 3Indiana University, Bloomington, IN; 4AION 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. Forbes1, S. Sivaprasad2, J.A. Haller1, J.A. Malunda1, P. Zhou10, J.A. Sheibani11, M.S. Muller3. 1King’s College London, London, United Kingdom; 2Optometry, University of Memphis, Memphis, TN; 3Hamilton Eye Institute, University of Newcastle, Newcastle Upon Tyne, United Kingdom; 4Medical Retina Unit, Centre for Clinical Research, Melbourne, Australia.*CR

5741 — A259 How much does glycated hemoglobin A1c explain the risk of diabetic retinopathy in persons with type 2 diabetes? The Diabetes Management Project (DMP). Jing Xie1, S. Selvarajah2, R. Kawasaki3, T. Nicolau4, S. Sammugasundram5, J. Wang6, T. Wong7, E. Lamooureaux7,8. 1Department of Ophthalmology, Centre for Eye Research Australia, East Melbourne, Australia; 2Department of Ophthalmology, Centre for Vision Research, Sydney, Australia; 3National University of Singapore, Singapore Eye Research Institute, Singapore, Singapore.*CR

5742 — A260 Telemedicine-based Digital Retinal Imaging Improves Diabetic Retinopathy Screening Compliance. Seema Garg1, B. King2, P. Jani3, S. Weir3, T. Karnowski3, S. Li4, E. Chau5. 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 An Edutainment Tool for Increased Compliance with DR Screening and Management, Part 2: Efficacy Study. Anne M. Edwards1, G. Zamora2, A. Mattiella3, P. Soliz4. 1VisionQuest Biomedical LLC, Albuquerque, NM; 2The Fotonovela Production Company, Santa Fe, NM.*CR


5747 — A265 Diabetes and Diabetic Retinopathy in an Australian Cardiac Population: the Australian Heart Eye Study. Adam J. Plant1,2, G. Burlutsky1, J. Chiha3. 1School of Optometry, 2Indiana University, Bloomington, IN; 3University of Sydney, Sydney, Australia.*CR

5748 — A266 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.O. Poulsen1A, J.A. Malunda1A, B. Leiby2. 1Centre for National Clinical Databases, South, Clinical Biochemistry and Pharmacology, Odense University Hospital, Odense, Denmark.*CR

5749 — A267 The Incidence Of Vitrrectomy For The Complications Of Proliferative Diabetic Retinopathy. Kristen H. Nwananyanwa1, N. Taiwar1, T.W. Gardner2, J.S. Wrobel3, J.D. Stein4. 1Ophthalmology and Visual Sciences, 2Internal Medicine, 3University of Michigan, Ann Arbor, MI.*CR

5750 — A268 Ophthalmic (CT) Registration Index – Refer to Program Number in the Clinical Trial (CT) Registration Index. – Refer to Program Number in the Clinical Trial (CT) Registration Index.
5759 — A277 Angiopoietin-like Protein 6 (ANGPTL6) has Angiogenic Activity on Retinal Endothelial Cells under High Glucose Concentrations. Hirotaka Yokouchi, T. Oshitari, S. Yamamoto. Ophthalmology, Chiba Univ Graduate School of Med, Chiba, Japan.

5760 — A278 Role of Nr2 in the regulation of diabetic retinopathy. Junsong Gong1, Z. Xu1, Y. Wei2, H. Huang3, C. Eberhart4, R. Thimmulapp2, S. Biswal2, E.J. Duh1. Wilmer Eye Institute, Johns Hopkins Univ School of Medicine, Baltimore, MD; 2Bloomberg School of Public Health, Baltimore, MD.

5761 — A279 Increased Oxygen Saturation in Retinal Vessels Of Patients With Diabetic Retinopathy Requiring Treatment. Christina M. Joergensen1, T. Bek1, S. Hardarson2. Ophthalmology & Visual Sciences, University of Iceland/Landspítali, University of Iceland/Landspítali, University Hospital, Reykjavik, Iceland.

5762 — A280 Thiorodoxin Interacting Protein Is Required For S-glutathionylation And Redox Regulation Of VEGF Angiogenic Signal. Mohammed A. Abdelsaid1,2, A.B. El-Remessy1,2A. Clin & Experimental Therapeutics, University of Georgia, Augusta, GA; 2Georgia Health Science University, Augusta, GA; 3Ophthalmology, Fukuoka University, Fukuoka, Japan; 4Ophthalmology, Fukuoka University, Fukuoka, Japan.


5764 — A282 Overexpression of IL-1 Receptor Antagonist in the Rat Retina by Retinal-mediated Gene Transfer Prevents Capillary Loss in Experimental Diabeties. Chiara Gerhardinger1,2, Y. Liu3, Z. Dagher4. Scheeps Eye Research Institute Massachusetts Eye and Ear, Boston, MA; 2Harvard Medical School, Boston, MA.

5765 — A283 Lipoprotein-associated Phospholipase Inhibition Regulates Retinal Vasoperoxidase During Experimental Diabeties. Alan W. Stitt1, P. Canning1, P.J. Luther1, J.V. Glenn1, L-D. Allen1, V. Prize1, P.S. Adamson1. Centre for Vision & Visual Science, Queens University Belfast, Belfast, United Kingdom; 2Pathology, UCL Institute of Ophthalmology, London, United Kingdom; 3Ophthalmology Discovery Performance Unit, GlaxoSmithKline, Stevenage, United Kingdom. *CR

5766 — A284 HFD-induced Retinal Microvascular Degeneration: Suggested Role Of Thioredoxin Interacting Protein (TXNIP). Islam N. Mohamed1,2, S. Hufez1,2, M. Abdelsaid1,2, S. Matragoon1,2, B. Pillai1,2, A. Ergul1,2, J.D. Imig1, A.B. El-Remessy1,2A. Clinical and Experimental Therapeutics, University of Georgia, Augusta, GA; 2Vision Discovery Institute, Physiology, Georgia Health Sciences University, Augusta, GA; 3Pharmacology 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. Rangasamy1, P. McGuire1. MSC10-5610 Surgery, 2Cell Biology & Physiology, Univ 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, R.A. Kroes1C. Center for Molecular Therapeutics, 1Northwestern University, Evanston, IL; 2School of Medicine, Albuquerque, NM; 3Pharmacology and Toxicology, Medical College of Wisconsin, Milwaukee, WI.

5770 — A288 Overexpression of ProNGF Induces Apoptosis and Acellular Capillary Formation Via Activation of P75NTR. Azza B. El-Remessy1A, M.M. Al-Gayyar1, S. Matragoon1, H. Saragovi1A. Clin & Experimental Therapeutics, University of Georgia, Augusta, GA; 2Pharmacology, McGill Univ - Jewish General Hosp, Montreal, QC, Canada.


5772 — A290 Intravital Anti-vegf Therapy Blocks Inflammatory Cell Infiltration And Re-entry Into The Circulation In Retinal Angiogenesis. Shintaro Nakao1, M. Arima1, K. Ishikawa1, R. Kohn1, S. Kawahara1, M. Miyazaki1, S. Yoshida1, H. Enaida1, T. Kono1, T. Ishibashi1. 1Department of Ophthalmology, Kyushu University, Fukuoka, Japan; 2Ophthalmology, Fukuoka University Chichibu Hospital, Chichuusno, Japan.

5773 — A291 Vascular Alteration And Lipids Accumulation In The Retina And Choroid Of Non-insulin-dependent Diabetic Goto-Kakizaki Rats. Elivre Vaucher4, M. Pouliot4, T.M. Boutin4, O. Fontaine4, R. Couture4. Optometry, 1Physiology, University of Montreal, Montreal, QC, Canada.

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

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

5776 — A294 Vascular Endothelial Growth Factor (VEGF) Prevents Tight Junctional Re-organisation In Retinal Pigmented Epithelial Cells Induced by VEGF. Nikita Ved1, J.W. Bainbridge1, D.O. Bates1. School of Physiology and Pharmacology, University of Bristol, Bristol, United Kingdom; 2UCL Institute of Ophthalmology, London, United Kingdom.


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. School of Physiology and Pharmacology, University of Bristol, Bristol, United Kingdom; 2UCL Institute of Ophthalmology, London, United Kingdom. *CR


5781 — A299 Adult Endothelial Progenitor Cell Populations: Functional Differences in Diabetic Retinopathy. Sergio Caballero, Jr1, S. Hazrd2, A. Bhawadekar1, S. Li Calzi1, L.J. Paradisios1, L. Miller1, T.S. Kerri1, M.B. Grant1. Pharmacology/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. Bhatwadekar1, P. Hu2, S. Haza3, S. Caballero4, S. Mohr5, S.F. Acbouwer6, D.R. Saban7, T. Chand Ling8, J.V. Busik9. 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; 7Department of Ophthalmology, University Scientific Institute San Raffaele, Milan, Italy; 8Cardiovascular Medicine, University of Sao Paulo, Sao Paulo, Brazil.

5782 — A301  Caspase-14: A Novel Caspase with Potential Role in Diabetic Retinopathy. Sylvia Megyers1, S. Ahmad1, S. Hsu2, Z. Guré3, E.S. Shin1, N. Shethani4, M. Al-Shahravan5. 1Oral Biology and Anatomy, 2Ophthalmology, 3Georgia Health Sciences University, Augusta, GA; 4Ophthalmology and Visual Sciences, University of Wisconsin, Madison, WI.

5783 — A302  Evaluation of Retinectomy in the Treatment of Severe Retinal Detachment. Thais S. Mendes1, A.M. Gomez1, H.Y. Passos1, A. Baptista1. 1Ophthalmology, Suel Abujamra Institute, Sao Paulo, Brazil; 2Ophthalmology, University of Sao Paulo, Sao Paulo, Brazil.


5786 — A340  The Outcome of vitrectomy for chronic diabetic tractional retinal detachment. Muneeza A. Abunajma1, H.N. Al-Shamsi2, H. Al-Dhibi4, N.G. Ghazzi3. 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. Passos1, A. Baptista1. 1Ophthalmology, Suel Abujamra Institute, Sao Paulo, Brazil; 2Ophthalmology, University of Sao Paulo, Sao Paulo, Brazil.


5791 — A345  Triamcinolone-Assisted Intraoperative Membrane Peeling During Primary Rhegmatogenous Retinal Detachment Repair Reduces Postoperative Macular Pucker Formation. Rajesh C. Rao1, K.J. Blinder2, G.K. Shah3. 1Ophthalmology and Visual Sciences, Washington University School of Medicine, The Retina Institute, Saint Louis, MO; 2The Retina Institute, Saint Louis, MO.

5792 — A346  Siluron 2000 Novel-Generation Silicone Oil: Proof of Concept and One Year Clinical Results. Theodor Stappler1, L. Konstantinidis2, D.S. Wong3. 1St Paul’s Eye Unit, Royal Liverpool University Hospital, Liverpool, United Kingdom; 2The Eye Institute, The University of Hong Kong, Hong Kong.

5793 — A347  Air as Tamponade for Retinal Detachments. Arranzu Mateo Montoya1, M.D. de S. Smerc1. 1Clinique de Monchois (Lausanne, Switzerland), Lausanne, Switzerland; 2Ophthalmology, Clinique de Monchois, Lausanne, Switzerland.


5795 — A349  Hole Position In Rhegmatogenous Retinal Detachment: A Analysis Of Mustard, A Retrospective Interventional Case Series Of 4325 Participants In Relation To The Lincoff-rules. Ulrich Thelen1, H. Gerding1. 1Private Practice, Munster, Germany; 2Clinic Pallas, Osten, Germany.

5796 — A350  Retinal Detachment from Guttering also a Problem after Vitrectomy. Milad Hakimbash1, P. Amini1, A. Khatibi1, M.H. Goldbaum1. 1Ophthalmology, Univ of California, San Diego, La Jolla, CA; 2Ophthalmology, Univ of California-San Diego, La Jolla, CA.

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

5798 — A352  The Effect Of Retinal Detachment On Retinal Oxygenation. Alexander Kyhnel1, III, S. Traustason2, J. Hajar3, J. Kiligaard4, E. Stefansson5, M. La courte1. 1Ophthalmology, Glostrup University Hospital, Glostrup, Denmark; 2Department of Ophthalmology, Landspitali University Hospital, Reykjavik, Iceland.

5799 — A353  Pockets of Subretinal Fluid after Retinal Reattachment Surgery: New Insights with SD-OCT. John B. Miller1, R.C. Rao2, N. Choudhury1, D.M. Wu1, G.K. Shah4, D. Vavvas1, S. Mukai2, D. Elliott3. 1Harvard Department of Ophthalmology, Massachusetts Eye and Ear Infirmary, Boston, MA; 2Department of Ophthalmology and Visual Sciences, Washington University School of Medicine/The Retina Institute, St. Louis, MO; 3Doheny Eye Institute, University of Southern California, Los Angeles, CA; 4Barnes Retina Institute, Town and Country, MO.

5800 — A354  Macular Effects of Silicone Oil Tamponade: Optical Coherence Tomography Findings During and After Silicone Oil Removal. Danielle M. Lo, L. Olmos, A.A. Farzii. 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 Sdodt Ultra Structural Findings In Patients With Successfully Repaired Rhegmatogenous Retinal Detachments. Marco F. Vieira1, M. Falcão2, 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, Portugal.

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

5807 — A361 Foveal Thickness After Surgery In Eyes With Retinal Detachment, gaku terauchi1, C.S. Matsumoto1, E. Watanabe2, K. Shinoda1, H. Matsumoto3, T. Kondo4, A. Mizota5. 1Ophthalmology, Teikyo University School of Medicine, Tokyo, Japan; 2Ophthalmology, Teikyo University, Itabashi-ku, Japan; 3Matsumoto Eye Clinic, Tokushima, Japan; 4Teikyo University, Tokyo, Japan; 5Ophthalmology, University Of West Verginia, Morgantown, WV.


5809 — A363 Prognosis Factors Of Rhegmatogenous Retinal Detachments Associated With Giant Tear. Mouin Benzerroug1, B. Chanaoui1, O. Genevois1, G. Brasseur2, S. Milazzo3, M. Marzine4. 1Ophthalmology, Amiens University Hospital, Amiens, France; 2Ophthalmology, Rouen University Hospital, Rouen, France.


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**Thursday – Posters – 5805 – 5827**


5816 — A370 Coats disease in Saudi Arabia. Abdullah A. Alqahtani1, N.G. Ghazi1, 2Ophthalmology, Damman University, Dhahrn, Saudi Arabia; 2Retina, KKESH, Riyadh, Saudi Arabia.

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**Moderators: Lihteh Wu and Demetros Vavvas**


5818 — A438 In Vivo Retinal Laser Lesion Formation with Simultaneous Adaptive Optics Enhanced Confoocal Scanning Laser Ophthalmoscopy (AOcSLO) and Spectral Domain Optical Coherence Imaging (AO-SDOCT). Ginger M. Pocock1, J.W. Oliver1, C.A. Harbert1, G.D. Noojin1, K.J. Schuster1, A. Shingledecker1, D.J. Stolarci1. 1Air Force Research Laboratory, Fort Sam Houston, TX; 2Biomedical Engineering, The University of Texas at Austin, Austin, TX.


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**5820 — A440 Laser Titration Algorithm For Minimally-traumatic, Sub-visible And Sub-lethal Retinal Phototherapies. Daniel Lavinsky1,2,3, S. Sramek1, Y. Mandel4,5, P. Huij4, D.V. Palanker1,2,4,6. 1Ophthalmology, ’Hansen Experimental Physics Laboratory, ’Stanford University, Stanford, CA; 2Topcon Medical Laser Systems, Santa Clara, CA.’CR

5821 — A441 Development Of A Simulated Model For Battlefield Retinal Laser Injury. Sher A. Aslam1, M. Singh1, P. Charbel Issa1, W. Davies1, M. McClements1, R. Scott1, R.E. MacLaren1. 1Nuffield Laboratory of Ophthalmology, University of Oxford, Oxford, United Kingdom; 2Royal Centre for Defence Medicine Institute of Research & Development, Birmingham, United Kingdom.


5823 — A443 Image Guided Navigated Retinal Laser Treatments Using Multiple Image Modalities. Igor Kozak1, J. Chhablani2, G. Bartessoli2, D.U.G. Bartski3, W.R. Freeman1. 1Ophthalmology, University of California San Diego, La Jolla, CA; 2Ophthalmology, Shiley Eye Center, UCSD, La Jolla, CA; 3Ophthalmology, Univ of California-San Diego, La Jolla, CA; 4Ophthalmology, UCSD Jacobs Retina Center, La Jolla, CA. *CR

5824 — A444 Nd-yag Laser Arteriometry For Central Retinal Artery Occlusion (crao). Clayton Scanlon1, M. Currie2, A. Grant2, E.N. Cetin1, L. Akdaman3. 1Ophthalmology, Saint Louis University Eye Institute, Saint Louis, MO; 2Ophthalmology, Washington University, Saint Louis, MO. *CR

5825 — A445 Effects of LMP7 Subunit Knockout Immunoproteasome on the Laser-Induced Chorioretinal Neovascular Model in Mice. Justin C. Koh1, A.A. Rageh1, D.A. Ferrington2, S.R. Montezuma2,3,4,5. 1Ophthalmology, University of Minnesota, Minneapolis, MN.

5826 — A446 Impact of Endothelial-specific Nf-kb Signalling on Chorioidal Neovascularization. Sooska Zandi1,2, S. Nakao1, D. Sun1, R. Schmidt-Ullrich1, A. Schering1, F. Hafezi2, A. Hafezi-Moghadam3. 1Radiology, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA; 2Ophthalmology, Geneva University Hospitals, Geneva, Switzerland; 3Ophthalmology, Kyushu University, Fukuoka, Japan; 4Ophthalmology, The Second Hosp of Harbin Med Univ, Harbin, China; 5Signal Transduction in Tumor Cells, Max-Delbrück-Center for Molecular Medicine, Berlin, Germany.

5827 — A447 An Angiogenic Role Of Adrenomedullin In Choroidal Neovascularization. Susumu Sakimoto1, M. Kamoi1, H. Kidoya2, H. Naito1, N. Matsunara1, M. Suzuki1, H. Sakaguchi1, N. Takakura2, K. Nishida1, 2Ophthalmology, Osaka University Graduate School of Medicine, Sita, Japan; 3Signal Transduction, Research Institute for Microbial Diseases, Osaka University, Sita, Japan.

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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 361
5828 — A448 Implication of Gpx4 in Choroidal Neovascularization. Murilo F. Roggia1, T. Ueta1, I. Hirota1, T. Inoue1, Y. Tanaki1, Y. Yang1. 1Ophthalmology, University of Tokyo, Tokyo, Japan; 2Pharmaceutical Sciences, Kitasato University, Tokyo, Japan.

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

5830 — A450 Topical ND1 Promotes Microglia Ramification in Experimental CNV. Kristopher G. Sheets1A, W.C. Gordon1B, N.G. Das1, H. Uehara1, N. Singh1, T. Miya1, B. Archer1, J.T. Thompson2, R.J. Sjaarda2. 1LSU Health Sciences Center, New Orleans, LA; 2University of Washington, Seattle, WA.

5831 — A451 Selective Cre/lox Flt-1 Ablation In RPE Induces CNV: A Novel Transgenic Murine CNV Model. Ling Lau1, T. Olsen1, X. Zhang1, S. Dus1, H. Uehara1, N. Singh1, T. Miya1, B. Archer1, Y.Z. Le1, B.K. Ambati2. 1Moran Eye Center, Salt Lake City, UT; 2Department of Ophthalmology, The 306th Medical Physics, Biocomplexity Institute, Novato, CA.


5835 — A455 Long Term Results of Photodynamic Therapy in Patients with Age Related Macular Degeneration. Amy Chawla1, J.T. Thompson1, R.J. Sjaarda2. 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. Killigaard1, N. Sorensen1, M.V. Kyhr1, M. Sars1, J.U. Pfraade2, M.D. de la Cour2. 1Dept of Ophthalmology, Rigshospitalet, Copenhagen, Denmark; 2Dept. of Ophthalmology, Glorup Copenhagen Univ. Hospital, Glorup, Denmark; 3Eye Pathology Inst, Copenhagen University, Copenhagen, Denmark.

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

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

5839 — A459 Transplantation of Human Embryonic Stem Cell-Derived Retinal Cells into the Subretinal Space of a Non-Human Primate. Jennifer R. Chaor1, D.A. Lamb1, T. Kleser1, K. Schnahren1, B. Taylor1, A. Yanagida1, M. Neitz1, J. Neitz1, R.K. Wang1, T.A. Rob1. 1Ophthalmology, 2Bioengineering, Dept of Biological Structure, University of Washington, Seattle, WA; 3Buck Institute for Research on Aging, Novato, CA; 4Ophthalmology, 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. Sheridan1, V. Kearns2, R. Williams2, D. Wong2, K. Vasiliev1, A. Bachuka1, A.C. Lo1, W.W. Law1. 1Eye Institute, 2Research Centre of Heart, Brain, Hormone and Healthy Aging, The University of Hong Kong, Hong Kong; Hong Kong Eye and Vision Science, University of Liverpool, Liverpool, United Kingdom; 3Mawson 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, L. McIntosh Ambrose1, C. Lin1, H. Qian1, T. Li1, T. Cogliati1, A. Sawai3, 1National Eye Institute, National Institutes of Health, Bethesda, MD; 2Department of Ophthalmology, National Cheng Kung University, Tainan, Taiwan.


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. Eric D. de Smet1, S. Wyse1, M. Vezina1, S. Conston1, C. Sachs1, S.H. Popma. 1Ophthalmology, Clinic of Montchoisi, Lausanne, Switzerland; 2Preclinical Services, Charles River Laboratories, Montreal, QC, Canada; 3Janssen Pharmaceuticals Companies of Johnson & Johnson, Radnor, PA.

5845 — A465 Correlation Of The Detection By Flow In An RPE-chorioid Graft With Phase-resolved Doppler OFDI, With The Revascularization Steps Found On SD-OCT. Elishet J. Van Zeeburg1, B. Braaf2, M.G. Cereda2, J.C. van Meurs3, 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 Thumm, N. Harmening, 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. Mandep S. Singh1, E.J. Lee1, H.E. Jones2, B. Ahmed1, I.M. Andolina1, P.M. Munro2, K.L. Grieve1, G.W. Aylward1, A.M. Sillito1, R.E. MacLaren2. 1University of Oxford & Oxford Eye Hospital NHRI Biomedical Research Centre, Oxford, United Kingdom; 2UCL Institute of Ophthalmology & Moorfields Eye Hospital NHRI Biomedical Research Centre, London, United Kingdom; 3Faculty of Life Sciences, University of Manchester, Manchester, United Kingdom.
5849 — A469 Ips-derived Rpe Demonstrate Both Trophic Rescue And Functional Phagocytosis Of Photoreceptor Outer Segments Following Implantation In Diseased Rat Eyes. David F. Friedlander1, F.D. Westenskow1, T. Kurihara2, J. Wang3, A.L. Dorsey3, S. Bravo4, G. Szuusk3, M. Friedlander4. 1Cell Biology, 2Center for Metabolomics, 3The Scripps Research Institute, La Jolla, CA.

5855 — A475 Anti-vegf In Rop Treatment - 5.5 Years Of Experience. Susana M. teixeira1,2, C.M. Santos1,2, F.C. Silva1, G. Pires1, R. Barros1. 1Ophthalmology, 2Ophthalmology Department, Hospital Professor Doutor Fernando Fonseca, Lisbon, Portugal.


5857 — A477 Comparison of Short Term Outcomes After Intravitreal Bevacizumab Versus Ranibizumab in the Treatment of Stage 3 Retinopathy of Prematurity. Jose Luis Guerrero-Naranjo, F. Schoonewolff, J.J. Fromow-Guerra, V. Morales-Canton, G. Garcia-Aguirre, H. Quiroz-Mercado, M.A. Martinez-Castellanos. 1Retina, Asoc Para Evitar la Ceguera en Mexico, Mexico City, Mexico; 2Retina, Asoc Para Evitar la Ceguera en Mexico, Mexico City, Mexico; 3Retina, Asoc Para Evitar la Ceguera en Mexico, Mexico City, Mexico; 4Retina, Asoc Para Evitar la Ceguera, Mexico City, Mexico; 5Retina, Asoc Para Evitar la Ceguera, Mexico City, Mexico; 6Retina, Asoc Para Evitar la Ceguera, Mexico City, Mexico; 7Retina, Asoc Para Evitar la Ceguera, Mexico City, Mexico; 8Retina, Asoc Para Evitar la Ceguera, Mexico City, Mexico.

5858 — A478 Structural Outcome Of Intravitreal Injection Of Bevacizumab For Type I Rop Compared To Conventional Laser Treatment. Antonio Baldascino1, D. Lepore1, F. Molle1, P. Papacci1, C. Giannantonio1, V. Purcaro1, L. Orazi1, P. Perrini1, A. Molisso1, C. Romagnoli1, 1Ophthalmology, Denver Health Medical Center, Denver, CO; 2Retina and Vitreous, Asociacion Para Evitar la Ceguera, Mexico, Mexico. 1Ophthalmology, Wills Eye Institute, Philadelphia, PA.

5859 — A479 Evaluation of the Effects of Intravitreal Injection of Bevacizumab on Contro lateral Eye Treated with Conventional Laser Photocoagulation. Fernando Molle1, D. Lepore1, A. Baldascino1, P. Perrini1, L. Orazi1, M.M. Pagliara1, V. Purcaro1, C. Giannantonio1, P. Papacci1, C. Romagnoli1. 1Ophthalmology, 2Pediatrics, 3Catholic University of the Sacred Heart, Rome, Italy.


5861 — A481 Fluorescein angiographic findings in spontaneously-regressing stage 1 or 2 retinopathy of prematurity. Andrea Portilla Demichelis, F. Schoonewolff, M.F. Chiang, R. Bollens, H. Winninghoff, J. Hernandez-Vargas, V. Morales-Canton, M. Martinez Castellanos, A.I. Ortiz. 1Asociacion para Evitar la Ceguera en Mexico, IAP, Col. Barrio San Lucas, Coyoacan, Mexico; 2Retina, Asoc Para Evitar la Ceguera en Mexico, Mexico, Mexico; 3Ophthalmology and Medical Informatics, Casey Eye Institute, Oregon Health & Science University, Portland, OR; 4Pomona College, Claremont, CA; 5Retina, Asoc Para Evitar la Ceguera, Mexico, Mexico; 6Retina-Col San Lucas Coyoacan, APEC, Mexico City, Mexico.

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

5863 — A483 Fluorescein Angiography Macular Abnormalities Assessed by Optical Coherence Tomography in Retinopathy of Prematurity. Fernando Schoonewolff, V.E. Giordano, V. Morales-Canton, R.V. Chant, H. Quiroz-Mercado, M.A. Martinez-Castellanos. 1Retina, Asociacion Para Evitar la Ceguera en Mexico, Mexico, Mexico; 2Retina, Asoc Para Evitar la Ceguera en Mexico, Mexico, Mexico; 3Retina, Asoc Para Evitar la Ceguera, Mexico City, Mexico; 4Retina, Asoc Para Evitar la Ceguera, Mexico City, Mexico; 5Retina, Asoc Para Evitar la Ceguera, Mexico City, Mexico; 6Ophthalmology, Weill Cornell Medical College, New York, NY; 7Retina, Asoc Para Evitar la Ceguera, Mexico City, Mexico; 8Retina, Asoc Para Evitar la Ceguera, Mexico City, Mexico; 9Retina, Asoc Para Evitar la Ceguera, Mexico City, Mexico; 10Retina, Asoc Para Evitar la Ceguera, Mexico City, Mexico; 11Ophthalmology, Weill Cornell Medical College, New York, NY; 12Retina, Asoc Para Evitar la Ceguera, Mexico City, Mexico; 13Retina, Asoc Para Evitar la Ceguera, Mexico City, Mexico.

5864 — A484 New method of analysis of tortuosity of retinal vessels in Retinopathy of Prematurity. Alfredo reibaldi, A. Scuderi, A. Longo, I.M. Franco, A. Russo, F. Munno, V. Villari, A. Cantavenera, M. Reibaldi. 1Ophthalmology, University of Catania, Catania, Italy; 2Institute for Physical and Chemical Processes, CNR-IPCF, Messina, Italy.

5865 — A485 Plus Disease Diagnosis In Retinopathy Of Prematurity: Vascular Tortuosity As A Function Of Distance From Optic Disc Center. Katie M. Keck, J. Kalpathy-Cramer, E. Ataer-Cansizoglu, S. You, D. Erdogmus, M.F. Chiang. 1Ophthalmology, 2Medical Informatics, 3Oregon Health & Science University, Portland, OR; 4Radiology, Massachusetts General Hospital, Boston, MA; 5Electrical and Computer Engineering, Northeastern University, Boston, MA.

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

Thursday Posters – 5849 – 5866

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

Retina

520 Retinopathy of Prematurity II

Moderator: Robison V Chan


5851 — A471 Earlier Laser Treatment Of Retinopathy of Prematurity Could Reduce Need For Vitrectomy. Joo Eun Lee, S. Jeon, I. Yun. 1Ophthalmology, Haeundae Paik Hospital, Inje University, Busan, Republic of Korea; 2Ophthalmology, GM St. Mary’s Eye Center, Busan, Republic of Korea; 3Ophthalmology, Busan Paik Hospital, Inje University College of Medicine, Busan, Republic of Korea.

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

5853 — A473 Long-term Follow-up Of The Adults With Retinopathy Of Prematurity Who Received Photocoagulation And Cryopexy Treatments. Hiroki Kaneko, C. Fujikota, R. Furushashi. 1Ophthalmology, Yokkaichi Municipal Hospital, Yokkaichi, Japan; 2Ophthalmology, Nagoa University Graduate School of Medicine, Nagoa, Japan.

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


5867 – 5877 – Thursday – Posters

5867 – A487  Outcome of Laser Treatment of AP-ROP in Extremely Premature Infants.  
Glenn A. Gold1,2, D.J. Guan1, D. Cartwright1.  
1Ophthalmology, Royal Childrens Hospital, Brisbane, Australia;  
2Paediatrics and Child Health, University of Queensland, Brisbane, Australia;  
3Neonatology, Royal Brisbane and Women’s Hospital, Brisbane, Australia.

5868 – A488  New Insights in Retinal Vascular Morphology in Neonates with Congenital Heart Disease.  
1Retina, APEC, Mexico City, Mexico;  
2Neonatal Intensive Care Unit, Instituto de Salud del Estado de Mexico, Toluca, Mexico;  
3Retina, New York Presbyterian Hospital Weill Cornell Medical College, New York, NY.

5869 – A489  Evaluating The Association Of Autonomic Drug Use In The Development and Severity Of Retinopathy Of Prematurity.  
Mohamed A. Hussein, D.K. Coats, H. Khan, E. Paysse, P. Steinkuller, L. Kong.  
Baylor College of medicine, Houston, TX.

5870 – A4890  Analysis of Postnatal Weight Gain for the Prediction of Severity of Retinopathy of Prematurity.  
Patricia Butké.  
Ophthalmology, San Antonio Military Medical Center, San Antonio, TX.

5871 – A491  Swedrop - A National Quality Register For Retinopathy Of Prematurity - Makes It Possible To Improve Screening Criteria For Rop In Sweden.  
Gerd Holmström1, A. Hellström1, P. Jakobsson1, P. Lundgren1, K. Tornqvist1, A. Wallin1.  
1Neuroscience, ophthalmology, Uppsala University, Uppsala, Sweden;  
2Section of Pediatric Ophthalmology, The Queen Silvia Children’s Hospital, Sahlgrenska Academy, University of Gothenburg, Sweden;  
3Ophthalmology, Linköping University, Linköping, Sweden;  
4Ophthalmology, Norrland’s University Hospital, Umeå, Sweden;  
5Ophthalmology, Lund University Hospital, Lund, Sweden;  
6Ophthalmology, St Eriks Eye Hospital, Stockholm, Sweden.

5872 – A492  Improving The Fit In Logistic Regression Models Of Retinopathy Of Prematurity: The Square Of Birth Weight As A New Covariate Of Risk.  
Simon J. Adamson1, P. Kozulin2, R. Maccarone1, S. Yen1, P. Hu1, S. Bist1, J. Provits, M.C. Madigan1,  
3ICEH / CRU / ITD, BNeonatology, 2Hospital Materno Neonatal Ramon Carrillo, Cordoba, Argentina;  
4Biomedical & Science Vision Science, Australian National University, Canberra, Australia;  
5School of Optometry & Vision Science, University of L’Aquila, L’Aquila, Italy;  
6School of Optometry & Vision Science, University of NSW, Sydney, Australia.

5873 – A493  Macular Pigment Imaging in Infants and Children Using the RetCam.  
1Ophthalm and Visual Sciences, Univ of Utah/Moran Eye Center, Salt Lake City, UT;  
2Physics, 3Pediatrics, 4Univ of Utah, Salt Lake City, UT.  
*CR

5874 – A494  Description Of A Technique To Make Stereo Ocular Images And Retina Angiograms Using The Retcam II For Pediatric Patients.  
Victoria Gonzalez1, F. Schoonewolff2, V. Morales-Canton3, M.A. Martinez-Castellanos3.  
1Ophthalmology, Asociacion Para Evitar la Ceguera, Mexico, D.F., Mexico;  
2Retina, Asoc Para Evitar la Ceguera en Mexico, Mexico, Mexico;  
3Retina, Asoc para Evitar la Ceguera, Mexico, Mexico;  
4Retina and Vitreous, Asociacion Para Evitar la Ceguera, Mexico, Mexico.

