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

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

Publication date:
2012

Document version
Early version, also known as pre-print

Citation for published version (APA):
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<td>Palm A</td>
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<td>537 New Directions for Bifocality, Multifocality and Restoration of Accommodation [VI] #6328-6334</td>
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### Thursday, May 10  ●  Posters

**Session Title** | **Program #** | **Board #**
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512 Novel Imaging, Photoreceptors, Vasculature and Disease [VI, MO,RE] | #5647-5683 | (A43-A79)
513 Clinical Electrophysiology and Retinal Disease [VN] | #5684-5710 | (A99-A125)
514 Visual Cortex and Brainstem Visual Centers [VN, VI] | #5711-5724 | (A126-A139)
515 Visual Electro physiology in Disease and Drug Toxicity [VN] | #5725-5737 | (A140-A152)
516 Diabetic Retinopathy Epidemiology [CL] | #5738-5753 | (A256-A271)
517 Vascular Mechanisms in Diabetic Retinopathy [RC, RE] | #5754-5783 | (A272-A301)
518 Retinal Detachment II [RE] | #5784-5816 | (A338-A370)
520 Retinopathy of Prematurity II [RE] | #5850-5892 | (A513-A539)
521 Stem Cells In Vivo and In Vitro: Fates and Functional Outcomes [RC, NT] | #5893-5927 | (A572-A606)
523 Corneal Endothelium [CO] | #5983-6027 | (A641-A670)
524 Keratoplasty II (Eye Banking, Substrates, Penetrating and Lamellar Grafts, Keratoprosthesis) [CO] | #6028-6075 | (A671-A704)
525 Contact Lens II (Basic Research) [CO] | #6076-6126 | (A705-A738)
526 Cornea/Anterior Segment Infection and Inflammation I [IM, CO] #6127-6161 | (A739-A782)
527 Cornea/Anterior Segment Infection and Inflammation II [IM, CO] | #6162-6191 | (A783-A816)
528 Anti-Infectives and Ocular Disease [IM, CO, RE, RC, BI] | #6192-6217 | (A817-A850)
529 AIDS-Related Ocular Disease [IM, RE, RC] | #6218-6237 | (A851-A884)
530 Autoimmune Ocular Disease [IM, CO, RE, RC] | #6228-6256 | (A885-A918)
531 Inflammation and Infection [PH] | #6257-6292 | (A919-A952)
543 Color Vision [VI] | #6390-6408 | (A25-A48)
544 Retinal Degeneration and Neuroprotection [RC] | #6409-6444 | (A49-A72)
545 Retinitis Pigmentosa III [RE] | #6445-6462 | (A73-A96)
546 AMD Disease Mechanisms II [BI] | #6463-6470 | (A97-A120)
547 AMD Clinical Research VII [RE] | #6511-6537 | (A121-A144)
548 Retina and RPE Cell Biology [RC, VN] | #6538-6569 | (A145-A168)
550 Cataract Surgery I [LE] | #6618-6651 | (A193-A226)
551 Cataract Surgery II [LE] | #6652-6680 | (A227-A250)
552 Cataract Complications and Drugs [LE] | #6681-6709 | (A251-A274)
553 Cataract Training, Modeling, Pediatrics [LE] | #6710-6742 | (A275-A300)
554 Oculoplastics III [EV] | #6743-6760 | (A301-A324)
555 Pediatric Ophthalmology [CL] | #6761-6783 | (A325-A348)
556 Corneal Biomechanics II [CO] | #6784-6822 | (A349-A372)
557 Blood Flow [PH] | #6823-6866 | (A373-A396)
558 Tumors: New Drugs, Delivery Systems and Mechanisms of Action [PH] | #6867-6884 | (A397-A420)

### Poster board numbers indicate exhibit hall location:
- A = Hall A
- D = Hall D

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

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

**Retina**

**501 Retina Late Breaking Papers**

**Moderators:** Ivana K Kim and David N Zacks

Florian A

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

**Cornea**

**502 Reshaping the Cornea: Present and Future of Refractive Surgery**

**Moderators:** Jesper Hjortdal and Dan Epstein

5569 – 8:30

**Enantiomorphism Of The Human Cornea Based On Corneal Topography 3D Atlas Analysis**


*CR

5570 – 8:45

**A Novel Approach To Determine Theoretical Head Tilt Effect On Ocular Cyclotorsion Measurements During Laser Refractive Surgery**


5571 – 9:00

**Long-term Outcomes Of Photorefractive Keratectomy For Low To High Myopia: Up To 19 Years Of Follow-up**


5572 – 9:15

**Incidence, Risk Factors, and Outcomes of LASIK Flap Striae Requiring flap Re-Lift and Irrigation**


5573 – 9:30

**Effect of Spherical Aberration and Total Higher Order Aberrations on Distance Corrected Near Vision and Contrast Sensitivity in Presbyopic Patients after Laser Blended Vision**

Timothy J. Archer, D.Z. Reinstein, M. Gobbe.

*CR

5574 – 9:45

**Spherical Aberration change as a function of pupil size: a comparison between Small Incision Lenticule Extraction (SMILE) and non-linear aspheric LASIK in moderate to high myopia**

Dan Z. Reinstein, T.J. Archer, M. Gobbe.

London Vision Clinic, London, United Kingdom.*CR

5575 – 10:00

**Femtosecond Laser Based Small Incision Lenticule Extraction For Moderate And High Myopia**

Jesper Hjortdal, S. Asp, A. Ivarsen, A. Vestergaard.

Ophthalmology, Aarhus University Hospital, Aarhus, Denmark.*CR

**Physiology & Pharmacology**

**503 Gene Therapy and Delivery II**

**Moderators:** Rajendra Kumar-Singh and Muna Naasa

5576 – 8:30

**A Comparative Evaluation Of Translational Read-through Inducing Drugs For Treatment Of Ush**


5577 – 8:45

**Gene Therapy For Choroideremia - Initial Report On A New Clinical Trial**


5578 – 9:00

**Adenoviral and Lentiviral Vectors for Efficient Gene Transfer to Mouse Retina**


*CR

5579 – 9:15

**Suppression of the Neurodegeneration of Experimental Optic Neuritis by Single-subunit Yeast NADH-Ubiquinone Oxidoreductase (ND11)**


Ophthalmology, Bascom Palmer Eye Institute, University of Miami, Miami, FL.*CR

5580 – 9:30

**A Novel Method To Transfect Retinal Pigment Epithelial Cells Without Detaching The Retina**


Ophthalmology, Hotel Dieu de Paris, Universite Paris Descartes, Paris, France; *CR

5581 – 9:45

**Progyny Of Pronuclear Injections Of Mutant Human Mitochondrial Genes**


Ophthalmology, Bascom Palmer Eye Inst, Univ of Miami, Miami, FL; *CR

5582 – 10:00

**Increased Longevity of Rescue of Light-Induced Retinal Damage in an Adult Mouse Using Peptide for Ocular Delivery (POD) as a Gene Transfer Vector**

Rajendra Kumar-Singh, C. Binder, S. Cashman.

Ophthalmology, Tufts University, Boston, MA.*CR

**Biochemistry & Molecular Biology**

**504 Retinal Biophysics 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. Peshenko, E. V. Olshevskaya, S. Lim, J.B. Ames, A.M. Dizhoor.

*CR

Travel Grant Awardee

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

349
5584 — 8:45 Alzheimer Retina Pathology in a Novel Animal Model of Neuropathology in Diabetes. Peter Frederikse, R. Kaswali, W. Klein, C. Kasinathan. 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. Setzen. Eye Research Institute, Oakland University, Rochester, MI.


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

Room 315 Thursday, May 10, 2012, 8:30 AM-10:15 AM

505 Lens Cell Differentiation

Moderators: A S Menko and Roy A Quinlan

5590 — 8:30 Deletion Of Cdk1 In The Ocular Lens Leads To A Disruption Of The Lens Epithelial Cell Proliferation, Differentiation, And Nuclear Retention. Blake R. Chaffee, M.L. Robinson1, F. Shang1, T. Clement1, M. Eddy1, B. Wagner1, A. Taylor1, 2Zoolology, Miami University, Oxford, OH; 3Human Nutrition Res Ctr on Aging, 4Nutrition & Vision Res-USDANHRC; 5Tufts University, Boston, MA; 6National Institute of Environmental Health Sciences, NIH, Research Triangle Park, NC; 7National Institute of Environmental Health Sciences, Research Triangle Park, NC.


5592 — 9:00 Glutaredoxin (Grx2) Gene Knockout Suppresses Fiber Cell Differentiation and Delays De-nucleation of the Mouse Lens. Marjorie F. Lion1,2, 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 Liu, A. Caceres1, J. Peng2, F. Shang1, J. Gao1, X. Sun1, R.T. Mathias1, A. Taylor1. 1Human Nutrition Rsrch Ctr on Aging, Tufts University, Boston, MA; 2Structural Biology, St. Jude Children’s Research Hospital, Memphis, TN; 3Physiology & Biophysics, State Univ of NY-Stony Brook, Stony Brook, NY.

5594 — 9:30 Dlg-1 and Scrib are Modulators of Wnt/PCP in the Mouse Ocular Lens. Shalini Shatatad1,2, R. Rachel3, A. Griepe4. 1Cell and Regenerative Biology, 2Anatomy, 3Univ 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 Biological/Biomedical Sciences, Biophysical Sciences Inst, Durham Univ, Durham, United Kingdom; 2Department of Chemistry, Imperial College, London, United Kingdom; 3School of Life Sciences, CHIPS and Division of Cell Biology and Immunology, Dundee University, Dundee, United Kingdom.

5596 — 10:00 Chromatin Remodeling Enzymes Snf2h/smarca5 And Brg1/smarca4 Are Independently Required For Mouse Lens Morphogenesis. Shuying He1A, J. Sun1A, J. A. Cvekl1A, A. Cvekl1A, K. S. Menko3. 1Anatomy & Cell Biology, University of Zurich, Zurich, Switzerland; 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.

5597 — 8:30 In Vivo Optical Recording From Mouse Retinal Ganglion Cells. Lu Yin1A, A.H. Cetin1, Y. Geng1,2, R. Sharma1,2,3,4, K. Ahmad3,4, E.M. Callaway2, D.R. Williams1,2,3,4, W.H. Merigan1,2,3,4. 1Center for Visual Science, 2Institute of Optics, 3Flau Eye Institute, University of Rochester, Rochester, NY; 4Systems Neurobiology Laboratories, Salk Institute for Biological Studies, La Jolla, CA. [CR]

5598 — 8:45 In Vivo Chorio-Capillaries Imaging Using Adaptive Optics Optical Coherence Angiography. Kazuhiro Kurokawa, K. Sasaki, S. Makita, Y. Yasuno. Computationals Optics Group, University of Tsukuba, Tsukuba, Japan. [CR]

5599 — 9:00 Photoreceptor and RPE Disruptions Observed Outside Clinically Visible Geographic Atrophy Lesions in the Living Eye with Fluorescence Adaptive Optics Scanning Laser Ophthalmoscopy (FAOSLO). Ethan A. Ross1, D.R. Williams1,2,3,4, A. Dubra1,2,2,3,4, H. Song4, M.A. Folwell1,4, L.R. Latchney2,2,3,4, M.M. Chang3,4, 5. 1Center for Visual Science, 2Institute of Optics, 3Flau Eye Institute, University of Rochester, Rochester, NY; 4Ophthalmology, 5Biophysics, 6Medical College of Wisconsin, Milwaukee, WI. [CR]

5600 — 9:15 In Vivo Two-Photon Imaging Of Mouse Retina. Robin Sharma1,2,3,4, Y. Geng1,2,3,4, L. Yin1A, W.H. Merigan1,2,3,4, D.R. Williams1,2,3,4, J.J. Hunter1. 1Institute of Optics, 2Center for Visual Science, 3Flau Eye Institute, 4University of Rochester, Rochester, NY. [CR]

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

5602 — 9:45 Measuring Individual Cone Directionalities Using Scanning Laser Ophthalmoscopy. Diego Rattia Millan1,2, B. Vohsenn1. 1School of Physics, University College of Dublin, Dublin, Ireland; 2Department of Electronics and Systems, Universidade Federal de Pernambuco, Recife, Brazil; 3School of Physics, University College Dublin, Dublin, Ireland.