5875 – A495  Influence of Foveal Photoreceptor Sub-Elements On Visual Acuity In Premature Infants With And Without Retinopathy Of Prematurity.  
Anand Vinekar1,2, K. Avadhani1,2, M. Sivakumar1, M. Kuriyan1, P. Mahendradas1, S. Braganza1, R. Shetty1, B. Shetty1.  
1Pediatric Retina, 2Narayana Nethralaya PG Institute of Ophthalmology, Bangalore, India.

5876 – A496  Digital Imaging Identification Of Skip Lesions In Laser Treatment Of Retinopathy Of Prematurity.  
Robison V. Chan1, K.B. Kang1, A. Orlis1, M.F. Chiang1, T.C. Lee1.  
1Ophthalmology, Weill Cornell Medical College, New York, NY;  
2Ophthalmology and Medical Informatics, Casey Eye Institute, Oregon Health & Science University, Portland, OR;  
3Ophthalmology, Childrens Hospital Los Angeles, Los Angeles, CA.  
*CR

Tamarra J. Lee1, J. Bernardos1, C. Sonnie1, G. Hoppe2, J.E. Sears2.  
1Ophthalmology, Cleveland Clinic Lerner College of Medicine, Cleveland, OH;  
2Cole Eye Institute, Cleveland Clinic, Cleveland, Ohio.  
*CR

5878 – A498  Lower Target Oxygen Saturation And Rop.  
Julio A. Urrutx-Zavalia1, N. Crim1, E.G. Knoll1,2, M.E. Forniez-Paz1, R. Monti1, E. Collino1,2, E. Esposito1, C.E. Gilbert1, H.M. Serra1.  
1University Clinic R Fabiola/Ophthalmol, Universdad Catolica de Cordoba, Cordoba, Argentina;  
2Ophthalmology, 3Neonatology, 4Hospital Materno Neonatal Ramon Carrillo, Cordoba, Argentina;  
5ICEH / CRU / ITD, London Sch of Hygiene & Tropical Med, London, United Kingdom;  
6Bioquimica Clinica, CIBICI, Fac ultad de Cs Quimicas UNC, Cordoba, Argentina.

Minqu Kang1,2, E. Kim1,2, Y. Chang1,2, S. Kim1,2.  
1Pediatrics, 2Samsung Medical Center, Seoul, Republic of Korea.

5880 – A500  Screening for ROP:16 years experience.  
Ophthalmology, Catholic University of the Sacred Heart, Rome, Italy.

5881 – A501  Telemedicine Screening for Retinopathy of Prematurity (ROP): Three years experience in Ontario, Canada.  
Nasrin N. Tehrani.  
Ophthalmology, The Hospital for Sick Children, Toronto, ON, Canada.

5882 – A502  Arginase 2 Deficiency Limits Microglia/Macrophage Activation and Prevents Hyperoxia-induced Vascular Injury in the Mouse Retina.  
Jatamas Sitowanpradit4, Z. Xai4, S.P. Narayanan4, R.W. Caldwell4, R.B. Caldwell4,2,2,  
1Vascular Biology Center, 2Department of Pharmacology and Toxicology, 3Georgia Health Sciences University, Augusta, GA;  
4VA Medical Center, Augusta, GA.

5883 – A503  Genetic Deletion or Pharmacological Inhibition of Aldose Reductase Protects the Retina in a Mouse Model of Ischemia-induced Retinopathy.  
Zhongjie Fu1,2, S-Y. Li1,3,4, D. Wong1, A.C. Lo1,2,3,4.  
1Eye Institute, 2Anatomy, 3Research Center of Heart, Brain, Hormone and Healthy Aging, 4The University of Hong Kong, Hong Kong, Hong Kong.

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

5885 – A505  Spectral Domain Optical Coherence Tomography TM (SDOCT) Findings in a Mouse Model of Retinopathy of Prematurity.  
1Ophthalmology & Visual Sciences, 2Pediatrics, 3University of Illinois at Chicago - UIC, Chicago, IL.

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. Yen1, P. Hu1, S. Bist1, J. Provits, M.C. Madigan1,  
3ICEH / CRU / ITD, Department of Anatomy & Histology, The University of Sydney, Sydney, Australia;  
4ARC Centre of Excellence In Vision Science, Australian National University, Canberra, Australia;  
5Biomedical & Science Technology, University of L’Aquila, L’Aquila, Italy;  
6School 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 Duhame1, S. Tremblay1, K. Zanolol1, P. Sapieha1, S. Chemtob3.  
1Pharmacology, Ste-Justine Hospital Research Center, Montreal, QC, Canada;  
2Ophthalmology, University of Montreal, Montreal, QC, Canada;  
3Pediatrics & Pharmacology, Research Ctr/Hosp Ste Justine, Montreal, QC, Canada.

*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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5888 — A508 Decreased IGF1 Expression Associated with Avascular Retina in Model of Retinopathy of Prematurity. Yanchao Jiang1, B. Numpang2, B. Yu1, H. Wang1, G. Smith1, M. McCloskey1, S. Patel1, R. DiGeromo1, 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. Sitara2, D. Hamel1, A. Madaan1, J-C. Honore1, B. Noueheid1, M. Blais2, C. Quiniou1, P. Sapieha1,2, S. Chemtob1,2. 1Pediatrics, Ophthalmology, Hopital Sainte-Justine/Montreal Children's Hospital, 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. Unat Karaaca1, T. Ozgur2, A.H. Durukan3, F.N. Aydin4, M. Ozler5, S. Tekin6, E.U. Bagriacik6. 1Ophthalmology, Isparta Military Hospital, Isparta, Turkey; 2Biochemistry, 3Ophthalmology, 4Physiology, 5School of Medicine, 6Gulhane Military Medical Academy, Ankara, Turkey; 7Immunology, Gazi University of Medicine, Ankara, Turkey.

5891 — A511 Nitric Oxide and Signal Loss in the “ROP Rat” Retina. Tara L. Favazza1, G. DeWalt2, N. Zhang2, R.M. Hansen3, A.B. Fulton4, W.D. Eldred2, J.D. Akula2. 1Ophthalmology, Children’s Hospital Boston, Boston, MA; 2Biology, Boston University, Boston, MA; 3Ophthalmology, Harvard Medical School, Boston, MA.

5892 — A512 The Retina and Retractive Outcome in the Rat Model of ROP. Nan Zhang2, T.L. Favazza1, A. Baglieri1, A.B. Fulton4, R.M. Hansen3, P.M. Iuvone1. 1Pediatrics, Ophthalmology, Children’s Hospital Boston, Boston, MA; 2Ophthalmology, Harvard Medical School, Boston, MA; 3Ophthalmology and Pharmacology, Emory University School of Medicine, Atlanta, GA.

Hall B/C A572-A606

Thursday, May 10, 2012, 8:30 AM-10:15 AM
Retinal Cell Biology / Nanotechnology and Regenerative Medicine Group

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

Moderators: Deborah C Otteson and Valeria Canto Soler

5893 — A572 Gene Expression and Immunogenicity of induced pluripotent Stem Cell-Derived Retinal Pigment Epithelial Cells. Hiroaki Kamao1,2, M. Mandai1, A. Suga1, J. Kiryu1, M. Takahashi1. 1Laboratory for Retinal Regeneration, RIKEN Ctr for Devlrmnt 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. Apicario1, A. DiConti1, T.C. Lee1. 1Doheny Eye Institute, University of Southern California, Los Angeles, CA; 2Ophthalmology, Children’s Hospital Los Angeles, Los Angeles, CA; 3Ophthalmology, Children’s Hospital Of Los Angeles, Los Angeles, CA; 4Ophthalmology, Childrens Hospital Los Angeles, Los Angeles, CA.

5895 — A574 VEGF Induces Neural and Astrocytic Differentiation and Angiogenesis in Bone Marrow-derived Stem Cells and Promotes Microglia Conversion Following Mobilization With GM-CSF. Revital B. Avraham Lubin1, T. Sadikov2, N. Askenasy2, N. Goldenberg Cohen2. 1The Krieger Eye Research Institute, Sackler Faculty of Medicine, Tel Aviv University, Petach Tikva, Israel; 2Frankel Laboratory, Center for Stem Cell Research, Petach Tikva, Israel; 3Department of Pediatric Ophthalmology, Schneider Children’s Medical Center of Israel, Petach Tikva, Israel.


5898 — A577 Growth and Optimization of Human iPSC Cell-Derived Retinal Cell Types on a Biocompatible Membrane. Jessica M. Martin1, J. Phillips1, L.S. Wright1, C. Johnson1, N. Radke1, D.M. Gamm1. 1University of Wisconsin - Madison, Madison, WI; 2Cook Biotech, West Lafayette, IN; 3University of Louisville, Louisville, KY.

5899 — A578 Enhanced Progenitor Cell Integration and Differentiation Following Transplantation on to PLGA Polymer Contact. Brandon M. Menke1,2, V.B. Joshi1, A. Wongrakpanich1, K.R. Anfinson1, M.R. Sred1, M.E. Eyestone1, A.K. Salem3, B.A. Tucker1. 1Ophthalmology, 2Pediatrics, Ophthalmology, Children's Hospital Boston, Boston, MA; 3Ophthalmology, Harvard Medical School, Boston, MA.


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

5902 — A581 Transdifferentiation And Molecular Characterization Of Bone Marrow-derived Progenitors In A Coculture system. Stephanie G. Lecaude, I. Mathivanin, S. Wolf, V. Ennemann. 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. Akshayalakshmi Sritharan1, M.M. Stewart1, M. Gupta1, J.S. Meyer2. 1Biology, Indiana Univ Purdue Univ Indianapolis, Indianapolis, IN; 2Center for Regenerative Biology and Medicine, Department of Medical and Molecular Genetics, Indiana University Stark Neurosciences Research Institute, Indianapolis, IN.

5905 — A584 In vitro Differentiation of Human Induced Pluripotent Stem Cells Towards Retinal Photoreceptors. Carla B. Mellough1, E. Sernagor2, D.H. Steel1, M. Lako2. 1Institute of Genetic Medicine, 2School of Neurology, Neurobiology and Psychiatry, ‘University of Newcastle Upon Tyne, Newcastle, United Kingdom; 3Sunderland Eye Infirmary, Sunderland, United Kingdom.

5906 — A585 Functional Comparison Of RPE Cultures Expanded From Differentiated Human iPS Cells And Prenatal Eye Tissue. Ruchira Singh1, W. Shen1, X. Guo1, E.T. Perez4, D. Kuai1, L.S. Wright1, B. Pattnaik2, 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, 4University 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. Hongisto2, H. Vaajasari2, S. Narkilahti2, R. Suuronen1, 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.

*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 – Refer to Program Number in the Clinical Trial (CT) Registration Index – Travel Grant Awardee –
5908 — A587 Engraft Of Hyaluronic Acid-based Hydrogel Loaded Mesenchymal Stem Cell Into The Vitreous Body Of The Ischemic Retina. Su-Ju Oh1, J. Lee2, J. Shin2, C. Yeum2, G. Chae2, M.-H. Chun4. 1Department of Anatomy, 2Institute of Hansen’s Disease, 1Coll of Med Catholic Univ of Korea, Seoul, Republic of Korea.

5909 — A588 Characterization Of Human Induced Pluripotent Stem Cells Derived Neural Progenitor Cells. Wei Kong1, N. Yang2, X. Li2. 1Ophthalmology, the Fourth People’s Hospital of Shenyang City, Shenyang, China; 2Ophthalmology, the 4th Affiliated Hospital of China Medical University, Shenyang, China.

5910 — A589 Directing Virus-free Human Induced Pluripotent Stem Cells To Differentiate Into Retinal Cells. Xufeng Zhong1, C. Hampton1, T. Park1, D.M. Gamm1, E. Zambidis1, V. Cantosoler1. 1Wilmer Eye Inst, Johns Hopkins Univ Sch, Baltimore, MD; 2Institute for Cell Engineering, Johns Hopkins Univ Sch, Baltimore, MD; 3Stem Cell Research Program at Waisman Center and Ophthalmology and Visual Sciences, University of Wisconsin-Madison, Madison, WI.

5911 — A590 BDNF and DNA Demethylation Increase Expression of Pluripotent and Retinal Neural Genes In ImM10 Müller Glia-Derived Retinal Stem Cells. Deborah C. Otteson1, J. Phillips1, T.D. Petkova1. 1Optometry, University of Houston, Houston, TX; 2University of Wisconsin, Madison, WI.

5912 — A591 Transcriptomic Comparison of RPE Derived From Two Human Embryonic Stem Cell Lines with Human Fetal RPE. Lawrence J. Rizzolo4, G. Gan1, S. Peng1, T.A. Van Zyl1, L.S. Ediriwickrema1, H. An1, M. Zhong1, C. Qiu1, R.A. Adelman1. 1Surgery/Ophthalmology, 2Cell and Neurobiology, University of Southern California-Santa Barbara, Santa Barbara, CA; 3Bioscience II, Center for Stem Cell Biology and Engineering- UCSB, Santa Barbara, CA; 4Ophthalmology, 1Yale University, New Haven, CT; 2Ophthalmology, 2nd Hospital of Harbin Medical University, Harbin, China.

5913 — A592 Retinal Differentiation Of Human Es Cells Maintained In Chemically Defined, Xeno-free E8 Culture Medium. Kyle Wallace1, A. Gerner1, J. Martin1, Z. Hou1, D.M. Gamm1. 1Waisman Center, University of Wisconsin, Madison, WI; 2Waisman Center, Department of Ophthalmology, Eye Research Institute, 3University of Wisconsin Madison, Madison, WI; 4Morgridge Institute for Research, Madison, WI.

5914 — A593 Microparticles in Differentiation of Retinal Pigment Epithelial Cells from Human Pluripotent Stem Cells. Anni E. Sarkio1,2. T.H. Ilmarinen1,2, J.S. Loo1, H.T. Skottman1,2. 1Institute of Biomedical Technology, University of Tampere, Tampere, Finland; 2Institute of Biosciences and Medical Technology, Tampere, Finland; 3School of Materials Science and Engineering, Nanyang Technological University, Singapore, Singapore.

5915 — A594 Transfection of IGF-1 and IGFBP1-1 in Neuronal Progenitor Cells from Human Persistent Fetal Vascular for Neuroprotection. Jie Ma1, C. Guo2, G. Chen1, D. Cui1, K. Lashkari1,2. 1Scheepens Eye Research Institute, Boston, MA; 2The Second Xiangya Hospital, Central South University, Changsha, China; 3Massachusetts Eye & Ear Infirmary, Boston, MA.

5916 — A595 Evaluation of Matrigel Degradation by MMP Secretion of hESC-RPE. Kenrick Kusumahara1, D. Zhu2, M. Humayun2, A.K. Ahuja. 1Doheny Eye Institute, Los Angeles, CA.

5917 — A596 Surface Substrates Affect The Behavior And Survival Of Müller Glia Derived Stem Cells. Gisela Velez, A. Roy. 1Optometry, University of Massachusetts Medical School, Worcester, MA.

5918 — A597 Effects Of Clinically Relevant Agents On Human Retinal Progenitor Cells (hrpcs) In Culture: A Pre-clinical Cytotoxicity Study. Jing Yang, H. Klassen. 1Gavin Herbert Eye Institute, Department of Ophthalmology, University of Irvine, Irvine, CA.


5920 — A599 Evaluation of hESC-Derived Retinal Pigment Epithelial Cells Cultured as a Monolayer on Polymer Substrate Transplanted in RCS Rats. Padmaja B. Thomas1, B.B. Thomas1, L. Liu1, Y. Hu1, D. Zhu1, E. Barron1, D.O. Clegg1, D.R. Hinton2, M.S. Humayun1. 1Ophthalmology, 1Doheny Eye Institute-USC, Los Angeles, CA; 2Cell and Neurobiology, University of Southern California, Los Angeles, CA; 3Biosciences II, Center for Stem Cell Biology and Engineering- UCSB, Santa Barbara, CA; 4Pathology, Keck School of Medicine USC, Los Angeles, CA.

5921 — A600 Activated Omental Stromal Cells Protect Against Light-Induced Retinal Injury. Evan B. Price2,4, P. Bu2,4, P. Sethupathi5, E.B. Stubbs, Jr2,4, J.L. Perlman2,4. 1Surgery, 4Research, 6Edward Hines, Jr. VA Hospital, Hines, IL; 2Ophthalmology, 5Microbiology and Immunology, 3Loyola University Medical Center, Maywood, IL.

5922 — A601 Embryonic Stem Cell Derived Retinal Pigment Epithelium Stem Cell Transplant: Survival And Lack Of Tumor Formation In Athymic Nude Rats. Bruno Diniz, S. Ribeiro, R. Brant, Y. Hu1, L. Liu1, P. Thomas1, B. Thomas1, D. Hinton1,2, M. Humayun1. 1Doheny Eye Institute, University of Southern California, Los Angeles, CA; 2Ophthalmology, Universidade Federal de São Paulo, São Paulo, Brazil; 3Department of Ophthalmology, Peking University Third Hospital, Beijing, China; 4Keck School of Medicine, Los Angeles, CA.

5923 — A602 Comparison of Barrier Properties of RPE Derived from Two Human Embryonic Stem Cell Lines to the Properties of Human Fetal RPE. Shaomin Peng1,2, G. Gan1, C. Qu1, L. Li1, R.A. Adelman1, L.J. Rizzolo1. 1Surgery/ Ophthalmology, 2Cell biology, Ophthalmology, 3Yale University, New Haven, CT; 4Ophthalmology, 2nd Hospital of Harbin Medical University, Harbin, China.

5924 — A603 Polarized Human Embryonic Stem Cell-Derived RPE Maintains its Monolayer Integrity and Function after Long-term in vitro Culture. Danhong Zhu1, D.O. Clegg2, D.R. Hinton3. 1Doheny Eye Institute/Pathology, Univ of Southern California, Los Angeles, CA; 2Bioscience II, Unv of California-Santa Barbara, Santa Barbara, CA; 3Pathology, Keck School of Medicine USC, Los Angeles, CA.


5926 — A605 Injury of the Adult Zebrafish Retina Induces Expression of Purinergic Receptors and Ecto-nucleotidases that Control In Vivo Cell Proliferation. Ariadna G. Batta1, M.P. Faillace2. 1Laboratorio de Neurociencias, Piso 7, Universidad de Buenos Aires Facultad de Medicina, Buenos Aires, Argentina; 2Instituto de Quimica y Fisicoquimica Biologicas (IQFIB), Buenos Aires, Argentina.

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

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Thursday – Posters – 5928 – 5952

Thursday, May 10, 2012, 8:30 AM-10:15 AM
Glaucoma / Clinical & Epidemiologic Research
522 Surgery and Lasers

Moderators: Robert D Fechtner and Colm J O’Brien

5928 – A153 Long-term Efficacy of Endoscopic Cyclophotocoagulation Combined with Cataract Surgery. Carter N. Kirk1, T.Q. Kirk2, S.H. Kirk3. 1Georgetown University School of Medicine, Washington, DC; 2Ophthalmology, Allegheny General Hospital, Pittsburgh, PA; 3Ophthalmology, Kirk Eye Center, River Forest, IL.

5929 – A154 Trabeculectomy™ Outcomes in Patients of African Decent. Ninita H. Jones1, 2Ophthalmology, Howard University, Washington, DC; 2Ophthalmology, Howard University Hospital, Washington, DC.

5930 – A155 The Trabecome - First European Clinical Results and Subgroup Analysis. Matthias Neubauer1, C. van Overendorp, T. Weller, D. Boenningger, T. Reinhard, J.F. Jordan. 1University Eye Hospital, Freiburg, Germany.

5931 – A156 Trabecome Results In Eyes With Low Preoperative IOP. Xueqing Chen1, K. Kaplowitz, N. Loewen. Ophthalmology, Yale School of Medicine, New Haven, CT.

5932 – A157 Characteristics and Outcomes of Eyes with Neovascular Glaucoma (NVG) that Underwent Combined Pars Plana Vitrectomy (PPV) and Baerveldt Glaucoma Shunt Procedure. Christopher W. Seery1, C. Seery2, P. Emami-Naeimi1, A. Kolomeyer1, M. Zarbin1, R. Fetchner2, N. Bhagat3. 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. Yuii Takihara1, M. Inatani2, M. Iwao1, M. Kawai1, T. Inoue1, K. Iwao1, H. Tanihara1. 1Ophthalmal & Vision Science, Kumamoto Univ Sch of Med, Kumamoto, Japan; 2Department of Ophthalmology, University of Fukuji, Fukuji, Japan; 3Ophthalmology, Asahikawa Medical College, Asahikawa, Japan; 4Ophthalmology, Saga University, Saga City, Japan.

5936 – A161 Time Course Of Induced Astigmatism After Canaloplasty. Anselm G. Junemann1, J. Schlimberg1, F.K. Horn1, R. Rejdak2, F.E. Kruse3, M.C. Moelle3. 1Ophthalmology, University of Erlangen Nuremberg, Erlangen, Germany; 2General Ophthalmology, Medical University of Lublin, Lublin, Poland.


5939 – A164 A Comparison of Intraocular Pressure Reduction After Selective Laser Trabeculoplasty With the Co-administration of Lopetrenol Versus None. Ronald L. Rebenitsch1, N.R. Binder2, A. Jani1, K. Pikey2. 1Ophthalmology, University of Missouri-Kansas City, Kansas City, MO.


5941 – A166 Efficacy Of Glaucoma Surgical Procedures: A Systematic Review and Meta-analysis. Luciano Quaranta1, I. Floriani2, I. Riva1, G. Gambirasio1, I. De Simone1, E. Rulli1, E. Biagioli1, S. Credidio1. 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 RCT. D. Jinapriya1, C. Perez1, A. Gerhard1, C. Trigo2. 1Ophthalmology, RP Centre, AIIMS, New Delhi, India.


5944 – A169 Progression Rate Before and After Trabeculectomy. Jimena Schmidt1, S. Araneda1, E. Abusleme1, C. Perez1, E. Maul D1, E. Maul F1, A. Gerhard1, C. Trigo2. 1Ophthalmology Department, Catholic University of Chile, Santiago, Chile; 2Ophthalmology Department, Sotero del Rio Hospital, Santiago, Chile.

5945 – A170 Success Rates And Risk Factors For Failure Of Bleb Needling Post Trabeculectomy. Andrew Toren1, S. Kulkarni2, L. Shuba1, M. Nicolel1. 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. Scheurer1, K. Rohrscheimer1. 1Department of Ophthalmology, Interdisciplinary Uveitis Center, University of Heidelberg, Heidelberg, Germany; 2Department of Ophthalmology, University of Heidelberg, Heidelberg, Germany.


5950 – A175 Impact of Trabeculectomy Surgery on Global Visual Field Indices Using Data from Advanced Glaucoma Intervention Study (AGIS). Linda Zhang, D.C. Masch, L.M. Nizio1, J.D. Stein. Ophthalmology, University of Michigan, Ann Arbor, MI.


5952 – A177 The Effects Of Trabeculectomy On Visual Field Progression Rates In Glaucoma. Aachal Kotecha1, R.A. Russell2, J.C. Clarke2, P.T. Khaw1, Moorflow Study Group, 1NIHR BRC for Ophthalmology, UCL Institute of Ophthalmology and Moorfields Eye Hospital, London, United Kingdom; 2Optometry and Visual Science, The City University, London, United Kingdom; 3Glaucoma, Moorfields Eye Hospital, London, United Kingdom.
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, S. Broccolini2, P.T. Khaw2, I. 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. Perera2, C. Ho3, C.K. Leung1, D.V. Istianoto4, M.E. Nongpiur1, H.M. Hoon1, T.T. Wong1,2, D. Goh1,2, T. Aung1,2. 1Glaucoma, Singapore Eye Research Institute, Singapore, Singapore; 2Glaucoma, Singapore National Eye Centre, Singapore, Singapore; 3Department of Ophthalmology and Visual Sciences, Chinese University of Hong Kong, Hong Kong, Hong Kong; 4Glaucoma, Jakarta Eye Center, Jakarta, Indonesia. #CR, #CR

5957 — A182 Excimer Laser trabeculoplasty (ELT) combined with Phacoemulsification and Lens Implantation: 5 Year Post-OP Observations. Ulrich F. Giers1, L. Kleineberg1, R.P. Stodtmeister2, M.S. Berlin1, E.P. Pillunat4. 1University Hospital Zurich, Zurich, Switzerland. 2Psychological and Brain Sciences, University of Chicago, Chicago, IL. 3John H. Stroger Jr. Hospital of Cook County, Chicago, IL. 4Drexel University, Philadelphia, PA.


5959 — A184 Primary and Repeat Selective Laser Trabeculoplasty in Pseudophakic Eyes: 2 year follow-up. Tamara L. Bereznia1, A.S. Khouri1, B.A. Maltzman1, K. Shah1, R.D. Fechner4. 1Ophthalmology, UMDNJ-New Jersey Medical School, Newark, NJ; 2Drexel University, Philadelphia, PA.

5960 — A185 Intraocular Pressure Reduction After Repeated Selective Laser Trabeculoplasty (slt). Marcelo N. Ayala, E. Chen. St Erik Eye Hospital, Stockholm, Sweden. #CR

5961 — A186 The Effectiveness of Selective Laser Trabeculoplasty on Eyes of Different Corneal Thicknesses. Joseph A. Donnelly1, E. Miglino2, L.F. Jordal3. 1Albert Einstein College of Medicine, Bronx, NY; 2Floral Park Ophthalmology, Floral Park, NY; 3Ophthalmology, Columbia University, Floral Park, NY. #CR

5962 — A187 Transscleral Micropulse Diode Laser Cyclophotocoagulation as Effective Adjunctive Treatment prior to Glaucoma Surgery. Maria Cecilia D. Aquino1, A. Tan1, S. Loon1, P.T. 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. Mamtta Shah, B. Eliasi-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. Berezina, S. Prasertsit, T.D. Patrianakos1,2. 1Ophthalmology, UMDNJ - New Jersey Medical School, Newark, NJ. 2Drexel University, Philadelphia, PA.

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, R.A. Sherry1,2, A. Sanabria3, A. Mamta Shah, B. Eliasi-Rad. Department of Ophthalmology, Boston University School of Medicine, Boston, MA. 4A192 Subsequent Slit Can Be Effective After Initially Less Responsive Slt: 4 Year Follow-up. Albert S. Khouri1, T.L. Berezina2, B. Maltzman2, K. Shah1, R.D. Fechner4. 1Ophthalmology, UMDNJ-New Jersey Medical School, Newark, NJ; 2Ophthalmology, Hudson Eye Physicians and Surgeons, Jersey City, NJ; 3Drexel University, Philadelphia, PA.


5968 — A194 Baseline Intraocular Pressure Strongly Predicts Response to Selective Laser Trabeculoplasty for Open Angle Glaucoma. J D. Nussdorf1, A C. Janot2, D.W. Hanson3, P.J. DeMarco4. 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. Saedon2, 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.

5971 — A196 Repeat SLT In Comprehensive Ophthalmic Practices. Jeffrey D. Henderer1,4, E.S. Tung1,4, A. Johnston1,4, S.K. Luminai1,4, R. Sherry1,4, J.P. Gaughan1,4. 1Ophthalmology, 2Epidemiology and Biostatistics, Temple University, Philadelphia, PA.

5972 — A197 Quantification of Short-term Endothelial Cell Loss and Intraocular Pressure Reduction Following Laser Peripheral Iridotomy. Gabriela C. Barretto1, L. Trancoso2, M. Cotat1, L. Biteli1, T. S Prata1. 1Glaucoma, Hospital Medicina dos Olhos, Sao Paulo, Brazil; 2Glaucoma, Complexo Hospital Padre Bento, Sao Paulo, Brazil.

5973 — A198 Efficacy of Transscleral Diode Laser Cyclophotocoagulation on Neovascular Glaucoma: Vein Occlusion versus Proliferative Diabetic Retinopathy. Neha Sangal1, A. Anchal1, T.D. Patrianakos1,2. 1University of Chicago, Chicago, IL; 2John H. Stroger Jr. Hospital of Cook County, Chicago, IL.


*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 Awards
**5977 — A202** A Qualitative and Quantitative Analysis of Filtering Blebs with Optical Coherence Tomography in Patients after Trabeculectomy. Pietro E. Napoli, F.E. Sayyad, M.R. Banitt. Ophthalmology, Bascom Palmer Eye Institute, University of Miami, Miami, FL.


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


**5981 — A206** Scanning Electron Microscopy Findings In Rabbit Eyes Undergoing Ultrasonic Cyclocoagulation. Florent Apfel*, A. Begèl, T. Charrel*, C. Lafon*, J-Y. Chapelon, P. Denis*, F. Romano*. ’Grenoble University Hospital, Grenoble, France; ’Insitut U1032, Lyon, France; ’EyeTechCare, Rillieux la Pape, France; ’Croix-Rousse University Hospital, Lyon, France. *CR

**5982 — A207** The Effects Of Combined Endoscopic Cyclophotocoagulation (ECP) And Phacoemulsification In The Treatment Of Mild To Moderate Glaucoma. Michael J. Siegel*, W-S. Shieh*, O.S. Faridi*, C.K. Gupta*, M.S. Juzeh*, M.E. Citron*, M.J. Siegel*, L.I. Siegel*. ’Ophthalmology, Kresge Eye Institute, Detroit, MI; ’School of Medicine, Wayne State University, Detroit, MI; ’Ophthalmology, William Beaumont Hospital, Royal Oak, MI; ’Ophthalmology, Beaumont, Bloomfield Hills, MI; ’Glaucome 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


**5988 — D809** Successful Culture Of Human Corneal Endothelial Cells Isolated From Patients With Fuchs Endothelial Corneal Dystrophy. Marie-Claude Perron*, K. Zaniolo*, C. Bostan*, O. Rochette Drouin*, A. Deschambaud*, I. Brunette*, S. Proulx*. ’Maisonneuve-Rosemont Hospital Research Center, Montreal, QC, Canada; ’Centre LOEX de l’Université Laval, Génie tissulaire et régénération; Centre de recherche FRSQ du CHA universitaire de Québec and Department of ophthalmology and ORL, Laval University, Quebec, QC, Canada; ’Department of ophthalmology, University of Montreal, QC, Canada.


**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 Proulx*, M. Haydar*, B. Goyer*, O. Roy*, S. Laprise*, O. Rochette Drouin*, I. Brunette*. ’Centre LOEX de l’Université Laval, Génie tissulaire et régénération; Centre de recherche FRSQ du CHA universitaire de Québec and Département d’ophthalmologie, Université Laval, Québec, QC, Canada; ’Département d’ophthalmologie, Université de Montréal and Centre de Recherche de l’Hôpital Maisonneuve-Rosemont, Montréal, QC, Canada.

**5993 — D814** Sulforaphane Decreases Endothelial Cell Apoptosis in Fuchs Endothelial Corneal Dystrophy: A Novel Treatment. Alireza Ziaei, U.V. Jarkunas. Schemps 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. Tsung-Jen Wang*, I-J. Wang*, T-H. Young*. ’Department of Ophthalmology, Taipei Medical University Hospital, Taipei, Taiwan; ’Institute of Biomedical Engineering, College of Medicine and College of Engineering, National Taiwan University, Taipei, Taiwan; ’Department of Ophthalmology, National Taiwan University Hospital, Taipei, Taiwan; ’Department of Ophthalmology, National Taiwan University College of Medicine, Taipei, Taiwan.

5996 — D817 Kinetics of Intracellular Pro-apoptotic Bax Protein Inducing Cell Death in Corneal Endothelial Cells. Marko Pastak1,4, B.B. Singer2,4, A. Kovtun1, M. Czugała2, B. Seitz2, M. Epplie1, K-P. Steuhl1,4, S. Ergün1,4, T.A. Fuchsflugere1,4, 1Institute of Anatomy, 2Department of Ophthalmology, ‘Esen University Hospital, Essen, Germany, 3Institute of Inorganic Chemistry, University of Duisburg Essen, Essen, Germany; 4Department of Ophthalmology, Saarland University Hospital, Homburg/Saar, Germany; 5Department of Ophthalmology, Düsseldorf University Hospital, Düsseldorf, Germany.


5999 — D820 Rock Inhibitor Eye Drops Accelerate Corneal Endothium Wound Healing In A Primate Model. Naoki Okumura1,2, N. Koizumi1, M. Ueno1, Y. Sakamoto1, H. Takahashi1, K. Yamasaki1, R. Torii1, J. Hamuro2, S. Kinoshita1. 1Biomedical Engineering, Doshisha University, Kyotanabe, Japan; 2Ophthalmology, Kyoto Prefectural Univ of Med, Kyoto, Japan; 3Research Center for Animal Life Science, Shiga University, Otsu, Japan.

6000 — D821 Culture of Human Corneal Endothelial Cells (HCECs) for therapeutic purposes. Jesinta Navaratnam1,4, J.K. Slettedal1,4, E. Gulliksen1,4, S. Boye1, M.C. Moe1, L. Drolsum1,4, 1Center for Eye Research, Department of Ophthalmology, Oslo University Hospital and University of Oslo, Norway.

6001 — D822 Increased Proliferation and Replicative Lifespan of Isolated Human Corneal Endothelium Cells with 1-Ascorbic acid 2-phosphate. Satoru Yamagami1,2, N. Shima1, M. Kinote1, M. Yamazaki1,2. 1Department of Ophthalmology, University of Tokyo Graduate School of Medicine, Bunkyo-ku, Japan; 2Foundation for Biomedical Research and Innovation, Kobe, Japan.


6003 — D824 In Vitro Expansion Of Corneal Endothelial Cells On Biomimetic Substrates. Rachelle Palchesko1,2, J.L. Finderburgh1, A. Feinberg2. 1Ophthalmology, University of Pittsburgh School of Medicine, Pittsburgh, PA; 2Biomedical Engineering, Carnegie Mellon University, Pittsburgh, PA.