5603 — 10:00 Adaptive Optics-Assisted Optical Coherence Tomography For Patient Imaging. Barry Cense1, K. Suda1, K. Kurokawa1, Y. Yasuno1. 1Ctr for Optical Resrch & Education, Utsunomiya University, Utsunomiya, Japan; 2Institute of Applied Physics, Computationals Optics Group, Tsukuba, Japan; 3Computational Optics Group, University of Tsukuba, Tsukuba, Japan. [CR]
Grand A

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

Eye Movements, Strabismus, Amblyopia & Neuro-Ophthalmology

507 Eye Movements, Nystagmus and Amblyopia

Moderators: Benjamin Thompson and Larry A Abel

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. Straumann1, S.C. Neuhann1, M-Y. Huang1.1Institute 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 Turuwhenua1A, T-Y. Yu1B, Z. Mazharullah1A, B. Thompson1B.1The Shelf Video Equipment, Switzerland.

5606 — 9:00 Uncorrected Antisaccade Errors Predict Cognitive Problems After Mild Traumatic Brain Injury In Younger Children. Larry A. Abel1, A. Phillippos1, J.M. Douglas2.1Ophthalmology, & Visual Sciences, University of Melbourne, Carlton, Australia; 2Human Communication Sciences, La Trobe University, Bundoora, Australia.

5607 — 9:15 Fatigue and Hypoglycemia Impair Saccade Velocity and Accuracy but not Visual Perception. Benjamin Thompson1, S. Duncan1, G. Kuhn1, J.M. Black1, N. Gant2.1Optometry & Vision Sciences, University of Melbourne, Melbourne, Australia; 2Department of Exercise Science, Cardiff University, Cardiff, United Kingdom.

5608 — 9:30 Saccadic Adaptation In Amblyopia. Rana Arham Raashid1, M. Chandrakumar1, A. Blakeman1, H. Goltz1, A.M. Wong2.1Neuroscience and Mental Health, University of Auckland; 2Department of Ophthalmology and Vision Sciences, The Hospital for Sick Children, Toronto, ON, Canada; 3University of Toronto, Toronto, ON, Canada.

5609 — 9:45 Effect of Compliance to Glasses Wear on the Outcome of Visual Acuity after Refractive Adaptation. Gail Macaconchie1, 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, Jr1.1Retina Foundation of the Southwest, Dallas, TX; 2Ophthalmology, UT Southwestern Medical Center, Dallas, TX; 3Pediatric Ophthalmology & Adult Strabismus, Plano, TX.

Grand B

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

Anatomy & Pathology

508 Tumors and Non-neoplastic Lesions: Expanding Frontiers from Histology to Molecular Histopathology and Gene Expression

Moderators: Hans E Grossniklaus, Jacob Pe’er and Deepak P Edward

5611 — 8:30 Predictors Of Ocular Surface Squamous Neoplasia Recurrence After Exisional Surgery. Carol L. Karp1, A. Galor1, P. Oellers1, A. Kao1, A. Abdelaziz1, W. Feuer2, S. Dubovy.1Ophthalmology, Bascom Palmer Eye Institute, Miami, FL.

5612 — 8:45 Multi-disciplinary Management Of Eyelid Merkel Cell Carcinoma. Qassem J. Nasser1, A. Khan1, W. Morrison1, T. El-Sawy1, S. Frank1, B. Esmaeli2.1Section 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. Schalenbourg1, M. Hamedani1, Z. Leonidas1, L. Schalenbourg1.1Pathology, Ophthalmology, 1Jules Gonin Eye Hospital, Lausanne University, Lausanne, Switzerland; 2Dermatopathology, Massachusetts General Hospital, Harvard Medical School, Boston, MA.

5614 — 9:15 Lymphoid Enhancing Factor-(lef-1) Gene Mutation and Its Differential mRNA Expression in Eyelid Sebaceous Carcinoma. Parumal Jayaraj1, S. Son1, A. Sharma1, A. Kashyap1, A. Rai1, N. Pushker1, M.S. Bajaj1, S. Ghose1, R. Azad1.1Department of Ocular Pathology, 2Department of Ocular Microbiology, 3Ophthalmoplasty service, 4Dr.R.P.Centre, A.I.I.M.S, New Delhi, India; 5Division of Biochemistry and Biotechnology, National Centre for Disease Control, New Delhi, India.


5616 — 9:45 Invasion of Lymphatic Vessels into the Eye after Open Globe Injury. Ludwig M. Heinü1, J.M. Wesse1, C. Hofmann-Rummelt1, G.O. Naumann1, F.E. Kruse1, C. Carstensen1.1Department of Ophthalmology, University of Cologne, Cologne, Germany; 2Department of Ophthalmology, University of Erlangen, Erlangen, Germany.

5617 — 10:00 Molecular Histopathology Using Gold Nanorods And Optical Coherence Tomography. Jared L. Matthews1, S. Prabhukkar2, A. de la Zerda3, S. Gambhi4, R. Awe1.1Bascom Palmer Eye Institute, Coral Gables, FL; 2Ophthalmology, Bascom Palmer Eye Institute, University of Miami, FL; 3Electrical Engineering and Radiology, 4Bioengineering & Materials Science and Engineering, Stanford University, Palo Alto, CA; 5Ophthalmology, Bascom Palmer Eye Institute, Miami, FL.

Grand D

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

Glaucoma / Multidisciplinary Ophthalmic Imaging Group

509 Structural and Functional Approaches In Glaucoma

Moderators: Felipe A Medeiros and Anders Heijl

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


5621 — 9:15 Detecting Glaucoma with Pupillography. Dolly S. Chang1, K.S. Arora1, H.A. Quigley1, H.D. Jampel1, P. Ramulu1, M.V. Boland1, D. Welsbie1, D.S. Friedman2, F. Supakontanasan. Ophthalmology, Wilmer Eye Institute Johns Hopkins University, Baltimore, MD.
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. Du1,2, J.K. Torbit1, B.M. Sutton1, R. Malik1; ‘School of Optometry, Indiana University, Bloomington, IN; 2Clinical Sciences, SUNY College of Optometry, New York, NY; 3SUNY Eye Institute, New York, NY; 4Glaucoma Research Unit, NIH Biomedical Research Center for Ophthal, London, United Kingdom.


5624 — 10:00 Correlation of Brain Volumes and Functional Deficits in Glaucoma. Alice L. Williams1, J. Lackey1, S. Wizov1, S. Gatla1, R. Sergott3, T. Chia2, S. Lai2, G.L. Spaeth1,3; 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. Hisuque Murakami1, H. Matsumoto1, M. Roh2, J. Suzuki1, K. Takeuchi1, D. Mantopoulos1, T. Hisatomi1, Y. Ikeda2, J.W. Miller2, D. Vanvass2; 1Angiogenesis Laboratory, Massachusetts Eye and Ear Infirmary, Boston, MA; 2Ophthalmology, Kyushu University, Fukuoka, Japan. *CR

5626 — 8:45 Successful Photoreceptor-Directed Gene Therapy with AAV2/5-hRPGR Reverses Post-Receptor Remodeling in Canine Models of X-linked RP. Gustavo D. Aguirre1, A.V. Cideciyan1, A.S. Levitin1, S. Iwabe1, H. Khanna1, A. Swaroop2, W.W. Hauswirth3, S.G. Jacobson2, W.A. Beltran1; 1Clinical Studies, Univ of Penn Sch Veterinary Med, Philadelphia, PA; 2Dept of Ophthalmology, Scheie Eye Institute, Philadelphia, PA; 3Molecular Genetics & Microbio, Ophthalmology, University of Florida, Gainesville, FL; 4Ophthalmology, University of Massachusetts Medical School, Worcester, MA; 5N-NRL, Bldg 6, National Eye Institute, Bethesda, MD. *CR

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

5628 — 9:15 Endothelial Progenitor Cells With Low Aldehyde Dehydrogenase Activity Recruited Monoctye-Derived Macrophages Through CCL2 Secretion And Rescued Vessel And Photoreceptor With Retinal Degeneration. Shinichii Fukuda1,2, M. Nagano1, T. Yamashita1,2, K. Kimura1, K. Akimoto1, I. Tsuboi1, S. Ueno1, M. Kondo1, T. Oshika1, O. Ohneda1; 1Ophthalmology, 2Regenerative Medicine and Stem Cell Biology, Tsukuba University, Tsukuba, Japan; 3Ophthalmology, Nagoya Univ School of Med, Nagoya, Japan; 4Ophthalmology, Mie University Graduate School of Medicine, Tsu, Japan.

5629 — 9:30 Phenotypic conservation in RPGR mutations. Kari E. Branham1, S. Zahid2, N.W. Khan1, M.I. Othman1, A. Moncrief1, P.A. Sieving2, A. Swaroop5, K. Jayasundera1, J.R. Heckenlively1; 1Ophthalmology and Visual Sciences, University of Michigan, Ann Arbor, MI; 2N-NRL, Bldg 6, National Eye Institute, Bethesda, MD.

5630 — 9:45 CRB2 and CRB1 in Retinal Development and Maintenance. Celso H. Alves1, L. Pellissier2, B. Park1, A. Sank1, S. Beck1, G. Huber2, N. Tanimoto1, M. Garrido2, F. Richard3, J. Wijnholds1; 1Neuromedical Genetics, Netherlands Inst for Neuroscience, Amsterdam, The Netherlands; 2Ocular Neurodegeneration Centre for Ophthalmology, Institute for Ophthalmic Research, Tubingen, Germany; 3Ingénieur d’étude CNRS / ACMO, Université de la Méditerranée, Developmental Biology Institute of Marseille Luminy (IBDML), Marseille, France.

5631 — 10:00 Knockout Of Cer2 Promotes Photoreceptor Survival In A Model Of Retinitis Pigmentosa. Atsushi Otani1, C. Guo2, A. Oshii2, N. Yoshimura1; 1Ophthalmology, Japanese Red Cross Wakayama Med Ctr, Wakayama, Japan; 2Ophthalmology, Kyoto University, Kyoto, Japan.

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

5632 — 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. Murthy1, S. Krishnaiah2, H.B. Pan2, P. Giridhar2, C.E. Gilbert2, G.N. Rao2. 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.

5633 — A30 Determining National Vision Health Priorities: Healthy People 2020 Vision Objectives. Axel Ryskulova1, R. Janiszewski1, R. Hines1. 1Ophthalmology and Visual Sciences, 1Univ of Texas Medical Branch, Galveston, TX; 2Ctr for Biomed Engineering, Univ of Texas Medical Branch, Houston, TX.

5634 — A31 Uncorrected refractive errors and ocular pathology found in outreach clinics in Malawi and Ethiopia. Rachel V. North1,2. 1Sch of Optom & Vision Sci, Card Univ, Cardiff, United Kingdom; 2VisionAid Overseas, Crawley, United Kingdom.

5635 — A32 Ophthalmology Inpatient Consultations For Patients With Acute And Chronic Leukemia At A Boston Tertiary Care Hospital. Nancy Huyhn, H-Y. Chang, S. Borboli-Gerogiannis. Ophthalmology, Massachusetts Eye & Ear Infirmary, Boston, MA.

5636 — A33 Direct Comparison of Current Pediatric Pseudoachromatic Color Vision Tests in Preschool Children. Michele E. Mercer1, R.J. Adams2. 1Psychology, 2Psychology/Pediatrics, 1Memorial University, St John’s, NL, Canada.

5637 — A34 Danish Rural Eye Study (DRES): Preliminary Data on Visual Impairment in Randomly Selected Adults of Denmark. Tracy B. Hoeg1, B. Moldow2, H. Buch Hesgaard2, D. Erngaard2, K. Klemp3, M. La Cour4, C. Ellervik5. 1Ophthalmology, 2Clinical Biochemistry, 1Naestved Hospital, University of Copenhagen, Naestved, Denmark; 2Ophthalmology, Naestved Hospital, Naestved, Denmark; 3Ophthalmology, Glostrup Hospital, Glostrup, Denmark; 4Ophthalmology, Gulostrup Hospital, University of Copenhagen, Glostrup, Denmark.

5638 — A35 A Comparison of Visuocortical Function in Premature Infants with Grade I/II and Grade III/IV Intraventricular Hemorrhage. William V. Good3, C. Hou1, A. Nicaragua1. 1Smith-Kettlewell Eye Research Institute, San Francisco, CA; 2Department of Psychology, Stanford University, Stanford, CA.