6004 — D825 Lentiviruses Mediated Interference With the ZO-1/ZONAB Pathway Induces Cell Cycle Progression in Human Corneal Endothelial Cells. Daniel Kämpf1,2, M. Basché2, A. Georgiadis3, U.F. Luhmann1, A.J. Smith1, F. Larkin1, R.R. Ali1. 1Department of Genetics, UCL Institute of Ophthalmology, London, United Kingdom; 2Moorfields Eye Hospital, London, United Kingdom.

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


6008 — D829 Over-representation Preliminary Analysis Between Expressed Genes In Corneal Endothelium And Mesenchymal Stem Cells. Jorge E. Valdez1,2, J. Zavaleta1, V. Treviño1, E. Martínez1. 1Dean’s Office, Tecnologico de Monterrey University of Medicine, Monterrey, Mexico; 2Cátedra de Oftalmología - Tecnologico de Monterrey, Monterrey, Mexico; 3Cátedra de Bioinformática - Tecnológico de Monterrey, Monterrey, Mexico.

6009 — 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.

6010 — D831 Cultivation of Human Corneal Endothelial Cells on a Pericellular Matrix Prepared from Human Decidua-Derived Mesenchymal Cells. Ryohi Numata1, N. Okumura1, M. Nakahara1, M. Ueno1, S. Kinoshita1, Y. Kanemura1, Y. Sasa1, 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.


6012 — D833 NF-xB is the Transcription Factor of FGF-2 that Causes Endothelial Mesenchymal Transformation in Cornea. Jeong Goo Lee1, J M. Heur1,2, E.P. Kay1,2. Ophthalmology, University of Southern California, Los Angeles, CA; 3Doheny Eye Institute, Los Angeles, CA.

6013 — D834 Isolation and Propagation of Human Corneal Endothelial Cells Using a Dual Media Culture System. Gary S. Peh1, K-P. Toh1, D. Balehosur1, H-P. Ang1, M-X. Lee1, D.T. Tan1,2, J. Mehta1,2, 1Singapore Eye Research Institute, Singapore, Singapore; 2Singapore National Eye Centre, Singapore, Singapore; 3Department of Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore; 4Department of Clinical Sciences, Duke-NUS Graduate Medical School, Singapore, Singapore.

6014 — D835 Apoptosis And Viability Of Human Corneal Endothelial Cell Cultures Following Photodynamic Therapy (pdt). Tanja Stachon1, J. Wung1,2, T. Eppig1, A. Langenbucher1, B. Seitz1, N. Szentmáry4, 1Department of Ophthalmology, 2Experimental Ophthalmology, 3Saarland University Hospital, Homburg/Saar, Germany; 4Department of Ophthalmology, Renmin Hospital of Wuhan University, Wuhan, China.

6015 — D836 Transient Receptor Potential Melastatin 8 (TRPM8) Channels Mediate Complex Calcium Responses in Human Corneal Endothelial Cells. Stefan Mergler1, M. Valtink1, M. Wahlmüller1, P.S. Reinach1, K. Engelmann2, U. Pleyer1. 1Department of Ophthalmology, University Medicine Charite Berlin, Berlin, Germany; 2Anatomy, TU Dresden, Dresden, Germany; 3Biological Sciences, SUNY College of Optometry, New York, NY; 4Ophthalmology, Klinikum Chemnitz, Chemnitz, Germany.*CR


6018 — D839 Study of Effect of Donor Age and Death Neculization Time on in-vitro Culture of Human Corneal Endothelial Cells. Himi Singh1, R. Tandon1, S. Mohanty1, A. Kumar1, 1Ophthalmology,Dr.R.P. Centre for Ophthalmic Sciences, 2Stem Cell Facility, 3All India Institute of Medical Sciences, New Delhi, India.
**6019 — D840** Enhanced Survival and Expansion of Bovine Corneal Endothelial Progenitors using Accutase. Wing Yan Yu1, C.M. Sheridan2, I. Grierson3, A.C. Lo4,1, Y. Wong4,1, 2,3

1Eye Institute, 2Research Centre of Heart, Brain, Hormone and Healthy Aging, 3The University of Hong Kong, Hong Kong, Hong Kong; 2Department of Eye and Vision Science, University of Liverpool, Liverpool, United Kingdom. 4CR

**6020 — D841** Cytotoxicity of Ganciclovir on Cultured Human Corneal Endothelial Cells. Young Joo Shin1, J. Koh2, T. Chung3, J. Hyon4, 5

6020 Liverpool, United Kingdom. 6021 University of Liverpool, Liverpool, United Kingdom. 6022 University of Seoul, Republic of Korea; 6023 Ophthalmology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Kwangju, Republic of Korea; 6024 Kaplan1, H. Dick2, W. Sekundo3, N. Pfeiffer1, U. B.D. Allan.

**6025** A Plateau Technique d’Imagerie Cellulaire et Toxotoxicity of Ganciclovir on the Corneal Endothelium. Ray J. Tsai1, R.Y. Tsai1, 2

3Department of Ophthalmology, New York University, New York, NY; 2Lions Eye Bank of Oregon, Portland, OR. 4CR

**6026 — 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, 2

3Department of Ophthalmology, New York University, New York, NY; 2Lions Eye Bank of Oregon, Portland, OR. 4CR

**6027 — D848** Improvement Of Endothelial Keratoplasty Lamellar Dissection By Combined Use Of Femtosecond And Eximer Lasers. Liem Trinh1,2, B. Sautanen1,2, F. Aucl4,1, A. Denoyer4,1, R. Lai-Kuen1, M. El Handaoui1,2,1, A. Labbé1,2,1, M-C. Despiau1, 2

4Ophthalmology, III, Clinical Investigation Center (CIC) 503, 1Pharmacy, 2Quinze-Vingts National Hospital, Paris, France; 3INSERM U705, UMR CNRS 8206, Paris, France; 4Plateau Technique d’Imagerie Cellulaire et Moléculaire, 5Toxicology, 6Faculty of Biological and Pharmacological Sciences, University of Paris 5 René Descartes, Paris, France; 7Vision 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**

5208 — 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, 1Cornea, 2Eye Center/University Medical College, Taipei, Taiwan; 3Ophthalmology, Taipei Eye Center, Taipei, Taiwan. 4CR

**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, 1Cornea, 2Eye Center/University Medical College, Taipei, Taiwan; 3Ophthalmology, Taipei Eye Center, Taipei, Taiwan. 4CR

**6029 — D850** Evolution of Corneal Transplantation in the Province of Quebec from 2000 to 2011. Louis-Pierre Gauvin Meunier1, J. Lapointe1, M-E. Choronzey2, S. Dubuc1, M. Germain3, M. Mabon1,4, I. Brunette1,2, 1Cornea And Refractive Surgery, Instituto de Oftalmologia Conde de Valenciana, Mexico City, Mexico; 2Instituto Nacional de Salud Publica, Cuernavaca, Mexico.

**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. Gheorge, I. Botez, P-J. Bertaux, A. Ferte, 1Ophthalmology, 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. Ikla2, C. Ulriksson1, 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. He3, N. Campolmiti4, B. Ha Thir, J. Dumollard4, M. Pesc4,5, N. Delesalle1, A. Bernard4, P. Gain1,2, 1Ophthalmology, 2Pathology, University Hospital of St-Etienne, Saint-Etienne, France; 3Corneal Graft Biology, Engineering and Imaging Laboratory, EA2521, Federative Institute of Research, Faculty of Medicine, Jean Monnet University, Saint-Etienne, France; 4The 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. Shab1, M. Moshiyar2, M. Miffili3, Y. Khalifa1, 1Flaura Eye Institute, University of Rochester Medical Center, Rochester, NY; 2Moran Eye Center, University of Utah, Salt Lake City, UT.


**6037 — D858** Cross-linked Variants Of A Novel Semi-synthetic Collagen Substitute For The Reconstruction Of The Surface. Corinna Petch1, U. Schlotzer-Schrehardt2, M. Frey3, F.E. Kruse4, B. Bachmann1. 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. 4CR

**6038 — D859** A Biocornea Of Fish Scales - First Results Of A Research Model. T. H. Van Esseni1, C. Lin2, H.J. Lai2, A.K. Hussain1, M.J. Jager1, G.P. Luyten1. 1Department of Ophthalmology, Leiden University Medical Center, Leiden, The Netherlands; 2Department of Research, Aeon Astron Europe B.V., Leiden, The Netherlands. 4CR

**6039 — D860** Investigation for the Possibility of Using Polymer Hygrodynes as a Device for Cultivation and Transplantation of Corneal Epithelial Cells. Toru Matsunaga1, Y. Watanabe1, 2

3René Descartes, Paris, France; 4Vision Institute, University of Montreal, Montreal, Quebec, Canada; 5Quinze-Vingts National Hospital, Paris, France; 6Buenos Aires, Argentina. 4CR

**Thursday Posters**

8:30 am – 10:15 am

*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**

**6040 — D861 Reduced Hem- And Lymphangiogenesis Into A Fishscale-derived Collagen Scaffold Used As Biological Artificial Cornea (BioCornea), Deniz Hos1, F. Bock2, B. Regenfuss3, J. Onderka2, C.C. Lin1, H.J. Lait1, C. Cursiefen1. 1Department of Ophthalmology, University of Cologne, Cologne, Germany; 2Department of Ophthalmology, University of Erlangen-Nuremberg, Erlangen, Germany; 3Aeon Astron Corp., Taipei, Taiwan; 4Aeon Astron Europe B.V., Leiden, The Netherlands.**

**6041 — D862 Autologous Tragal Perichondrium Transplantation in Refractory Necrotizing Scleritis. Jae Chan Kim, H. Koo, J. Kim. Ophthalmology, Chung-Ang Univ. Hospital, Seoul, Republic of Korea.**

**6042 — D863 The Fate Of Collagen-based Hydrogels As Corneal Substitutes In “High Risk” Gift Recipients. Lucia Kuffova1, R. Fordyce1, M. Robertson1, M. Griffith2, J-J. Ahn3, K. Merritt4, R.L. Hendricks5, J.V. Forrester1. 1Integrative Regenerative Medicine, Ottawa Eye Institute, Ottawa, ON, Canada; 2Department of Ophthalmology, University of Linköping, Linköping, Sweden; 3Department of Ophthalmology, New York Medical College, Valhalla, NY; 4Aeon Astron Europe B.V., Leiden, The Netherlands; 5Department of Ophthalmology, Samsung Medical Centre, Sungkyunkwan University, Korea, Republic of Korea.**


**6053 — D874 Long-Term Outcome Of Corneal Transplant Surgery In Pediatric Patients with Keratoconus. Anna Djougarian1,2, G.W. Zaidman1,2. 1New York Medical College, Valhalla, NY; 2New York Medical College, Valhalla, NY; 3Ophthalmology, 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. Gheorghe, A. Ferte, I. Boze, 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, A. Iovieno1, C. Nicucci1, T. Maurino1. 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-odontokeratoprosthesis (ookp). Richard M. Lee1, G. Ong2, J. White2, F. Lam3, C.S. Liu4, C.C. Hall5. Ophthalmology, Susse Eye Hospital, Sussex Eye Hospital, United Kingdom; 6Optometry & Visual Science, City University, London, United Kingdom.**

**6061 — D882 In Vitro Effect Of Microbial Infection on Candidate Biomaterials for Osteo-odontokeratoprosthesis Skirt. Jodhbir S. Mehta1, X. Tan1,2, A. Bian1, A. Tan1, R.W. Beuerman2, D. Tan1, K. Khor3. Osteo Refractive Tissue Engineering, Tissue Engineering, SNEC / SERI, Singapore, Singapore; 5Tissue Engineering, SERI, Singapore, Singapore; 6Cornea, SERC, Singapore, Singapore.**

**6062 — D883 Field of View of Modified Osteo-odontokeratoprosthesis. Victor M. Hernandez1,2, C. de Freitas1, G.C. Falcinelli1, Y. Sawatari1, V. Perez1, D. Sathiu1, F. Manier1, E.C. Alfonso1, J-M.A. Pare1,4. Ophthalmic Biophysics Center, Department 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. Maksous2, M. Chol2. Bioengineering, University of Illinois at Chicago, Chicago, IL; 3Physical Therapy and Human Movement Sciences, Orthopaedic Surgery and Physical Medicine, Northwestern University, Chicago, IL.**

**6064 — D885 Boston Type I Keratoprosthesis: Microbial Colonization and Antibacterial Resistance. Elie P. Eid1, M-C. Robert1, P. Saint-Antoine1, M. Harissi-Dagher2. Ophthalmology, Microbiology, Centre Hospitalier de l’Université de Montréal (CHUM), Hôpital Notre-Dame, Montréal, QC, Canada.**

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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 – Refer to Program Number in the Travel Grant Awardee Index*
0606 — D887 Outcomes following Boston Keratoprosthesis Type I Implantation in Aniridia Patients: The University of Montreal Experience. Salima I. Hassanaly, J. Talajic, M. Harissi-Dagher. 1Ophthalmology, Massachusetts Eye & Ear Infirmary, Boston, MA; 2Schepens Eye Research Institute, Boston, MA.


0671 — D892 Long-term Follow-Up Of Implanted Boston Type I Keratoprosthesis And Angle Structural Changes Using Ultra-sensitive Segment Optical Coherence Tomography. Cynthia X. Qian, S. Hassanali, M. Harissi-Dagher. 1Ophthalmology, 2Medicine, University of Montreal, Montreal, QC, Canada.


0674 — D895 Monitoring Of Glaucoma After The Implantation Of A Keratoprosthesis. Riccardo Scotti, M. Papadiaz, A. Baghisraz, A. Macri, C.E. Traverso. 1Ophthalmology, DiNOG, University of Genova, 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 Cornea

525 Contact Lens II (Basic Research)

Moderators: Nicole A Carnt and Nancy J Keir

0676 — D897 Effect of Contact Lens Solutions on the Antimicrobial Efficacy of Human Tear Proteins during Lens Disinfection. Bianca L. Price, P.B. Morgan, C. Maldonado-Codina, C.B. Dobson. 1Faculty of Life Sciences, 2Euro lens Research, Faculty of Life Sciences, 3University of Manchester, Manchester, United Kingdom.

0677 — D898 Effects Of Multi-purpose Solutions On The Viability And Encystment Of Clinical Isolates Of Acanthamoeba Determined By Flow Cytometry. Masaki Imayasu, K.T. Tchedre, H.D. Cavanagh. 1R&D Center, Menicon Co Ltd, Kasugai, Japan; 2Ophthalmology, Univ Texas Southwestern Med Ctr, Dallas, TX.*CR

0678 — D899 Evaluation Of Commercially Available Novel Multi-purpose Contact Lens Care Solutions Effect On Membrane-associated Mucin Expression In The Rat Cornea. Kissoua T. Tchedre, M. Imayasu, Y. Horii, H.D. Cavanagh. 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.*CR


0681 — D902 Antimicrobial Properties Of Selenium Covalently Incorporated Into The Polymer Of Contact Lens Case Material. Ted W. Reid, P. Tran, C. Jarvis, J. Thomas, K. Tran, T. Mosley, R. Hanes, A. Hamood. 1Ophthalmology and Visual Science, 2Microbiology, 3Texas Tech University Health Sciences Center, Lubbock, TX; 4Selenium Ltd., Lubbock, TX; 5Selenium Ltd., Austin, TX.*CR


0685 — D906 Antimicrobial Efficacy of Melamine Covalently Bound to Contact Lenses. Debarun Dutt, N. Cole, M. Willcox. 1Brien Holden Vision Institute, Sydney, Australia; 2School of Optometry and Vision Science, University of New South Wales, Sydney, Australia.


0687 — D908 Non-Cultivable Bacterial Biofilm Communities in Used Contact Lens Cases. Judith L. Flanagan, M. Allgeier, M.D. Willcox, P. Hugenholz. 1Brien Holden Vision Institute, Sydney, Australia; 2Joint Genome Institute, Walnut Creek, CA; 3Brien Holden Vision Institute, Univ of New South Wales, Sydney, Australia; 4Australian Centre for Ecogenomics, School of Chemistry and Molecular Biosciences & Institute for Mol, University of Queensland, Queensland, Australia.


0689 — 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 — CR Refer to Program Number in the Clinical Trial (CT) Registration Index — CR Travel Grant Awardee
1Brien Holden Vision Institute, Sydney, Australia; 2School of Optometry and Vision Science, University of NSW, Sydney, Australia; 3Brien Holden Vision Institute, Vision Cooperative Research Centre, Sydney, Australia. *CR, ▲

6091 — D912 Cytotoxic Potential Assessment Of Contact Lens Care Solutions And Evidence For A Useful Rinse Step With Unpreserved Solution. Melody Dutot1, J. Vincent2, I. Fabre2, C. Grasmick2, R. Fagorn1, P. Rat1.
1Toxicology, 2Research & Development, YSLAB, Paris, France; 3Direction des Laboratoires et des Contrôles, Agence Française de Sécurité Sanitaire des Produits de Santé, Vendargues, France; 4Chimie-Toxicologie Analytique et Cellulaire (EA 4463), Université Paris Descartes, Sorbonne Paris Cité, Faculté de Pharmacie, Paris, France. *CR

6092 — D913 Morning Cleaning or Replacement of Lenses Reduces Complications with Extended Wear of Contact Lenses. Jerome Ozkan1, M.D. Willcox2, P. Lazon 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; 4Connea, Contact lens, Refractive Surgery, LV Prasad Eye Institute, Banjara Hills, Hyderabad, India; 5Brien Holden Vision Institute, Vision Cooperative Research Centre, Sydney, Australia. ▲


1Mechanical and Aerospace Eng, University of Florida, Gainesville, FL; 2Center of Physics, University of Minho, Braga, Portugal; 3Applied Thermodynamics, Universidad Politécnica de Valencia. Spain, Valencia, Spain. *CR


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. Jalalah P. Varikooty1, N.J. Keir1, T.L. Simpson1, 2CCR, School of Optometry, 3School of Optometry, 1University of Waterloo, Waterloo, ON, Canada.


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

6102 — D923 Development of a Drug released Soft Contact Lens that Releases Antibiotics in a Sustained Manner. Shinichiro Kobayakava1, T. Matsunaga1, K. Kaksi1, Y. Yamazaki1, T. Sato1, T. Tochikubo1. 11st Dept of Ophthalmology, Toho University, Tokyo, Japan; 2SEED Co Ltd, Kounosu-T. Tochikubo1.


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

6105 — D926 Oxygen Diffusion Behind Modern Sercial Rigid Gas Permeable Contact Lenses. Sofia C. Peixoto-de-Matos1, V. Compañ2, S. Moya1, J. Jorge1, J.M. Gonzalez-Meijome1. 1Center of Physics, University of Minho, Braga, Portugal; 2Applied Thermodynamics, Universidad Politécnica de Valencia. Valencia, Spain. *CR

6106 — D927 Rapid Measurement of Tear Oxygen Tension Underneath Soft Contact Lenses by Frequency-Domain Phosphorimetry. Sangpyo Srinivas1, G. Guidoboni2, L. Carichino2. 1Optometry, Indiana University, Bloomington, IN; 2Mathematics, IUPUI, Indianapolis, IN.


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


6112 — D933 Contact Lens/Contact Lens solution Combinations Determine the Inflammatory Changes on the Ocular Surface: A Laser In Vivo Confocal Microscopy Study. Bernardo M. Cavalcanti1, A. Cruz1, Y. Qazi1, N. Baniadisi1, M. Trinidad1, A. Watts1, D. Crisler2, C. Leathy1, C.W. Spinner1, P. Hamrah1.
1Cornea/Ophthalmology, Harvard Medical School/MEEI, Boston, MA; 2Cornea / Ophthalmology, Harvard Medical Sch/MEEI, Boston, MA; 3Ophthalmology, Cornea Research, Massachusetts Eye and Ear Infirmary, Boston, MA; 4Cornea/Ophthalmology, MA Eye & Ear Infirmary/ Harvard Med Sch, Boston, MA; 5Contact Lens, Ophthalmology, University of Iowa, Iowa City, IA. *CR, ▲

1Materials Science and Engineering, University of Florida, Gainesville, FL; 2Center of Physics, University of Florida, Gainesville, FL; 3R & D, Alcon Research Ltd, Fort Worth, TX. *CR


6115 — D936 Surface Segregation of Chemical Moieties in Silicone Hydrogels. Scott S. Perry1, 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


*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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6118 — D939 Cytotoxic and Inflammatory Effects of Contact Lens Multipurpose Solutions on Human Corneal Epithelial Cells, Nir Erdinest1A, Y. Grosman1A, R. Harari1A, H. Ovadia1B, A. Solomon1B. 1Ophthalmology, 2Neurology, 3Hadassah Hebrew University Medical Center, Jerusalem, Israel.

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


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

6122 — D943 Differential Surface Friction Analysis of Silicone Hydrogel Contact Lenses Treated with Block Co-Polymer Multi-Purpose Solutions. Peter Maziarz, III1, X. Liu1. 1Research & Development, Bausch + Lomb, Brockport, NY; 2Research & Development, Bausch + Lomb, Rochester, NY; 3Bausch & Lomb, Rochester, NY. *CR


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

6125 — D946 Measuring The Kinetics and Activity of Adsorbed Proteins: In Vitro Lysozyme Deposited Onto Contact Lenses Over Short Time Periods. Brad Hall1, L. Jones2, J.A. Forrest3. 1School of Optometry, 2Department of Physics & Astronomy, 3University of Waterloo, Waterloo, ON, Canada.


Hall B/C D987-D1021
Thursday, May 10, 2012, 8:30 AM-10:15 AM
Immunology & Microbiology / Cornea
526 Cornea/Anterior Segment Infection and Inflammation I

Moderator: Ashok Kumar


6128 — D988 Pseudomonas aeruginosa Small Protease (PASP), a Keratitis Virulence Factor. Richard J. O’Callaghan, A. Tang, M. Marquart, E. Bednarsek, K. N_BLACK. Department of Ophthalmology, Wayne State University - School of Medicine, Detroit, MI.

6129 — D989 Cell Contribution To Host Resistance Following Pseudomonas Aeruginosa Corneal Infection But Not To Herpes Simplex Virus Type 1. Katie M. Hudson1, D.J. Carr2,3,4. 1Infection, 2Microbiology, 3Microbiology and Immunology, 4University of Oklahoma Health Sciences Center, Oklahoma City, OK.

6130 — D990 Vasoactive Intestinal Peptide Regulates Toll-like Receptors in the Infected Cornea. Xiaoyu Jiang, S.A. McClellan, R.P. Barrett, E.A. Berger, Y. Zhang, L.D. Hazel1. Department of Anatomy and Cell Biology, Wayne State University School of Medicine, Detroit, MI.

6131 — D991 mTOR Inhibition has Similar Effects to Treatment with Substance P in the Cornea of Pseudomonas aeruginosa-Infected BALB/c Mice. Megan E. Foldenauer, S. McClellan, R. Barrett, L. Hazel1. Anatomy & Cell Biology, Wayne State University School of Medicine, Detroit, MI.

6132 — D992 Pseudomonas aeruginosa Keratitis: Pathogen Genotype Impacts Clinical Presentation and Outcomes. Durga S. Borkar1, S.M. Fleischig1, D.J. Evans2, C. Leong2, P. Lalitha3, M. Srinivasan1, T.M. Lietman1, N.R. Acharya1. 1F. I. Proctor Foundation, University of California, San Francisco, San Francisco, CA; 2School of Optometry, University of California, Berkeley, Berkeley, CA; 3Aravind Eye Hospital, Madurai, India.

6133 — D993 Virulence factors in Pseudomonas aeruginosa keratitis. Henri Suecke1, J. Shankar2, T. Neal3, S. Aldwinek3, C. Winstanley3, S. Tuft3, S.B. Kaye4. Microbiology Ophthalmic Group. 1Ophthalmology, 2Microbiology, 3Royal Liverpool University Hospital, Liverpool, United Kingdom; 4Microbiology, University of Liverpool, 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 priya1, R. Sivaganese Karthikeyan1, N. Venkatesh Prajna1, E. Pearlman1, A. Rietsch1, P. Lalitha1. Microbiology, 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 aeruginosha with human corneal fibroblasts in vitro., Ahmad Elsahn1,2, C. Heath1, M. Christoudoulides1, P. Hossain1,2. 1Infection, Inflammation & Immunity, University of Southampton, Southampton, United Kingdom; 2Eye Unit, University Hospital Southampton NHS Foundation Trust, Southampton, United Kingdom.


6139 — D999 Genotypic Characterization of Staphylococcus aureus isolates from Eyes with Keratitis. Takashi Sueke1, S. Hayashi, Y. Ohashi. Department of Ophthalmology, Ehime University,Graduate School of Medicine, Toon-shi, Japan. *CR

6140 — D1000 Molecular Characterization of Virulence Genes Associated with MRSA Keratitis isolates. Jorge Maestre1, E. Perez2, M. Diaz3, E. Alfonso4, D. Miller4. 1Ophthalmology, 2Bascom Palmer Eye Institute, 3University of Miami, Miami, FL.
6141 — D1001 Involvement of Corneal Epithelial Cells in the T<sub>h</sub>17 Response in an In Vitro Bacterial Inflammation Model. Isabel Arranz-Valsero<sup>1</sup>, U. Schultz<sup>2</sup>, L. Contreras-Ruiz<sup>2</sup>, L. Garcia-Posadas<sup>2</sup>, A. Lopez-Garcia<sup>2</sup>, P. Faule<sup>2</sup>, Y. Diebold<sup>2</sup>. 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.


6143 — D1003 Reprogramming Induced by TLR2/4 Agonists Regulates Corneal Immune Responses to Fungal Infection. Xinyi Wu, J. Wang, L. Wang, Y. Li. 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. Goldschmidt<sup>a</sup>, D. Di Cave<sup>b</sup>, S. Degorge<sup>b</sup>, D. Benalaloua<sup>b</sup>, E. Borsali<sup>b</sup>, A. Le Bouter<sup>c</sup>, B. Labelliere<sup>c</sup>, V. Borderie<sup>c</sup>, L. Laroche<sup>c</sup>, C. Chaumeil<sup>c</sup>. Laboratoire de Virologie Moleculaire et Structurale, Gif sur Yvette, France; 2Hospital Bichat AP-HP Cornea, Fondation A de Rothschild, Paris, France; 3Institut de la Vision, Paris, France; 4Genomic Vision, Bagneux, France; 5Celllectis therapeutics SAS, Paris, France. *CR

6145 — D1011 CD8<sup>+</sup> T Cells Inhibit Viral Replication but Become a Source of VEGF Expression During Corneal Herpes Simplex Type I Infection. Christopher D. Conrady<sup>a</sup>, M. Zheng<sup>b</sup>, D. U. Stone<sup>b</sup>, D. J. Carr<sup>b</sup>. 1Microbiology and Immunology, Univ of Oklahoma Hlth Sci Ctr, Oklahoma City, OK; 2Ophthalmology, University of Oklahoma, Oklahoma/Oklahoma City, OK. *CR

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

6153 — D1013 Non-Muscle Myosin II Mediates HSV-1 Entry Into the Cells of the Human and Pig Corneas. Thessicar E. Antoine<sup>a</sup>, D. Shukla<sup>b</sup>,<sup>c</sup>. 1Ophthalmology and Visual Sciences, University of Illinois at Chicago, Chicago, IL.

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

6149 — D1009 Bilateral Herpetic Keratoconjunctivitis in Cancer Patients. Elvia Canseco<sup>a</sup>, J. Modak<sup>b</sup>, A. Kingham<sup>c</sup>, V. Arevalo<sup>c</sup>, S.K. Kim. 1Ophthalmology, UT Houston Health Science Center (UTHSC), Houston, TX; 2Ophthalmology Section/Head and Neck Surgery, UT MD Anderson Cancer Center, Houston, TX. *CR

6150 — D1010 HSV-1-specific Megenaclease May Reduce Ocular Inflammation In A Mouse Model Of Herpes Keratitis. Marc Labetoulle<sup>b</sup>, E.E. Gabison<sup>a</sup>, N. Huot<sup>a</sup>, A. Rousseau<sup>a</sup>, S. Barraudeau<sup>a</sup>, C. Mahier<sup>a</sup>, M. Gaillerd<sup>a</sup>, C. Desseaux<sup>a</sup>, B. Chapellier<sup>a</sup>, A. Ergani<sup>a</sup>. 1Ophthalmology, Hopital 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, Fondation A de Rothschild, Paris, France; 4Institut de la Vision, Paris, France; 5Genomic Vision, Bagneux, France; 6Celllectis therapeutics SAS, Paris, France. *CR

6155 — D1015 Efficacious Clinical Outcome of an Ophthalmic Formulation of Phosphatidylserine- binding Monoclonal Antibody in a Rabbit Model of Acute HSV-1 Keratitis. Christian Clement<sup>a</sup>, H.W. Thompson<sup>b</sup>, P.S. Bhattacharjee<sup>c</sup>, H.E. McFerrin, Jr<sup>c</sup>, W.J. Lukiv<sup>a</sup>, K. Corbin-Lieffert<sup>c</sup>, C.J. Empig<sup>c</sup>, K. Schlunegger<sup>c</sup>, J.M. Hill<sup>c</sup>. 1Ophthalmology, School of Public Health, 1LSUHSC, New Orleans, LA; 2Biology, Xavier University of Louisiana, New Orleans, LA; 3Neuroscience & Ophthalmology, Louisiana State Univ Hlth Sci Ctr, New Orleans, LA; 4Ophthalmology, 5Peregrine Pharmaceuticals, Inc., Tusin, CA; 6Peregrine Pharmaceuticals Inc., Tusin, CA. *CR


6157 — D1017 Mistyping of Human Adenovirus Type 19 Associated with Epidemic Keratoconjunctivitis. Xiaohong Zhou<sup>a</sup>, C.M. Robinson<sup>b</sup>, J. Rajata<sup>c</sup>, D. Seto<sup>c</sup>, M.S. Jones<sup>c</sup>, D.W. Dy<sup>e</sup>, J. Chodosh<sup>a</sup>. 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


6159 — D1019 Treatment of VZV-induced Chronic Pain in a Rat Model of Post-Herpetic Neuralgia Using Replication Defective HSV-1 Expressing the Tonal Modulator Proenkephalin. Paul R. Kinchington<sup>a</sup>, M.B. Yel<sup>b</sup>, M. Zhang<sup>c</sup>, W.F. Goins<sup>b</sup>. 1Ophthalmology/Mol Micro & Genetics, Univ of Pittsburgh Eye & Ear Inst, Pittsburgh, PA; 2Mol Micro & Genetics, Univ of Pittsburgh, Pittsburgh, PA.

6160 — D1020 Neutralizing Kc (cex1) Ameliorates Recurrent Hsk. Patrick M. Stuart, D. West. Ophthalmology, St Louis University, St Louis, MO.

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. Marsovszky2, E. Medgyessy1, A. Balog1, L. Kovacs1, J. Nemeth1. 1Dept Ophthalmology, Semmelweis University, Budapest, Hungary; 2Rheumatology Department, University of Szeged, Albert Szent-Györgyi Clinical Center, Faculty of Medicine, Szeged, Szeged, Hungary.

6186 — D1046 Microarray Based IgE Detection In Tears Of Vernal Keratoconjunctivitis Patients. Andrea Leonardi1A, D. Faggian1B, A. La Gloria1. In Tears Of Vernal Keratoconjunctivitis. 1A, D. Faggian1B, A. La Gloria Valerio1, F. Pileggi1, L. Motterle1, M. Plebani1. 1Neuroscience, Ophthalmology, 2Department of Laboratory Medicine, 3University of Padova, Padova, Italy.

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

6188 — D1048 Bone Marrow Derived Dendritic Cells Prevent Corneal Allograft Rejection In The Rat. Thomas Ritter, M. Nosov, A. Ryan, O. Treacy, M. Cregg, G. Fahy, M. Morcos, L. O’Flynn. 1University of Padova, Padova, Italy. 2University of Bristol, Bristol, United Kingdom.


6190 — D1050 Etiologic Diversity Of Atypical And Severe Anterior Uveitis. Audrey Fel1, M. Bojanova1, V. Toutou1, P. Le Houang1, F. Rozenberg2, B. Bodaghi2. 1Ophthalmology, Hospital la Pitie Salpêtrière, Paris, France; 2Virology, Hospital Cochin, Paris, France.

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


6194 — D1054 Emergence Of Pan-drug Resistant Pseudomonas Aeruginosa As A Cause Of Microbial Keratitis. Merle Fernandes1, A. Pathengay1, N. Kumar1A, 2Cornea and Anterior Segment, 3Ocular Microbiology Service, 4LV Prasad Eye Institute, Visakhapatnam, India; 5Retina, Bascom Palmer Eye Institute, Miami, FL.

6195 — D1055 Antibiotic Resistance Profile Of Ocular Pathogens - An Update from the ARMOR Project. Andrea Leonardi1A, D. Faggian1B, A. La Gloria Valerio1, F. Pileggi1, L. Motterle1, M. Plebani1. 1Neuroscience, Ophthalmology, 2Department of Laboratory Medicine, 3University of Padova, Padova, Italy.


6197 — D1057 Heterogeneous Vancomycin-Intermediate Staphylococci Isolates from Endophthalmitis. Paulo J. Bispø1, D. Miller1. Ophthalmology, Bascom Palmer Eye Institute, Miami, FL; 2Universidade Federal de Sao Paulo, Sao Paulo, Brazil.

6198 — D1058 Microbiological Eradication Rates with BID or TID Dosing of Befloxacin Ophthalmic Suspension, 0.6% in Bacterial Conjunctivitis Clinical Trials from 2004 - 2010. Kirk Bateman, T.L. Comstock, L.S. Gearinger, C.K. Deuter, D. Doycheva, B. Sobolewska. 1Ophthalmology, 2University of Tuebingen, Tuebingen, Germany; 3Physics Department, University of Tuebingen, Tuebingen, Germany.