5640 — A36 The Prevalence and Causes of Visual Impairment and Blindness in a Multi-Ethnic Asian Population: The Singapore Epidemiology of Eye Disease (SEED) Study. Tien Y. Wong1,2, Y. Zheng1, W-L. Wong1, E.L. Lamoureux1, J-J. Wang2, P. Mitchell3, N. Cheung1, T. Aung4, S. Saw1, C. Cheng2. 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, G.L. Chen2, C.C. Teng3. 1Ophthalmology, NYU School of Medicine, New York, NY; 2Einhorn Clinical Research Center, New York Eye and Ear Infirmary, New York, NY.

5642 — A38 Genetic Determinants of Serum Lutein and Zeaxanthin Levels in the Carotenoids in Age-Related Eye Disease Study. Chitra K. Karki1, S.K. Iyengar2, B. Truitt1, R.P. Igo Jr.1, E. Johnson1, L. Tinker2, 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.

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

5644 — A40 Heritability Of Ocular Biometry Parameters Using Structural Equation Modeling In A Study Of Angle-closure Glaucoma. Robert Wojciechowski1, P.Y. Ramulu1, S. Kavitha1, P. Sun1, D. Szlag2, D. Iskander1B, M. Wojtkowski2. 1Ophthalmology & Visual Sciences, 1Univ of Texas Medical Branch, Galveston, TX; 2Ctr for Biomed Engineering, Univ of Texas Medical Branch, Houston, TX; 3Ophthalmology,MMC 493, Univ of Minnesota, Minneapolis, MN.


5646 — A42 Rare Variant Analysis of Refractive Error in the AREDS Cohort. Joan E. Bailey-Wilson1, C.L. Simpson2, R. Wojciechowski1, C. Motter3, S. Szymczak2, 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.


5648 — A44 High Resolution Adaptive Optics Imaging Complements Standard SD-OCT Imaging In Macular Diseases. Griban S. Khurshid1, A. Boretsky1, P. Gupta1, C. Tung2, B.F. Godley1, M. Motamedi3, E.F. Van Kuijk4. 1Ophthalmology & Visual Sciences, 2Ophthalm & Visual Sciences, 1Ophthalmology and Visual Sciences, 4Univ of Texas Medical Branch, Galveston, TX; 3Ctr for Biomed Engineering, Univ of Texas Medical Branch, Houston, TX; 4Ophthalmology,MMC 493, Univ of Minnesota, Minneapolis, MN.

5649 — A45 Spectral and Phase Analyses of Ocular Hemodynamics using Combined SD-OCT and Ultrasonic Method. Monika E. Danielskawska1, D. Szlag1, D. Iskander1A, M. Wojtkowski2. 1Institute of Physics, 2Institute of Biomedical Engineering and Instrumentation, 3Wrocław University of Technology, Wrocław, Poland; 4Institute of Physics, Nicolaus Copernicus University, Torun, Poland.

5650 — A46 High-resolution Imaging Of The White Dot Structure Observed In Fundus Albipunctatus. Yakiko Makiyama1, S. Ooto1, M. Hangai1, K. Takayama1, A. Oishi1, K. Ogino1, S. Nakagawa2, K. Yonezawa2, Y. Satô1, N. Yoshimura1. 1Ophthalmology and Visual Science, Kyoto University Grad School of Med, Kyoto, Japan; 2CANON INC., Tokyo, Japan.

Thursday – Posters – 5632 – 5650

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

Visual Psychophysics & Physiological Optics / Multidisciplinary Ophthalmic Imaging Group / Retina

5621 — 5631 Visual Impairment/Low Vision and Genetic Epidemiology

Moderator: Tracy B Hoeg

5622 — 5630 Visual Impairment/Low Vision and Genetic Epidemiology

Moderator: Nancy J Coletta

5623 — 5630 Visual Impairment/Low Vision and Genetic Epidemiology

Moderator: Tracy B Hoeg


5653 — A49 Improved Retinal Blood Flow Analysis Method Using Abnormal Frame Information Automatically Detected From AO-SLO Image Sequence. Hiroshi Imamura1, P. Fletcher1, K. Nozato2, S. Ueda1, A. Uji1, N. Yoshimura1. 1Canon Inc, Tokyo, Japan; 2Canon Information Systems Research Australia, Sydney, Australia; 3Ophthalmology, Kyoto University Graduate School of Medicine, Kyoto City, Japan. *CR

5654 — A50 Characterization of Diabetic Retinopathy Lesions Using Adaptive Optics Scanning Laser Ophthalmoscopy. Sonja G. Prager1,2, S.H. Radwani1, K. Noah1, O.S. Silva1, S.A. Burns1, P.P. Acioli1, J.K. Sun1. 1Beetham Eye Institute, Joslin Diabetes Center/Harvard Medical School, Boston, MA; 2Department of Ophthalmology and Optometry, Medical University Vienna, Vienna, Austria; 3Ophthalmology, Cairo University, Cairo, Egypt; 4School of Optometry, Indiana University, Bloomington, IN.

5655 — A51 Structural analysis of small vessels in The Human Retina: an adaptive optics study. Michel Paques1, K. Nakashima1, F. Rossant1, J.A. Sahel1. 1Clinical Investigation Center 503, Quinze-Vingts Hospital, INSERM, Paris, France; 2SIEP, Paris, France; 3UMR-S 968, Institut de la Vision, Paris, France. *CR


5657 — A53 In Vivo Investigation of the Retinal Microcirculation in Patients with Type 1 Diabetes Mellitus. Mariacristina Parravano1, M. Lombardo1, G. Lombardo1, B. Boccassini1, S. Lioi1, M. Varano1. 1Ophthalmology, Fondazione GB Bietti-IRCCS, Rome, Italy; 2CR-IPCF Unit of Support Cosenza, LiCRY Laboratory, University of Calabria, Rende, Italy.

5658 — A54 Measurement Of Retinal Blood Flow In Diabetic Retinopathy Using Adaptive Optics Scanning Laser Ophthalmoscopy. Akibito Uji1, M. Hangai1, S. Osto1, T. Murakami1, N. Yoshimura1, H. Imamura1, K. Nozato1. 1Ophthalmology, Kyoto Univ Graduate Sch of Med, Kyoto City, Japan; 2Canon INC, Tokyo, Japan. *CR

5659 — A55 Adaptive Optics and SD OCT in Macular Telangiectasia Type 2. Alain Gaudric1, K. Nakashima1, V. Krivov1, N. Chateau1, J.A. Sahel1, M. Paques1. 1Ophthalmology, Lariboisiere Hospital University Paris 7, Paris, France; 2Ophthalmology, Clinical Investigation Center 503 Quinze-Vingts Hospital, INSERM, Paris, France; 3Imagine Eyes, Orsay, France; 4Ophthalmology, UMR-S 968 Institut de la Vision, Paris, France. *CR


5661 — A57 Effectiveness In Detecting Area Of Photoreceptor Disruption By Dioptic Adaptive Optics Scanning Laser Ophthalmoscopy (d-aoslo) With Widder Field Of View. Yoshiyuki Kitaguchi1, T. Fujikado1, H. Kandori1, T. Morimoto1, T. Yamaguchi1, T. Mihashi1, K. Nishida1. 1Ophthalmology, Sumitomo hospital, Osaka, Japan; 2Applied Visual Science, Osaka University, Suita, Japan; 3Topcon Research Institute, Itabashi, Japan; 4Ophthalmology, Osaka University, Osaka, Japan. *CR

5662 — A58 Foveal Microvasculature And Its Relationship To Retinal Thickness. Toco Y. Chui1, A.E. Elsner1, S.A. Burns1. 1Optometry, Indiana University, Bloomington, IN; 2School of Optometry, Indiana University, Bloomington, IN.

5663 — A59 Variations Of The Eye’S Image Optical Quality And The Sampling Limit Of Resolution Of The Cone Mosaic With Axial Length. Marco Lombardo1, S. Serra1, P. Daccò1, G. Lombardo1. 1IRCSS Fondazione G.B. Bietti, Rome, Italy; 2CR-IPCF Unit of Support Cosenza, LiCRY Laboratory, University of Calabria, Rende, Italy.

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

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

5666 — A62 In vivo Imaging of Photoreceptor Loss Associated with Dry Age-Related Macular Degeneration Using Adaptive Optics Scanning Laser Ophthalmoscopy. Adam Boretsky1, F. Khan1, G. Burnett1, R. Harris1, M. Stephens1, M. Motamed1, E.F. von Kuflik1. 1Center for Biomedical Engineering, School of Medicine, Univ of Texas Medical Branch, Galveston, TX; 2Ophthalmology MMC 493, Univ of Minnesota, Minneapolis, MN.

5667 — A63 Adaptive Optics Scanning Laser Ophthalmoscopy With Amplitude Pupil Apodization. Yasuji N. Suzuki1, A. Dubra1,2. 1The Institute of Optics, 2Flaum Eye Institute, 3University of Rochester, Rochester, NY; 4Ophthalmology, Biophysics, Medical College of Wisconsin, Milwaukee, WI.

5668 — A64 Limitations To Adaptive Optics Imaging Quality In Highly Powered Eyes. Xiaolin Zhou, P. Bedgood1, A. Metha1. Department of Ophthalmology and Vision Sciences, University of Melbourne, Melbourne, Australia.

5669 — A65 The Repeatability of Photoreceptor Reflectance Changes in the Living Human Retina. Robert F. Cooper1, J. Rha1, A.M. Dubis1, A. Dubra1,2,3, J. Carroll1,2,3,4. 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. Xundu Lau1, A.V. Cideciyan1, A. Samarako1, S.B. Schwartz1, A.J. Roman1, J.B. Goldberg1, B. Baum1, B. Wissinger1, S. Koh1, 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. Dubis1, S.O. Hansen1, R.F. Cooper1, B.R. Hansen1, J. Carroll1,2,3,4. 1Cell Biology, Neurobiology and Anatomy, 2Ophthalmology, 3Medical College of Wisconsin, Wauwatosa, WI; 4Biomedical Engineering, Marquette University, Milwaukee, WI.

5673 — A69 Disrupted RPE and intact photoreceptors observed in vivo with Fluorescence Adaptive Optics Scanning Laser Ophthalmoscopy years following accidental laser exposures in humans. Jennifer J. Hunter1,2,3, E.A. Rossi1, W. Fischer1, A. Dubra1,2,3, M.M. Chung1,2,4. 1Flaum Eye Institute, 2Center for Visual Science, 3University of Rochester, Rochester, NY; 4Ophthalmology, Biophysics, 5Medical College of Wisconsin, Milwaukee, WI.

5674 — A70 Measuring the Performance of an Adaptive Optics Flood Illuminated Camera for Imaging the Cone Mosaic in the Clinical Setting. Jonathan D. Fay, A. Faridi, A. Garg, M.E. Pennesi. Case 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 the Nile Rat Model of Diabetes and Crowding. Xiaolong Song1, D.R. Williams1, L. Latchney2, A. Dubra2,3, M.M. Chung1,2,4. 1Center for Visual Science, 2Institute of Optics, 3Flaum Eye Institute, 4University of Rochester, Rochester, NY; 5Ophthalmology, Medical College of Wisconsin, Milwaukee, WI. *CR

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

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Hall B/C  A99-A125
Thursday, May 10, 2012, 8:30 AM-10:15 AM
Visual Neurophysiology
513 Clinical Electrophysiology and Retinal Disease

Moderator: Stefanie B Varghese

5684 — A99  Oscillatory Potential Contribution to the ERG: A New Mean to Identify Disease Onset. Nataly Tranq1, M. Gauvin1, R. 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 Sliskoraitiene1, E. Troeger1, S. Kohl2, B. Wissinger1, E. Zrenner2. 1Institute for Ophthalmic Research, University of Tuebingen, Tuebingen, Germany; 2Institute for Ophthalmic Research, Molecular Genetics Laboratory, Tuebingen, Germany; 3Molecular Genetics Laboratory, Institute for Ophthalmic Research, Centre for Ophthalmic Research, Tuebingen, Germany.

5686 — A101  Molecular Modeling of RS1 Structure Indicates Two Classes of Missense Variants With Mild and Severe XLRS Phenotypes. Yuri V. Sergeyev1, P.A. Steving1, A. Vincent2, A.G. Rohson1, A.T. Moore1, A.R. Webster2, G.E. Holder2. 1OGYFB, National Eye Institute, Bethesda, MD; 2Electrophysiology, Moorfields Eye Hospital, London, United Kingdom; 3Institute of Ophthalmology, University College London, London, United Kingdom.

5687 — A102  Retinal Function Assessed By Full-field ERG In Ranibizumab Treated Neovascular AMD Patients. Karen B. Pedersen1, F. Møller1, A. Sjølie2, S. Andreasson3. 1Department of Ophthalmology and Biomedical Engineering, 2Ophthalmology, University of Vienna, Vienna, Austria.


5689 — A105  Discrete Wavelet Transform (DWT) Of The ERG More Accurately Predicts The End Stage Of Retinal Degenerative Disorders. Mathieu Gauvin1,2, J Raco1,3, J. Darlow2, 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; 2École de technologie supérieure, Montreal, QC, Canada; 3Ophthalmology, Laval University - Centre de recherche Université Laval Robert-Giffard, Quebec, QC, Canada.


5691 — A107  Two New Mutations in RPL11.1 Gene in Occult Macular Dystrophy Patients Associated with a Depolarizing Pattern of Focal Macular ERG. Shuhei Kameya1, T. Kabuto1, H. Takahashi2, Y. Goto-Fukuura1, T. Igarashi1, K. Yamaki1, A. Mizota2, Y. Miyake3, H. Takahashi4. 1Ophthalmology, Chiba Hokusoh Hosp Nippon Med Sch, Inzai, Japan; 2Ophthalmology, Nippon Medical School, Bunkyo-Ku, Japan; 3Ophthalmology, Teikyo University, Ibaraki-ku, Japan; 4Ophthalmology, National Institute of Sensory Organs, National Hospital Organization Tokyo Medical Center, Tokyo, Japan; 5Aichi Medical University, Aichi-gun, Japan.

5692 — A108  Cortical Impact of Genetic Retinal Degeneration of Ganglion Cell Origin and With Early Visual Loss. Catarina A. Mateus1, A.A. Reis1,2, J. Castelhano1, E. Silva1, M. Castelo-Branco1. 1Visual Neuroscience, IBILI-Faculty of Med-Univ of Coimbra, Coimbra, Portugal; 2Ophthalmology, University Hospital of Coimbra, Coimbra, Portugal.

5693 — A109  Phenotypic characterization in two patients with identified Rhodopsin gene mutation: Impact of retinal degeneration on cortical structure. Andreia C. Pereira1, A. Mates1, A. Reis1,2, B. Quendera1, S. Ferreira1, M. Almeida1, E. Silva1, M. Castelo-Branco1. 1Visual Neuroscience Laboratory, IBILI-Faculty of Medicine-University of Coimbra, Coimbra, Portugal; 2Ophthalmology, University Hospital of Coimbra, Coimbra, Portugal; 3Center for Neuroscience and Cell Biology, University of Coimbra, Coimbra, Portugal.

5694 — A109  Phenotypic Characterization in Two Patients with Identified Rhodopsin Gene Mutation: Impact of Retinal Degeneration on Cortical Structure. Ana Paula Pereira1,3,4, C. Mates1,4, A. Reis1,2, B. Quendera1, S. Ferreira1, M. Almeida1, E. Silva1, M. Castelo-Branco1. 1Visual Neuroscience Laboratory, IBILI-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; 4Pediatrics & Pharmacology, Research Centre/St. Justine Hospital, Montreal, QC, Canada.

5697 — A112 Focal Macular Electrotoretinogram Elicited By Hemispheric Circumluminal In Eyes With Branch Retinal Vein Occlusion. Shunsuke Yasuda{1}, S. Ueno{1}, C-H. Piao{1}, M. Kondo{2}, H. Terasaki{1}. 1Ophthalmology, Nagoya Univ Graduate Sch of Med, Nagoya, Japan; 2Ophthalmology, Miyazaki Medical Sch of Univ, Sch of Med, Tsu, Japan.


5699 — A114 Visual Impairment in Leber Hereditary Optic Neuropathy Carriers of the Same Pedigree. Aldina A. Reis{1,2}, C. Mateus{1}, E. Silva{1,2}, M. Castelo-Branco{1}. 1Visual Neuroscience Laboratory, IBILI-Faculty of Med-Univ of Coimbra, Coimbra, Portugal; 2Ophthalmology, University Hospital of Coimbra, Coimbra, Portugal.


5702 — A117 Effects of Nutrition on Flicker ERGs: Application of DFT and T-Circ. Stefanie B. Varghes{1,2}, N. Naser{1,4}, T.P. Than{17,18}, K.T. Keyster{1,2,4}, E. Hartmann{1,18}. Vision Science, Optometry, Univ of Alabama at Birmingham, Birmingham, AL.

5703 — A118 The Characteristics Of Cone-driven Oscillatory Potentials In Human Electrotoretinogram. Bo Li{1}, H. Peng{1}, J. You{1}, Q. Li{1}. 1Ophthalmology, The First Affiliated Hospital of Changqing Medical University, Changqing, China; 2Ophthalmology, University of Florida, Gainesville, FL.


5705 — A120 Trichromatic And Dichromatic Electrotoretinograms Using A Chromatic-Achromatic Temporal Compound Stimulus. Neil R. Parry{1,2}, I.J. Murray{3}, A. Panourgias{4}, D.J. McKeefry{1}, B.B. Lee{3}, J.J. Kremers{5}. 1Vision Science Centre, Manchester Royal Eye Hospital, Manchester, United Kingdom; 2Optometry & Vision Sci, FLS, Univ of Manchester, Manchester, United Kingdom; 3School of Optometry and Vision Science, University of Bradford, Bradford, United Kingdom; 4Biological Sciences, SUNY College of Optometry, New York, NY; 5Dept of Ophthalmology, University of Erlangen, Erlangen, Germany.

5706 — A121 Seleral Depression Depresses the Photopic ERG. Scott E. Brodie{1,2}, J.H. Francis{1}, B. Murr{1}, D.H. Abramsor{1}. Ophthalmology, 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. Hagan{3,4}, K.J. Quinn{1}, L. Milner{1}, R.L. Robinson{1,4}, A.F. Taktak{1}, A.C. Fisher{3,4}. 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 Electrotoretinograms Explained by Convolution of Transient Responses. Jonathan A. Toft-Nielsen{1,2}, J. Bohorquez{1}, V. Porciatti{2}. 1Biomedical Engineering, University of Miami, Miami, FL; 2Bascom Palmer Eye Inst, Univ of Miami Miller Sch Med, Miami, FL.

5709 — A124 Temporal Interactions Between the b-wave and d-wave of the Human Electrotoretinogram. 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. McKeefry{1}, N.K. Challa{2}, I.J. Murray{3}, J.J. Kremers{5}, N.R. Parry{5}. 1Optometry, Bradford School of Optometry & Vision Science, Bradford, United Kingdom; 2Electrophysiology, L.V.Prasad Eye Institute, Hyderabad, India; 3Optometry & Vision 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. Varsanyi{1,3}, B.V. Nagy{1,3}, A. Magyar{1,3}, A. Farkas{1,3}, J. Nemeth{1,3}. 1Department of Ophthalmology, 2Dept of Ophthalmology, Semmelweis University, Budapest, Hungary; 3Experimental Psychology, University of Sao Paulo, Sao Paulo, Brazil.

5712 — A127 The Limited Ability Of Neurons In Visual Area 2 (v2) To Integrate Contour Elements Over Extended Space In Infant Macaque Monkeys. Bin Zhang{1,2}, G. Shef{1}, X. Tao{1}, E.L. Smith{1,3}, J.M. Chino{1}. 1College of Optometry, Nova Southeastern University, Plantation, FL; 2College of Optometry, University of Houston, Houston, TX.

5713 — A128 The Use of Optokinetic Response to Quantitatively Measure Visual Acuity in Adult Zebras. Peony C. Tam, F. Rassamdana, K. Dang, D. Cameron. Optometry, Western University of Health Sciences, Pomona, CA.


5715 — A130 Mapping The Spatiotemporal (S-T) Domain And Gain Of Putative M- And P-dominated Limbs Of The Human Cortical Contrast Response Function (CRF) Using The Sweep Vep (svep). Russell D. Hamer{1,2}, G.S. Souza{1,2}, T.L. Cost{1,4}, B.D. Gomes{1,5}, L.C. Silva{1,5}, D.F. Ventura{1,2,3}. 1Departamento de Psicologia Experimental, Instituto de Psicologia, Sao Paulo, Brazil; 2Smith-Kettlewell Eye Research Institute, San Francisco, CA; 3Instituto de Ciencias Biologicas, Universidad Federal do Para, Belem, Brazil; 4Nucleo de Medicina Tropical, Universidad Federal do Pará, Belem, 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.

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, Daniele Amodeo, I. Ingster-Moati, E. Albuisson, C. Girard, B. Delboeuf, M. Mackay. 1Department of Ophthalmology, University Paris 7 Diderot, Necker Hospital, Paris, France; 2Biostatistics Department, University of Medicine, Vandelouviers-Nancy, France; 3Department of Ophthalmology, University Hospital Besancon, France.

5726 — A141 Full-field Electroretinogram Changes In Patients In Therapy With Chloroquine And Hydroxychloroquine: Time And Dose Effect, Giulio Ruberto, C. Tinelli, P. Piccinni, L. Bossolesi, M. Raimondi. 1Clinica Oculistica, Biometric Service, IRCCS Policlinico San Matteo, Pavia, Italy.

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

5728 — A143 Ganzfeld-electroretinogram In Patients With Coronary Heart Disease. Katja Goebel, A. Reffken, H. Drexler, C. Körbel. 1Ophthalmology, Schloss Park Clinic, Berlin, Germany; 2Ophthalmology, Hannover Medical School, Hannover, Germany; 3Eye clinic, Wittenbergplatz, Berlin, Germany.

5729 — A144 Electrophysiology And Fluorescein Angiography In Susac Syndrome. Julia M. Promesberger, A.F. Alex, I. Kleffner, J-M. Dörfl, N. Eter. 1Ophthalmology, 2University hospital of Muenster, Muenster, Germany; 3NeuroCure Clinical Research Center, Charité, University hospital of Berlin, Berlin, Germany.


5731 — A146 Flicker Electroretinogram - Temporal Response Function In Children On Vigabatrin (VGB). Aparna Raghuram, O. Kolawole, R.M. Hansen, A.B. Fulton. 1Department of Ophthalmology, Childrens Hospital Boston, Boston, MA; 2Harvard Medical School, Boston, MA; 3Northeastern University, Boston, MA.
**Moderator: Robin D Hamilton**

5738 — A256  Efficacy of Diabetic Retinopathy Screens for Patients Who Were at High-Risk for Sight-Threatening Retinopathy in a County Healthcare System. Glen Y. Ozawa1, T. Litvin1, J.A. Cuadros1, S. Ramaswamy2, M.S. Muller3, A.E. Elsner2, T.J. Gast1. 1UC Berkeley School of Optometry, Berkeley, CA; 2School of Optometry, Indiana University, Bloomington, IN; 3AEON Imaging, LLC, Bloomington, IN. *CR

5739 — A257  Cases of Legal Blindness and Visual Impairment Avoided Using Ranibizumab for Diabetic Macular Edema in the United States. Robit Varna1, N.M. Bressler2, Q. Doan3, P.P. Lee4, I.I. Suner5, M. Danese6, C.M. Dolan7, A. Turpeau8, J. Ward9, J.S. Ehrlich1. 1UC Berkeley School of Optometry, Berkeley, CA; 2School of Optometry, Indiana University, Bloomington, IN; 3AEON Imaging, LLC, Bloomington, IN. *CR

5740 — A258  Cognitive impairment (CI) does not correlate with severity of diabetic retinopathy (DR) in people with Type 2 Diabetes (T2D). Roxanne R. Crosby-Nwobi1, A. Forbes2, S. Sivaprasad3. 1King’s College London, London, United Kingdom; 2Optometry, King’s College Hospital, London, London, United Kingdom.

5741 — A259  Diabetic Retinopathy Inpatient Study. Jessica J. Kovarik1, L.A. Willard1, E.L. Wazum2. 1Ophthalmology, UPMC Eye Center, Eye and Ear Institute, University of Pittsburgh School of Medicine, Pittsburgh, PA; 2Medicine, UPMC Mercy Hospital, Pittsburgh, PA.

5742 — A260  How much does glycated hemoglobin A1c explain the risk of diabetic retinopathy in persons with type 2 diabetes? The Diabetes Management Project (DMP). Jing Xie1, S. Selvarajah1, R. Kawasaki1, T. Nicolau2, S. Sammutgursandram3, J. Wang4, T. Wong5, E. Lamotheaux6. 1Department of Ophthalmology, Centre for Eye Research Australia, East Melbourne, Australia; 2Department of Ophthalmology, Centre for Vision Research, Sydney, Australia; 3National University of Singapore, Singapore Eye Research Institute, Singapore, Singapore.