6199 — D1059 Moxifloxacin Superior To Cefuroxime In Reducing Early-phase Adherence Of Staphylococcus Epidermidis To Hydrophobic Intracorneal Lenses. Fahdalah Benhouzoud, S.A. Bajil1, F. Renaud2, H. Hartmann2, A. Denis1, L. Kodjikian1. 1Ophthalmology, Lyon Croix-Rousse Hospital, Lyon, France; 2Ophthalmology, Saint Roch Hospital, Nice, France; 3Microbiology laboratory, Department of biomaterials and biological interactions, 4Claude Bernard University, Lyon I, Lyon, France.

6200 — D1060 N-chloroacetamide,n-monochloro-deimethylaurine And N-2-chloroethyl-dimethylaurine Are Safe And Effective Bacterialid Agents In Cornea Models. Barbara Teuschner1, E. Schmidt1, M. Nagl1A, N. Bechrazi1A. 1Ophthalmology, 2Microbiology, Innsbruck Medical University, Innsbruck, Austria.

6201 — D1061 Therapeutic Effects of Topical Bacteriophage KPP12 Administration on Pseudomonas aeruginosae Keratitis in Mice. Ken Fukuda1, W. Ishida1, J. Uchiyama1, T. Morita1, Y. Harada1, T. Sumi1, S. Matsuzaki1, M. Daibata1, A. Fukushina1A. 1Ophthalmology, 2Microbiology and Infection, 3Kochi Medical School, Nankoku, Japan; 4Kochi Medical School Hospital, Nankoku, Japan.


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

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

6206 — D1066 In Vivo Effectiveness Of Photodynamic Therapy Against Multi-resistant Pathogens. Katrin Winkler1, M. Finke1, J. Wang1, N. Szentmáry1, T. Eppig1A, H-J. Foth1, D. Büttnerberger1, A. Langenbucher1, B. Seitz1A, M. Bischoff1A. 1Department of Microbiology, 2Department of Ophthalmology, 3Experimental Ophthalmology, 4Saarland University, Homburg, Germany; 5Physics Department, University of Kaiserslautern, Kaiserslautern, Germany; 6Apoare Pharma GmbH, Bielefeld, Germany; 7Experimental Ophthalmology, 8Department of Ophthalmology, 9Saarland University, Homburg/Saar, Germany.


6209 — D1069  Treatment of Infectious Keratitis from Acanthamoeba by Corneal Crosslinking. Martin Berra¹, G. Galperin¹, G. Boscaro¹, J. Zarate¹, J. Tuir¹, P. Charlieu², A. Berra². Lab de Investigaciones Oculares, Buenos Aires, Argentina; ²Biofundus, Buenos Aires, Argentina; ³Servicio de Oftalmologia-Hal Clinicas, Buenos Aires, Argentina.

6210 — D1070  In Vitro Investigation of Riboflavin/UVA-mediated Elimination of Acanthamoeba Castellani. Karim Mekdoumi¹,2, A. Backman¹,2, J. Mortensen¹, S. Crafoord¹,2, Portland, OR; 2Ophthalmology, Emory Eye Center, Atlanta, GA.

6211 — D1071  In Vitro Efficacy Of Amoebicidal Treatment Using Riboflavin/UV-A (365nm) Combination. Jonathan Letsch, Jr¹, A. Sauer¹, C. Speeg-Schatz¹, A. Abou-Bacar², E. Candolfi², T. Bourcier¹. ¹Service d’Ophthalmologie, Nouvel Hopital Civil, Strasbourg, France; ²Laboratoire de Parasitologie et de Mycologie Medicale, Hopitaux Universitaires de Strasbourg, Strasbourg, France.


6214 — D1074  The Effect of Low Concentrations of Benzalkonium Chloride on Acanthamoeba survival. Elmer Y. Tu¹, M.E. Shoff², C.E. Joslin. ¹Ophthalmology, University of Illinois at Chicago, Glenview, IL; ²CDRH/OSEL/DB, FDA, Silver Spring, MD; ³Ophthalmology/Visual Sciences, University Illinois at Chicago, Chicago, IL.


6216 — D1076  Systemic vs. Combination Antiviral Therapy and Retinal Outcomes in Acute Retinal Necrosis. Stephanie K. cramer¹, 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. Mitchell¹,2, P. Tran¹,2, A. Arnett¹,2, T. Mosley¹, R. Hanes¹, C. Jarvis¹,2, A. Hamood², L. Dominguez², T. Reid¹,2. ¹Ophthalmology, ²Microbiology and Immunology, Texas Tech University HSC, Lubbock, TX; ³Selenium 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. Sugar¹,2,3, A.T. Lyon¹, R.A. Lewis¹, D.A. Jabs¹, M-H. Heinemann¹, J.P. Dunn¹, J.H. Kempen. ¹Studies of Ocular Complications of AIDS Research Group. ²Biostatistics, Epidemiology, Bloomberg School of Public Health, The Johns Hopkins University, Baltimore, MD; ³The Sidney Kimmel Comprehensive Cancer Center, Ophthalmology, The Johns Hopkins University School of Medicine, Baltimore, MD; ⁴Ophthalmology, Northwestern University, Chicago, IL; ⁵Ophthalmology, Medicine, Pediatrics, Molecular and Human Genetics, Baylor College of Medicine, Houston, TX; ⁶Ophthalmology, Internal Medicine, Mount Sinai School of Medicine, New York, NY; ⁷Ophthalmology, Weill Cornell Medical College, New York, NY; ⁸Ophthalmic Oncology Service, Department of Surgery, Memorial Sloan Kettering Cancer Center, New York, NY; ⁹Ophthalmology, Epidemiology, Center for Clinical Epidemiology and Biostatistics, The University of Pennsylvania School of Medicine, Philadelphia, PA. *CR

6219 — D1079  The Best Functional Predictor of HIV Status in Relation to the Retinal Damage. Afsana Karim¹,2, I. Kosaz³, D-U.G. Bartsch², H. Lemos¹, L. Dustin¹, J. Chhablani³, G. Barteselli³, H. Wang³, S.P. Azen³, W.R. Freeman. ¹UCSD Jacobs Retina Center; ²Ophthalmology, °University of California San Diego, La Jolla, CA; ³Ophthalmology-Shiley Eye Ctr, Univ of California-San Diego, La Jolla, CA; ⁴Graduate School of Public Health, San Diego State University, san diego, CA; ⁵Biostatistics, University of Southern California, Los Angeles, CA; ⁶Vitreo-Retina, Shiley Eye Center, UCSD, La Jolla, CA; ⁷Preventive Medicine, USC Keck School of Medicine, Los Angeles, CA; ⁸Ophthalmology, UCSD Jacobs Retina Center, La Jolla, CA.

6220 — D1080  Non-Cytomegalovirus Related Ocular Opportunistic Infections in Patients With AIDS. Alice T. Lyon¹, S. Gangapatra¹, J.E. Thorne¹, V. Vaidya¹, L.T. Drye¹. Longitudinal Study of Ocular Complications of AIDS(LSOCA) Research Group. ¹Ophthalmology, Northwestern University, Chicago, IL; ²Ophthalmal & Visual Sciences, Fundus Photograph Reading Ctr, Madison, WI; ³Ophthalmology, Johns Hopkins Wilmer Eye Inst, Baltimore, MD; ⁴Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD.

6221 — D1081  Association between HIV Microangiopathy and Systemic Complications in Patients with AIDS. Yoko Iwasaki¹,², N. Yamamoto¹, T. Kawaguchi¹,², N. Ozaki¹, M. Mochizuki¹, K. Murakami¹. ¹Ophthalmology, Tokyo Metropolitan Cancer and Infectious diseases Center Komagome Hospital, Tokyo, Japan; ²Ophthalmology & Visual Science, Tokyo Medical and Dental University, Tokyo, Japan.


6223 — D1083  Ocular Manifestations in HIV/ AIDS Patients with Concurrent Cryptococcal Meningitis, Ninami E. Coyene Kombo¹, O. Nkomazana², S.H. Forster², R.A. Adelman². ¹Ophthalmology and Visual Science, Yale University School of Medicine, New Haven, CT; ²University of Botsswana School of Medicine, Gaborone, 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. Blaock¹, L.R. Bush¹, C.J. 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. Blaock¹, H. Chien¹, R.D. Dix². ¹Department of Biology, Viral Immunology Center, Georgia State University, Atlanta, GA; ²Department of Ophthalmology, Emory University School of Medicine, Atlanta, GA.
6227 — D1087 Characteristics of Suppressor of Cytokine Signaling (SOCS)1 and SOCS3 Expression in Response to Murine Cytomegalovirus (MCMV) Infection During Health and Retrovirus-Induced Immunosuppression (MAIDS), Christine I. Alston1, H. Chien1, E.L. Blalock1, R.D. Distel2.
1Department of Biology, Viral Immunology Center, Georgia State University, Atlanta, GA; 2Department of Ophthalmology, Emory University School of Medicine, Atlanta, GA.

Hall B/C D1088-D1116

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

Immunology & Microbiology / Cornea / Retina / Retinal Cell Biology

530 Autoimmune Ocular Disease

Moderator: Dale Gregerson


6229 — D1089 Cd4+ Foxp3+ Cd25Bright T Regulatory Cells Population In Ocular Sarcoidosis, Alexis Pinel1, A. Mathian2,2, M. Miyara3, C. Chapelon-Abric1,2, C. Parizo1, D. Boatin1,2, Z. Amoura1, G. Gorochov1,2, P. Lehoang1,2, B. Bodaghi1,2. Ophthalmology, Internal medicine, Immunology, CHU Pitie-Salpetriere, Paris, France; 3INSERM UMR-S 945, Paris, France; 1U972 INSERM, Paris, France.

6230 — D1090 Assessment of Th1, Th2, and Th17 Cells in Birdshot Retinocytoidiopathy, Paul Yang, C.S. Foster. Ophthalmology, Massachusetts Eye Research and Surgery Institute, Cambridge, MA.


6232 — D1092 Clinical Course of Patients with Behcet’s Uveoretinitis that Discontinued Infliximab Therapy, Tatatsuiki Kizugawa1,2, Y. Iwasaki1, S. Kanda1, S. Sugita1, M. Mochizuki1. Ophthalmology, Tokyo Metropolitan Komagome Hospital, Tokyo, Japan; 2Ophthalmology & Visual Science, Tokyo Medical and Dental University, Tokyo, Japan.

6233 — D1093 Anti-DEC205 Mediated Delivery of Self-Antigen to Dendritic Cell Restores Tolerance in Spontaneous EAU, Koju Kano1, C. Martin-Granados1, C. Boub1, M.E. Wikstrom1, M.A. Degli-Eposti1, R.M. Steinman2, J.V. Forrest2. Ophthalmology, University of Aberdeen, Aberdeen, United Kingdom; 2Lion Eye Institute, University of Western Australia, Nedlands, Western Australia, Australia; 3Rockefeller University, New York, NY.

6234 — D1094 Monocyte-derived Macrophages in EAU Resolution, Inbal Benhar1, A. London1, R.R. Caspi1, M. Schwartz1. Neurobiology, Weizmann Institute of Science, Rehovot, Israel; 2Laboratory of Immunology, National Eye Inst/NIH, Bethesda, MD. ©

6235 — D1095 Alpha-1 Adrenergic Stimulation Exacerbates Acute Ocular Inflammation Through A Mechanism Mediated By Transforming Growth Factor Beta (TGFβ), Paola A. Durand1, Y. Tan1, D. Fatnani1, X. Xia1, E. Suarez1, V.I. Perez1, J.L. Vega1. Neurology, Herbert Wertheim College of Medicine-Florida International University, Miami, FL; 2Ophthalmology, Bascom Palmer Eye Institute, Miller School of Medicine, Miami, FL.


6237 — D1097 Role of IC3b-CR3 interaction in Experimental Autoimmune Anterior Uveitis, Bharati Matta, P. Jha, P.S. Bora, N.S. Bora. Ophthalmology, Jones Eye Institute-UAMS, Little Rock, AR.

6238 — D1098 Temporal Expression of miR-155 Correlates with the initiation and Development of Experimental Autoimmune Uveitis (EAU), Bernadette Marrero, Y. Chen-Rong, C. Nagnini, C. Egwaigwa. Immunology, NEI, Bethesda, MD.

6239 — D1099 DAP-12, a Major Immunomediator, Either Promotes or Suppresses EAU Development, Barbara P. Vistica1, V. Montalvo-Reddin1, G. Shi1, L. Nugent2, L. Quigley2. Ophthalmology, Jones Eye Institute-UAMS, Little Rock, AR.

6240 — D1100 Inhibition of CdK5 Attenuates Experimental Autoimmune Uveitis, Zili Zhang1, M. Wang1, A. Nakajima1, J. Horl1. Ophthalmology, Nippon Medical School, Tokyo, Japan; 2Rheumatology, Tokyo Metropolitan Police Hospital, Tokyo, Japan.

6241 — D1101 Immunological Inhibition of Pigment Epithelium-derived Factor (PEDF)2. Charles E. Thirkill, Ocular Immunology Research Lab 1220 Surge III, UC Davis, Davis 95616, CA. © CR

6242 — D1102 Label-free LC-MSMS-based Differential Proteome Analysis of Vitreous from Autoimmune Uveitis Cases, Stefanie M. Hauck1, F. Hofnauzer1, J. Dieter1, M. Blinder1, E. Kremer1, M.E. Swadzba1, B. Amann1, C.A. Deeg1, M. Ueffing1,2. 1Department of Protein Science, Helmholtz Center Munich, Neuhberg, Germany; 2Department for Veterinary Sciences, Institute of Animal Physiology, Munich, Germany; 3Centre for Ophthalmology, Institute for Ophthalmic Research, Tubingen, Germany; 4Institute for Molecular Immunology, Helmholtz Center Munich, Munich, Germany.

6243 — D1103 Hsa-mir-let-7i Treatment Suppresses Thr4 Mediated Mitochondrial Oxidative Stress In Giant Cell Arteritis, Nursing A. Rao, S. Saraswathy. Ophthalmology, Doheny Eye Institute, Los Angeles, CA.

6244 — D1104 Amelioration of Experimental Autoimmune Uveoretinitis by Inhibition of Toxic AGEs Formation, Zhenyu Dong1,2, N. Kitaichie1,2, D. Iwata1,2, R. Ando1,2, J. Fukuhara1,2, A.M. Lennikov1,2, A. Kanda1,2, K. Noda1,2, S. Ohno1,2, S. Ishida1,2. 1Department of Ophthalmology, Laboratory of Ocular Cell Biology and Visual Science, 2Department of Ocular Inflammation and Immunology, Hokkaido University Graduate School of Medicine, Sapporo, Japan; 3Department of Ophthalmology, Health Sciences University of Hokkaido, Sapporo, Japan.

6245 — D1105 Ophthalmological and Histological Manifestations of IgG4-Related Disease, Elise Philippakis, V. Toutou, C. Bloch-Queyrat, A. Rigolet, F. Charlotte, P. LeHoang, B. Bodaghi. Pitie Salpetriere Hospital, Paris, France.

6246 — D1106 Ocular Immun Pathological Analysis in a Murine Model of Anterior Scleritis, Hiroko Taniguchi1, M. Wang1, A. Nakajima1, J. Horl1. Ophthalmology, Nippon Medical School, Tokyo, Japan; 2Rheumatology, Tokyo Metropolitan Police Hospital, Tokyo, Japan.

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


6249 — D1109 Scleritis Associated with Inflammatory Bowel Disease, Matteo Saenz de la Maza1, N. Molina1, L.A. Gonzalez-Gonzalez1, P.P. Doctor1, J. Tuaber1, S. Foster1. 1Instituto Clinico Oftalmologia, Hospital Clinico Oftalmologia, Barcelona, Spain; 2Ophthalmology, Massachusetts Eye Research and Surgery Institution, Cambridge, MA; 3Ophthalmology, Bay-Wiew Clinic, Mumbai, India; 4Ophthalmology, Tauber Eye Center, Kansas City, MO; 5Ophthalmology, Harvard Medical School, Boston, MA.
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


6259 — D1119 In Vitro Activity of ACH-0139586, a Novel Isothiazoloquinolone, Moxifloxacin and Gatifloxacin Against Clinical Isolates, Including Methicillin and Fluoroquinolone Resistant. Aron Shapiro1, L. Belen2, A. Whallock3, D. Salme4. Ora, Inc., Andover, MA; *Eurofins Medinet, Chantilly, VA. *CR

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


6262 — D1122 Prevalence and risk factors of methicillin-resistant Staphylococcus aureus nasal carriage among ophthalmology outpatients in Puerto Rico. Maria H. Berrocal1, V. López1, L.A. Acabá1, A. Acabá2. Ophthalmology, University of Puerto Rico, San Juan, PR; *Bryn Mawr College, Bryn Mawr, PA; *U. of Puerto Rico, San Juan, PR; *U. Puerto Rico, San Juan, PR. *CR

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


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. Weisbord2,6, E. Mandelcorn1, C. Schwartz2, R. Kohly2, K. Eng1, B. W-C. Lam1, P. Kertes2. 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 Busnego1, G. Perez2, W. Trattler3, J.A. Khell4, B. Henderson4. 1General & Surgical Ophthalm, Center for Excellence in EyeCare, Miami, FL; 2Ctr for Excellence in Eye Care, Miami, FL; 3Cornea, Center For Excellence in Eye Care, Miami, FL; 4Ophthalmology/Cornea, Center for Excellence in EyeCare, Miami, FL; 5Boston Eye Surgery and Laser Center, Boston, MA. *CR,  


6272 — D1132 Retinal Damage in Severe Chemical Burn and the Use of Influximab Therapy. Fabiano Cade1,2, E. Paschalidis1, C.V. Regattieri1,2, R. Dana1,3, C.H. Dohlmann1. 1Cornea and Refractive Surgery, Massachusetts Eye & Ear Infirmary, Harvard Medical School, Boston, MA; 2Department of Ophthalmology, 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, H.D. von Pein2, A. Ziegler1. 1Laboratory of Ocular Cell Biology and Visual Science, Department of Ophthalmology, 2Department of Ocular Inflammation and Immunology, Hokkaido University, Sapporo, Japan; 3Department of Ophthalmology, London, United Kingdom; 4Department of Ocular Cell Biology and Visual Science, Department of Ophthalmology, Hokkaido University, Sapporo, Japan.  

6274 — D1134 Twenty-Eight Day Microbial Preservative Efficacy of Loteprednol Etabonate Ophthalmic Ointment, 0.5%; an Unpreserved Ointment with Low Water Activity. Brien C. David, L.S. Gearinger, J. Klingensmith, I.H. Decory. R&D Microbiology, Bausch & Lomb, Rochester, NY. *CR,  

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

6276 — D1136 Amelioration Of Endotoxin-induced Uveitis Treated With An Ikb Kinase Inhibitor. Imd-0354 In Rats. Anton Lennikov1, N. Kitaichi2,3, K. Noda2, R. Ando2, Z. Dong4, K. Namba1, K. Namba1, S. Ohno1, S. Ishida1. 1Laboratory of Ocular Cell Biology and Visual Science, Department of Ophthalmology, 2Department of Ophthalmology, Tokyo, Japan; 3Department of Ophthalmology, Keio University School of Medicine, Tokyo, Japan; 4Wakasa Seikatsu Co., Ltd., Tokyo, 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, K. Tsunoda1, Y. Ozawa1,2. 1Laboratory of Retinal Cell Biology, 2Department of Ophthalmology, Keio University School of Medicine, Tokyo, Japan; 3Wakasa Seikatsu Co., Ltd., Tokyo, Japan. *CR,  

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

6279 — D1139 Topical Application Of Infliximab (Remicade®) In The Treatment Of Corneal Cauterisation. Fabio Bignami1,2, G. Ferrari1,2, C. Giacomini1, S. Franchini1, P. K-H. Sonoda3, S. Kinoshita4. 1Istituto di Oftalmologia, 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.  

6280 — D1140 Identification of The Anti-Inflammatory Annexin-A1 Protein in Tears of Normal Subjects and Association of its Inflammatory Annexin-A1 Protein in Tears Of Patients With Ocular Sarcoidosis. K. Namba1A, K. Namba1A, S. Ohno1B, S. Ishida1A. 1Laboratory of Ocular Cell Biology and Visual Science, Department of Ophthalmology, Hokkaido University, Sapporo, Japan; 2Department of Ophthalmology, University Hospital, Antwerp, Belgium; 3Center for Cell Therapy and Regenerative Medicine, Antwerp University Hospital, Antwerp, Belgium; 4Department of Ophthalmology, Tokyo, Japan. *CR,  

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. Teng2. 1TissueTech and Ocular Surface Center, Miami, FL; 2Ocular Surface Center, Ocular Surface Res & Educ Fndtn, Miami, FL. *CR,  


6283 — D1143 Viscoelastic And Sedimentation Characterization Of Loteprednol Etabonate Ophthalmic Gel, 0.5%. Martin J. Coffey, S.R. Davio. Pharmaceutical Product Development, Bausch and Lomb, Rochester, NY. *CR,  

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


6286 — D1146 Clinical Experience With Sustained-Release Intravitreal Corticosteroid Implants: A Comparison Between The Fluocinolone Acetone (Retisert) And Dexamethasone (Ozurdex) Implants In Uveitis. Cheryl A. Arluck1, C. Foster1, O. Ceroni1, L. Alimukti1. 1Uveitis and Ocular Immunology, Massachusetts Eye Research & Surgery Institute, Cambridge, MA; 2Ophthalmology, Massachusetts Eye and Ear Infirmary, Cambridge, MA. *CR,  

6287 — D1147 Cytokine Levels In The Vitreous Fluid Of Patients With Ocular Sarcoidosis And Patients With Diabetic Retinopathy. Kenji Nagata1, K. Maruyama1, K. Yoned1, T. Yoshimura1, K-H. Sonoda1, S. Kinoshita1. 1Ophthalmology, 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 Gransdorf1, B. Wouters1, J. Rozema1, N. Cools1, V. Van Tendeloo1, Z. Berneman2, M-J. Tassignon1. 1Ophthalmology, Statistics, Hematology, 2Center for Cell Therapy and Regenerative Medicine, University Hospital Antwerp, Antwerp, Belgium; 3Center 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. Hidemori Takahashi1,2, Y. Fujino1, Y. Yang1. 1Ophthalmology, Tokyo KoseiNenkin Hospital, Tokyo, Japan; 2Ophthalmology, University of Tokyo, Tokyo, Japan.  


6292 — D1152  Cytokine Profile In Active Ocular Toxoplasmosis. Amanda Rey Torrente, B. Molins, V. Llorens, L. Pelegrín, M. Mesquida, M. Figueras, A. Adán Civera. Ophthalmology, Hospital Clinic Barcelona, Barcelona, Spain.
6293 — 11:15 Tyrosinase Function Determines Retinal Vascular Regeneration and Retinal Vascular Endothelial Progenitor Cell Recruitment in the Oxygen-Induced Retinopathy Model. Robert C. Symons1, R.S. White2, B.E. O’Bryhim1. 1Ophthalmology, Kansas University Medical Center, Prairie Village, KS; 2Ophthalmology, Kansas University Medical Center, Kansas City, KS; 3Ophthalmology; 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. Symons2. 1Molecular & Integrative Physiology, Univ of Kansas Medical Center, Kansas City, KS; 2Ophthalmology, Univ of Kansas Medical Center, Prairie Village, KS.


6296 — 12:00 Activation of the Endothelin System in Models of Ischemic Retinopathy. Chintan Patel1, W. Zhang2, Z. Xu1, S.P. Narayanan1, N-T. Tsai1, W. Caldwell1, R.B. Caldwell1. 1Vascular Biology Center, #Pharmacology & Toxicology, Georgia Health Sciences University, Augusta, GA; 2Ophthalmopathy, The University of Texas Medical Branch, Galveston, TX.

6297 — 12:15 Progressive Central Photoreceptor Damages and Retinal Pigment Epithelium Abnormalities in Oxygen Induced Retinopathy. Zhipeng Shao1, J. Rivera2, T.E. Zhou1, P. Sapieha3, P. Lachapelle4, S. Chentob5. 1Pharmacology and Therapeutics, McGill University, Montreal, QC, Canada; 2Departments of Pediatrics and Pharmacology, Hôpital Ste Justine, Research Center, Montreal, QC, Canada; 3Ophthalmology, University of Montreal, Montreal, QC, Canada; 4Ophthalmology, McGill U-Montreal Childrens Hosp, Montreal, QC, Canada; 5Pediatrics & Pharmacology, Research Ctr/Hosp Ste Justine, Montreal, QC, Canada.

6298 — 12:30 Netrin-1 Promotes Vascular Regeneration in a Mouse Model of Ischemic Retinopathy. Francois Binet1, G-S. Mawambo-Tagne1, S. Favret1, N. Situras1, N. Tétreault1, A. Cerani1, E. Lapalme1, F. Rezende1, T. Kennedy2, P. Sapieha1. 1Research Center, Maisonneuve Rosemont Hospital, Montreal, QC, Canada; 2Montreal Neurological Institute, McGill University Montreal, QC, Canada.

6300 — 11:15 Decreasing Peripherical Hyperopia With Distance-centre Relatively-plus Powered Periphery Contact Lenses Reduced The Rate Of Progress Of Myopia: A 5 Year Vision Crc Study. Brien A. Holden1,2, P.R. Sankardurg1, P. Lazon De La Jara1, T. Naduvilath1, A. Ho1,2, D.F. Sweeney1, M. Markoullis1, E.L. Smith, J.P. Acharya2,3, E. Ng4, L. Tong5,1. 1Ophthalmology, BPathology, 1University of Melbourne, Melbourne, VIC, Australia; 2Montreal Neurological Institute, McGill University, Montreal, QC, Canada; 3Research and Exploratory Development, Johns Hopkins Univ - APL, Laurel, MD; 4College of Health and Science, University of Western Sydney, Sydney, Australia; 5College of Optometry, University of Houston, Houston, TX; 6Optical Thickness Study.

6302 — 11:45 A Novel Method Of Measuring Tear Evaporation Rates Using Infrared Thermography. Andrea Petznick1, S. Lee2, J. Tan2, U. Acharya1, E. Ng1, L. Tong1. 1Ocular Surface Research Group, Singapore Eye Research Institute, Singapore; 2Singapore Institute of Technology, University of Glasgow, Glasgow, United Kingdom; 3School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore; 3Cornea and External Eye Disease Service, Singapore National Eye Centre, Singapore.

6303 — 11:30 Impact of a Novel Silicone Hydrogel Material on Meibomian Gland Structure. Jason J. Nichols1, K.E. Osborn2, T. Henderson1. 1College of Optometry, University of Houston, Houston, TX; 2Vistakon, Columbus, OH; 3Vistakon, Jacksonville, FL, CR, ©. 4Department of Ophthalmology, Johns Hopkins University, Baltimore, MD; 3The Wilmer Eye Institute at Johns Hopkins, Baltimore, MD; 4Department of Ophthalmology, Johns Hopkins University, Baltimore, MD. CR

6304 — 12:15 Vitrified Collagen Gels with Optimized Material Properties for Repair of Ocular Injuries. Xiaoming Calderon-Colon1, Z. Xia1, Q. Guo1, J.E. Tiffany2, J.P. Maranchi3, R.L. McCully1, O. Schein1, J.H. Ellissieff1, M.M. Trexler1. 1Research and Exploratory Development, Johns Hopkins Univ - APL, Laurel, MD; 2Department of Biomedical Engineering, Johns Hopkins University, Baltimore, MD; 3The Wilmer Eye Institute at Johns Hopkins, Baltimore, MD; 4Department of Ophthalmology, Johns Hopkins University, Baltimore, MD. CR


6306 — 12:45 A Novel Method to Generate Precut Tissue for Descemet Membrane Endothelial Keratoplasty (DMEK). Bjorn O. Bachmann1, U. Schlötzer-Schrehardt2, M. Börge3, F.E. Kruse1. 1Ophthalmology, Universityhospital Erlangen, Erlangen, Germany; 2Deutsche Gesellschaft für Gewebetransplantation (DGTF), Hannover, Germany.

Room 114

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

Immunology & Microbiology / Eye Movements, Strabismus, Amblyopia & Neuro-Ophthalmology / Retina / Retinal Cell Biology

534 Ocular Immune Responses

Moderators: Holly L Rosenzweig and Paul G McMenamin

6307 — 11:15 The Role of Interleukin-17A in a Spontaneous Model of Autoimmune Uveitis Elicited by Retina-specific T Cells. Benjamin C. Chao1, R. Horai2, J. Chen1, C. Zárate-Blades1, R. Villasmil2, C-C. Chan1. 1Brien Holden Vision Institute, Sydney, Australia; 2Laboratory of Immunology, Flow Cytometry Core, National Eye Institute - NIH, Bethesda, MD; 3Howard Hughes Medical Institute, Bethesda, MD.

6308 — 11:30 Abundant II-17 T Cells Induced In Immunized C57Bl6 Mice Are Not Autoreactive. Deming Sun1, D. Liang1, A. Zuo1, H. Shao2, H.J. Kaplan1, H. Nian1. 1DVRIC-411, Doheny Eye Institute, Los Angeles, CA; 2Ophthalm & Visual Sciences, University of Louisville, Louisville, KY; 3Ophthalm & Vis Science, University of Louisville, Louisville, KY.


*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures}
Thursday – Papers – 6310 – 6331

6310 — 12:00 Thrombospondin Receptor CD47

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

6312 — 12:30 In vivo Imaging of Experimental Autoimmune Uveitis disease progression in Cx3cr1-GFP and CD11c-YFP mice. Xiangting Chen1, H.R. Chinney2, J. Kezie1, M. Sidhu1, A. Bernard1, J.V. Forrester1, P.G. McMenamin1, A. Anatomy and Developmental Biology, 2Monash Immunology and Stem Cell Laboratories, 3Monash University, Clayton, Australia; 4School of Medicine (Optometry) Deakin University, Geelong, Australia; 5Anatomy and Developmental Biology, Monash University & Centre For Eye Research Australia, Clayton, Australia; 6Centre 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.L. Li, S. Javadi, 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. Perry2, L.Y. Kim1, K.C. Turnage1, R. Zhang1, D. Vollrath1, I. Schmidt-Krey1, 1School of Chemistry & Biochemistry, 2School of Biology, 3Georgia Institute of Technology, Atlanta, GA; 4Department of Genetics, Stanford University School of Medicine, Palo Alto, CA.

6318 — 12:15 Clusterin in Age-Related Ocular Exfoliation Syndrome. Jorge Ghio1, I. Doudeski1, M. Cowman1, 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 LOX1-1-Associated Pathomechanisms in Exfoliation Syndrome. Katalin Csizsar1, R. Laczk01, K. Molnarne Szuster1, 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 As A Potential Direct Target Gene Of The FOXC1 Transcription Factor. Yoko Ito1, F. Berry1, A. Walter1, 1Medical Genetics, 2Surgery, 3Univ of Alberta, Edmonton, AB, Canada.

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


6326 — 12:30 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. Zhang2, 3Eye Research Institute, Oakland University, Rochester, MI; 4Department of Physiology and Pathophysiology, Xi’an Jiaotong University School of Medicine, Xi’an, China.

6327 — 12:45 Genetic Modulation of the Ratio of Cholinergic Amacrine Cells in the GCL and INL of the Mouse Retina. Irene E. Whitney1, B. Ravan1, A. B. Reese2, G. Yoon3, 1Molecular, Cellular, and Developmental Biology, 2Neuroscience Research Institute, 3Psychological and Brain Sciences, 1University of California, Santa Barbara, CA.

Moderators: Jim Schwiegerling and Sanjeev KasthuriRangan

6328 — 11:15 Optimizing Modified Monovision to Improve Binocular Through-Focus Visual Performance. Len Zheleznyak1, R. Sabesan1, S. MacRae1, G. Yoon1, 1The Institute of Optics, 2Flaum Eye Institute, 3University of Rochester, Rochester, NY, 4University of Rochester, Rochester, NY.

6329 — 11:30 Depth Of Field With Induced coma At Different Orientations. Christina Schwarz1, C. Canovas2, S. Manzanera3, P.M. Prieto4, H.A. Weeber4, P.A. Piers4, P. Arata5, 1Laboratorio de Optica, Universidad de Murcia, Murcia, Spain; 2RD & Abbott Medical Optics, Groningen, The Netherlands.

6330 — 11:45 Visual Outcomes Following Bilateral Implantation of a Trifocal Intraocular Lens. Sunil Shah1, A.L. Sheppard2, U. Bhatt3, J.S. Wolfssohn3, 1Midland Eye Institute, Birmingham, United Kingdom; 2School of Life and Health Sciences, Aston University, Birmingham, United Kingdom.

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

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

537 New Directions for Bipolacency, Multifocality and Restoration of Accommodation

Moderators: Michael A Walter and Tonja S Rex

6314 — 11:15 Innate Immune Network in the Retina Activated by Optic Nerve Crush. Eldon G. Geisert1, J. Templeton2, J.M. Nickerson2, X. Wang2, M.M. Jahbonski1, R.W. Williams1, T.S. Rex1, 1Ophthalmology, University of Tennessee Health Sci Ctr, Memphis, TN; 2Ophthalmology, Emory University, Atlanta, GA.

6315 — 11:30 Hmg-b1 Induces Apoptosis In Retinal Ganglion Cells And Intraretinal Inflammation By Activation Of Tlr4 And Cytokine Release. Maurice Schallenberg1, H. Melkonyan1, S. Thonas2, 1Department of Ophthalmology, University Hospital Essen, Essen, Germany; 2Institute of Experimental Ophthalmology, University of Muenster, Muenster, Germany.

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


6327 — 12:45 Genetic Modulation of the Ratio of Cholinergic Amacrine Cells in the GCL and INL of the Mouse Retina. Irene E. Whitney1, B. Ravan1, A. B. Reese2, G. Yoon3, 1Molecular, Cellular, and Developmental Biology, 2Neuroscience Research Institute, 3Psychological and Brain Sciences, 1University of California, Santa Barbara, CA.

Moderators: Jim Schwiegerling and Sanjeev KasthuriRangan

6328 — 11:15 Optimizing Modified Monovision to Improve Binocular Through-Focus Visual Performance. Len Zheleznyak1, R. Sabesan1, S. MacRae1, G. Yoon1, 1The Institute of Optics, 2Flaum Eye Institute, 3University of Rochester, Rochester, NY, 4University of Rochester, Rochester, NY.

6329 — 11:30 Depth Of Field With Induced coma At Different Orientations. Christina Schwarz1, C. Canovas2, S. Manzanera3, P.M. Prieto4, H.A. Weeber4, P.A. Piers4, P. Arata5, 1Laboratorio de Optica, Universidad de Murcia, Murcia, Spain; 2RD & Abbott Medical Optics, Groningen, The Netherlands.

6330 — 11:45 Visual Outcomes Following Bilateral Implantation of a Trifocal Intraocular Lens. Sunil Shah1, A.L. Sheppard2, U. Bhatt3, J.S. Wolfssohn3, 1Midland Eye Institute, Birmingham, United Kingdom; 2School of Life and Health Sciences, Aston University, Birmingham, United Kingdom.

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.  CR — 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, R

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 McLoon


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

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


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

6341 — 12:45 Sustained IGF-I Treatment Improves Eye Alignment in Adult Strabismic Monkeys. Linda K. McLoon1, C.L. Willoughby1, S.P. Christiansen2, 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.

6342 — 11:15 Retinal Microvascular Signs and 5-year Incidence of Stroke: The Singapore Malay Eye Study. Carol Y. Cheung1,2, W. Tay1, M. Ikrar1-3, E. Tai1, T.Y. Wong2-4. 1Singapore Eye Research Institute, Singapore, Singapore; 2Department of Ophthalmology, 3Department of Medicine, 4Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore.


6345 — 12:00 RAAB+DR - Rapid Assessment of Blindness Including Diabetes: Results of a New Population-based Survey Method in Chiapas (Mexico), Cape Town (South Africa), and Taif (Saudi Arabia). David B. Yorston1,2, S. Polack3, H. Kuper1,4, N. Cockburn3, P. Gomez2, M. Rabiu1. 1Tenent 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. Cheung2, W. Tay1, C.Y. Cheung1, P. Mitchell3, S-M. Saw2, T.Y. Wong2-4. 1Centre for Eye Research Australia, Royal Victorian Eye and Ear Hospital, Melbourne, Australia; 2Singapore Eye Research Institute, Singapore, Singapore; 3Department of Ophthalmology, University of Sydney, Sydney, Australia; 4Department of Epidemiology and Public Health, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore.


Grand D

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

Glaucoma / Clinical & Epidemiologic Research

540 Advances in Glaucoma Surgery

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

6349 — 11:15 Regional Variations In The Rate Of Laser Trabeculoplasty In The Medicare Population. Henry D. Jampel1-4, S.D. Cassard5, D.S. Friedman6, H.A. Quigley7, E.W. Gower2. 1Glaucoma Center of Excellence, 2Dana Center for Preventive Ophthalmology, Johns Hopkins Wilmer Eye Inst, Baltimore, MD; 3Epithelium 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 Trabeculoplasty. Andrew J. White2, A. Mukherjee2, J. Hanspal1, N. Sarkies1, K.R. Martin1, P. Shah1,4.
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 Trabeculoplasty versus Argon Laser Trabeculoplasty in Open Angle Glaucoma and Ocular Hypertension Secondary to Pseudoexfoliation. Francie F. Sti1, S. Kent1, C.M. Hutnik1, K. Damji1, P. Harasyomowycz2, W.G. Hodg1, Y. I. Paw1, A. Crichton1.
1Ophthalmology, University of Western Ontario, London, ON, Canada; 2ThromboGenics NV, Leuven, Belgium; 3ALab of Ophthalmology, Northwestern University, Chicago, IL; 4Ophthalmology, Bascom Palmer Eye Institute, Miami, FL; 5Ophthalmology, Bascom Palmer Eye Institute, Miami, FL; 6Ophthalmology, University of Campinas, Sao Paulo, Brazil; 7Glaucoma Associates of Texas, Dallas, TX; 8Ophthalmology & 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

1Ophthalmology, Robert Wood Johnson Univ Hosp, New Brunswick, NJ; 2Mechanical and Aerospace Engineering, Rutgers University, Piscataway, NJ.

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.P. Costa1, D. Godfrey1, Y.M. Buis1, Ahmed Baerveldt Comparison Study Group.
1Ophthalmology, University of North Carolina, Chapel Hill, NC; 2Glaucoma Service, Moorfields Eye Hospital, London, United Kingdom; 3Biostatistics, Univ of Miami-Bascom Palmer, Miami, FL; 4Ophthalmology, Bascom Palmer Eye Institute, Miami, FL; 5Ophthalmology, University of Campinas, Sao Paulo, Brazil; 6Glaucoma Associates of Texas, Dallas, TX; 7Ophthalmology & Vision Sciences, University of Toronto, Toronto, ON, Canada. *CR, ↪

6354 — 12:15 Postoperative Retinal Function After Recent-onset Retinal Detachment In Relation To The Topography Of The Affected Quadrants. Marcos J. Rubio Caso1, M. Martin-Baranera2, N. Vila Grane1, I. Arias Barquet1, J. Caminal Mitjana1, J. Catala Mora1, P. Garcia Bru1, O. Pujol Goyta1, J. Arruga Ginebreda1, J. Garcia-Arumi1.
1Ophthalmology, Hospital Universitari de Bellvitge, Barcelona, Spain; 2Epidemiology, Consorci Sanitari Integral, Barcelona, Spain; 3Ophthalmology, Hospital Vall d’Hebron, Barcelona, Spain.

Vitreo-Retinal, Academic Medical Center, University of Amsterdam, Amsterdam, The Netherlands.

6358 — 11:45 Correlation Between Pre-Operative Spectral Domain Optical Coherence Tomography Features of Macula Involving Rhegmatogenous and Tractional Retinal Detachments and Post-Operative Outcomes.
Samira Khan, M. Gendy, A.T. Lyon, M. Gill.
Ophthalmology, Northwestern University, Chicago, IL.

Ocular Wound Healing & Therapeutics, Singapore Eye Research Institute, Singapore, Singapore.

1Lab of Ophthalmology, University of Leuven, Leuven, Belgium; 2Ophthalmology, University of Cambridge, Cambridge, 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, ↪

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

387
**Moderator:** Nathan G Congdon

**636 — A1**  Intracocular pressure and ocular perfusion pressure among 10-year incident glaucoma cases in the Age-Related Eye Disease Study (AREDS). Thassarat S. Vajaranant1, J.A. Hallak2,3, C.E. Joslin1,2, 4Ophthalmology and Visual Sciences, 4Epidemiology and Biostatistics, 5University of Illinois at Chicago, Chicago, IL.

**636 — A2**  Evaluation of a Novel Optic Disc Grading Software for used in Population-based Studies. Yih Chung Tham1,2, C-L. Cheung3,4, T. Wong5,6, M. Baskaran1, J. Liu1, B-H. Lee1, J. Wang4, P. Mitchell1, T. Aung2, C-Y. Cheng2, 4Singapore Eye Research Institute (SERI), Singapore National Eye Centre, Singapore, Singapore; 5Department of Ophthalmology, Yonsei University College of Medicine, Seoul, Republic of Korea; 6Department of Ophthalmology, Singapore National University Hospital, Singapore, Singapore; 7Centre for Quantitative Medicine, Office of Clinical Sciences, Duke-NUS Graduate Medical School, Singapore, Singapore; 8Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*Star), Singapore, Singapore; 9Department 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 Aron1A, V. Arora1A, R. Sagar3B, V. Sreenivas4C, A. Moore5, I. Irrcher, D. Jinapriya. 1Ophthalmology, Doheny Eye Institute, Univ. of Southern California, Los Angeles, CA; 2Preventive Medicine, USC Keck School of Medicine, Los Angeles, CA.

**636 — A4**  Metabolic Syndrome and the Risk of Developing Normal Tension Glaucoma. Mijin Kim1, J. Jeoung1, W. Oh1, H. Choi1, M. Kim1, K. Park1, S. Kim1, T-W. Kim1, D. Kim1. 1Department of Ophthalmology, Seoul National University Hospital, Seoul, Republic of Korea; 2Department of Ophthalmology, Seoul National University Bundang Hospital, Seongnam, Republic of Korea; 3Kong Eye Clinic, Seoul, Republic of Korea; 4Department of Ophthalmology, Healthcare System Gangnam Center, Seoul National University Hospital, Seoul, Republic of Korea; 5Department of Ophthalmology, Seoul National University Boramae Hospital, Seoul, Republic of Korea.


**637 — A9**  Profile of Patients Assisted During the 2011 World Glaucoma Week in Araguari - Minas Gerais - Brazil. Fabia F. nogueira1, G.E. Carlos1, D.R. Martins1, G.R. Cunha1, M.S. Arcieri2, N.B. Ramos1, P.E. Rosa1, R.S. Arcieri1, R.L. Pereira1, E.S. Arcieri2. 1School of Medicine, Presidente Antonio Carlos University (UNIPAC), Araguari, Brazil; 2School of Medicine of Ribeirão Preto, University of São Paulo (USP), Ribeirao Preto, Brazil; 3Ophthalmology, University of Campinas (UNICAMP), Campinas, Brazil.


**637 — A12**  Refractive Status In Patients With Narrow Angles. Sarah M. Simpson1, D.C. Warder, A. Moore1, I. Irrcher, D. Janipriya. Department of Ophthalmology, Queen’s University, Kingston, ON, Canada.


**638 — 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). Tami Dada1, 4, V. Arora1, S.K. Gupta2, V. Sreenivas5, P. Vashist1, 4, T. Agarwal2. 1RP Centre for Ophthalmic Sciences, 2Centre for Community Medicine, 3Department of Biostatistics, 4All India Institute of Medical Sciences, New Delhi, India.

**638 — 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. Azen1, 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.

**638 — 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.

**638 — A19**  Prevalence Survey of Structural and Functional Glaucomatous Optic Nerve Abnormalities in Young Chinese Adults. Christopher S. Sales1, M. Margeta1, L. Hsu1, T. Fu1, A. Fang1, M.Y. Kahook1, J. Tsai1. 1Young Chinese-American Glaucoma Prevalence Study Group, S.C. Lin1, K. Singh1. 1Glaucoma, 2Stanford, Palo Alto, CA; 3Ophthalmology, Washington University, St. Louis, MO; 4Ophthalmology, University of Colorado, Aurora, CO; 5Ophthalmology & Visual Sciences, Univ of Iowa Hospitals & Clinics, Iowa City, IA; 6Ophthalmology, Univ of California - SF, San Francisco, CA.

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Hal B/C A80-A98  
Thursday, May 10, 2012, 11:15 AM-1:00 PM  
Visual Psychophysics & Physiological Optics

543 Color Vision

Moderators: Dora F Ventura


3683 — 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.


3685 — A23 The Association Between Compliance with Recommended Follow-up and Glaucomatous Disease Severity in a County Hospital Population. Yoshi Murakami1, C. Ung1, E. Zhang2, T. Affaro1, M.I. Seidman2, K. Singh1. 1Ophthalmology, Stanford University, Stanford, CA; 2Ophthalmology, University of California, San Francisco, San Francisco, CA. *CR

3686 — A24 Systemic Illnesses In Glaucoma: A Possible Link Between Glaucoma And Breast Cancer? Felise May Barte1, S. Muthiah1, B. Adams-Huet1, K. Kooser1. 1Ophthalmology, 1Clinical Sciences, 1University of Texas Southwestern Medical Center, Dallas, TX.


3688 — A26 Direct Cost Of Glaucoma Treatment For Patients With Primary Angle Closure Glaucoma Over 10 Years. Kailing Yong1, H.M. Hoon1, D.T. Quek2, V.W. Wang1, E.L. Lamoureux1, III2, T. Aung2. 1Ophthalmology, Singapore National Eye Centre, Singapore, Singapore; 2StatisticAdmin, Singapore Eye Research Inst, Singapore, Singapore; 1Center for Health Services Research, Singapore National Health Services, Singapore; 1Ophthalmology, University of Melbourne, Melbourne, Australia; 2Singapore Eye Research Institute, Singapore National Eye Centre, Singapore; 1Glaucoma, Singapore National Eye Center, Singapore, Singapore.


Thursday – Posters – 6382 – 6404

3690 — A80 Learning to Name Colors Altered by Colored Filters. Thomas Kuyk, A. Smith4, S. Kunneri1. 1TASC, Inc, Ft Sam Houston, TX; 2Air Force Research Laboratory, Ft Sam Houston, TX.

3691 — A81 Spatio-chromatic Properties Of Human Trichromatic Vision. Elise W. Dees1, S. Gilson1, R.C. Baraus1. 1Optometry & Visual Science, Buskerud University College, Kongsvang, Norway; 1Mathematical Sciences & Technology, Norwegian University of Life Sciences, Ås, Norway.


3695 — A85 Color Contrast Sensitivity Estimated With Two Different Psychophysical Methods. Luiz Carlos L. Silveira1, C.D. Perry1, E.C. Lacerda2, M.M. Jacob1, G.S. Souza1, B.D. Gomes1, M.E. Fitzgerald1. 1Nucleo de Medicina Tropical, 2Instituto de Ciencias Biologicas, Universidade Federal do Para, Belem, Brazil; 3Biology, Biology Xavier University of Louisiana, New Orleans, LA; 1Anat & Neurobiol & Ophthalmol, UTHSC, Memphis, TN.


3697 — A87 Magno- And Dorsal Stream Processing Decline Slower Than Parvocellular Performance In Normal Aging. Maria F. Loureiro1, C. Mateus2, B. Oliveira2, R. Lemos2, A. Reis2, M. Castelo-Branco1. 1Visual Neuroscience, IBILI-Faculty of Medicine-University of Coimbra, Coimbra, Portugal; 2Ophthalmology, University Hospital of Coimbra, Coimbra, Portugal.

3698 — A88 Binocular Enhancement of Color Contrast Sensitivity. Jeff C. Rubin1, B. Stewart2, V. Wong3, J. Boster1, M. Ruelle4, T. Tran1, J. Gooch5, S. Wright1. 1Optometry, UIW Rosenberg School of Optometry, San Antonio, TX; 2Ophthalmology, USAF School Aerospace Medicine, Dayton, OH.


3600 — A90 Cone Isolating Electroretinograms In Individuals With A Mutant Opsin Allele Associated With Cone Dystrophy. James A. Kuchenbecker1, S.H. Greenland1, J. Carroll2, G.A. Fishman1, M.A. Gmeiner1, T.B. Connors Jr1, M. Neitz2, J. Neitz3. Ophthalmology, University of Washington, Seattle, WA; 2Ophthalmology, 4Cell Biology, 6Medical College of Wisconsin, Milwaukee, WI; 1Chicago Lighthouse for People Who Are Blind or Visually Impaired, Chicago, IL; 1Ophthalmology and Visual Sciences, University of Illinois - Chicago, Chicago, IL; 2The Pangere Center for Hereditary Retinal Diseases, Chicago, IL.

3601 — A91 Color vision of female carriers and color vision deficiency subjects evaluated with the Cambridge Color Test. Daniela M. Bonci1, M. Neitz2, J. Neitz2, M. Gauvrit1, M.T. Barboni1, T.L. Costa1, L.L. Silveira1, D.F. Ventura1. Experimental Psychology, University of Sao Paulo, Sao Paulo, Brazil; 1Ophthalmology, University of Washington, Seattle, WA; 1Nucleo de Medicina Tropical, Universidade Federal do Para, Belem, Brazil.


3604 — A94 A New Color Visual Function Test to Evaluate the Aging Changes in Normal Eyes. Kazuo Ichikawa1, S. Yokoyama2, Y. Tanaka2, H. Nakamura1, S. Tanabe2, K. Tanaka2, R. Hora2, Y. Kato1. 1Ophthalmology, Social Insurance Chukyo Hosp, Nagoya Aichi, Japan; 2Faculty of Engineering, Shinshu University, Nagano, Japan; 2Chukyo Eye Clinic, Nagoya Aichi, Japan.
Thursday Posters


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

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

6408 — A98 Does Color Vision Impairment Correlate with Neuropsychological Losses in Visual Space and Object Perception Tests? Rosani A. Teixeira'2, A.L. Moura'2, M.F. Costa'2, A. Taub'3, D. Callegaro'2, D.F. Ventura'2. 1Psychology, 2Department of Psychology, 3Psychiatry, 4Neurology, 5Universidade de Sao Paulo, Sao Paulo, Brazil; 6Experimental Psychology, University of Sao Paulo, Sao Paulo, Brazil.

Hall B/C A302-A337

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

Retinal Cell Biology

544 Retinal Degeneration and Neuroprotection

Moderators: Patrice E Fort and Jorgelina M Calandra

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


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

6412 — A305 Morphological Differences And Apoptotic Rate In An Experimental Model Of Retinal Detachment After Systemic Submission Of A Dhea-analogue. Pavlina A. Tsokai'2, I. Charalampopoulos'1, A. Gravanis'1, M.K. Tsilimbaris'1. 1Neurology & Sense Organs, 2Pharmacology, 3University of Crete, Heraklion, Crete, Greece; 4Ophthalmology-Research Act, University of Crete, Heraklion, Greece.

6413 — A306 The Effect Of Ketone Bodies On The Synthesis Of Kyenureic Acid In Bovine Retinal Slices. Tomasz Zarnowski'1, M. Tulidowicz'2, T. Choragiewicz'1, R. Robert'1, T. Kocki'1, W. Turski'1. 1Dept of Ophthalmology, 2Dept of Pharmacology and Toxicology, 3Medical University Lublin, Lublin, Poland.

6414 — A307 Neuroprotective Effects Of Sirna, Targeted Caspase9, And Ateolecomagen Complex On Rat Retinal Damage Induced By Transient Ischemic Injury. Shinichiro Ishikawa'1, A. Hirata'1, J. Nakabayashi', R. Ikaviri', 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'2, M.H. Aung'2, T.S. Obertone'2, J.K. You'2, M.T. Pardue'1,2. 1Rehab R&D Center of Excellence, Atlanta VA Medical Center, Decatur, GA; 2Ophthalmology, Emory University, Atlanta, GA.


6417 — A310 Increased Susceptibility to Retinal Stress In Mice Lacking Sigma Receptor 1 (Srl1). Yonju Ha'1, A. Saut'2, C. Williams'1. 1Neurology & Sense Organs, 2Emory University, Atlanta, GA.

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


6422 — A315 Quantum Dots As Neuroprotective Factor In A Model Of Retinal Photoreceptor Degeneration. Raúl Velez-Montoya'2, N. Madava'2, C.R. Stodd'1, J.L. Olson'2. 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'1, A. Montemani'1, S. Rossì'2, G. Parisi'2, F. Lamoche'2, F. Facchiano'2, G. Ripandelli'4, M. Bartoli'1. 1Ophthalmology, Pharmacology and Toxicology, 2Georgia Health Sciences University, Augusta, GA; 3Experimental Medicine and Pathology, University of Rome La Sapienza, Rome, Italy; 4Hematology and Oncology, Istituto Superiore Di Sanita, Rome, Italy; 5Fondazione GB Bietti, Rome, Italy.


6426 — A319 DHA Restores HNE And PDE5 By Inhibiting Oxidative Damage In RPE At High Glucose Levels. Emma Arroll1, S. Johnsen-Soriano2, M. Miranda2, A. Navea1, J. Romero12, Y. Courtos2, F.F. Behr-Cohen3. UMR 872 team 17, INSERM Centre des Cordeliers, Paris, France; UMR 872 team 17, Université Pierre et Marie Curie et Université Descartes, Paris, France; Ophthalmology, Hotel Dieu de Paris, Université Paris Descartes. INSERM UMR872, Paris, France.

6427 — A320 Transferrin Delivery In The Eye Protects Photoreceptors From Light-Induced Retinal Degeneration. Emillie Picard3, M. Berdugo4, M. El Sanharawi1, J-C. Jeanny12, L.A. Yannuzzi23. University of Regensburg, Regensburg, Germany; 2Ophthalmology, University Hospital Lozano Blesa. Aragon Health Sciences Institute Molecular Diagnostics Laboratory, Zaragoza, Spain.


6429 — A322 Iron Accumulation In Animal Models Of Genetic Retinal Degeneration: Human Transferrin As A Protector For Photoreceptors. Jean-Claude P. Jeanny1, E. Hadzhialmatovitch2, J. Connell3, S. Greico1, J. Burke1, S. Whitcup3. Institute of Human Genetics, 1Cole Eye Inst/Cleveland Clinic, Cleveland, OH; 2Casey Eye Institute Molecular Diagnostics Laboratory, Oregon Health Science University, Portland, OR.

6430 — A323 TUDCA Prevents Microglia Activation In The P23H Rat Retina. Laura Fernandez-Sanchez1, A. Noailles2, I. Pinilla3, J. Martin-Nieto1, P. Lax3, N. Cuenca4. 1Physiology, Genetics & Microbiology, University of Alicante, Alicante, Spain; 2Ophthalmology, University Hospital Lozano Blesa. Aragon Health Sciences Institute, Zaragoza, Spain.

6431 — A324 Gentamicin-Induced Retinal Degeneration in Dutch Belted Rabbis. Omar Delgado1, J. Demir1, S. Louie1, M. Crowley1, S. Poor1, S. Hanks1, C. Bigelow1, Y. Zhang1, B. Jaffee1, S.M. Liao. Ophthalmology, Novartis, Cambridge, MA.

6432 — A325 Fixation Stability and Central Retinal Sensitivity after Intravitreal Autologous Bone-Marrow Stem Cells for Hereditary Retinal Dystrophy. Rubens C. Siqueira1, A. Messias1, J.C. Volterelli2, K.V. Messias1, R.S. Arici1, R. Jorge1. 1Retina, 2Bone Marrow Transplantation, 3Sao Paulo University, Ribeirao Preto, Brazil. *CR


6434 — A327 A SubmicronVolts Focal ERG Technique for Evaluating Macular Function in Stargardt/FF Dysrophy: Clinical Assessment Of Test Reliability. Benedetto Falsini1, M. Piccardi1, D. Marangoni1, A. Minnella1, M. Bertelli2, S. Bisti1, A. Fadda1. Ophthalmology, Catholic University, Rome, Italy; Ophthalmology, MAGI Laboratory for molecular genetics in rare diseases, Rovereto, Trento, Italy; 1Physiology, University of L’Aquila, L’Aquila, Italy; 2Health and Technology, Istituto Superiore di Sanita, Rome, Italy.


6436 — A329 Progressive RPE Dystrophy in Dutch Belt Rabbis. Meg Ramos12, I. Raymond1, J.G. Hollyfield1. Ophthalmology/Bio-environnemental Division Erika T. Camacho, S. Wirkus. 1University, Glendale, AZ.

6437 — A330 Retinal Degeneration and Microglial Activation in Mouse Models of Neuronal Ceroid Lipofuscinoses. Myrram Mirza1, C. Vol1, L. Woltering1, C. Schuller1, H. Jägle2, 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. Wirks. 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. Stieger1. Department 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 Db2j/~ Mice. Michael Scholz1, M. Fuchs2, J. Atoor1, R. Enz3, J.H. Brandstatter3. Anatomy 2, Biology, 3Department of Biology, University of Erlangen-Nuremberg, Erlangen, Germany; 4Ophthalmology, University Hospital Erlangen, Erlangen, Germany.


6443 — A336 Retinal Histopathology In Eyes from a Patient with Autosomal Dominant Retinitis Pigmentosa caused by the Pro23His Rhodopsin Mutation. Mary E. Rayborn1, V.L. Bonilha1, B.A. Bell1, M.J. Mariano1, G.J. Bauer1, C.D. Beight1, E.I. Traboulsi1, J.G. Hollyfield1. Ophthalmology, 1Cleveland 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  –  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 Caspase8 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 Prionsulin 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. 1Cell & Molecular Medicine, Centro de Investigaciones Biologicas, Madrid, Spain; 2Physiology, University of Alcala, Alcala de Henares, Spain; 3ProRetina Therapeutics SL, Madrid, Spain; 4CBATEG, Universitat Autonoma de Barcelona, Bellaterra, Spain.

6448 — A374 Long-Term Rescue with Gene Therapy in a Mouse Model of Autosomal Dominant Retinitis Pigmentosa (ADRP). Haoyu Mao1, M.S. Gorbatyuk1, B. Rossmeisl2, W.W. Hauswirth2, P. Marin2, C. Choudhury1, M. Gorbatyuk1, 1Molecular Genetics & Microbiology, University of Florida, Gainesville, FL; 2Department of Ophthalmology, NEI, Bethesda, MD.


6450 — A376 Altered Fractalkine Homeostasis In Rd10 Degenerating Mouse Retina. Marina Ziegler1, C. Schubert1, P. Uhrin1, P.K. Ahnelt1, 1Neurophysiology and Neuropharmacology, 2Vascular Biology and Thrombosis Research, 3Medical University of Vienna, Vienna, Austria.

6451 — A377 Characterization of a humanized Mouse-Model for X-linked Retinitis Pigmentosa caused by a point mutation in the Rpgcr gene. Jutta U. Schlegel1, D. Rolf1, M. Bergmann2, B. Lorenz2, K. Stiegler1. 1Department of Ophthalmology, 2Department of Veterinary Anatomy, 3Justus-Liebig-University Giessen, Giessen, Germany.


6453 — A379 ER Stress is Involved in Retinal Degeneration Induced by Human T17m Mutant Rhodopsin. Mansi M. Kunte1, S. Choudhury, V.M. Shinde1, J.F. Manhoni1, M. Miura2, O.S. Gorbatyuk3, M.S. Gorbatyuk1. 1Cell Biology and Anatomy, UNT Health Science Center, Fort Worth, TX; 2Laboratory for Cell Recovery Mechanisms, Brain Science Institute, RIKEN, Tokyo, Japan; 3Department of Molecular Genetics and Microbiology, University of Florida, Gainesville, FL.

6454 — A380 Ethanol Consumption Correlates with Retinal Degeneration and Vision Loss in the P23H Rat. Genma Esquivel1, P. Law1, L. Fernandez-Sanchez1, A. Naosiller1, J. Pinillier1, N. Cuenca1. 1Physiology, Genetics and Microbiology, University of Alicante, Alicante, Spain; 2Ophthalmology, Universityary Hospital Lozano Blesa, Zaragoza, Spain.


6456 — A382 Cbr1 And Cbr2 Controls Cell Division During Retina Development. Lucie P. Pelissier1, C.H. Alves1, D. Lundvig1, M. Garcia Garrido1, V. Sotilhingam1, N. Tanimoto1, J. Klooster1, M. Janrich1, M. Seeliger1, J. Wijnholds1. 1Neuromedical Genetics, Netherlands Inst for Neurosci, Amsterdam, The Netherlands; 2Division of Ocular Neurodegeneration, Institute for Ophthalnic 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. Lewin2, M.S. Gorbatyuk1. 1Cell 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. Akamine1, G.L. Lishomoto1, B.V. Nagy1, D.F. Ventura1, J. Klein-Seetharaman1, D. Hamassaki1, 1Cell and Developmental Biology, 2Experimental Psychology, ’University of Sao Paulo, Sao Paulo, Brazil; 3Structural Biology, University of Pittsburgh, Pittsburgh, PA.

6459 — A385 siRNA preservation in rapidly progressing autosomal dominant retinitis pigmentosa, Brian P. Rossmeisl1,2, H. Mao2,3, A.S. Lewin1,2. 1Genetics, 2Molecular Genetics & Microbiology, 3Genetics, Molecular Genetics & Microbio, ’University of Florida, Gainesville, FL; 4Department of Molecular Genetics and Microbiology, 5Department of Molecular Genetics and Microbiology, ’University of Florida, Gainesville, FL.

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

6461 — A387 Long-term Preservation Of Cone Photoreceptors By A Novel Multifunctional Drug In A Mouse Model Of Human Retinitis Pigmentosa. Bin Lint1, K. Wang1, M.B. Youdim1. 1Anatomy, Eye Institute, 2Anatomy, ’University of Hong Kong, Hong Kong; 3Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel.

6462 — A388 Analysis Of Photoreceptor Abnormality In Gucy2d Knockout Transgenic Pigs. Corinne Kostic1, T. King1, C. Sylvain1, S. Philippe1, S. Lilliac1, C. Sarkis1, J. Mallet1, Y. Arsenijevic1, B. Whetstone1. 1Gene Therapy & Stem Cell Biol, Jules-Gonin Eye Hosp, Univ Lausanne, Lausanne, Switzerland; 2Division of Developmental Biology, The Roslin Institute, University of Edinburgh, Scotland, United Kingdom; 3NewVextys, Paris, France; 4Team of Biotherapy and Biotechnology, CRICM, Paris, France.

*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures – *CR Refer to Program Number in the Clinical Trial (CT) Registration Index – * Travel Grant Awardee
6464 — A390 Zinc Supplementation Affects Lesion Characteristics in a Spontaneous CNV Mouse Model. Neda Barzegar-Befrouei, T. Peto, Y. Ng, D.T. Shima, L. Morse, C.E. Melanosomes. Iron Ions; Comparison with Lipofuscin and Retinal Melanolipofuscin in the Presence of

6467 — A391 Inflammatory Reactions Complicating Exudative Age-Related Macular Degeneration (AMD). D.G. Telander, C.E. Morse, S.S. Park, C.E. Thirkill. UC Davis Eye Center, UC Davis Eye Center, Sacramento, CA; Eye Center, University of California Davis, Sacramento, CA; Ophthalmology, University of California, Davis, Sacramento, CA; Ophthalmology, Univ of California-Davis, Sacramento, CA; ©Ophthalmology and Vision Science, Univ of California Davis Eye Ctr, Sacramento, CA; Research Lab 1220 Surge III, UC Davis, Davis, CA.

6466 — A392 Properdin and Malondialdehyde (MDA) effects on the APOE4 mouse model of Age-Related Macula Degeneration (AMD). Yu To, A. Maeda, M. Groelle, J. Ding, W-C. Song, C. Bowes Rickman. Ophthalmology, ©Ophthalmology and Cell Biology, Duke University Medical Center, Durham, NC; School of Medicine, University of Pennsylvania, Philadelphia, PA.

6467 — A393 Pro-oxidant Properties of Human Retinal Melanolipofuscin in the Presence of Iron Ions; Comparison with Lipofuscin and Melanosomes. Malgorzata B. Rozanowska, L. Kelly, M. Groelle, J. Ding, W-C. Song, C. Bowes Rickman, M. Golczak, A. Maeda, K. Palczewski. ©Ophthalmology, ©Ophthalmal and Cell Biology, 1Duke University Medical Center, Durham, NC; School of Medicine, University of Pennsylvania, Philadelphia, PA.

6466 — A392 Properdin and Malondialdehyde (MDA) effects on the APOE4 mouse model of Age-Related Macula Degeneration (AMD). Una L. Kelly, M. Groelle, J. Ding, W-C. Song, C. Bowes Rickman, M. Golczak, A. Maeda, K. Palczewski. ©Ophthalmology, ©Ophthalmal and Cell Biology, 1Duke University Medical Center, Durham, NC; School of Medicine, University of Pennsylvania, Philadelphia, PA.

6467 — A393 Pro-oxidant Properties of Human Retinal Melanolipofuscin in the Presence of Iron Ions; Comparison with Lipofuscin and Melanosomes. Malgorzata B. Rozanowska, L. Kelly, M. Groelle, J. Ding, W-C. Song, C. Bowes Rickman, M. Golczak, A. Maeda, K. Palczewski. ©Ophthalmology, ©Ophthalmal and Cell Biology, 1Duke University Medical Center, Durham, NC; School of Medicine, University of Pennsylvania, Philadelphia, PA.

6468 — A394 Therapeutic Effects Of Fenofibrate On Laser-induced Choroidal Neovascularization. Yang Hu, Y. Chen, J-X. Ma. OHUHC BSEF 300, ©Harold Hamm Oklahoma Diabetes Ctr, Univ of Oklahoma Hlth Sci Ctr, Oklahoma City, OK; ©Physiology, OHUHC, Oklahoma City, OK.

6469 — A395 Mechanism Of All-Trans-retinal Toxicity: Implications For Stargardt’s Disease And Age-related Macular Degeneration. Ji Chen, K. Okano, T. Maeda, V. Chauhan, M. Golczak, T. Maeda, K. Palczewski. ©Pharmacology, ©Ophthalmology, Case Western Reserve University School of Medicine, Cleveland, OH; ©Ophthalmology, Case Western Reserve University, Cleveland, OH.


6474 — A400 Microrna-335 Inhibits Sod2 Expression And Increases Oxidant-induced Rpe Cell Injury. Haijiang Lin, B.F. Godley. ©Ophthalmology, ©Ophthalmal and Visual Sciences, ©Univ of Texas Medical Branch, Galveston, TX.

6475 — A401 The Inflammatory Response To Immune Complex Formation In The Retina. Salome Murinello, L. Kelly, O. Perry, J.L. Teeling, M. Golczak, A. Maeda. ©Ophthalmology, ©Ophthalmal and Cell Biology, 1Duke University Medical Center, Durham, NC; ©School of Medicine, University of Pennsylvania, Philadelphia, PA.