5743 — A261  Telereimaging-based Digital Retinal Imaging Improves Diabetic Retinopathy Screening Compliance. Seema Garg1, B. King1, P. Jani1, S. Weir1, T. Kavrnovski1, S. Li2, E. Chaum1. 1Dept of Ophthalmology, University of North Carolina, Chapel Hill, NC; 2Oak Ridge National Laboratory, Memphis, TN; 3Hamilton Eye Institute, University of Memphis, Memphis, TN. *CR


5746 — A264  An Edutainment Tool for Increased Compliance with DR Screening and Management, Part 2: Efficacy Study. Anne M. Edwards1, G. Zamora1, A. Matiella1, P. Soliz2. 1VisionQuest Biomedical LLC, Albuquerque, NM; 2The Fotonovela Production Company, Santa Fe, NM. *CR


5748 — A266  Diabetes and Diabetic Retinopathy in an Australian Cardiac Population: the Australian Heart Eye Study. Adam J. Plant1,2, G. Burlutsky1, J. Chiha3, A. Thiagalingam4, P. Kowoor5, P. Mitchell6,7. 1Ophthalmology, Centre for Vision Research, Sydney, Australia; 2University of Sydney, Sydney, Australia; 3Cardiology, Westmead Hospital, Sydney, Australia.

5749 — A267  Associations Between Diabetic Retinopathy and Plasma Levels of High-Sensitive C-Reactive Protein or Von Willebrand Factor in Long-Term Type 1 Diabetic Patients. Jakob Grauslund8, J.V. Laurson9, S.S. Hoffmann9, A. Green9, M. Nybo10, A. Spolje11. 1Ophthalmology, Centre for National Clinical Databases, South, 2Clinical Biochemistry and Pharmacology, Odense University Hospital, Odense, Denmark.

5750 — A268  Sight impairment certification amongst patients attending diabetic retinopathy screening in East London. Tunde Peto1, R. Bourkiza1, M. Subashi1, J. Da Costa1, D. Qatarneh1, C. Bunce1. 1NIHR Biomedical Research Centre, Wills Eye Hospital, NHS Foundation Trust and UCL Institute for Ophthalmology, at Moorfields Eye Hospital for the Complications of Proliferative Diabetic Retinopathy. David H. Steel1,2, D. Vaideanu3, S. Sandhu4. 1Sunderland Eye Infirmary, Sunderland, United Kingdom; 2Institute of Genetic Medicine, University of Newcastle, Newcastle Upon Tyne, United Kingdom; 3Medical Retina Unit, Centre for Eye Research Australia, Melbourne, Australia.

5751 — A269  Risk Factors for Prevalence, Incidence and Progression of Diabetic Retinopathy Among Non-insulin Dependent Diabetes in Taiwan. Shwa-Juan Shew1,2, W-L. Ho1, J-Y. Lin1, N-C. Liu3, S-C. Chen4, Y-H. Hong5, H-C. Lam6,7. 1Department of Ophthalmology, 2Department of Endocrinology, 3Kaohsiung Veterans Gen Hospital, Kaohsuing, Taiwan; 4Ophthalmology, National Yang Ming University, Taipei, Taiwan.

5752 — A270  The Incidence Of Vitrectomy For The Complications Of Proliferative Diabetic Retinopathy. Kristen H. Nwanyanwu1, N. Taiwai2, T.W. Gardner3, J.S. Wrobel4, J.D. Stein5. 1Ophthalmology and Visual Sciences, 2Internal Medicine, 3University of Michigan, Ann Arbor, MI.


5754 — A272  Fractal-Based Oscillation of Venous Density Within the Macula During Progression of Diabetic Retinopathy. Patricia A. Parsons-Wingerter1, K. Radhakrishnan1. 1Research & Technology Directorate, John Glenn NASA Research Center, Cleveland, OH; 2Dep. of Pathology, Cancer Center, SOM, University of New Mexico, Albuquerque, NM.

5755 — A273  (Pro)renin Receptor Is Associated With Angiogenic Activity In Proliferative Diabetic Retinopathy. Atsuhiko Kand4,5, K. Noda4,6, B. Saito4, S. Ishida4,5. 1Department of Ophthalmology, 2Laboratory of Ocular Cell Biology & Visual Science, 3Hokkaido Univ Grad Sch of Med, Sapporo, Japan.


5757 — A275  Influence of Diabetic Vitreous on the Endothelial Cells Activity, the Role of Anti-VEGF and Matrix Components. Yousef Yafai1, C. Jochmann1, W. Eichler1, P. Wiedemann1. 1Eye Hospital, University of Leipzig, Leipzig, Germany.

*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 Awarder

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

5760 — A278 Role of Nrf2 in the regulation of diabetic retinopathy. Junsun Gong1, Z. Xu1, Y. Wei2, H. Huang1, C. Eberhart1, R. Thimmulappu2, 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. Bek2, S. Hardarson2. 1Department of Ophthalmology, Aarhus University Hospital, Aarhus C, Denmark; 2Department of Ophthalmology, University of Iceland/Landsdópitali, University Hospital, Reykjavík, Iceland.

5762 — A280 Thioredoxin Interacting Protein Is Required For S-glutathionylation And Redox Regulation Of VEGF Angiogenic Signal. Mohammed A. Abdelsaid1, A.B. El-Remessy2,3. 1Clin & Experimental Therapeutics, University of Georgia, Augusta, GA; 2Georgia Health Science University, Augusta, GA; 3Pharmacology and Toxicology, Medical College of Georgia, Savannah, GA.

5763 — A281 Polymines Contribute To Diabetic Retinal Edema. Bruce A. Berkowitz1,2, L. Hawel, III1, C. Byus1, D.P. Bissig2, R. Roberts1,3,4. 1Anatomy/Cell Biol & Ophthal, 2Anatomy & Cell Biol, 3Wayne State Univ Sch of Med, Detroit, MI; 4University of California, Riverside, Riverside, CA; 5Anatomy and Cell Biology, Wayne State Univ Sch of Med, Detroit, MI.

5764 — A282 Overexpression of IL-1 Receptor Antagonist in the Rat Retina by Retinovirus-mediated Gene Transfer Prevents Capillary Loss in Experimental Diabeties. Chiara Gerhardinger1,2, Y. Liu1, Z. Daghes1. 1Scheepens Eye Research Institute Massachusetts Eye and Ear, Boston, MA; 2Harvard Medical School, Boston, MA.

5765 — A283 Lipoprotein-associated Phospholipase A2 Inhibition Regulates Retinal Vasopermeability During Experimental Diabeties. Alan W. Stitt1, P. Canning1, P.J. Luther1, J.V. Glenn1, L-D Allen1, V. Prise1, P.S. Adamson1. 1Centre for Vision & Visual Science, Queens University Belfast, Belfast, United Kingdom; 2Pathology, UCL Institute of Ophthalmology, London, United Kingdom; 3Ophthalmology Discovery Performance Unit, GlaxoSmithKline, Stevenage, United Kingdom.

5766 — A284 HFD-induced Retinal Microvascular Degeneration: Suggested Role Of Thioredoxin Interacting Protein (TXNIP), Islam N. Mohamed1,2, S. Hafez1,2, M. Abdelsaid1,2, S. Matraigon1,2, B. Pillai1,2, A. Ergul3,4, J.D. Imig1,4, A.B. El-Remessy1,2,3. 1Clinical and Experimental Therapeutics, University of Georgia, Augusta, GA; 2Vision Discovery Institute, 3Physiology, 4Georgia Health Sciences University, Augusta, GA; 5Pharmacology and Toxicology, Medical College of Wisconsin, Milwaukee, WI.


5768 — A286 Chemokine Mediated Monocyte Trafficking into the Retina: Role of Inflammation in Diabetic Retinopathy. Arup Das1, S. Rangasamy1, P. McGuire1. 1MUSC 5140-5160 Surgery, 2Cell Biology & Physiology, 3Univ of New Mexico Sch of Med, Albuquerque, NM.

5769 — A287 Neural And Vascular Gene Expression Changes In The Diabetic Rat Retina. Jennifer C. Lau1,2, L.A. Linsenmeier1A,3, J.R. Moskal1A,3. 1Department of Ophthalmology, Kyushu University, Fukuoka, Japan; 2Ophthalmology, Fukuoka University Chikushi Hospital, Chikushino, Japan.

5770 — A288 Overexpression of ProNGF Induces Apoptosis and Acicular Capillary Formation Via Activation of P75NTR, Azza B. El-Remessy1, M.M. Al-Gayyar1, S. Matraigon1, H. Saragovi2. 1Clin & Experimental Therapeutics, University of Georgia, Augusta, GA; 2Pharmacology, McGill Univ - Jewish General Hosp, Montreal, QC, Canada.


5772 — A290 Intravitreal Anti-vegf Therapy Blocks Inflammatory Cell Infiltration And Re-entry Into The Circulation In Retinal Angiogenesis. Shintaro Nakao1, M. Arima1, K. Ishikawa1, R. Kohno1, S. Kawahara1, M. Miyazaki2, S. Yoshida1, H. Enaida1, T. Kono2, T. Ishibashi2. 1Department of Ophthalmology, Kyushu University, Fukuoka, Japan; 2Ophthalmology, Fukuoka University Chikushi Hospital, Chikushino, Japan.

5773 — A291 Vascular Alteration And Lipids Accumulation In The Retina And Choroid Of Non-insulin-dependent Diabetic Goto-Kakizaki Rats. Elvire Vaucher1,2, M. Pouliot1,2, T.M. Boutin1,4, O. Fontaine1,4, R. Couture1,4. 1Optometry, 4Physiology, 5University of Montreal, Montreal, QC, Canada.

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

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


5777 — A295 VEGF-B Prevents Tight Junctional Functional Differences in Diabetic Pigmented Epithelial Cells Induced by VEGF, Nikita Ved, J.W. Bainbridge, D.O. Bates. 1School of Physiology and Pharmacology, University of Bristol, Bristol, United Kingdom; 2UCL Institute of Ophthalmology, London, United Kingdom.


5781 — A299 Adult Endothelial Progenitor Cell Populations: Functional Differences in Diabetic Retinopathy. Sergio Caballero, J. S. Hazred, A. Bhutwadekar, S. Li Calzi, L.J. Paradissis, L. Miller, T.S. Kern, M.B. Grant. 1Pharmacology & Therapeutics, University of Florida, Gainesville, FL; 2America Stern Cell, Inc., Helotes, TX; 3Department of Medicine, Case Western Reserve University, Cleveland, OH.

Thursday – Posters – 5758 – 5781

Thursday Posters
8:30 am – 10:15 am

*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
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. Hu1, S. Haza2, S. Caballero1, S. Mohr1, S.F. Abcouwer1, D.R. Saban1, T. Chan-Ling1, J.V. Bush2. 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; 7Scheepens Eye Research Institute, Harvard Medical School, Boston, MA; 8Anatomy, University of Sydney, Sydney, Australia.

5783 — A301  Caspase-14: A Novel Caspase with Potential Role in Diabetic Retinopathy. Sylvia Megyerd1, S. Ahmad1, S. Hsu1, Z. Gure1, E.S. Shin1, N. Sheibani2, M. Al-Shabrawey1, M. Al-Shabrawey1. 1Oral Biology and Anatomy, 2Ophthalmology, 3Georgia Health Sciences University, Augusta, GA; 4Ophthalmology and Visual Sciences, University of Wisconsin, Madison, WI.

Hall B/C  A338-A370
Thursday, May 10, 2012, 8:30 AM-10:15 AM
Retina
518 Retinal Detachment II

Moderator: Cesare Mariotti

5784 — A338  Primary Repair of Rhegmatogenous Retinal Detachment with 23-Gauge Transconjunctival Vitrectomy. Ricardo Valdes1, O. Ramirez2, P. Ochoa3, J. Trajillo3. 1Clinica Ver Bien, Pereira, Risaralda, Colombia; 2Clinica Ver Bien, Armenia, Quindio, Colombia.


5786 — A340  The Outcome of vitrectomy for chronic diabetic tractional retinal detachment. Muneeza A. Abuqamja1, H.N. Al-Shams2, H. Al-Dhib1, N.G. Ghazzi2. 1Ophthalmology Residency Program, King Saud University, Riyadh, Saudi Arabia; 2Vitrectina, 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. Gomez2, H.V. Paxos2, A. Baptista1. 1Ophthalmology, Suel Abujama Institute, Sao Paulo, Brazil; 2Ophthalmology, University of Sao Paulo, Sao Paulo, Brazil.