6476 — A402 Elucidating the correlation between the levels of Macular Xanthophylls and A2E In Normal Indian Donor Eyes, Srinivasan Senthilkumari, R. Ranjith Kumar, A. Kotnala, T. Velpandiar. ©Department of Ocular Pharmacology, Aravind Medical Research Foundation, Madurai, India; ©Department of Ocular Pharmacology & Pharmacy, All India Institute of Medical Sciences, New Delhi, India.

6477 — A403 Linking Retinoids To Clinical Patterns Of AMD. Zoal Albonczyk, D. Higbee, A.M. Hanneken, K.L. Schey, Y. Koutalos, R.K. Crouch. ©Ophthalmology, Medical University of South Carolina, Charleston, SC; ©Molec & Exp Med, The Scripps Research Institute, La Jolla, CA; ©Biochemistry, Vanderbilt University, Nashville, TN.

6478 — A404 Quantification Of CEP By LC MS/MS, Geeng-Fu Jiang, L. Zhang, L. Hong, H. Wang, R.G. Salomon, J.W. Crabill. ©Eye Institute, Cleveland Clinic, Cleveland, OH; ©Department of Chemistry, Case Western Reserve University, Cleveland, OH. ©CR

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

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

6481 — A407 Amyloid-β Peptide Induces Angiogenesis In The Adult Zebrafish Retina. Khomthon P. Cunvong, D. Cameron. ©Graduate College of Biomedical Sciences, ©College of Optometry, ©Western University of Health Sciences, Pomona, CA.

6482 — A408 Intense Physiological Light Upregulates VEGF and Promotes Choroidal Neovascularization via PGC-1α/ERR-α Pathway. Takashi Ueta, T. Inoue, K. Yuda, T. Furukawa, Y. Yanagi, Y. Tamaki. ©Ophthalmology, Univ of Tokyo, School of Med, Bunkyo-ku, Japan; ©Department of Developmental Biology, Osaka Bioscience Institute, Suita, Osaka, Japan.

6483 — A409 Genetic Association of Glucose Transporter Type 1 Variants with Age-Related Macular Degeneration and its Direct Interaction with Complement Factor H at the Protein Level. Elod Kortvely, A.I. Den Hollander, M. Gorza, V. Cipriani, J.R. Yates, C. Hayward, A.F. Wright, S. Fauser, C.C. Hoyng, M. Ueffing. Centre for Ophthalmology, University of Tubingen, Tubingen, Germany; Department of Ophthalmology, Radboud University Nijmegen, Medical Centre, Nijmegen, The Netherlands; Research Unit for Protein Science, Helmholtz Zentrum München, German Research Center for Environmental Health, Neuherberg, Germany; Institute of Ophthalmology, University College, London, London, United Kingdom; Department of Medical Genetics, University of Cambridge, Cambridge, United Kingdom; Institute of Genetics and Molecular Medicine, MRC Human Genetics Unit, Edinburgh, United Kingdom; University Eye Hospital Cologne, Cologne, Germany; Institute for Ophthalmic Research, University Eye Hospital, Tuebingen, Germany.


6485 — A411 Can Environmental Enrichment (EE) Prevent the Rodent Light-Induced Retinopathy (LIR)? Yasmin Kerouci, K. Rousseau, M. Guivrin, M. Quaddoumi, A. Polosa, P. Lachapelle. Ophthalmology and Neurology-Neurosurgery, McGill University-Montreal Children’s Hospital’s Research Institute, Montreal, QC, Canada; Department of Applied Therapeutics, Kuwait University, Faculty of Pharmacy, Kuwait.

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

6488 — A414 Translational diffusion of rainibuzamab and bevacizumab as measured by Fluorescence Recovery after Photobleaching (FRAP). Nishanthan Srikantha1A, K. Suhling1B, Eiichi Nishimura1,2, M. McCloskey1, Y. Jiang1, G.W. Kingdon. 1UCL Institute of Ophthalmology, London, United Kingdom.

6489 — A415 Understanding the Roles of Interferon-Gamma Inducible Chemokines in Progression of Age-related Macular Degeneration (AMD). Syeda F. Absar1, D. Cyr1, Syeda F. Absar1A, A.D. Proia2, M.T. Malik1, P. Bev3, K. Lashkari4. 1Laboratory of Immunology, National Eye Institute, Bethesda, MD; 2Center for Advanced Biotechnology and Medicine, University of Medicine and Dentistry of New Jersey, Piscataway, NJ.


6492 — A418 8-CPT-2-O-Me-cAMP, a Rap1 activator, suppress laser-induced CNV in Mice. Eichi Nishimura1A, M. McCloseky1, Y. Jiang2, G.W. Smith1, H. Wang3, E.S. Witteken4, R. Koide5, M.E. Hartnett1. 1Ophthalmology, John A Moran Eye Ctr, Univ of Utah, Salt Lake City, UT; 2Ophthalmology, Showa University School of Medicine, Tokyo, Japan; 3Cell and Developmental Biology, University of North Carolina, Chapel Hill, NC.

6493 — A419 Impaired Vision in the DNA Double-Strand Break Repair Poly-mutant Mouse. Noemi L. Alvarez-Lindo1, J. Balderola1, J.M. Sammartin1, T. Suarez2, G. Terrados3, B. Escudero1, A. Bernd1, L. Blanco4, P. de la Villa1, E. de la Rosa1. 1Cellular and molecular medicine, Centro de Investigaiones Biologicas-CSIC, Madrid, Spain; 2Centre de Biologia Molecular CSIC-UAM, Madrid, Spain; 3Centro de Nacional de Investigaciones Cardiovasculares, Madrid, Spain; 4Physiology, University of Alcala, Alcala de Henares, Spain.

6494 — A420 Ginseng Mediated Improvement In The Hydraulic Conductivity Of Human Bruch’s Membrane: Potential For Preventive Therapy In AMD. Cheul Muu Sim1, J. Seok1, M. Kang1, Y. Shin1, H. Shin1, Y. Lee1, A. Hussain7. 1Neuron Science Department, Korea Atomic Energy Research Institute, Daejeon, Republic of Korea; 2GBioMix, Jeonju, Republic of Korea; 3Physics, JeonBuk University, Jeonju, Republic of Korea; 4Division of Molecular Therapy, UCL Institute of Ophthalmology, London, United Kingdom. *CR

6495 — A421 The Kinetics of Retinal Gene Expression Profile of Ccl2/Cx3cr1 Double Deficient Mice on rd8 Background. De Fen Shen1, Y. Wang1, K. Jin1, J. Tuo1, M. Xiang2, C-C. De Fen. 1Laboratory of Immunology, National Eye Institute, NIH, Bethesda, MD; 2Center for Advanced Biotechnology and Medicine, University of Medicine and Dentistry of New Jersey, Piscataway, NJ.


6498 — A424 Understanding The Mechanism Behind Enhancing Survival Of Photoreceptors In Culture And Regulation Of Photoreceptor Metabolism. Ken Lindsay1A, T.A. Reh1B, J.B. Harley1C, D. Lamba1C, J. Gust1B. 1Biochemistry, 2Biological Structure, University of Washington, Seattle, WA.


6502 — A428 Diet Can Influence Human Retinal n-3/n-6 VLC-PUFA Ratios. Aihua Liu1, R. Terry3, K. Nelson3, X. Sheng2, P.S. Bernstein1. 1Ophthalm & Visual Sci, Univ of Utah/Moran Eye Center, Salt Lake City, UT; 2Department of Pediatrics, Univ of Utah/Department of Pediatrics, Salt Lake City, UT.


6505 — A431 Modifications Of Glycoproteins In The Bruch’s Membrane Via Glycolaldehyde Or Nitration: A Model For Aging And Inflammation. Mai T. Thao1, J.P. Dillon2A, E.R. Guillard2B. 1Chemistry and Biochemistry, Northern Illinois University, Sycamore, IL; 2Chemistry and Biochemistry, 3Northern Illinois University, DeKalb, IL.


6507 — A433 ArmS2 In/del Polymorphism Predicts Response To Intra Vitreal Anti-vegf Therapy For Choroidal Neovascular Age-related Macular Degeneration (amd). Alan J. Franklin1, M.F. Shuler1, S. Gupta1, J. Myers1, W.B. Lauten1. 1Retina Specialty Institute, Panama City, FL; 2Retina Specialty Institute, Pensacola, FL. *CR
Thursday – Posters – 6508 – 6525

6508 – A434 Conditional Knock-Out of Ran-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. Ferreiraa, A. Saha1, E. Haquex, Y-Z. Lei1, M. Webb2. 1Ophthalmology, Duke University Medical Center, Durham, NC; 2Medicine, Univ of Oklahoma Hlth Sci Ctr, Oklahoma City, OK.

6509 – A435 Image Registration Reveals Sites of Injury from Mitochondrial Oxidative Stress in the Retinal Pigment Epithelium. Alfred S. Lewina, M.P. Krebs, S. Soo, K. Jones, H. Mao. 1Department of Ophthalmology, Val de Grace Military Hospital, Paris, France; 2Desmettes Military Hospital, Lyon, France; 3Ophthalmology, Chamonix Mont-Blanc, France; 4Ecole Nationale de Ski et d’Alpinisme, Chamonix Mont-Blanc, France.

6510 – A436 Genetically-related Inflammatory Priming and Failing Retinal Maintenance Predispose to Age-Related Retinal Degeneration in Mice. Debashri Mustafti2, H. Kohno1, T. Maeda1. 2Department of Molecular Genetics & Microbiology, 1University of Florida, Gainesville, FL; The Jackson Laboratory, Bar Harbor, ME; Department of Ophthalmology, Univ of Florida Coll of Medicine, Gainesville, FL. *CR

6511 – A513 Associations Between Early Signs Of Age-related Macular Degeneration (AMD) And Risk Of AMD In The Fellow Eye In Patients With Unilateral AMD. Mariko Sasaki, H. Okuno, K. Palczewski, T. Maeda, A. Uchida, T. Koto, H. Mochimaru. 1Molecular Genetics & Microbiology, 1University of California, Los Angeles; 2Eye Clinic Maastricht, Maastricht, The Netherlands; 3Ophthalmology, University Eye Clinic Maastricht, Maastricht, The Netherlands; 4Ophthalmology, University Medical Center Utrecht, Utrecht, The Netherlands. *CR


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

6514 – A516 Do Ultraviolet Radiations Induce Earlier Aged Ocular Pathologies Among Mountaineer Guides? Hussan El Chehab, C. Dot2, J. Blein1, J. Herry2, J. Giraud2, F. May2, J. Renard3. 1Department of Ophthalmology, 2Val de Grace Military Hospital, Paris, France; 3Desmettes Military Hospital, Lyon, France; 4Ophthalmologist, Restaurant Chamonix Mont-Blanc, France; 5Ecole Nationale de Ski et d’Alpinisme, Chamonix Mont-Blanc, France.

6515 – A517 Impact Of Visceral Fat, Serum Leptin Levels And High-sensitive Crp Levels On The Pathogenesis Of Age-related Macular Degeneration. Paulina Haus1, K. Kubista1, W. Krugluger1, J. Huber1, S. Binder1. 1Ophthalmology, Rudolf Foundation Clinic, Vienna, Austria; 2Institute for Laboratory Medicine SMZ-East, Vienna, Austria; 3Gynecology, Medical University of Vienna, Vienna, Austria.

6516 – A518 Correlation of Osteoporosis and Incidence of Skin Cancers and AMD grade in the Irish Nun Eye Study Population. Evelyn Moore1, V. Silvestri1, M. Stevenson4, G. Silvestri2. 1Ophthalmology, Royal Group Hospital, Belfast, United Kingdom; 2Ophthalmology, Royal Hospital Trust, Belfast, United Kingdom; 3Centre for Public Health, Centre for Vision and Vascular Science, Queen’s University, Belfast, United Kingdom.

6517 – A519 Plasma Homocysteine And Extracellular Soluble Receptor For Advanced Glycation End Products (mEsrAGE) In Aqueous Humor Of Patients With Age-related Macular Degeneration. Pinio Matoula1,2, K. Ninios1, N. Scentmry1, R. Obeid1, B. Seitz1. 1Department of Ophthalmology, 2Department of Clinical Chemistry and Laboratory Medicine, 1University of Saarland, Homburg, Germany.

6518 – A520 Visual Impairments In Age-related Macular Degeneration To Process Spatial Frequencies During Natural Scene Categorization. Baxandra Hera1, B. Musel2, S. Chokron2, C. Chiquet1, J. Romanet1, J. Le Bas1, J. Pinio Matoula1, 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.


6520 – A522 A Canadian Registry Of Lucentis Treatment To Collect Effectiveness And Safety Data In Patients With Neovascular Age-related Macular Degeneration Over 36 Months (LENS): Findings From A 12-month Interim Analysis. Sebastien Olivier1, A. Charbonneau1, M. Guinta1, F. Saurel2, M. Benete3, B. Rebel2, F. De Takacsy3, R. Li3. 1Ophthalmology, Hospital Maisonneuve-Rosemont, Montreal, QC, Canada; 2Polyclinique de Trois-Rivières, Trois-Rivières, QC, Canada; 3Université de Sherbrooke, Sherbrooke, QC, Canada; 4Clinique ChirurgiVision, Drummondville, QC, Canada; 5Health Sciences Centre-Eye Clinic St John’s, St John’s, NL, Canada; 6Everest Clinical Research Services, Inc., Markham, ON, Canada; 7Novartis Pharmaceuticals Canada Inc., Dorval, QC, Canada. *CR

6521 – A523 The Impact Of Anti-vegf Treatment On Vision-related Quality Of Life In Age-related Macular Degeneration Outside Clinical Trials. Robert P. Finger1, J.B. Hassell1, F. Abed2, M.C. Gilliss3, J.E. Keffe1, R.H. Guym1. 1Centre for Eye Research Australia, Melbourne, Australia; 2Save Sight Institute, Sydney, Australia. *CR


6523 – A525 Spectral Domain Optical Coherence Tomography Treatment Guidance Of Monthly Follow-up Of Patients With Exudative Age-Related Macular Degeneration. Roberto Gallego-Pinazo1, E. Sanz-Marco1, S. Martinez-Castillo1, R. Dolz-Marco1, J. Arévalo1, M. Díaz-Llopis3, 4. 1Ophthalmology, University and Polytechnic Hospital La Fe, Valencia, Spain; 2Retina, Wilmer Eye Institute, Johns Hopkins University School of Medicine, Baltimore, MD; 3King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia; 4Faculty of Medicine, University of Valencia, Valencia, Spain. *CR

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

6525 – A527 One year’s treatment with intravitreal Ranibizumab (lucentis®) and Verteporfin PDT combination therapy at month 2 for neovascular age-related macular degeneration (AMD). Eric Fournaux, M. Dominguez, L. Rosier, L. Velasque. Retine Tourny, Grenoble, France.

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6526 — A528 Clinical Features Of Self-resolving Sub-foveal Choroidal Neovascularisation in ‘Wet’ Age Related Macular Degeneration. Sharmin Badi**1, N. Patel1, S. Walker1. *ophthalmology, William Harvey Hospital NHS trust, Ashford, United Kingdom; †Medical Retina Department, Medical Retina Department, East Kent Hospitals University Foundation NHS Trust, Canterbury, Kent, Kent, United Kingdom.

6527 — A529 Novel Methods to Enhance Reading Ability in Patients with Macular Disease. Anthony Fernandez1, D. Rath1, A. Shah1, H. Fine1, J. Prenger1, W. Feuer2. *ophthalmology, Robert Wood Johnson Medical School, New Brunswick, NJ; 2Bascom Palmer Eye Institute of the University of Miami School of Medicine, Miami, FL. *CR

6528 — A530 A French Version Of Skedread To Identify Reading Difficulties Related To Central Scotoma. Anne Catherine Scherlen1, G. Faure2, M. Goldschmidt3, D. Raffort1, F. Vital-Durand4, Anne Catherine Scherlen1, G. Faure2, University of Miami School of Medicine, Miami, FL.

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. *ophthalmology, Duke University, Durham, NC; †Ophthalmology and Vision Science, University of Coimbra, Coimbra, Portugal; 2Faculty of Medicine, University of Tampere, Tampere, Finland; 3Acucela, Inc., Seattle, WA. *CR


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


6534 — A536 Evaluation of Peripheral Fundusautofluorescence Changes in Patients with Wet ARMD: The OTELOLO Study. Anita Zenger1, M.B. Rougier, H.F. P.E. Stanga2, S. Schmitz-Valskenberg2, L. Roznekie1, U.E. Wolf-Schnurrbusch1,2,4. †Berk Photographic Reading Centre, ‡ophthalmology, ‘University Bern, Bern, Switzerland; 3Service d Ophthalmologie, CHU-Bordeaux Unio de Bordeaux, Bordeaux, France; 4Vitreoretinal Unit, Manchester Royal Eye Hospital, Manchester, United Kingdom; †Ophthalmology, University of Bonn, Bonn, Germany; ‡Department of Ophthalmology, Ludwig-Maximilians-University, Munich, Germany. *CR

6535 — A537 Significance of Small Dense Particles During Treatment of Exudative Age-related Macular Degeneration. Randhir Chavan1, M.B. Rougier, III2, E. Chauhan1,2, W.H. Baldridge3. †Retina and Optic Nerve Research Laboratory, Ophthalmology & Visual Sciences, ‡Retina and Optic Nerve Research Laboratory, Ophthalmology & Visual Sciences, Anatomy & Neurobiology; 3Retina and Optic Nerve Research Lab, Ophthalmology & Visual Sciences, Physiology & Biophysics, Dalhousie University, Halifax, NS, Canada.

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

6537 — A539 Within-visit And Between-visit Repeatability Of The Diagnosys Full-field Stimulus Threshold (D-FST) When Measuring Rod Sensitivity In Patients With Atrophic Age-related Macular Degeneration (ARMD). Martin Klein1, D.G. Birch2, J. Chandler1, J. Koester1, H. Hughes1, A. Reaves1, R. Kubota1. †Rose Silverthorne Ret. Degen. Lab, Retina Foundation of the Southwest, Dallas, TX; ‡ophthalmology, UT Southwestern Medical Center, Dallas, TX; 3Acucela, Inc., Seattle, WA. *CR

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

6538 — A540 Neuropeptide Y Protects Retinal Neuronal Cells From Glutamate-induced Toxicity Through The Activation Of NPY Y4 Receptor. Ana Santos-Carvalho1,2, A.F. Ambrósio3, C. Cavadas1,2. †Center for Neuroscience and Cell Biology, University of Coimbra, Coimbra, Portugal; ‡Faculty of Pharmacy, University of Coimbra, Coimbra, Portugal; 3Center of Ophthalmology and Vision Sciences, IBILI, Faculty of Medicine, University of Coimbra, Coimbra, Portugal.


6540 — A542 Involvement of P2X7 receptor and therapeutic efficacy of Brilliant Blue G in a mouse model of subretinal hemorrhage. Shoji Notomi1, T. Hisatomi2, A. Takeda2, Y. Ikeda2, H. Enaida2, T. Ishibashi, Sr. †ophthalmology, ‡Department of Ophthalmology, Kyushu University, Fukuoka, Japan; †Department of Ophthalmology, Kyushu University, Higashi-ku, Japan.

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

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

6543 — A545 Intercellular Ca2+ Wave Propagation In Patients With Early Age-related Macular Degeneration. Ana Maria Barreira1,2, M.T. Ribeiro1,3,4,2, R. Costa1,2, L.D. Freitas1,2, P. Cipriano1,2, J.M. Costa1,2, H. Monteiro1,2, J. Santos-Carvalho1,2, A.F. Ambrósio3, C. Cavadas1,2. †Center for Neuroscience and Cell Biology, University of Coimbra, Coimbra, Portugal; 2Faculty of Medicine, University of Tampere, Tampere, Finland; 3Institute of Biomedical Engineering, Tampere University of Technology, Tampere, Finland; 4Institute of Biomedical Engineering, University of Tampere, Tampere, Finland.

6545 — A547 Alpha 2 adrenergic agonist receptor in chick retina. Gabriella V. Costa1,4, M.K. Shigetomi1,2, K. Juati-Ustia1,2, K. Larsson1,2, H. Skottman1,2, J. Hyttinen1. †Department of Biomedical Engineering, Tampere University of Technology, Tampere, Finland; 2BioMediTech, Tampere, Finland; †Institute of Biomedical Technology, University of Tampere, Tampere, Finland.

6546 — A548 Angiotensin II upregulates MCP-1 Expression through the NF-kB Pathway in Human Retinal Pigment Epithelium Cells Induced By Mechanical Stimulation. Amna E. Abu Khadhakhi1,2, K. Juati-Ustia1,2, K. Larsson1,2, H. Skottman1,2, J. Hyttinen1. †Department of Biomedical Engineering, Tampere University of Technology, Tampere, Finland; 2BioMediTech, Tampere, Finland; †Institute of Biomedical Technology, University of Tampere, Tampere, Finland.


6548 — A550 Loss of Ife Leads to Progression of Tumor Phenotype in Primary Retinal Pigment Epithelial Cells. Jaya Pranava Gnana Prakasami1, R. Veeranan-Karmegam2,3, V. Coohkandashwamy4, S.K. Reddy5, P.M. Martin5,6, M. Thanagaraju5,6, S.B. Smith5, V. Ganapathy5,6. †Biochemistry and Molecular Biology, ‡Cellular Biology and Anatomy, †Georgia Health Sciences University, Augusta, GA.
**Thursday – Posters – 6549 – 6571**

**6549 — A551** Therapeutic Inhibition Of Retinoblastoma By Nanoceria. Kathryn E. Klump1A, S.V. Kiosoava1A, S. Seid1A, M.A. Dyer1A, J.F. McGinniss1A,2A. "Oklahoma Center for Neuroscience, Department of Ophthalmology, University of Oklahoma Health Sciences Center, Oklahoma City, OK; 1Department of Mechanical Engineering, University of Florida, Gainesville, FL; 2Department of Biomedical Engineering, University of Florida, Gainesville, FL.

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

**6551 — A553** Absorption Of Spio Nanoparticles Using Different Media On Arpe-19 and Hec Cell Cultures. Gustavo T. Grottone1A, R.R. Loureiro1A, J. Couvre2, L. Gamarra3, P. Cristovam1, J.P. Gomes1A. 1Ophthalmology, UNIFESP/Santa Casa de Santos, Santos, Brazil; 2Ophthalmology, UNIFESP, Santos, Brazil; 3Oncology, Instituto Israelita de Pesquisas Albert Einstein, São Paulo, Brazil.

**6552 — A554** Secretion Of VEGF From Polarized RPE By Tnf-a Or Thrombin. Hiroto Terasaki1A, M. Shirasawa1A, N. Arimura1A. 1AoOphthalmology, University of Tokyo, Tokyo, Japan; 2Academic Medical Center, Amsterdam, The Netherlands.

**6553 — A555** CEP290 is Required for Photoreceptor Ciliogenesis and Ventricular Ependymal Cilia Function. Erin Tanamato1A, R. Rachel1A, M. Dewanjee1A, J. Handa1A,2A, V. Vedula1A,2A, A. Panchal1A, G. Kong1A, V.G. Chrysostomou1A, C.A. Pinker1A, A. Bhat1A,2A, A. Limb2A, A. Swaroop1A, B.L. Lam1A, B. Koide1A, A. Duque1A,2A, A. Boesze-Battaglia1A. 1Department of Ophthalmology, University of California-Davis, Davis, CA; 2University of Pennsylvania, Philadelphia, PA; 3Department of Anatomy, Showa University School of Medicine, Tokyo, Japan.

**6554 — A556** Rapid Photoreceptor Degeneration Occurs In Zebrafish at an Early Age. Following Suppression Of Pep Signaling. Brian D. Perkins, L. Dudinsky. Biology, Texas A & M University, College Station, TX.


**6556 — A558** Effect of Storage Temperature on the Viability of Cultured Retinal Pigment Epithelial Cells. Laura Pasovic1A, J.R. Elder1A, P. Aadal1A, T. Lyberg2A, X. Chen1A, T.P. Utheim1A. 1Center for Clinical Research, Department of Ophthalmology, Oslo 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-Nolting1, S. Johnsen-Soriano1, M. Miranda1, C. Romero-Gomez1A. 1Physiology, Univer CEU Cardenal Herrera, Valencia, Spain; 2Fundacion Oftalmologica del Mediterraneo, Valencia, Spain; 3Universidad Catolica ‘San Vicente Mártir’, Valencia, Spain.

**6560 — A562** The Cysteine Prodrug L2-Oxothiazolidine-4-Carbonylic Acid (OTC) Elicits Potent Antioxidant and Anti-inflammatory Effects in RPE: Relevance to Treatment of Age-related Macular Degeneration. Wanvisa Promsote1A, S. Ananth1A, R. Veeranan-Karmegam1A, N. Lambert1A, C-C. Chau1A, V. Ganapathy1A, P.M. Martin1A. 1Biochemistry and Molecular Biology, Pharmacology and Toxicology, Georgia Health Sciences University, Augusta, GA; 2Immunopathology Section, National Eye Institute, Bethesda, MD.

**6561 — A563** Cigarette Smoke Induces Endoplasmic Reticulum (ER) Stress in Retinal Pigment Epithelial (RPE) Cells. Marisol d. Cano1, L. Wang1, A. Wan1, J.T. Handa1A. 1Wilmer Eye Institute/Ophthalmology, Johns Hopkins University, Baltimore, MD; 2Hopkins Wilmer Eye Inst, Baltimore, MD.

**6562 — A564** Whole Number And Spatial Distribution Of The Pouf Family Of Transcription Factors In The Adult Rat Retina. Francisco M. Nalad-Nicolás1A, M. Jimenez-Lopez1A, M. Salinas-Navaarro1A, L. Nieto-Lopez1A, A. Ortin-Martinez1A, C. Galindo-Romero1A, M. Sanchez-Migallon1A, P. Sobrado-Calvo1A, M. Valdiv-Sanz1A, M. Aguado-Barrias1A. 1Unidad de Investigación, Hospital Universitario Virgen de la Arrixaca, Murcia, Spain; 2Oftalmologia, Universidad de Murcia, Murcia, Spain.


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

**6565 — A567** Putative Role for Melanoregulin (Mreg) In Retinoid Lipofuscin Degradation In the Retinal Pigment Epithelium (RPE). Laura S. Frost1A, J.R. Sparrow2A, P.F. Stafon1A, K. Boese-Battaglia1A. 1School of Dental Medicine, University of Pennsylvania, Philadelphia, PA; 2Department of Ophthalmology, Columbia University, New York, NY.

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

**6567 — A569** The Influence of Substrate Elastic Modulus on Retinal Pigment Epithelial Cell Phagocytosis. Kieran S. Boochoon1A, J.T. Davis1A, J.C. Manaran2A, A.M. McDermott3A,4A, W.J. Foster5A,6A. 1Biology & Biochemistry, Physics, Optometry & Vision Science, University of Houston, Houston, TX; 2Ophthalmology, Weill-Cornell Medical College, Houston, TX.

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

6572 — A210 Elevated Intraocular Pressure Increases Serine Protease Levels In The Retina And Promotes Retinal Ganglion Cell Loss. Shirvan 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 Retina. Lihin Jiang, F. Chen, N. Wang. Eye Center, Beijing Tongren Hospital, Beijing, China.


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

6578 — A216 Effects Of 24S-hydroxycholesterol On Primary Glial Müller Cells, New Insights On Müller Cells Function And Cholesterol Homeostasis In The Retina. Cynthia Fourgeau, L. Martine, L. Leclere, B. Buteau, A. Brou, C-G. Catherine, L. Bretilion. INRA, University of Burgundy, Eye, Nutrition & Cell Signalling Res Grp, Dijon, France; Department of Ophthalmology, University Hospital, Dijon, France.

6579 — A217 Neuroprotective Effect of Resveratrol after Optic Nerve Transection. SeokHwan Kim1, J. Park2, M. Kim1, M. Kim1, D. Kim2, J. Jeoung, T-W. Kim4, K. Park2. ‘Ophthalmology, Boramae Hospital, Seoul, Republic of Korea; Ophthalmology, Seoul National University Hospital, Seoul, Republic of Korea; Ophthalmology, Seoul National University Bundang Hospital, Kyunggi, Republic of Korea; Ophthalmology, 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. Shenghai Zhang, X. Sun, J. Wu. Eye & ENT Hospital, Fudan University, Shanghai, China.

6584 — A222 Acid Phosphoglycineline Plays a Role in IR-induced Retinal Degeneration. Jie Fan1, B.X. Wei2, Y.A. Hamann3, C.E. Crosson4. *Ophthalmology-Storm Eye Inst; *Biochemistry and Molecular Biology; *Ophthalmology; Medical Univ of South Carolina, Charleston, SC.

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

6586 — A224 Etaercept, A Widely Used Inhibitor Of Tumor Necrosis Factor-α (tnf-α), Prevents Retinal Ganglion Cell Loss In A Rat Model Of Glaucoma. Mín Rohl1, Y. Zhang, Y. Marukami1, A. Thunov2, D.G. Vavvas1, L. Benowitz1, J.W. Miller1. *Ophthalmology, MEEI, Angiogenesis Research Institute, Oakland University, Rochester, MI.

6587 — A225 a2-adrenergic Receptor Agonist Restores Mitochondrial Transcription Factor A And Oxidative Phosphorylation, And Protects Retinal Ganglion Cells Against Retinal Ischemic Injury. Won-Kyu Jhi1, D. Lee1, K. Kim2, Y. Noh1, R.N. Weinreb1. *Hamilton Glaucoma Center, Neurobiology Center, Children’s Hospital Boston, MA.

6588 — A226 Ocumostatin M Protects Retinal Ganglion Cells in an Optic Nerve Crush Mouse Model. Xin Xia1,2, Y. Li1, Z. Wang1, L. Luo1, R. Noh1A, R.N. Weinreb1A. ‘Eye Center, Beijing Eye & ENT Hospital, Fudan University, Shanghai, China; Shanghai Zhongshan Ophthalmic Center, Sun Yat-sen University, Shanghai, China.


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


6596 — A234 ShH10, A Novel Müller Glia Cell-specific AVA 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, Jr1, D. Schaffer1, J.G. Flannery1, A.M. Demetriades1. *Glaucoma Research Laboratory, Dyson Institute, Weill Medical College of Cornell University, New York, NY; Avalanche Biotechnologies, Inc, Redwood City, CA; *Helen Wills Neuroscience Institute, University of California, Berkeley, Berkeley, CA. *CR


6599 — A237 Alpha-1 Adrenergic Receptor Stimulation Induces Ocular Disease via TGF-Beta-Mediated Mechanisms. Jose L. Vega1, I. Agoulnik1, S. Masli1, F. Mir1, D. Chen1, W. Bowden2, Y. Quang1, E. Suarez1, P. Durand1,2.


6601 — A239 Sirt2 Delays The Death Of Retinal Ganglion Cells After Optic Nerve Crush Injury. Thomas F. Sabjic, A. Ball.

6602 — A240 Subtype- and Location-Dependent Degeneration of Retinal Ganglion Cells in a Mouse Model of Ocular Hypertension. Liang Feng, Y. Zhao1, M. Yoshida2, S. Lindstrom1, T.S. Kim1, J. Cang1, J.B. Troy1, X. Liu1.

6603 — A241 Mechanosensitive Channels In Isolated Rat Retina Ganglion Cells: Response To Strain From Within Neurons. Jingsheng Xia1, J.C. Lim1, W. Lu1, J.M. Beckel1, A.M. Laties1, C.H. Mitchell1,2,3.

6604 — A242 Retinal ganglion cell morphology is not affected by chronic experimental glaucoma in mice selectively expressing Yellow Fluorescent Protein. Giedrius Kalesnykas1, E. Oglesby1, F. Grybauskas1, R. Burdi1, L. Walker1, P.A. Knepper1.


6606 — A244 Alteration Of Lymphocyte Levels In An Autoimmune Model Of Retinal Ganglion Cell Loss. Sandra Kuehn1, R. Noristami1, M. Kuehn1, J. Schwiek1, F. Gras1, B. Dick1, S. Joachimi1. Experimental Eye Research Institute, Ruhr University, Bochum, Germany; Experimental Ophthalmology, University of Mainz, Germany.


6608 — A246 Axonal Subtypes in Normal and Glaucomatous Retinas. Ye Zhou1, X. Zhao2, S. Williams2, W. Kong1, X. Huang1. Ophthalmology, Northwestern University Medical School, Chicago, IL.


6610 — A248 Pre-degenerative Astrocyte Modifications in the Optic Projection of Glaucomatous Mice. Caroline C. Benoist1, J.D. Hopper1, S.D. Crisde1, D.J. Calkins1. Ophthalmology, Vanderbilt Univ Medical Center, Nashville, TN; Pharmaceutical Sciences, Northeastern Ohio Univ College of Med, Rootstown, OH.

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

6612 — A250 Enhancement Of Stem Cell Integration Into The Retina By Modulating Gial Reactivity In An In-vitro Stem Cell Transplantation Model. Alessia Tassoni1, N.D. Bull1, K.R. Martin1,2. Clinical Neurosciences, Centre for Brain Repair, University of Cambridge, Cambridge, United Kingdom; Department of Ophthalmology, University of Cambridge, United Kingdom.

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

6614 — A252 Is Transforming Growth Factor Beta 2 (TGF-β2) An Inducer Of Cross-Linked Actin Networks (CLANs) In Cultured Optic Nerve Head Cells (ONH)? Laura M. Carrie1, N. Pollock1, L. Parauan1, A.F. Clark1, I. Grierison1.