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

5792 — A346  Siluron 2000 Novel-Generation Silicone Oil: Proof of Concept and One Year Clinical Results. Theodor Stappler1, L. Konstantinidis1, D.S. Wong2. 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. Arranzuato Mateo Montoya1, M.D. de Serr1. 1Clínica de Monchois (Lausanne, Switzerland), Lausanne, Switzerland; 2Ophthalmology, Clínica 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 Lincoll rules1, Ulrich Tholen1, H. Gerding1. 1Private Practice, Munster, Germany; 2Clinic Pallas, Olten, Switzerland.

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

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

5798 — A352  The Effect Of Retinal Detachment On Retinal Oxygenation. Alexander Kynhel1, III, S. Traustason1, J. Hjärdi1, J. Kii laat2, E. Stefansson3, M. La cour4. 1Ophthalmology, Gloustop University Hospital, Gloustop, Denmark; 2Department of Ophthalmology, LundsPals University Hospital, Rejkjavik, 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. Shah2, D. Vavvas1, S. Mukai1, D. Elliott1. 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. Olimos, A.A. Fawzi. Ophthalmology, Doheny Eye Institute, Keck School of Medicine, University of Southern CA, CA.


5804 — A358  Autofluorescence Image Intensity Segmentation And Analysis Of Macular Geometry Indices Against Microperimetry And Sdoct Ultra Structural Findings In Patients With Successfully Repaired Rhegmatogenous Retinal Detachments. Marco F. Vieira1, M. Falcão1, P. Brito1, A. Sousa1, P. Faria1, N. Gomes1, E. Brandão1, F. Falcão-Reis1. 1Ophthalmology, Hospital S. Joao Porto, Porto, Portugal; 2Ophthalmology, Hospital S. Joao Porto, Porto, Portugal.

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. Mende1, J.H. Koval1, P. Dufour2, U.E. Wolf-Schnurrbusch1, L. Ceklic, S. Wolf1. Dept of Ophthalmology, University of Bern, Bern, Switzerland; 2Ophthalmic Technologies, ARTORG Center, Bern, Switzerland.

5807 — A361 Foveal Thickness After Surgery In Eyes With Retinal Detachment, gaku terauchi1, C.S. Matsutomo1, E. Watanabe2, K. Shinoda1, H. Matsumoto1, T. Kondo1, A. Mizota1. 1Ophthalmology, Teikyo University School of Medicine, Tokyo, Japan; 2Ophthalmology, Teikyo University, Ibaraki-ku, Japan; 3Matsumoto Eye Clinic, Tokushima, Japan; 4Teikyo University, Itabashi-ku, Japan; 5Ophthalmology, University Of West Verginia, Morgantown, WV.


5809 — A363 Prognosis Factors Of Rhegmatogenous Retinal Detachments Associated With Giant Tear. Mouin Benzerroug1, B. Chanaoui2, O. Genevois1, G. Brasseur2, S. Milazzo1, M. Maraine1. 1Ophthalmology, Amiens University Hospital, Amiens, France; 2Ophthalmology, Rouen University Hospital, Rouen, France.


Hall B/C  A437-A469

Retina

519 Laser/Choroidal Neovascularization/Retina-RPE Transplantation

Moderators: Lihteh Wu and Demetrios Vavvas


5818 — A438 In vivo Retinal Laser Lesion Formation with Simultaneous Adaptive Optics Enhanced Confocal Scanning Laser Ophthalmoscopy (AOcSLO) and Spectral Domain Optical Coherence Imaging (AO-SDOCT). Ginger M. Pocock1,2, J.W. Oliver1, C.A. Harber1, G.D. Noojin1, K.J. Schuster1, A. Shingledecker1, D.J. Stolarcki1. 1Air Force Research Laboratory, Fort Sam Houston, TX; 2Biomedical Engineering, The University of Texas at Austin, Austin, TX.


5820 — A440 Laser Titration Algorithm For Minimally-traumatic, Sub-visible And Sub-lethal Retinal Phototherapies. Daniel Lavinsky1,2, A.A. Rakef7, A. Sramek2, Y. Mandel1A,1B, P. Huie1, D.V. Pulanker1,4,10. 1Ophthalmology, 2Hansen Experimental Physics Laboratory, 3Stanford University, Stanford, CA; 4Topcon 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. Mc Clements2, R. Scott1, R.E. MacLaren1. 1Nuffield Laboratory of Ophthalmology, University of Oxford, Oxford, United Kingdom; 2Royal Centre for Defence Medicine Institute of Research & Development, Birmingham, United Kingdom.


5823 — A443 Image Guided Navigated Retinal Laser Treatments Using Multiple Image Modalities. Igor Kozak1, J. Chhablani1, G. Bartessoli2, D-U.G. Bartessoli1, W.R. Freeman1. 1Ophthalmology, University of California San Diego, La Jolla, CA; 2Ophthalmology, Shirley Eye Center, UCSD, La Jolla, CA; 3Ophthalmology, Univ of California-San Diego, La Jolla, CA; 4Ophthalmology, UCSD Jacobs Retina Center, La Jolla, CA. *CR

5824 — A444 Nd-yag Laser Arteriotomy For Central Retinal Artery Occlusion (crao). Clayton Scanlon1, M. Currie1, A. Grant1, E.N. Cetin1, L. Akduman1. 1Ophthalmology, Saint Louis University Eye Institute, Saint Louis, MO; 2Ophthalmology, Washington University, Saint Louis, MO. *CR

5825 — A445 Effects of LMP7 Subunit Knockout Immunoproteasome on the Laser-Induced Chorioretinal Neovascular Model in Mice. Justin C. Koh1, A.A. Rageh1, D.A. Ferrington1, S.R. Montezuma1. 1Ophthalmology, University of Minnesota, Minneapolis, MN.

5826 — A446 Impact of Endothelium-specific NFκ-B Signaling on Choroidal Neovascularization. Soosaa Zandi1,2, S. Nakao1, D. Sun1, R. Schmidt-Ullrich1, A. Schering1, F. Hafezi2, A. Hafezi-Moghadam1. 1Radiology, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA; 2Ophthalmology, Geneva University Hospitals, Geneva, Switzerland; 3Ophthalmology, Kyushu University, Fukuoka, Japan; 4Ophthalmology, The Second Hosp of Harbin Med Univ, Harbin, China; 5Signal Transduction in Tumor Cells, Max-Delbrück-Centre for Molecular Medicine, Berlin, Germany.

5827 — A447 An Angiogenic Role Of Adrenomedullin In Choroidal Neovascularization. Susumu Sakimoto1, M. Kami1, H. Kidoya2, H. Naito1, N. Matsunuma1, M. Suzuki1, H. Sakaguchi1, N. Takakura2, K. Nishida1. 1Ophthalmology, Osaka University Graduate School of Medicine, Suita, Japan; 2Signal Transduction, Research Institute for Microbial Diseases, Osaka University, Suita, Japan.
5828 — A448  Implication of GPx4 in Choroidal Neovascularization. Murilo F. Roggia1, T. Ueta1, I. Hiraoka1, T. Taw1, Y. Tanaka1, Y. Yanagi1.
   1Ophthalmology, University of Tokyo, Tokyo, Japan; 2Pharmaceutical Sciences, Kitasato University, Tokyo, Japan.

   1Genetics' Retinal Cell Signaling, Boys Town Natl Res Hospital, Omaha, NE; 2Genetics, Boys Town Nr1 Research Hosp, Omaha, NE.

5830 — A450  Topical NDPL Promotes Microglia Ramiﬁcation in Experimental CNV. Kristopher G. Sheets1A, W.C. Gordon1B, N.G. Bazan1A.
   1Neuroscience Center, 2Ophthalmology & Neuroscience Center, 1LSU Health Sciences Center, New Orleans, LA.

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. Miyata1, B. Archer1, Y.Z. Le1, B.K. Ambati1.
   1Moran Eye Center, Salt Lake City, UT; 2Department of Ophthalmology, The 306th Hospital of PLA, Beijing, China; 3Department of Medicine and Harold Hamm Oklahoma Diabetes Center, University of Oklahoma Health Sciences Center, Oklahoma City, OK.

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


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

5835 — A455  Long Term Results of Photodynamic Therapy in Patients with Age Choroidal Neovascularization Secondary to Age Related Macular Degeneration. Amy Chawla1, J.T. Thompson1, R.J. Sgarda1.
   1Ophthalmology, University of Maryland, Baltimore, MD; 2Ophthalmology, Retina Specialist, Baltimore, MD. *CR

5836 — A456  Functional Recovery After Experimental RPE Debridement, mERG Studies in a Porcine Model. Jens F. Kiligaard2, N. Sorensen1, M.V. Kyhr1, N. Lassote1, J.U. Prasse1, M.D. de la Cour2.
   1Dept of Ophthalmology, Rigshospitalet, Copenhagen, Denmark; 2Dept. of Ophthalmology, Glastrup Copenhagen Univ. Hospital, Glastrup, Denmark; 3Eye Pathology Inst, Copenhagen University, Copenhagen, Denmark.

   Physics, Biocomplexity Institute, Bloomington, IN.

5838 — A458  Transplantation of Human ESC-derived RPE into Rodent Models of Retinal Degeneration. Madalena Caridi1, Y. Zhu1, I. Hirotaka2, T. Inoue1, Y. Tamaki1, Y. Yanagi1.
   2Pharmaceutical Sciences, Kitasato University, Tokyo, Japan; 2Ophthalmology, Retina Specialist, Baltimore, MD; 3Department of Ophthalmology, University of Maryland, Baltimore, MD.

   1Ophthalmology, 2Bioengineering, 3Dept of Biological Structure, 4Erasmus MC, University Medical Center, Rotterdam, The Netherlands; 5Science Interventional, Menlo Park, CA; 6Jansen Pharmaceuticals Companies of Johnson & Johnson, Radnor, PA. *CR

5840 — A460  Characteristics Of Rat Iris Pigment Epithelial Cells Cultured On Modified Expanded-polytetrafluoroethylene (ePTFE) Substrates. Shen Nian1A, C.M. Sheridan2, V. Kearns2, R. Williams2, D. Wong2, K. Vasilev1, A. Bachluka1, A.C. Lo1B, W.W. Lai1B.
   1Eye Institute, 2Research Centre of Heart, Brain, Hormone and Healthy Aging, the University of Hong Kong, Hong Kong; 3Eye and Vision Science, University of Liverpool, Liverpool, United Kingdom; 4Mawson Institute and School of Advanced Manufacturing, University of South Australia, Mawson Lakes, Australia.

5841 — A461  Cell-based Therapy In A Mouse Model Of Leber Congenital Amaurosis. Yi-Sheng Chang1, W. McIntosh Ambrose2, C. Lin2, H. Qian1, T. Li1, T. Cogliati1, A. Swareo1, 1National Eye Institute, National Institutes of Health, Bethesda, MD; 2Department of Ophthalmology, National Cheng Kung University, Taiwan, Taiwan.

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


5844 — A464  Repeated Ab-Externo Catheterization of the Sub-retinal Space Using a Microcatheter for Targeted Delivery of a Cell Therapy Product in a Pig Model. Marc D. de Smet1, S. Wyse1, M. Vezina1, S. Conston1, C. Sachs1, S.H. Popma1.
   1Ophthalmology, Clinique de Montchoisi, Lausanne, Switzerland; 2Preclinical Services, Charles River Laboratories, Montreal, QC, Canada; 3Science Interventional, Menlo Park, CA; 4Jansen Pharmaceuticals Companies of Johnson & Johnson, Radnor, PA. *CR

   1The Rotterdam Eye Hospital, Rotterdam, The Netherlands; 2Rotterdam Ophthalmic Institute, Rotterdam, The Netherlands; 3Erasmus MC, University Medical Center, Rotterdam, The Netherlands; 4Institute for Lasers, Life and Biophotonics Amsterdam, Department of Physics and Astronomy, VU University, Amsterdam, The Netherlands. *CR

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

5847 — A467  Efficient Transfection and Genomic Integration of the PEDF Gene into a Limited Number of Primary IPE Cells. Gabriele Thomann, 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. Mandeep S. Singh1, E.J. Lee1, H.E. Jones2, B. Ahmed2, I.M. Andolina1, P.M. Munro3, K.L. Grieve3, G.W. Aylward1, A.M. Sillito3, R.E. MacLaren1.
   1University of Oxford & Oxford Eye Hospital NIHR Biomedical Research Centre, Oxford, United Kingdom; 2UCL Institute of Ophthalmology & Moorfields Eye Hospital NIHR Biomedical Research Centre, London, United Kingdom; 3Faculty of Life Sciences, University of Manchester, Manchester, United Kingdom.
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. Kuriharad4, J. Wang2, A.L. Dorsey1, S. Bravo4, G. Sizudsk4, M. Friedlander4. 1Cell Biology, 2Center for Metabolomics, 3The Scripps Research Institute, La Jolla, CA.