*CR — Travel Grant Awardee

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

† Refer to Program Number in the Clinical Trial (CT) Registration Index
6619 – A608 Aravind Pseudoxefoliation Study (APEX) I: Intraoperative Results. Alan L. Robin1,2, R. Venkatesh3, A. Harripriya1, C. Shivakumar1, V Prabhhu1, M. Sekhar1, B. Talwar1, P. Sathyan1, D. Ramakrishnan1. 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. Uy2, K. Edwards1, T. Olimstead1, T. Veum1, S. Bottr1. 1Clinical and Regulatory Affairs, 2Research & Development, LensAR, Orlando, FL; 3Asian Eye Institute, Makati, Philippines.  

6622 – A611 Morphology of Femtosecond Intrastromal Arcuate Incisions. Perry S. Binder1, B. Gray2, M. Brownell3, J. Martiz, MD4, A. Gwon, MD5, J. Hill1. 1Gavin Herbert Dept of Ophthalm, Univ of California Irvine, CA, San Diego, CA; 2Biological Sciences, R&D; 3Abbott Medical Optics, Santa Ana, CA; 4Cornea, International Refractive Consultants, Spring, TX; 5University of California Irvine, Newport Beach, CA; 6Abbott 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. Findl2, P.V. Vesei-Marlovits3. 1Department of Ophthalmology, Hiething 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. Savary2, E. Agard3, A. Malecles1, N. Chave1, G. Ract-Madoux1, J. Giraud4. 1Ophthalmology, Hopital Desgenettes, Lyon Cedex 03, France; 2Department of Ophthalmology, Hopital Desgenettes, Lyon, France.  

6626 – A615 Visual Quality In Monofocal Lenses: Compare Primary Posterior Capsulorhexis Versus Yag Laser Capsulotomy. Sergio D. Herrera1, Sr., O. Guerrero, Sr., B. Medina1, C. Palacio, C. Mendoza1, L. Arroyo. 1Anterior Segment, Hospital Foundation; Mexico, Mexico.  

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. Fritz2, R.R. Dubielzig1. 1Pathobiological Sciences, UW-Madison School of Veterinary Medicine, Madison, WI; 2Eye Care for Animals, Tustin, CA.  

6628 – A617 Correlation Of Subjective Nuclear Sclerotic Cataract Grading And Intraoperative Cumulative Dispersed Energy During Phacoemulsification. Nakul Shekhawat1, A. Chomsky2, V. Vandenberg University School of Medicine, Nashville, TN; 3VA Tennessee Valley Healthcare System, Nashville, TN.  

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

6630 – A619 Objective Discrimination Between Operable And Non-operable Cataracts. Clemente Paz Filgueira1, R.F. Sanchez1, L.A. Iossolo1, M. Vilaseca1, J. Pujol1, E.M. Colombo. 1Departamento de Luminotecnica, ILAV, CONICET - UNT, San Miguel de Tucuman, Argentina; 2CD6-Optica i Optometria, Universitat Politècnica Catalunya, Terrassa, Spain. *CR  

6631 – A620 Subjective Outcomes Evaluation of Aspheric Diffractive and Asphoric Foldable Aspheric Multifocal IOLs. Dwayne K. Logan1, E. Sadr1. 1Cataract and Refractive Surgery, Atlantis EyeCare, Long Beach, CA; 2Cataract and Refractive Surgery, Atlantis EyeCare, Newport Beach, CA.  

6632 – A621 Quantitative Evaluation Of The Effect Of Oral Propranolol And Sublingual Propranolol on the Phacoemulsification With the OZil-Assisted Clear Cornea Cataract Surgery. Eddy E. Okpara1,5, K. Edwards1A, T. Olmstead1B, V. Teuma1B, S. Bott1B. 1Gavin Herbert Dept of Ophthalm, UMEA University, Umea, Sweden; 2Clinical and Regulatory Affairs, 5Research & Development, OZil, Baltimore, MD.  

6633 – A622 Postoperative Refractive Error After Simultaneous Vitrectomy and Phacoemulsification with Sulcus Fixation of Nuclear Sclerotic Cataract. J-R. Fenolland1, M. Francoz1, D. Sendon1, F. El Asri1, 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.  

6634 – A623 Evaluation Of Subjective Outcomes With Two PreSyringe-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 Assil1, W. Christian, L. Harris. Assil Eye Institute, Beverly Hills, CA. *CR  

6636 – A625 Continuous Intraocular Pressure Measurements During Small Incision Phacoemulsification Surgery In Porcine Eyes. Seung Youn Jeu1, M. Son1, T. Baek2, J. Lee2. 1Ophthalmology, GM St. Mary eye center, Busan, Republic of Korea; 2Ophthalmology, Haedae 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 Giraud1, H. El Chehab2, J-R. Fenolland1, M. Francoz1, D. Sendon1, F. El Asri1, 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. Mönstrom1. 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 Wang1, D.K. Koch1, M.P. Weikert1, R. Jenkins1. Cullen Eye Institute, Dept Ophthalmology, Baylor College of Medicine, Houston, TX.  

6640 – A629 Viscoat Versus Visthusia During Phacoemulsification Cataract Surgery: Corneal And Foveal Changes. Marilina M. Moschos1,2, E.P. Chatzivalli1, T.N. Sergentanis1, I. Ladas2. 11st Department of Ophthalmology, 2Department of Epidemiology and Biostatistics, University of Athens, Athens, Greece.  


6642 – A631 A Comparative Study Of Phacoemulsification With The Ozil-Inelligent Phaco(IP) handpiece and OZil handpiece:retrospective clinical study. Yoshinao Setoguchi1, H. Ito2, H. Nakanishi2, K. Kuroda2, K. Anemiy3, A. Taniguchi1, Y. Okamoto1, A. Ootani1, Y. Tanaka2. 1Japanese Red Cross Wakayama Medical Center, Wakayama, Japan; 2Tanaka Eye Clinic, Wakayama, Japan.  

6643 – A632 Balancing the Small Angle Domain (Accuity) and the Large Angle Domain (Straylight) of the Point-Spread-Function for Cataract Surgery. Thomas J. Van Den Berg1, I.J. van der Meulen2. 1Ophthalmic Research, 2Netherlands Inst for Neurosci, Royal Acad, Amsterdam, The Netherlands; 3Ophthalmology, Academic Medical Center, Amsterdam, The Netherlands. *CR  

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


The Effect Of Anterior Capsulorhexis Optic Capture Of A Suleus Fixed At Iol Implant On Refractive Outcome. Eoghan R. Millar, K. Merchant, D. Steel. 1Royal Victoria Infirmary, Newcastle upon Tyne, United Kingdom; Sunderland Eye Infirmary, Sunderland, United Kingdom.

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.

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.


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

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.

Hall B/C A641-A670

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

Lenses

551 Cataract Surgery II

Moderator: Ales Cvekl


Clinical Outcomes at a VAMC after the Introduction of Universal NSAID Therapy Perioperatively in Cataract Patients. Cameron C. Johnson, R.A. Rombola, P.J. Krall. 1Ophthalmology, 2College of Medicine, 3University of Florida, Gainesville, FL.


Sutureless transcleral Intraocular lens implantation after ocular trauma. Malek Khousani, D. Gaucher, T. Bourcier, C. Speeg, M. Montard, B.Y. Delbosc, M. Saleh. 1ophthalmology, University Hospital of Besancon, Besancon, France; 2ophthalmology, University Hospital 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, Univ Hosp, Besancon, France.

Surgical Changes In Anterior Chamber Depth And Refractive Power After Cataract Surgery With Or Without Simultaneous Vitreous Surgery. Mao Kusano, E. Tsuiki, M. Uematsu, A. Fujikawa, T. Kumagami, K. Suzuma, T. Kitaoka. Ophthalmology, Nagasaki Univ School of Medicine, Nagasaki, Japan.

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


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.

Preoperative Cataract Density Grading by Scheimplug 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.


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


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


The Effect of Posterior Capsule Polishing on Posterior Capsule Opacification. Jeanie Y. Paik, M. Shiloach, M.S. Macsai-Kapl. 1University of Chicago, Chicago, IL; 2NorthShore Univ Health System, Glenview, IL; 3ophthalmology, NorthShore Univ Hlth System, Glenview, IL.
6669 — A658 Retrospective Evaluation of Tecnis Multifocal (ZMA00 or ZMB00) and ReSTOR (SN60D1) Intraocular Lenses Following Phacoemulsification. Gabriela Perez, J.A. Khell, A. Khetrapal, W. Trattler, C. Biznego, F. Spektor. Ctr for Excellence in Eye Care, Miami, FL. *CR, ☑.


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

6672 — A661 Evaluation Of Photorefractive Keratotomy Enhancement For Optimizing Refractive Error In Patients With An Implanted Alcon Acrysof Toric Iol. Eric Liss1, G. Perez2, G. Lacayo3, R.B. Simon1, J.A. Khell, W. Trattler4, C. Biznego5, B. Mendelsohn6, F. Spektor. 1FIU Herbert Wertheim College of Medicine, Sarasota, FL; 2Ctr for Excellence in Eye Care, Miami, FL; 3Cornea, Center For Excellence in Eye Care, Miami, FL; Ophthalmology/Cornea, Center for Excellence in Eyecare, Miami, FL.


6674 — A663 The Effect of Acute Heat Stress on Lens Epithelial Cells: A Novel Therapeutic Strategy for Posterior Capsule Opacification. Matthew Balazi1, B.F. Fernandes1, S. Di Cesare2, S.C. Maloney2, T.J. Granne1, M.N. Burnier, Jr.3. 1Henry C Witelson Ocular Pathology Laboratory, Montreal, QC, Canada; 2Ocular Pathology, Ophthalmology, McGill University, Montreal, QC, Canada. *CR.


6679 — A669 Morgagnian Cataract Simulating Iris Neoplasia: Case Report. Alessandra Protti1, S.A. Gandolfi2, P. Mora3, L. Zografos2. 1Ophthalmology, University of Parma, Parma, Italy; 2Ophthalmology, Jules-Gonin Eye Hospital, Lausanne, Switzerland.


Hall B/C  D701-D729
Thursday, May 10, 2012, 11:15 AM-1:00 PM
Lens

552 Cataract Complications and Drugs

Moderator: Paul G Fitzgerald

6681 — D701 Conjunctival Bacterial Flora And Antibiotic Resistance Patterns After Preoperative Application Of Topical Levofloxacin 0.3%. Herminia Mino de Kaspar1, L.E. Hoffmann1, L. He2, B. Li3, M.M. Nentwich1, C. Haritoglou1, D. Kook1, M. Grueterich1, A. Kampa2. 1Department of Ophthalmology, Ludwig-Maximilians-University, Munich, Germany; 2Department of Ophthalmology, School of Medicine, Stanford University, Stanford, CA.

6682 — D702 Hypertension Complicated by Cardiovascular Disease is an Important Risk Factor for the Development of Intravitreal Floppy Iris Syndrome. Cynthia I. Tung1, G. Vizzieri1, B. Luan1, T.C. Prugger2, J.M. George1, O.J. Alsheikh1. 1Ophthalmology and Visual Sciences, University of Texas Medical Branch, Galveston, TX; 2Ophthalmology and Visual Science, University of Texas Health Science Center at Houston, Houston, TX.

6683 — D703 Is Topical Ketorolac Tromethamine 0.4% Ophthalmic Solution Needed for Cataract Surgery? A Randomized Controlled Trial. Flavia G. Ticly1, R.P. Lira2, F.R. Zanetti1, M. Machado1, G.B. Rodrigues1, C.E. Arieta2. Ophthalmology, UNICAMP, Campinas, Brazil. ☑


6688 — D708 Management Of Vitreal Loss From Posterior Capsular Rapture During Cataract Operation: Posterior Versus Anterior Vitrectomy? Chaerin Park1, S. Wool2, J. Hyon3, T. Kim4, K. Park1. 1Department of Ophthalmology, Seoul National University Hospital, Seoul, Republic of Korea; 2Seoul Artificial Eye Center, Institutes for Biomedical Research, Seoul National University Hospital, Seoul, Republic of Korea; 3Department of Ophthalmology, Seoul National University Bundang Hospital, Seongnam, Republic of Korea.

6689 — D709 Laterality as a Risk Factor for Intraoperative Complications During Cataract Surgery. Danielle Tiefert1, P.A. Legoutko2, M.K. Daly3. 1Ophthalmology, Veterans Affairs Boston Healthcare System, Boston, MA; 2Ophthalmology, Massachusetts Eye and Ear Infirmary, Boston, MA; 3Semiphonic, Novato, CA; 4Ophthalmology, Boston University School of Medicine, Boston, MA.

6690 — D710 Clinical Efficacy Of Lotepranol Etabonate Gel 0.5% In The Treatment Of Ocular Inflammation And Pain After Cataract Surgery. Rajesh K. Rajpal1, R. Siou-Mermet2, T. Erb3A, T.L. Comstock4. 1Cornea Consultants, PC, McLean, VA; 2European Pharmaceutical Clinical Science, Bausch & Lomb, Montpellier, France; 3Biostatistics, 4Medical Affairs, Global Pharmaceutical, Bausch & Lomb, Rochester, NY. *CR, ☑.


6694 — D714 Incidence Of Postoperative Complications In Infants Undergoing Bilateral Simultaneous, Bilateral Sequential, Or Unilateral Cataract Surgery. Sheela Masifi1, E. Agabegi1, B. Schnell2, M.B. Yang1, A. Mozayan.

6695 — D715 Safety of Difluprednate 0.05% after Cataract Surgery in Glaucoma Patients. Jessica Prince-Wolfish, J. Cotliar, A. Mozayan, M. Maged.


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


6700 — D720 Subconjunctival Steroid Injection versus Steroid Eyedrops: Evaluation of the Inflammatory Reaction after Phacoemulsification. Myrthe Dieleman1, R.J. Wubbels2, P.W. de Waard3. 1Rotterdam Ophthalmic Institute, 2Glaucoma, 3Rotterdam Eye Hospital, Rotterdam, The Netherlands. —


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

6704 — D724 Visual Outcomes and Macular Status in Diabetic Patients after Cataract Surgery in a Teaching Institution. Cherrie-An M. Mattis1, M. Gonzalez1, N.Z. Gregory1. 1Surgery-ophthalmology, Miami VA Healthcare System, Miami, FL; 2Ophthalmology, Bascom Palmer Eye Institute, Miami, FL.

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

6706 — D726 Risk Factors For Developing Capsular Distension Syndrome. Maged Nessim1,2, P. Pandy1, M. Tahani2, P. Good3, A.J. Ghawri. 1Glaucoma Services, 2Visual Sciences, 3Birmingham & Midland Eye Centre, Birmingham, United Kingdom; 4Sandwell General Hospital, Birmingham, United Kingdom.


6708 — D728 Factors Influencing Retinal Image Contrast in Eyes with Retrolodos(Rykjavik Eye Study). Kota Nagai2, N. Mita1, N. Hatsuoka1, R. Honda2, H. Osada2, E. Kubo2, H. Sasaki2, K. Sasaki2, F. Jonasson1. 1Ophthalmology, Nagai Eye Clinic, Ibaraki, Japan; 2Department of Ophthalmology, 3Kellogg Eye Center, 4Sandwell General Hospital, 5Birmingham & Midland Eye Centre, Birmingham, United Kingdom; 6Department of Ophthalmology, Tokyo, Japan.

6709 — D729 Ultrastructural Changes In The Crystalline Lens Of Diabetic Patients Treated With Panretinal Argon Laser Photocoagulation. Zelilha Izcar1, M. Kilic1, E. Erdemli1, F. Topal Celikkan1. 1Ophthalmology, Ankara Numune Education and Research Hospital, Ankara, Turkey; 2Histology, Ankara University Medical Faculty, Ankara, Turkey.

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Hall B/C  D730-D762

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

Lens

553 Cataract Training, Modeling, Pediatrics

Moderator: Paul G FitzGerald

6710 — D730 A Comparison of the Outcomes of Resident-Performed Phacoemulsification in Patients on Alpha Blockers Before and After the Description of Floppy Iris Syndrome (IFIS). Asher Neren1, A. Greenberg1, E. Burstein1, C. Muskhopadyay1, A. Schrier1, E. Smith1.

6711 — D731 Optimization of the A Constant for the SRK/T Formula. Eva Nong1, J.C. Merriam1, L. Zhang1, M. Schlesinger1. 1Ophthalmology, 1Biostatistics, 1Columbia University, New York, NY.


6713 — D733 Determination of Endotoxin Concentration in Hyaluronic Acid by The Light Scattering Method. Taiki Ohashi1, Y. Sugiiara1, T. Asano1, T. Hiroto1, M. Sawa1. 1Division of Ophthalmology, 2Department of Visual Sciences, Nihon University School of Medicine, Tokyo, Japan; 3Biophotonics Section, Research & Development Department, Electronics & Optics Division., Kowa Company, Ltd., Tokyo, Japan.


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


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


6725 – D745 Validity of a Miniaturised Open-field Aberrometer with Surgical Application. James S. Wolffsohn1A, U.K. Bhatt1A, A.L. Sheppard2A, S. Shak2A, H. Dua1A, T. Mihashi1A, T. Tanayaguchi1A. 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 Sahler1A, J.F. Bille1A, R. Aguiller1A, S. Zhou1B, D. Schanzlin1A. 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. Chun. Ophthalmology, Univ of S Carolina, School of Medicine, Columbia, SC.


6731 – D751 Biometric Parameters Before And After Mydriasis. Jonathan Shahrak, N. Fisher, E. Rosenfeld, S. Kurtz. Tel Aviv Medical Center, ophthalmology department, Sackler faculty of Medicine, Tel Aviv University, Tel Aviv, Israel.


6733 – D753 Evaluation Of A Warm-up Effect In Resident-Performed Cataract Surgery. Mohsin Chowdhury1A, J.B. Rosenberg2B, J.G. Lee1A, L.A. Essen2B, A.A. Madue2B. 1Albert Einstein College of Medicine, Bronx, NY; 2Department of Ophthalmology and Visual Sciences, 3Division of Critical Care Medicine, Department of Medicine, 4Montefiore Medical Center/Albert Einstein College of Medicine, Bronx, NY; 5Department 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 Wise1A, J. Wang1, A. Rathod1A, N.K. Wade1A, 2Faculty of Medicine, 3Ophthalmology and Visual Sciences, 4University of British Columbia, Vancouver, BC, Canada; 5Office of Dr. N Kevin Wade, Vancouver, BC, Canada.


6740 – D760 Complication Rate and Corneal Endothelial Impact in Phacoemulsification Performed by Ophthalmology Residents at an Argentinian University Hospital. Enrique L. Nebot, Sr.1A, P.R. Ruizsher Vazquez2A, L. Fernández Abuyé1, H. Fernández Mendy1, J.D. Galletti1A, P. Chiaria1A, J.G. Galletti1A. 1Ophthalmology, Hospital of Clinics, University of Buenos Aires, Buenos Aires, Argentina; 2ECOS (Clinical Ocular Studies) Laboratory, Buenos Aires, Argentina.


6742 – D762 Comparison Between Objective And Subjective Assessment Of The Duration Of Cataract Surgery. Brivaël Le Du14A, C. Temstet14A, P-R. Rothschild1A, O. Rostaqui1A, J-B. Daudin1A, D. Monnet, Sr.1A, S. Grabar1A, A.P. Brezin1A. 1Hospital Eye Clinic, 2Biostatistics and epidemiology, 3Cochin Hospital, Paris, France.
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 Dave, M. Bajaj, N. Pushker, M. Chandra, S. Ghose. Ophthalmology, Dr RP Centre, AIIMS, New Delhi, India.


1Ophthalmology & Visual Sciences, Univ of Illinois Eye & Ear Infirmary, Chicago, IL; 2DNA Services Facility, Univ of Illinois at Chicago, Chicago, IL.


1Ophthalmology, Baylor College of Medicine, Houston, TX; 2Ophthalmology, Cullen Eye Inst, Baylor Coll of Med, Houston, TX.

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


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

1Ophthalmology, 2Oculoplastics, 3Pathology, Brown University, Providence, RI.


6756 — D776  Intraoperative Mitomycin C To Retard Future Cicatricis Formation During Severe Cicatricular Lid Retraction Repair. Renelle Pointdujour1, J. Gutman1, C. Calderon1, P. Langer2, R. Shinder2. Ophthalmology, SUNY Downstate Medical Center, Brooklyn, NY; 2Ophthalmology, University of Medicine & Dentistry of New Jersey, Newark, NJ.

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

1Ophthalmology, Cleveland Clinic-Cole Eye Inst, Cleveland, OH; 2Ophthalmology, Cole Eye Institute, Cleveland, OH.


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

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

6762 — D782  Refractive Error in Preschool-Aged Children: Sydney Paediatric Eye Disease Study (SPEDS). Sonia Afsari1, K.A. Rose2, A. Pai1, J. Leone2, P. Mitchell1. Ophthalmology, University of Sydney, Sydney, Australia; 2Discipline of Orthoptics, University of Sydney, Lidcombe, Australia.

6763 — D783  Outcomes Associated with Cataract Surgery in the Pediatric Medicaid Population. Michelle Tarver1, M.K. Repka1, H. Silverman1, R. Domurat1, N. Kordic1, T. Macurdy1. 1CDRH/ODE/DONED, Food and Drug Administration, Silver Spring, MD; 2Ophthalmology, Johns Hopkins Wilmer Eye Inst, Baltimore, MD; 3Acumen, LLC, Burlington, CA.


6765 — D785  Coagulopathy and Retinal Hemorrhage in Pediatric Head Trauma. Aida Bounama1,2, B.J. Forbes1,4, C.W. Christian1,2,8, J. Huang1, G-S. Ying2, K.E. Romero1, J.P. Antigua1, G. Binenbaum1,2. 1Ophthalmology, 2Pediatrics, 3Children’s Hospital of Philadelphia, Philadelphia, PA; 4Pediatrics, 5Children’s Hospital of Philadelphia, Philadelphia, PA; 6Pediatrics, University of California San Diego, San Diego, CA.

1Ophthalmology, 2Anesthesiology, 3Hirzeck Hospital, CHRU Lille, Lille, France; 4Biostatistics unit, CHRU Lille, Lille, France.

6767 — D787  Central Corneal Thickness and Intraocular Pressure in Moderate-Late Premature School Aged Children. Lina H. Raffa1, J. Dahlgren1, J-A. Karlsson1, M.A. Gronland1. 1Department of Ophthalmology, Institute of Neuroscience and Physiology, Gothenburg, Sweden; 2Department of Pediatrics, Institute of Clinical Sciences,The Sahlgrenska Academy at the University of Gothenburg, Gothenburg, Sweden; 3Department of Ophthalmology, Institute of Neuroscience and Physiology, Gothenburg, Sweden.
6768 — D788 Access To Government-insured Vision Care Versus Privatized Dental Care Amongst Canadian Adolescents: Is Cost The Sole Barrier? Kunyoung Yoo1, G. E. Trope2, K. Thavorn2, Y-Jiue2.1, Michael G DeGroat Sch of Med, McMaster University, Hamilton, ON, Canada; 2Department of Ophthalmology and Vision Sciences, McMaster University, Hamilton, ON, Canada; 3Institute of Health Policy, Management and Evaluation, Dalhousie School of Public Health, University 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. Solebo1, J.S. Ral1,2, British Isles Congenital Cataract Interest Group. MRC Centre Epidemiology (Child Health), Institute of Child Health, UCL, London, United Kingdom; 2Kingston Eye Hospital, London, United Kingdom; 3Moorfields Eye Hospital, London, United Kingdom.

6770 — D790 Eye Injuries in US High School Athletes: Results of a Six-Year Epidemiologic Study. Andrew W. Stacey1, C.N. Czyz2, J.A. Foster3, D. Constock4,1. 1Department of Medical Education, Riverside Methodist Hospital, OhioHealth, Columbus, OH; 2Division of Ophthalmology, Section Oculofacial Plastic and Reconstructive Surgery, University of Ohio, 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 tsuruoka1, O. Katsumi1, M. Miyata2, Y. Aoki2, Y. Miyashita3, K. Inoue4, K. Oda3. 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 Beavitzumab Era. Yi hsing Chen1, W-C. Wu, IP. 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. Chan2, E. Lamoureux3, J. Thumboo4, T. Wong5, S. Saw6. 1Pediatric Services, Singapore National Eye Centre, Singapore, Singapore; 2National University Singapore, Singapore, Singapore; 3University of Melbourne, Melbourne, Australia; 4Singapore General Hospital, Singapore, Singapore; 5Singapore Eye Research Institute, Singapore, Singapore.

6780 — D800 Sibling Motivation Cards - New Screening Initiative in South India for Pediatric Eye Disease. Brinda Muthusamy1, B. Dey2, V. Kannusamy1, F. Mouatappa1, H.J. Park1. 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 Raley, A. Summers, J. Vaughan, L. Reznick. Pediatric Ophthalmology, Casey Eye Institute, Portland, OR.

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

556 Corneal Biomechanics

Moderator: Cynthia J Roberts

6784 — D948 Corneal Biomechanical Properties and their Change with Corneal UV-Riboflavin Cross-linking from 2D Flap-Extensionality, Sabine Kung1, 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 Rubinfeld1, W. Trattler2, G. Perez3, C.J. Kaiser1, A. Koreishi1, P. Majmudar2, R.J. Epstein1, S. Bajun2, R. Malhotra2. 1Washington Eye Physicians and Surgeons, Chevy Chase, MD; 2Cornea, Center For Excellence in Eye Care, Miami, FL; 3Cornea Associates of Texas, Dallas, TX; 4Chicago Cornea, Chicago, IL; 5Cleveland Eye Clinic, Cleveland, OH; 6Ophthalmology Associates, St. Louis, MO.


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

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6788 — D952 Lack Of Influence Of Corneal Thickness On Biomechanical Waveforms And How That Impact In Distinguishing Candidates For Lasik Or Prk. Marcony R. Santiago1,2, R. Ambrosio, Jr.,3, W.J. Dups, Jr.,4, D. Smadja1, E.M. Espante6, S.E. Wilson6. 1Ophthalmology, Cleveland Clinic Foundation, Cleveland, OH; 2Ophthalmology, University of Sao Paulo and Rio Laser, Sao Paulo and Rio de Janeiro, Brazil; 3Duke University Eye Center, Durham, NC.


6791 — D955 An Experimental Evaluation Of Know Computer Models Of The Porcine Cornea. Vito Romano1, M. Angellillo1, A. Pandolfi1. 1Second University of Naples, Napoli, Italy; 2University of Salerno, Salerno, Italy; 3Politecnico of Milan, Milano, Italy.

6792 — D956 Automated Measurement Of Corneal Stromal Collagen Fiber Angular Distribution. Moritz Winkler1, K.R. Hauclin1, C.J. Murphy1, D.J. Brown1, J.V. Jester1. 1Theoretical & Applied Optics Division, Avedro, Inc, Waltham, MA; 2Medical Sciences Program, Boston University, Boston, MA; 3Boston Eye Group, Boston, MA.

6793 — D957 Biomechanical Response Of Paired Donor Corneas To An Air Puff: Isolated Corneal vs Intact Whole Cornea. Kimberly Metzler1, A.M. Mahmoud2, J. Liu3,4, D. Lee3,4, S.J. Shiao1, C.J. Roberts1,2,3,4. 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. Huang6, B. Goldhagen6, A.N. Kuo6, N.A. Afshar1. 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 Touboul1, T. Nguyen1, J. Aubry1, J. Gennisson1, M. Tanter1, J. Bercoff1, J. Colin1. 1CHU de Bordeaux, Bordeaux, France; 2Institut Langevin - espci, Paris, France; 3SuperSonic Imagine, Aix-en-Provence, France.★CR

6801 — D965 Natural history of Intacts in keratoconus and corneal ectasia. Jasmin R. Desai1, P.S. Hersh1. 1Ophthalmology, Cornea 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, 2St Petersburg State University, St Petersburg, Russian Federation; 3St-Petersburg Branch I&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. Kamesh1, S. Morali1, A.A. Vincent1, R. Shetty1, H. Matalia1. 1Stem Cell Research Lab, 2Cornea and Refractive Surgery, 3Narayana Nethralaya Post Grad Institute of Ophthalmology, Bangalore, India.★CR

6805 — D969 Implications of New Absorption and Fluorescence Measurements of Riboflavin for Corneal Cross-linking. Pavel Kamaev2, R. Pertaud1, M. Friedman1, D. Muller1. 1Research, 2Avedro, Waltham, MA.★CR

6806 — D970 Ultrasound-enhanced Penetration of Topical Riboflavin into the Corneal Stroma. Ricardo Lamy1,2, E. Chan3,4, H. Zhang5,6, V. Salgaonkar2, C.J. Diederich1, J.M. Stewart1,2. 1Ophthalmology; 2Radiation/Oncology, 3University of California, San Francisco, San Francisco, CA.

6807 — D971 Reducing Riboflavin Pre-soaking Time In Corneal Cross-linking. Silvia Schumacher, J. Werndli, T. Seiler, M. Mrochen. R & D, IROC AG, Zurich, Switzerland.★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

6809 — D973 Treatment of Keratoconus Using Collagen Cross Linking, Vincent Imbrogno, M. Pihlblad. Ophthalmology, University at Buffalo/ Ross Eye Institute, Buffalo, NY.★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 Photocrosslinking Method to Increase Cornea Mechanical Strength. Irene E. Kochevar1, D. Cherfar, T.E. Gisel1, E.E. Verter1, R.W. Redmond2, S. Melki1. 1Wellman Center for Photomedicine, Massachusetts General Hospital, Boston, MA; 2Medical Sciences Program, Boston University, Boston, MA; 3Boston Eye Group, Boston, MA.★CR


6817 — D981 Contralateral Eye Long-term Follow-up Of Prophylactic High-fluence Collagen Crosslinking Combined With Lasik For High Myopia. Kathy M. Trout1, S.L. Wang2, A.J. Kanellopoulos1,2. 1New York University School of Medicine, New York, NY; 2Laservision.gr Institute, Athens, Greece.
6818 — D1182 Atpy, Floppy Eyelid Syndrome, Obstructive Sleep Apnea Syndrome, Eye Rubbing And Keratoconus. Ines Tran1A, J. Harquel1A, A. Sauer1A, D. Gaucher1A, C. Speeg-Schatz2A, P. Bourgon1B, T. Bourcier1A. ¹Service d’Ophthalmologie, ²Service sommeil, ¹CHU de Strasbourg, Strasbourg, France.


6820 — D1194 Long-term Results Of Cross-linking Treatment For Progressive Keratoconus. Dan Epstein1, E. Albè2, R. Vinciguerra2, P. Vinciguerra1A. ¹Ophthalmology, Universitaets Spital Zurich, ZURICH, Switzerland; ²Ophthalmology, Istituto Clinico Humanitas, Milano, Italy.

6821 — D1195 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 Hypoxia In Prediabetes And Type 2 Diabetes. Mary E. Lott1A, B. Smith1, J.E. Slocumb1B, V. Shkivkhar2A, K. Bettmann2A. ¹Heart and Vascular Institute, ²Neurology, ¹Penn State Milton S Hershey Med Ctr, Hershey, PA.


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

6826 — D1156 Effect of Nitric Oxide Inhalation on Retinal Arteriolar Diameter in Minipigs. Ioannis K. Petropoulos1A, A-L. Martin1A, G. Mangiorris1A, E. Mendrinos1A, P.C. Rimensberger1A, C.J. Pournaras1A. ¹Laboratory of Neurobiology and Physiology of the Retinal Circulation, Department of Ophthalmology, ²Department of Pediatrics, ³Geneva University Hospitals, Geneva, Switzerland.


6828 — D1158 Measurement of retinal blood flow using dual beam bi-directional Fourier domain Doppler OCT - comparison with laser Doppler velocimetry. Rene M. Werkmeister1A, N. Dragostinoff1A, S. Palkovits1A, R. Tol'da1A, L. Schmetterer1A,2A. ¹Med Physics and Biomed Eng, ²Clinical Pharmacology, ³Medical University of Vienna, Vienna, Austria.

6829 — D1159 Role of Endothelin-1 in Optic Nerve Head Blood Flow Regulation during Isometric Exercise in Healthy Humans. Agnes Boltz1A,2A, D. Schmid1A, M. Lasta1A, S. Kaya1A, S. Palkovits1A, R. Tol'da1A, G. Fuchsjaeger-Mayrl1A,2A, G. Garhofer1A, L. Schmetterer1A,2A. ¹Department of Clinical Pharmacology, ²Center for Medical Physics and Biomedical Engineering, ³Department of Ophthalmology and Optometry, ⁴Medical University of Vienna, Vienna, Austria.

6830 — D1160 Evaluation of Ultrasound-Assisted Thrombolyisis Using Nontargeted Ultrasound Contrast Agents in a Model of Retinal Vein Occlusion. Walid F. Abdallahi1A, H. Patel1A, E. Grant1A, G. I. Chader1A, M. S. Humayun1A. ¹Ophthalmology, Doheny Eye Institute, Los Angeles, CA; ²Ophthalmology, Faculty of Medicine, Zagazig University, Zagazig, Egypt; ³Radiology, Keck School of Medicine, University of Southern California, Los Angeles, CA. *CR

6831 — D1161 In Vivo Adaptive Optics Imaging Of Retinal Pericytes And Capillary Blood Velocity In Mice. Jesse B. Schalleck1A, Y. Geng1A, D.R. Williams1A,2A. ¹Center for Visual Science, ²The Institute of Optics, ³Flaum Eye Institute, ⁴University 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 Schmidt1A, A. Boltz1A, S. Kaya1A, R.M. Werkmeister1A, N. Dragostinoff1A, M. Lasta1A, E. Polski1A, G. Garhofer1A, L. Schmetterer1A,2A. 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 Garhofer1A, R.M. Werkmeister1A, N. Dragostinoff1A, L. Schmetterer1A,2A. ¹Department of Clinical Pharmacology, ²Biomed Engineering & Physics, ³Medical University of Vienna, Vienna, Austria.