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

5851 — A471 Earlier Laser Treatment Of Retinopathy of Prematurity Could Reduce Need For Vitrectomy. Joo Eun Lee1, S. Jeal1, I. Yoon1. 1Ophthalmology, Haemundae 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 Baci2, T.N. Zymarek2, C.S. Teitelbaum3, W.W. Merriam4, S.W. Merriam4, J.S. Weiser2, J.D. Stein2, S.M. Archer2, S.E. Morii2. 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 Photocoagulatoin And Cryopexy Treatments. Hiroki Nakato1, C. Fujikota1, R. Furushashi1. 1Ophthalmology, Yokkaichi Municipal Hospital, Yokkaichi, Japan; 2Ophthalmology, Nagoya University Graduate School of Medicine, Nagoya, Japan.

5854 — A474 Refractive Error and Ocular Biometry in Patients with a History of Retinopathy of Prematurity. Susan E. Yanni1, J.N. Leffler2, E.E. Birch1. 1Retina Foundation of the Southwest, Dallas, TX; 2Children’s Eye Care of North Texas, Plano, TX; 3Ophthalmology, University of Texas Southwestern Medical Center, Dallas, TX.

5855 — A475 Anti-vegf In Rop Treatment - 5.5 Years Of Experience. Susana M. teixeira1,2, C.M. Santos2, F.C. Silva2, G. Pires2, R. Barros2. 1Ophthalmology, 2Ophthalmology Department, 3Hospital Professor Doutor Fernando Fonseca, Lisbon, Portugal.


5857 — A477 Comparison of Short Term Outcomes After Intravitreal Bevacizumab Versus Ranibizumab in the Treatment of Stage 3 Retinopathy of Prematurity. Jose Luis Guerrero-Naranjo1, F. Schooneveldt, J.J. Fromow-Guerra1, V. Morales-Canton1, G. Garcia-Aguirre1, H. Quiroz-Mercado1, M.A. Martinez-Castellanos2. 1Retina, Asoc Para Evitar la Ceguera en Mexico, Mexico City, Mexico; 2Retina, Assoc Fora Para Evitar la Ceguera en Mexico, Mexico, Mexico; 3Retina, Association Para Evitar la Ceguera en Mexico, Mexico City, Mexico; 4Retina, Assoc Para Evitar la Ceguera, Mexico City, Mexico; 5Retina, Assoc Para Evitar la Ceguera, Mexico, Mexico; 6Retina, Asoc Para Evitar la Ceguera, Mexico City, Mexico; 7Ophthalmology, Denver Health Medical Center, Denver, CO; 8Retina and Vitreous, Asociacion Para Evitar la Ceguera, Mexico, 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, 2Pediatrics, 3Catholic University of the Sacred Heart, Rome, Italy.

5859 — A479 Evaluation of the Effects of Intravitreal Injection of Bevacizumab on Controlateral Eye Treated with Conventional Laser Photocoagulation. Fernando Molle1, A. Baldascino1, P. Perrini1, L. Orazi1, M.M. Pagliara1, V. Purcaro1, C. Giannantonio1, P. 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. Schooneveldt, M.F. Chiang, R. Bolens, H. Winninghoff, J. Hernandez-Vargas, V. Morales-Canton1, M. Martinez-Castellanos1, A.I. Ortiz1. 1Asociacion Para Evitar la Ceguera en Mexico, IAP, Col. Barrio San Lucas, Coyoacan, Mexico; 2Retina, Assoc 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, Assoc Fora Para Evitar la Ceguera, Mexico, Mexico; 6Retina, Col San Lucas Coyoacan, APEC, Mexico City, Mexico. *CR

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

5863 — A483 Fluorescein Angiography Macular Abnormalities Assessed by Optical Coherence Tomography in Retinopathy of Prematurity. Fernando Schooneveldt, Y.E. Giordano1, V. Morales-Canton1, R.V. Chan2, H. Quiroz-Mercado1, M.A. Martinez-Castellanos2. 1Retina, Asociacion Para Evitar la Ceguera en Mexico, Mexico, Mexico; 2Retina, Assoc Para Evitar la Ceguera en Mexico, Mexico, Mexico; 3Ophthalmology, Well Cornell Medical College, New York, NY; 4Ophthalmology, Denver Health Medical Center, Denver, CO; 5Retina and Vitreous, Asociacion Para Evitar la Ceguera, Mexico, Mexico.

5864 — A484 New method of analysis of tortuosity of retinal vessels in Retinopathy of Prematurity. Alfredo reibaldi1, A. Scuderi1, A. Longo2, I.M. Franco4, A. Russo3, F. Munno3, V. Villari4, A. Cantavenera1, M. Reibaldi1. 1Ophthalmology, University of Catania, Catania, Italy; 2Institute for Physical and Chemical Processes, CNR-IPCF, Messina, Italy.

5865 — A485 Plus Disease Diagnosis In Retinopathy Of Prematurity: Vascular Tortuosity As A Function Of Distance From Optic Disc Center. Katie M. Keck1, J. Kalpachry-Cramer1, E. Atae-Cansizoglu2, S. You1, D. Erdogmus4, M.F. Chiang1,2,3. 1Ophthalmology, 2Medical Informatics, 3Oregon Health & Science University, Portland, OR; 4Radiology, Massachusetts General Hospital, Boston, MA; 5Electrical and Computer Engineering, Northeastern University, Boston, MA. *CR

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

Hall B/C A470-A512

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

Retina

520 Retinopathy of Prematurity II

Moderator: Robison V Chan
5867 – A487 Outcome of Laser Treatment of AP-ROP in Extremely Premature Infants. Glyn A. Goli1, D.J. Gunn1, 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. Axel Orozco-Hernandez1, F. Schooneveldt2, J. Mercado1, R. Chan1, V. Morales-Canton1, G. Garcia-Aguirre1, M. Martinez-Castellanos4. 1Retina, APEC, Mexico City, Mexico; 2Neonatal Intensive Care Unit, Instituto de Salud del Estado de Mexico, Toluca, Mexico; 3Retina, New York Presbyterian Weill Cornell Medical College, New York, NY.


5870 – A490 Analysis of Postnatal Weight Gain for the Prediction of Severity of Retinopathy of Prematurity. Patricia Butke. 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 ForROP In Sweden. Gerid Holmstrom1, A. Hellstrom1, P. Jakobsson1, P. Lundgren1, K. Tornqvist5, A. Wallin6. 1Ophthalmology, Lunar and Children Hospital, Sweden; 2Section of Pediatric Ophthalmology, The Queen Silvia Children’s Hospital, Sahlgrenska Academy, University of Gothenburg, Sweden; 3Ophthalmology, Linkoping University, Linkoping, Sweden; 4Ophthalmology, Norrland’s University Hospital, Umea, 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 Dulk1, C.N. Igwe1, R.L. Holder2, L. Butler3. 1Birmingham & Midland Eye Centre, City Hospital, Birmingham, United Kingdom; 2Department of Primary Care, University of Birmingham, Birmingham, United Kingdom.

5873 – A493 Macular Pigment Imaging in Infants and Children Using the RetCam. Paul S. Bernstein1, M. Sharifzadeh1, A. Liu1, J. Ernmark2, K. Nelson2, X. Sheng1, C. Paniush, B. Carlstrom3, R.O. Hoffmann1, W. Gellermann1. 1Ophthalm and Visual Sciences, Univ of Utah/Moran Eye Center, Salt Lake City, UT; 2Physics, 3Pediatrics, 1Univ 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 In Pediatric Patients. Victoria Gonzalez1, F. Schooneveldt2, V. Morales-Canton1, M.A. Martinez-Castellanos4. 1Ophthalmology, Asociacion Para Evitar la Ceguera, Mexico, D.F., Mexico; 2Retina, Assoc 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.


5876 – A496 Digital Imaging Identification Of Skip Lesions In Laser Treatment Of Retinopathy Of Prematurity. Robison V Chan1, K.B. Kang1, A. Orlin1, W.F. Chiang2, T.C. Lee3. 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


5878 – A498 Lower Target Oxygen Saturation And Rop, Julio A. Urrest-Zavalias, N. Criel, E.G. Knoll1, M.E. Forniz-Paz, R. Monti1, E. Collino1, E. Esposito1, C.E. Gilbert1, H.M. Serra2. 1University Clinic R Fabiola/Ophthalmol, Universidad 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.


5882 – A502 Arginase 2 Deficiency Limits Microglia/Macrophage Activation and Prevents Hyperoxia-induced Vascular Injury in the Mouse Retina. Jutamas Suwanpradid4, Z. Xu4, S.P. Reddy4. 1Vascular Biology Center, 2Department of Pharmacology and Toxicology, 3Georgia Health Sciences University, Augusta, GA; 4VA Medical Center, Augusta, GA.

5883 – A503 Genetic Deletion or Pharmacological Inhibition of Aldose Reductase Protects the Retina in a Mouse Model of Ischemia-induced Retinopathy. Zhongjie Fu4, S.Y. Li4, S. Chung1, C. O. Lo4, C. Eye Institute, 5Anatomy, 6Research Center of Heart, Brain, Hormone and Healthy Aging, 7The University of Hong Kong, Hong Kong, Hong Kong.

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


5886 – A506 Dark Rearing (DR) as a means of mimicking ‘Physiological Hypoxia’: A rationale for non-invasive treatment of Retinopathy of Prematurity. Samuel J. Adamsom1, P. Kozulin1, R. Maccarone1, S. Yun1, P. Hu1, S. Biste1, J. Provits2, M.C. Madigan3, J. McColn1, T. Chon-Ling3. 1Department of Anatomy & Histology, The University of Sydney, Sydney, Australia; 2ARC Centre of Excellence In Vision Science, Australian National University, Canberra, Australia; 3Biomedical & Science Technology, University of L’Aquila, L’Aquila, Italy; 4School of Optometry & Vision Science, University of NSW, Sydney, Australia.

5887 – A507 Role of the Krebs Cycle Metabolites in Retinal Angiogenesis: Implication of α-KG and its Receptor GPR99. Francois Duhame1, S. Tremblay1, K. Zaniolo1, S. Chemtob3. 1Pharmacology, Ste-Justine Hospital Research Center, Montreal, QC, Canada; 2Ophthalmology, University of Montreal, Montreal, QC, Canada; 3Pediatrics & Pharmacology, Research Ctr/Hosp Ste Justine, Montreal, QC, Canada.
**5888 — A508** Decreased IGF1 Expression Associated with Avascular Retina in Model of Retinopathy of Prematurity. Xianchao Jiang1,2, B. Numpang2, B. Yu1, H. Wang1, G. Smith1, B. McCloskey1, S. Patel1, R. DiGeronomo1, M. Harnett1, R. Lane2. 1Ophthalmology, John Moran Eye Center, The University of Utah, Salt Lake City, UT; 2Division of Neonatology, The University of Utah, Salt Lake City, UT.

**5889 — A509** A Novel Allosteric Modulator of the IL-1 Receptor Prevents the Development of Oxygen-Induced Retinopathy. Jose C. Rivera1,2, N. Sitara1, D. Hamel1, A. Madaan1, J-C. Honore1, B. Noueheid1, M. Blais2, C. Quiniou3, P. Sapieha3, S. Chemboto1,2. 1Pediatrics, Ophthalmology, Pharmacology, Hospital Sainte-Justine/Montreal University, Montreal, QC, Canada; 2Ophthalmology, Maisonneuve-Rosemont Hospital, Montreal, QC, Canada.

**5890 — A510** A Novel Model of Retinopathy In Normobaric Hyperoxic Conditions With Fewer Oxygen Supply In The Rat. Unut Kaara1, T. Ozgurtas1, A.H. Durukan1, F.N. Aydin2, M. Ozer2, S. Tekin2, E.U. Bagriacik2. 1Ophthalmology, Isparta Military Hospital, Isparta, Turkey; 2Biochemistry, Ophthalmology, Physiology, School of Medicine, Gülhane Military Medical Academy, Ankara, Turkey; 1Immunology, Gazi University of Medicine, Ankara, Turkey.