6834 — D1164 Hemodynamic and Microcirculatory Changes of Conjunctival Hypoxia in Rats. Bruce I. Gaynes1A, W.M. Fortune1A, G. Cull1A, C. F. Burgoyne1A, L. Wang1A. ¹Optic Nerve Head Research Lab, ²Ophthalmology, University of Illinois, Chicago, IL.

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

6836 — D1166 Effect Of Breathing Pure Oxygen And A Mixture Of 92% O2 + 8% CO2 On Flicker Induced Vasodilatation. Stefan Palkovits1A, M. Lasta1A, R. Tol'da1A, G. Garhofer1A, L. Schmetterer1A,2A. ¹Clinical Pharmacology, ²Center for Medical Physics and Biomedical Engineering, ³Medical University of Vienna, Vienna, Austria.


6839 — D1169 Bloodflow Regulation In The Optic Nerve Head During Prolonged Elevation Of The Intraocular Pressure. John V. Lovasik1A, H. Kergoat1A, M. Parent1A, M.G. Quigley2A. ¹School of Optometry, University of Montreal, Montreal, QC, Canada; ²Department of Ophthalmology, McGill Univ/Univ of Montreal, Montreal, QC, Canada.


6845 — DI175 Signaling Pathway for Porcine Retinal Arteriolar Constriction to PKC Activation: Roles of L-type Voltage-operated Calcium Channels, Myosin Light Chain Kinase and Myosin Light Chain Phosphatase. Luke B. Potts1, L. Kuo2, W. Xu3, T.W. Hein4. *Ophthalmology, Molecular Regenerative Medicine, Paracelsus University, Salzburg, Austria.


6847 — DI177 Theoretical Analysis Of Myogenic And Metabolic Responses In Retinal Blood Flow Autoregulation. Julia Arciero1, A. Pickrell2, B. Siessky1, A. Harris3. *Mathematics, Indiana University-Purdue University Indianapolis, Indianapolis, IN; 1St. George’s University School of Medicine Grenada West Indies, Great River, NY; 0Ophthalmology, Indiana University School of Medicine, Indianapolis, IN.

6848 — DI178 The Dcx-dsRed Transgenic Rat As A Model To Study Pericyte Function? Andrea Trost1A, F. Schroedl2,3,4,5, B. Bogner2A, C. Strohmair4, C. Rungge1A, G. Grabner4, A. Laigner4A, H.A. Reitsamer4A. *Ophthalmology/Optometry, 1Anatomy, 2Molecular Regenerative Medicine, 3Paracelsus Medical University, Salzburg, Austria.

6849 — DI179 Caffeine Affects Ocular Microcirculation In Young Healthy Subjects. Naim Terai1A, E. Spoerl1A, R.P. Stodmeister2, L.E. Pilkunat4A. *Ophthalmology, 1Dept of Ophthalmology, 2University of Dresden, Dresden, Germany; 3Ophthalmology, University Hospital Carl Gustav Carus, Rodalben, Germany.


6854 — DI184 Dilatation of Porcine Retinal Arterioles via a cAMP/Protein Kinase A and AMP-Activated Protein Kinase-Dependent Mechanism with Cilostazol. Ichiro Tanano, T. Nagaoka, T. Omae, T. Kaminia, S. Ono, A. Yoshida. Ophthalmology, Asahikawa Medical University, Asahikawa, Japan.


6856 — DI186 Intracocular Vascular Communication Through Collateral Vessels In An Experimental Pig Model. Hakan Moren1A, B. Gesslein2, P. Undren1A, S. Andreasson1A, M. Malmsjö1A. *Ophthalmology, Retinal Vascular Research, Lund University, Lund, Sweden; 2Department of Neuroradiology, Skåne University Hospital, Lund, Sweden.

6857 — DI187 Dorzolamide-induced Vasorelaxation of Porcine Ciliary Arteries Is Mediated by Nitric Oxide, Sildie Kringelholt1, U. Simonsson2, T. Bøk2. *Department of Ophthalmology, Aarhus University Hospital, Aarhus C, Denmark; 2Department of Biomedicine, Aarhus University, Aarhus C, Denmark.


6861 — DI191 Time of Collapse of Spontaneous Venous Pulsation. Fabrice Moret1A, W.A. Lagrèze2A, C.M. Poloschek1A, M. Bach2, 4Sect. Visual Function and Electrophysiology, 3Sect. Neuroophthalmology, 1Eye Hospital, University of Freiburg, Freiburg, Germany.

6862 — DI192 Manometric Investigation Of The Relationship Between Pulsatile Ocular Blood Flow And Intraocular Pressure In Living Human Eyes. Nikolaos Karyotakis1A, H.S. Ginis2A, A.I. Dastiridou1B, M.K. Tsilimbaris2A, I.G. Pallikaris1B. *Medicine School, University Of Crete, Heraklion, Greece; 1Institute of Vision & Optics, 0Ophthalmology-Research Acct, University of Crete, Heraklion, Greece; 2Medicine School, University Of Larisa, Larisa, Greece; 3School of Medicine, University of Crete, Heraklion - Crete, Greece. 


6864 — DI194 Optic Nerve Head Capillaries Blood Oxygenation Following Dynamic Exercise in Human. Vasilie Diaconu, P. Sauvageau, Y. Vecea. École D’optométrie, University of Montreal, Montreal, QC, Canada.

6865 — DI195 Age Effects on Retinal Blood Flow Assessed Using Spectral-Domain Optical Coherence Tomography Doppler. Firddaas Yusof1, F. Tayyari1, J.G. Flanagan1A, C. Hudson2A, 3School of Optometry and Vision Sciences, University of Waterloo, Waterloo, ON, Canada; 2Department of Optometry and Visual Science, International Islamic University of Malaysia, Bandar Indera Mahkota, Kuantan, Malaysia; 3Department of Ophthalmology and Vision Sciences, University of Toronto, Toronto, ON, Canada. *CR

6866 — DI196 Effect of Slow Releasing Hydrogen Sulfide Donor GYY4137 on Isolated Bovine Ciliary Artery. Madhura S. Kulkarni1A, E. Al-Shahwan, S.R. Nowilaty. *Ophthalmology, 1School of Pharmacy Sciences, Creighton University, Omaha, NE; 2Pharmacy Sciences, Creighton University, Omaha, NE; 3University of Exeter, Peninsula Medical School, Exeter, United Kingdom.
Thursday, May 10, 2012, 11:15 AM-1:00 PM

**Physiology & Pharmacology**

### 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 Palioura\(^1\), Y. Gobin\(^2\), S.E. Brodie\(^3\), I. Dunkel\(^4\), B. Marr\(^4\), D. Abramson\(^4\).

1Ophthalmic Oncology Service, Memorial Sloan-Kettering Cancer Center, New York, NY; Currently, Department of Ophthalmology, Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston, MA; 2Division of Interventional Neuroradiology, Departments of Radiology, Neurosurgery and Neurology, Weill Cornell Medical College, New York Presbyterian Hospital, New York, NY; 3Department of Ophthalmology, Mount Sinai School of Medicine, New York, NY; 4Department of Pediatrics, Memorial Sloan-Kettering Cancer Center, 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 Hu\(^4\), R.B. Rosen\(^1\), M. Chen\(^1\), S.A. McCormick\(^2\).

1Ophthalmology, Boston Medical Center; 2Veterans Affairs Boston Healthcare System, Boston University School of Medicine, Boston, MA; 3Division of Pharmaceutical Sciences/Winkle College of Pharmacy, University of Cincinnati, Cincinnati, OH. *CR

**6869 — D1199**

**Intraocular Treatments of a New Orthotopic Primary Human Retinoblastoma Xenograft.**

Nathalie Cassoux\(^1\), F. Assayag\(^1\), O. Chouchane-Mlik\(^2\), F. Nemati\(^2\), A. Thuleau\(^2\), J-J. Fontaine\(^2\), I. Acts\(^2\), L. Desjardins\(^2\), F. Doz\(^2\), D. Decaudin\(^2\).


**6870 — D1200**

**RXRG Agonist Bexarotene Suppresses Retinoblastoma Growth by Enhancing TRB1 and p53 Tumor Suppressor Activity.**

Xiaoliong L. Xu\(^1\), J. Jia\(^1\), H. Huang\(^1\), E. Joseph\(^1\), N. Zhou\(^1\), D.H. Abramson\(^1\), X. Fan\(^1\), S.C. Jiang\(^1\).

1Department of Pathology, Ophthalmic Oncology Service, Memorial Sloan Kettering Cancer Center, New York, NY; 2Department 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 Gru-mutant Uveal Melanomas.**

Vasiliyi Poulaki\(^1\), S. Chew\(^1\), B. He\(^1\), V. Eedunnuri\(^1\), D. Bedoya\(^2\), M.J. Jager\(^2\), B.W. O’Malley\(^2\), N. Mitsiades\(^2\).

1Ophthalmology, VA Boston Healthcare System, Boston University, Boston, MA; 2Medicine/Molecular and Cellular Biology, Molecular and Cellular Biology, Baylor College of Medicine, Houston, TX; 3Adrienne Helis Malvin Medical Research Foundation, New Orleans, LA; 4Ophthalmology, Leiden University Med Center, Leiden, The Netherlands.

**6872 — D1202**

**Periocular Tissue Concentration of Propanolol after Delivery with a Gel-forming Solution.**

Michael B. Yang\(^2\), J. Hao\(^1\), H. Liu\(^2\), S. Li\(^2\).

1Abramson Pediatric Eye Institute/Ophthalmology, Cincinnati Children’s Hospital, College of Medicine, Division of Pharmaceutical Sciences/Winkle College of Pharmacy, University of Cincinnati, Cincinnati, OH. *CR

**6873 — D1203**

**Outcomes Of Rho-kinase Inhibition On The Metastatic Profile Of A Uveal Melanoma Cell Line.**

Aitzhan Tapenbayeva, J. Lüke, M. Lüke, S. Grisanti, A. Tora.

Ophthalmology, University of Lübeck, Lübeck, Germany.

**6874 — D1204**

**Nicotinamide Treatment Decreases Secretion of Angiogenic and Inflammatory Cytokines in Uveal Melanoma Cell Lines.**


Ophthalmology, McGill University, Montreal, QC, Canada.

**6875 — D1205**

**Two Years Report: New Experience With Ranibizumab Against Choroidal Melanoma.**

Peter E. Liggett\(^2\), V.A. Kon Jara\(^3\), G. Haffner\(^4\), A. Cherfan, T. Granner, A. Abrahmson Pediatrics Eye Institute/ Ophthalmology, Boston Medical Center; 2Veterans Affairs Boston Healthcare System, Boston, MA; 3Department of Ophthalmology, Leiden University Medical Center, Leiden, The Netherlands.

**6876 — D1206**

**Therapeutic Efficacy By Targeting Correction Of Ntchi-1 induced Aberrants In Uveal Tumors.**

Xiaolin Huang\(^2\), L. Wang\(^2\), H. Zhang\(^2\), R. Jia\(^2\), H. Wang\(^2\), Z. Zhao\(^2\), G. Qian\(^2\), A.D. Singh\(^2\), S. Ge\(^2\), F. Fan\(^2\).

1Ophthalmology, Ninth People’s Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai, P.R., China; 2Department of Biochemistry and Molecular Biology, Shanghai Jiao Tong University School of Medicine, Shanghai, P.R., China; 3Cleveland Eye Institute, Cleveland, OH.

**6877 — D1207**

**Towards a Novel Therapy for Uveal Melanoma: Targeting Oncogenic Ga(q).**

Timothy W. Corson, K. Sishtla. Glick Eye Institute, Department of Ophthalmology, Indiana University School of Medicine, Indianapolis, IN.

**6878 — D1208**

**Topical Timolol for the Treatment of Benign Vascular Periocular Lesions.**

Raymond G. Areaux, Jr., D. Yoo.

Ophthalmology, Loyola University Chicago, Maywood, IL.

**6879 — D1209**

**Association Of Ocular Findings And Preventive Therapy With Onset Of Cerebral Involvement In Patients With Primary Intraocular Lymphoma.**

Noriyasu Hashida, K. Nakat, N. Ogihara, K. Nishida. 
1Dept of Ophthalmology, Osaka University, Suita, Japan; 2Dept of Ophthalmology, Osaka Koseinenkin Hospital, Osaka, Japan.

**6880 — D1210**

**Syringes Design Used for Intravitreal Injection Influences Dosing Accuracy and Drug Wastage.**

David M. Kramholz. Clinical Sciences, SUNY College of Optometry, New York, NY.

**6881 — D1211**

**Precise Modeling of the Eye for Proton Beam Radiotherapy of Intraocular Tumors.**

Michael B. Rueggsegger\(^2\), J.H. Kowa\(^4\), S. Wolf\(^8\), ARTORG Center Ophthalmic Technologies, 1Department of Ophthalmology, University of Bern, Bern, Switzerland.

**6882 — D1212**

**In Vivo Confocal Microscopy Study Of Conjunctival Intraepithelial Neoplasia Treated With Interferon-alpha2b.**

Hyunjoo J. Lee\(^4\), R. Dunphy\(^9\), M. Daly\(^4\), D. Siracuse-Lee\(^4\). Ophthalmology, Boston Medical Center / Boston University School of Medicine, Boston, MA; 2Ophthalmology, Optometry, Veterans Affairs Boston Healthcare System, Boston, MA.

**6883 — D1213**

**Expression Of N-glycoly Gm3 In Retinoblastoma, A Promising Candidate For Targeted Therapies.**


**6884 — D1214**

**Sulindac Protects RPE Cells Against Oxidative Damage but Enhances the Killing of Retinoblastoma Cells Exposed to Oxidative Stress.**

Arunodoy Saur, H.M. Prentice, H. Weissbach, J.C. Blank. 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.
Florianid A

Thursday, May 10, 2012, 1:15 PM-3:00 PM
Retinal Cell Biology / Genetics Group

559 AMD/Retinal Degeneration Models

Moderators: Martin-Paul G Agbagha and William A Beltran


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. Hannun. Biochemistry and Molecular Biology, Medical University of South Carolina, Charleston, SC; Ophthalmology, Medical Univ of South Carolina, Charleston, SC.

6887 — 1:45 Idenybene Prevents Retinal Pigmentepithelium (RPE) Cells from Oxidative Stress and Senescence. Nicole Arend, S. Koenig, P. Laubichler, A. Wolf, C. Hartingou, M.W. Ulbig, A. Kampik, M. Kernt. Institute for Ophthalmic Research, University Eye Hospital, Tuebingen, Germany; Institute for Ophthalmic Research, University Eye Hospital, Tuebingen, Germany.

Florianid BCD

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

560 Corneal Biomechanics III

Moderators: Jodhbir S Mehta and James Y Jester

6892 — 1:15 Patient Specific Finite Element Cornea Model. David Vassarino, R. Asper, E. Moissief, A. Gefen. Ophthalmology, Tel Aviv Medical Center, Tel Aviv, Israel; Sackler School of Medicine, Dept. of Biomedical Engineering, Tel Aviv University, Tel Aviv, Israel.

6893 — 1:30 Conservation of Arclength in Keratoconic and Normal Corneas with Air Puff Induced Deformation. Cynthia J. Roberts, A.M. Mahmoud, J. Lii, Z. Sharalaya, T.F. Mauger, R.G. Lembach, A.J. Hendershot, R. Kuenen, S.D. Klyce. Ophthalmology, Biomedical Engineering, College of Medicine, The Ohio State University, Columbus, OH; Ophthalmology, Mount Sinai School of Medicine, New York, NY.*CR


6895 — 2:00 Numerical analysis of the influence of Intraocular 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.


6897 — 2:30 Quantification of Changes in Optical Properties of Cornea with Stress In Vitro. Ashutosh Richhariya, V.S. Sangwan, S. Punjabi, G. Yoon, T. Goto, J. Wei. The Institute of Optics, University of Rochester, Rochester, NY; Cornea & Ocular Immunology, LV Prasad Eye Institute, Hyderabad, India; Mechanical Engineering, Ujjain Engineering College, Ujjain, India.


Room 114

Thursday, May 10, 2012, 1:15 PM-3:00 PM
Immunology & Microbiology / Cornea / Retina / Retinal Cell Biology

561 Inflammatory Tissue Damage and Immunoregulation

Moderators: Justine R Smith and Henry J Kaplan

6899 — 1:15 Corneal Transplant Rejection In NIH Miniature Swine Is Associated With Donor-reipient Mismatches In A Region Containing The Homologue Of The Mouse Zfp106 Gene Encoding The H3A Antigen. Susan M. Nicholls, L.K. Mitchell, R. Pong-Wong, R. Harley, A.D. Dick, A.L. Archibald, M. Bailey. 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.


6901 — 1:45 Infl-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 Inst/EYE, Bethesda, MD.

*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures — Ø Refer to Program Number in the Clinical Trial (CT) Registration Index — Travel Grant Awardee
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 Upadhyla, L. Reneke. 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. Wolf, C.C. Gaar, K. Gueta, N. Podduturi, P.S. Zelenka, R. Ashery-Padan, J. Zavadil, A. Cvekl. Ophthalmology & Visual Sciences and Genetics, Albert Einstein College of Medicine, Bronx, NY; 2LMBD, NEI, Bethesda, MD; 3Sackler School of Medicine, Tel Aviv University, Tel Aviv, Israel; 4Langone Center, NYU, New York, NY.


6910 — 2:15 A Putative Role for Histamine Releasing Factor in Posterior Capsule Opacification. I.M. Wormston, J.K. Kular, J.R. Reddan, L.J. Davies. 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 EPFA2 SAM Domain Mutations Alter Receptor Stability and Function. Jeong Eun Park1, A.I. Son1, R. Hua2, X. Zhang2, R. Zhou2. 1Department of Chemical Biology, Susan Lehman-Cullman Laboratory for Cancer Research, Ernest Mario School of Pharmacy, Rutgers University, Piscataway, NJ; 2McKusick-Zhang Center for Genetic Medicine and State Key Laboratory of Medical Molecular Biology, Institute of Basic Medical Sciences, Chinese Academy of Medical Science & Peking Union Medical College, Beijing, China.

6912 — 2:45 Evaluation Of Doxorubicin Loaded Mepeg-pel Nanoparticle For Prevention Of Posterior Capsular Opacification. Aditya Konar1, R. Guha1, S. Chowdhary1, H. Palui2. 1Veterinary Pharmacology, BPathology, CClinical Science & Peking Union Medical College, Beijing, China; 2Agricultural University, Virology, Kolkata, India.

6913 — 1:15 Light Adaptation at Distinct Intensity Levels within the Photopic Regime. Alexandra Tidjii-Hamburyan, T.A. Münch. - Interim Analysis. 1University of Tuebingen, BTelethon Institute for Child Health Research, CCIN / MNI / MPI, CIN / MPI, University of 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. Eulner1. 1BCCN / CIN, 2BCCN / CIN / MPI, University of Tuebingen, Tuebingen, Germany.


6916 — 2:00 Nicotinic Block Reduces Direction Selectivity to Moving Gratings by Increasing Amplitude and Shifting Phase of Null Direction Excitation. Mikhail Y. Lipin, W.R. Taylor, R.G. Smith1. 1Department of Biomedical Sciences, Colorado State University, Fort Collins, CO; 2Casey Eye Institute, Ophthalmology, Oregon Health Sciences University, Portland, OR; 3Dept of Neuroscience, University of Pennsylvania, Philadelphia, PA.


6918 — 2:30 Developmental Characterization Of NMBA Receptor Expression In Identified Retinal Ganglion Cells Of The Mouse Retina. Ben Stafford, K.Y. Wong1, J.B. Dember. 1Ophthalmology and Visual Sciences, University of Michigan, Ann Arbor, MI; 2Ophthalmology & Visual Sciences, Yale University, New Haven, CT.


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

Anatomy & Pathology

564 Myopia IV: Clinics

Moderators: Thomas T Norton and Jane E Gwiazda


6921 — 1:30 Choroidal thickness associated with spherical equivalent in healthy young adults: The Raine Eye Health Study. Alexander X. Tan1, H. Forward1, C. McKnight4, S. Yazar4, C. Pennelli5, J. Mountain4, T.L. Young2, A.W. Hewitt3, D.A. Mackey4, F.K. Chen4. 1Lions Eye Institute, 2Telethon Institute for Child Health Research, 3University of Western Australia, Perth, Australia; 4Ophthalmology, Duke University Eye Center, Durham, NC; 5Department of Ophthalmology, Centre for Eye Research Australia, Surrey Hills, Australia.

6923  2:00  Central and Peripheral Outer Nuclear Layer Thickness Differences between Myopes and Hyperopes/Emmetropes using Spectral Domain Optical Coherence Tomography. Christopher A. Clark1, A.E. Elsner2, C. Costagliola2. 1Department of Ophthalmology, university of Ferrara, Ferrara, Italy; 2Department of Ophthalmology, Vitreous Retina Macula Consultants of New York, New York, NY; 3Ophthalmology, Istituto Clinico Humanitas, Milan, Italy; 4Service d’Ophtalmologie, University Hospital Pellegrin, Bordeaux, France; 5Retina, Hospital Oftalmologico de Sorocaba, Sorocaba, Brazil; 6Hospital Oftalmologico de Sorocaba, Indiaiatuba, Brazil; 7Retina, Hospital de Olhos de Sorocaba, Sorocaba, Brazil; 8Ophthalmology UNIFESP-EPMR, Federal Univ of Sao Paulo, Sao Paulo, Brazil.

6924  2:15  Croraloid Changes in Myopic Eyes Affected by Croraloid Neovascularization. Marco R. Romano1, M. Rinaldi1, F. Chiosi1, R. dell’Omo2, F. Parmeggiani1, F. Semeraro1, C. Costagliola1. 1Ophthalmology, Istituto Clinico Humanitas, Milan, Italy; 2University of Molise, Campobasso, Italy; 3Ophthalmology, Second University of Naples, Naples, Italy; 4Ophthalmology, university of Ferrara, Ferrara, Italy; 5Ophthalmology, University of Brescia, Brescia, Italy.

6925  2:30  Peripheral Refraction During Accommodation In Children Treated By Orthokeratology. Zhi Chen, X. Zhou. Ophthalmology & Visual Science, Fudan University EENT Hospital, Shanghai, China.

6926  2:45  Association of Paired Box 6 gene with High Myopia in Japanese. Masahiro Miyake1, K. Yamashiro1, H. Nakashiki1, H. Hayashi1, I. Nakata1, Y. Akagi-Kurashige1, N. Yoshimura1. 1Department of Ophthalmology, Kyoto University Graduate School of Medicine, Kyoto, Japan; 2Department of Ophthalmology, Tokyo Medical and Dental University Graduate School of Medicine, Bunkyo-Ku, Japan.


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, M. Waisbourd1, A. Barak1, A. Loewenstein3. 1Ophthalmology, 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 C. Holz1, Y. Ogura2, J. Roiser3, J-F. Korobelnik4, B. Stemper5, R. Vitti6, J-F. Chau1B, F. Haas1, J. Stuckler1B, A. Ryskulova3, J. Saaddine1A, J. Wester1A, J. Saaddine1A. 1Posterior Segment, 2Division of Diabetes Translation, CDC/Ginn Group Inc, Atlanta, GA; 3OptumInsight, Burlington, ON, Canada; 4Vision Health Initiative, 1CDC, Atlanta, GA; 5Neurology, Cleveland Clinic Foundation, Cleveland, OH.

6930  2:00  Macular Edema After Uneventful Phacoemulsification Detected By Occular Coherence Tomography (OCT). Luiz Felipe Q. Silveira1, G.A. Pellegrini1, M. Harasawa1, G.A. Carlos1, J.C. Souza1, T. Leite1, G.S. Pierozzi1, A.F. Bordon4. 1Retina, Hospital Oftalmologico de Sorocaba, Sorocaba, Brazil; 2Hospital Oftalmologico de Sorocaba, Indiaiatuba, Brazil; 3Retina, Hospital de Olhos de Sorocaba, Sorocaba, Brazil; 4Ophthalmology UNIFESP-EPMP, 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. Collins1, G. Francis1, Z. Zhang1, L.Y. Kappos1, 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.

6933  2:45  C-REALITY (Canadian Burden of Diabetic Macular Edema Observational Study). John R. Gonder1, V. Walker2, N. Zaour2, M. Barbeau1, L. Hemsley1, R. L1, 1Ophthalmology, 3Optometry, 4Eye Institute, London, ON, Canada; 5OptumInsight, Burlington, ON, Canada; 6Novartis Pharmaceuticals Canada Inc, Montreal, QC, Canada.

6934  1:15  Socioeconomic Disparity in Access to Eye Care Services among U.S. Adults with Age-related Eye Diseases Emerged during 2002 and 2008. Xinzi Zhang1, P. Nair1, G. Beckles1, C-F. Chou1, L. Geiss1, A. Ryskulova3, J. Saaddine1A. 1Division of Diabetes Translation, CDC/Ginn Group Inc, Atlanta, GA; 2Division of Eye and Vision Health, CDC, Atlanta, GA; 3CDC, Hyattsville, MD.

6935  1:30  Affordability of Cataract Surgery using the Big Mac Index. Jan C. Lingsingh1, M.J. Carter2, K.L. Windrop1, J.M. Furtado1. 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.E. Munoz2, B.E. Munoz3, C. Guyod1, T. Quinn1. 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.

6938 — 2:15  Prevalence of Functional Low Vision and Need for Annualized Eye Evaluation in Adult Malays and Indians Living in Singapore. Yingfeng Zheng1,2, C-Y. Cheng1,2, E.L. Lamoureux, III1, P. Chiang1, A. Anuar1,2, T. Aung1, S-M. Saw1. 'Singapore Eye Research Institute, Singapore National Eye Centre, Singapore, Singapore; 2State Key Laboratory of Ophthalmology, Zhongshan Ophthalmic Center, Sun Yat-sen University, Guangzhou, China; 3Department of Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore; 4Ophthalmology, University of Melbourne, Melbourne, Australia. Visual Impairment and Blindness. Decrements Associated with Self-Reported Informal Care Days, and Quality of Life


6940 — 2:45  Lack Of Government-insured Annual Eye Examinations Increases The Risk Of Vision Problems Amongst Low-income Elderly. Yaping Jin1, Y.M. Buys1, J. Xiong2, G.E. Trope1. 'Ophthalmology & Vision Sciences, University of Toronto, Toronto, ON, Canada; 2University of Waterloo, Waterloo, ON, Canada; 3Ophthalmal/Toronto Western Hosp, University Toronto, Toronto, ON, Canada.

6941 — 1:15  Increased Immune Response Against Ocular Tissue After Immunization With An Optic Nerve Antigen. Stephanie C. Joachim1, O.W. Gramlich1, P. Laspa2, S. Kuehn3, H.D. von Pein3, B. Dick3, F.H. Grus3. 'Experimental Eye Research Institute, Ruhr University, Bochum, Germany; 2Experimental Ophthalmology, University Medical Center, Mainz, Germany; 3Experimental Ophthalmology, Department of Neuroradiology, Mainz, Germany.

6942 — 1:30  Retinal Ganglion Cell Loss Correlates With Increased IOP in MMP-9 Knockout Mice. Behrad Garmsiri, J.V. Robertson, A.K. Ball, J.A. West-Mays. 'Department of Ophthalmology, Glaucoma Research Unit, Centre for Eye Research Australia, East Melbourne, Australia; 2Ophthalmology, University of Auckland, Auckland, New Zealand; 3Glaucoma Research Unit, Centre for Eye Research Australia, Melbourne, Australia; 4University of Melbourne, Centre for Eye Research Australia, Melbourne, Australia.


6944 — 2:00  Overstimulation of TRPV4 in vivo Induces Selective Apoptosis of Retinal Ganglion Cells. An Acute in vivo Experimental Model for Glaucoma, amber m. flye1, D. Ryskamp2, S. Chashani3, A. Jo4, D. Krizaj2. 'Moran Eye Institute, The University of Utah, Department of Ophthalmology & Visual Sciences, Salt Lake City, UT; 2ophthalmology, The University of Utah, Salt Lake City, UT.

6945 — 2:15  Anti-Connective Tissue Growth Factor Antibody Therapy Combats Expression of Fibrotic Genes in Glaucoma. Deborah M. Wallace1,2, A.F. Clark2, N. Oliver2, J.K. Cream2, C.J. O’Brien2,3. 'School Medicine & Medical Science, 2School of Biomolecular & Biomedical Science, 3Conway Inst., University College Dublin, Dublin, Ireland; 4Dept. Of Ophthalmology, Mater Misericordiae University Hospital, Dublin, Ireland; 5Cell Biology & Anatomy, University of North Texas HSC, Fort Worth, TX; 6FibroGen Inc, San Francisco, CA; 7Ophthalmology, Mater Misericordiae Univ Hospital, Dublin, Ireland; 8School of Medicine and Medical Science, University College Dublin, Ireland.

6946 — 2:30  Crossed Linked Actin Networks are Formed in Human Trabecular Meshwork Cells after treatment with Latrunculin B. Paul Russell1, K. Murphy1, J.V. Robertson, A.K. Ball, J.A. West-Mays. 'School of Veterinary Medicine, 2School of Biomedical Engineering, 3School of Medicine and School of Veterinary Medicine, 4University of California Davis, Davis, CA.

6947 — 2:45  Defects In Whole Cell Respiration In POAG Lymphblasts. Jonathan G. Crowston1, L. Shek2, N.J. Van Bergan3, S. Lee4, V. Chrysostomou5, A.L. Vincent6, I.A. Trounce7. 'Department of Ophthalmology, Glaucoma Research Unit, Centre for Eye Research Australia, East Melbourne, Australia; 2Ophthalmology, University of Auckland, Auckland, New Zealand; 3Glaucoma Research Unit, Centre for Eye Research Australia, Melbourne, Australia; 4University of Melbourne, Centre for Eye Research Australia, Melbourne, Australia.

Grand D

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

Glucoma / Anatomy & Pathology

567 Molecular and Cellular Mechanisms

Moderators: Abbot F Clark and Rebecca M Sappington

6941  Increased Immune Response Against Ocular Tissue After Immunization With An Optic Nerve Antigen. Stephanie C. Joachim1, O.W. Gramlich1, P. Laspa2, S. Kuehn3, H.D. von Pein3, B. Dick3, F.H. Grus3. 'Experimental Eye Research Institute, Ruhr University, Bochum, Germany; 2Experimental Ophthalmology, University Medical Center, Mainz, Germany; 3Experimental Ophthalmology, Department of Neuroradiology, Mainz, Germany.

6942  Retinal Ganglion Cell Loss Correlates With Increased IOP in MMP-9 Knockout Mice. Behrad Garmsiri, J.V. Robertson, A.K. Ball, J.A. West-Mays. 'Department of Ophthalmology, Glaucoma Research Unit, Centre for Eye Research Australia, East Melbourne, Australia; 2Ophthalmology, University of Auckland, Auckland, New Zealand; 3Glaucoma Research Unit, Centre for Eye Research Australia, Melbourne, Australia; 4University of Melbourne, Centre for Eye Research Australia, Melbourne, Australia.

Grand H

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

Retina

568 Retinal Prosthesis II

Moderator: Eberhart Zrenner


6949  Cortical Responses to Repetitive Electrical Stimulation of the Retina using Suprachoroidal Virtual Prostheses. Sam E. John1, M.N. Shivdasani2, J.B. Fallon3, G. Rathbone4, C.E. Williams5. 'Bionics Institute/Latrobe University, East Melbourne, Australia; 2Bionics Institute, East Melbourne, Australia.

6950  Low Contrast Trip Hazard Avoidance using Simulated Prosthetic Vision. Chris McCarthy1,2, P. Lieby1,2, J.G. Walker1, A.F. Scott1, V. Botea1, N. Barnes1,2. 'Canberra Research Laboratory, NICITA, Canberra, Australia; 2Engineering, Australian National University, Canberra, Australia. *CR

6951  The influence of visual information on walking behaviour in the Graz Mobility Test. Thomas Georgi1, D. Ivastinovic2, M. Brandner1, R. Hornig1, M. Velikay-Parel1. 'Ophthalmology, Medical University of Graz, Graz, Austria; 2IMI Intelligent Medical Implants GmbH, Bonn, Germany.
6952 — 2:15 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, Jr3; L. daCruz4; F. Hafezi5; P. Merlino6; 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, #

6953 — 2:30 Results Update from Second Sight’s Argus® II Retinal Prosthesis Study. Mark S. Humayun1; L. da Cruz2; G. Dagnelie3; J-A. Sahel4; P.E. Stanga5; E. Filley6; D. Eliott7; J. Duncan8; R.J. Greenberg9; Argus II Study Group. 1Ophthalmology, Doheny Eye Institute - USC, Los Angeles, CA; 2Moorfields Eye Hospital, London, United Kingdom; 3Lions Vision Research and Rehab Center, Johns Hopkins University, Baltimore, MD; 4Centre Hospitalier National d’Ophtalmologie des Quinze-Vingts, Paris, France; 5Manchester Royal Eye Hospital, Manchester, United Kingdom; 6Retina Foundation of the Southwest, Dallas, TX; 7Ophthalmology, Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston, MA; 8University of California, San Francisco School of Medicine, San Francisco, CA; 9Second Sight Medical Products, Sylmar, CA. *CR, #

6954 — 2:45 An Eye-surface Conformable Retinal Prosthesis using Liquid Crystal Polymers. Joonsoo Jeong1A,1B; S. Lee2; K. Min1A,1B; S. Shin1A,1B; S. Bae3; J-M. Seo1A,1B; H. Chung4; S. Kim1A,1B. 1Electrical Engineering & Computer Science, 2Inter-University Semiconductor Research Center, 3Electrical Engineering, Seoul, Republic of Korea; 4Department of Neurosurgery, Massachusetts General Hospital, Boston, MA; 5Ophthalmology, Seoul National University Hospital, Seoul, Republic of Korea.