**5891 — A511** Nitric Oxide and Signal Loss in the “ROP Rat” Retina. Tara L. Favazza1, DeWald1, N. Zhang1, R.M. Hansen3, A.B. Fulton3, W.D. Eldred1, J.D. Akula2,1. 1Ophthalmology, Children’s Hospital in 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 Zhang12, T.L. Favazza1, A. Baglieri1, A.B. Fulton3, R.M. Hansen3, P.M. Ivone1, J.D. Akula2,1. 1Ophthalmology, Children’s Hospital in Boston, Boston, MA; 2Ophthalmology, Harvard Medical School, Boston, MA; 3Ophthalmology and Pharmacology, Emory University School of Medicine, Atlanta, GA.

**5894 — A573** Manipulation Of Gene Expression In Orbital Adipose-derived Mesenchymal Stem Cells From Retinoblastoma Patients Using Lentiviral Vectors. David M. Wu1, J. Apicario2, 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. Sadkikov2, N. Askenasy3, N. Goldenberg Cohen4. 1The Krieger Eye Research, Sackler Faculty of Medicine, Tel Aviv University, Petch Tikva, Israel; 2Frankel Laboratory, Center for Stem Cell Research, Petch Tikva, Israel; 3Department of Pediatric Ophthalmology, Schneider Children’s Medical Center of Israel, Petch Tikva, Israel.


**5898 — A577** Growth and Organization of Human iPSC-Celled 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. *CR

**5899 — A578** Enhanced Progenitor Cell Integration and Differentiation Following Transplantation on to PLGA Polymer Construct. Brandon M. Menke1, V.B. Joshi2, A. Wongrakpanich3, K.R. Anfinsen1, M.R. Sreb1, M.E. Eyeston1, A.K. Salem1, B.A. Tucker2. 1Ophthalmology, 2Pharmacy, 3University of Iowa, Iowa City, IA.


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**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, Araucu, 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. Lecadea1, I. Mathivanan2, S. Wolf, V. Enzmann2. 1Department of Ophthalmology, University of Bern, Bern, Switzerland.

**5903 — A582** Visual Cycle Machinery in Human Induced Pluripotent Stem Cell-Derived RPE. Alberto Muniz1, M.L. Plamper1, B.S. Betts1, A.J. Johnson2, H-C.H. Wang1. 1Ocular Trauma, US Army Inst of Surgical Research, 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. Aksyahalakshmi Srithar1, 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 iPSCs And Prenatal Eye Tissue. Ruchira Singh1,2, W. Shen1,4, X. Guo1, E.T. Perez2, D. Kuai1, L.S. Wright1, B. Pattnaik1,8, D.M. Gamm1,6. 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 Mikhailova1,2, H. Hongisto1,2, H. Vaajasaari1,2, S. Narkilahti1,2, R. Suuronen2,3, T. Ilmarinen1,2, H. Skottman1,2. 1University of Tampere, Institute of Biomedical Sciences and Medical Technology, Tampere, Finland; 2Tampere University Hospital, Department of Eye, Ear and Oral Diseases, Tampere, Finland; 3Institute of Biosciences and Medical Technology, Tampere, Finland; 4Tampere University Hospital, Department of Ophthalmology, University of Tampere, Tampere, Finland.

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**Thursday – Posters – 5888 – 5907**

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. Hirojuki Kamao1,2, M. Mandai1, A. Suga1, J. Kiriya1, M. Takahashi1. 1Laboratory for Retinal Regeneration, RIKEN Ctr for Devlpmntl Biology, Kobe, Japan; 2Ophthalmology, Kawasaki medical school, Okayama, 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*
5908 — A587  Engraft Of Hyaluronic Acid-based Hydrogel Loaded Mesenchymal Stem Cell Into The Vitreous Body Of The Ischemic Retina. Su-Ju Oh1, Y. Lee2, J. Shin2, C. Yeum2, G. Chae2, M-H. Chun2, 1Department of Anatomy, 2Institute of Hansen’s Disease, 3Coll of Med Catholic Univ of Korea, Seoul, Republic of Korea.

5909 — A588  Characterization Of Human Induced Pluripotent Stem Cells Derived Neural Progenitor Cells. Wei Kong1, N. Yang1, X. Li2. 1Ophthalmology, the Fourth People’s Hospital of Shenyang City, Shenyang, China; 2Ophthalmology, the 4th Affiliated Hospital of China Medical University, Shenyang, China.

5910 — A589  Directing Virus-free Human Induced Pluripotent Stem Cells To Differentiate Into Retinal Cells. Xiufeng Zhong1, C. Hampton1, T. Park1, D.M. Gamm1, E. Zambris2, V. Canto-Soler2. 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 Neuronal Genes in ImM10 Müller Glia-Derived Retinal Stem Cells. Deborah C. Otteson1, J. Martin2, Z. Hou3, D.M. Gamm1, 1Optometry, University of Houston, Houston, TX; 2University of Wisconsin, Madison, WI.


5913 — A592  Retinal Differentiation Of Human Es Cells Maintained In Chemically Defined, Xeno-free E8 Culture Medium. Kyle Wallace1, A. Gerner1, J. Martin2, Z. Hou2, 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. Sorkkio1, T.H. Ilmarinen1, J.S. Loo1, H.T. Skottman1, 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. Guo1, G. Chen1, D. Cyr1, K. Lashkari1, 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 Kuvahara1, D. Zhu1, M. Humayun2, A.K. Ahuja1. Doheny Eye Institute, Los Angeles, CA.

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

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


5920 — A599  Evaluation of hESC-Derived Retinal Pigment Epithelial Cells Cultured as a Monolayer on Polymer Substrate Transplanted in RCS Rats. Padmaja B. Thomas1, B.B. Thomas2, L. Liu3, Y. Hu1, D. Zhu1, E. Barron1, D.O. Clegg2, D.R. Hinton1, M.S. Humayun1. 1Ophthalmology, 2Doheny Eye Institute-USC, Los Angeles, CA; 3Cell and Neurobiology, University of Southern California, Los Angeles, CA; 4Ophthalmology, Chang Gung Memorial Hospital, Taoyuan, Taiwan; 5Ophthalmology, Peking University Third Hospital, Beijing, China; 6Pathology/Doheny Eye Inst, Univ of Southern California, Los Angeles, CA; 7Ophthalmology, Keck School of Medicine USC, Los Angeles, CA; 8Ophthalmology, Doheny Eye Institute - USC, Los Angeles, CA.

5921 — A600  Activated Omental Stromal Cells Protect Against Light-Induced Retinal Injury. Evan B. Price1,2,3, P. Bu2,4, P. Sethupathi5, E.B. Stabbas1,2, J.I. Perlman1,2. 1Surgery, 2Research, 3Edward Hines, Jr. VA Hospital, Hines, IL; 4Ophthalmology, 5Microbiology and Immunology, 6Loyola University Medical Center, Maywood, IL.

5922 — A601  Embryonic Stem Cell Derived Retinal Pigment Epithelium Stem Cell Transplant: Survival And Lack Of Tumor Formation In Athymic Nude Rats. Bruno Diniz, S. Ribeiro, R. Brandt, Y. Hu1, L. Liu, P. Thomas1, B. Thomas2, D. Hinton1, M. Humayun1. 1Doheny Eye Institute, University of Southern California, Los Angeles, CA; 2Ophthalmology, Universidade Federal de Sao Paulo, Sao Paulo, Brazil; 3Department of Ophthalmology, Peking University Third Hospital, Beijing, China; 4Keck School of Medicine, Los Angeles, CA.

5923 — A602  Comparison Of Barrier Properties of RPE Derived From Two Human Embryonic Stem Cell Lines To the Properties of Human Fetal RPE. Shaun Peng1,2, G. Gan1, C. Qiu3, L. Li1, R.A. Adelman4, L.J. Rizzolo1. 1Surgery/ Ophthalmology, 2Cell biology, 3Ophthalmology, 4Yale University, New Haven, CT; 5Ophthalmology, 2nd Hospital of Harbin Medical University, Harbin, China.

5924 — A603  Polarized Human Embryonic Stem Cell-Derived RPE Maintains its Monolayer Integrity and Function after Long-term in vitro Culture. Danhong Zhou1, D.O. Clegg2, D.R. Hinton1. 1Doheny Eye Institute/Pathology, Univ of Southern California, Los Angeles, CA; 2Bioscience II, Univ of California-Santa Barbara, Santa Barbara, CA; 3Pathology, Keck School of Medicine USC, Los Angeles, CA.


5926 — A605  Injury of the Adult Zebrafish Retina Induces Expression of Purinergic Receptors and Ecto-nucleotidases that Control In Vivo Cell Proliferation. Ariadna G. Battista1, M.P. Faillace2. 1Laboratorio di 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.
Friday – Posters – 5928 – 5952

7:00 am – 9:00 am

Thursday – Posters – 5928 – 5952

8:30 am – 10:15 am

Thursday, May 10, 2012, 8:30 AM-10:15 AM
Gliaoma / Clinical & Epidemiologic Research

522 Surgery and Lasers

Moderators: Robert D Fechner 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.


5930 — A155 The Trabecu- First European Clinical Results and Subgroup Analysis. Matthias Neuburger1, C. van Oterendorp2, M.C. Moelle3, R. Fetchner2, N. Bhagat2. 1University Hospital, Freiburg, Germany; 2Laboratory of Clinical Trials, Istituto di ricerche farmacologiche «Mario Negri», Milan, Italy; 3Ophthalmology, University of Erlangen Nurnberg, Erlangen, Germany.

5931 — A156 Trabeculectome Results In Eyes With Low Preoperative IOP. Xiaojing Chen1, K. Kaplowitz2, N. Loewen. 1Ophthalmology, 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. Kolomerey1, M. Zarbin1, R. Fetchner2, N. Bhagat2. 1UMDNJ/Bucknell University, Florham Park, NJ; 2UMDNSJ, Newark, NJ.


5935 — A160 A Prospective Study of Phakic vs Pseudophakic Eyes After Phacoemulsification in Trabeculectomy for Open- Angle Glaucoma. Yuji Tukihara1, M. Inatani2, M. Iwao3, M. Kawai4, T. Inoue2, K. Iwao1, H. Tanikawa1. 1Ophthalmal & Vis Science, Kumamoto Univ Sch of Med, Kumamoto, Japan; 2Department of Ophthalmology, University of Fukui, Fukui, Japan; 3Ophthalmology, Asahikawa Medical College, Asahikawa, Japan; 4Ophthalmology, Saga University, Saga City, Japan.

5936 — A161 Time Course OfInduced Astigmatism After Canaloplasty. Anselm G. Junemann1, J. Schloemberg2, F.K. Horn1, R. Rejdak3, F.E. Kruse4, M.C. Moelle4. 1Ophthalmology, University of Erlangen Nurnberg, Erlangen, Germany; 2General Ophthalmology, Medical University of Lublin, Lublin, Poland.


5939 — A164 A Comparison Of Intraocular Pressure Reduction After Selective Laser Trabeculoplasty With The Co-administration Of Loteprednol Versus None. Ronald L. Rebenitsch1, N.R. Binder1, A. Jani1, K. Pikey1. 1Ophthalmology, University of Missouri-Kansas City, Kansas City, MO.


5941 — A166 Efficacy Of Glaucoma Surgical Procedures: A Systematic Review And Metaanalysis. Luciano Quaranta1, I. Floriani1, I. Riva1, G. Gambirasio1, I. De Simone2, E. Rulli3, E. Biagioli3, S. Credidio3. 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 Exp-press Than Trabeculectomy: Results Of A Prospective Rct. Delan Jinjupriya1, L. Beltran-Aguillo1, J.P. Bern1, T.B. Wagonchal2, G.E. Trope3, Y.M. Bous2. 1Ophthalmology, Queen’s University, Kingston, ON, Canada; 2Ophthalmology and Vision Sciences, 3Dalla Lana School of Public Health, 4University of Toronto, Toronto, ON, Canada; 5Ophthalmology, Shaare Zedek Medical Center, Jerusalem, Israel.


5944 — A169 Progression Rate Before and After Trabeculectomy. Jimena Schmidt1, S. Araneda2, E. Basulescu3, C. Perez4, E. Maul5, A. Gerhard6, C. Triger7. 1Ophthalmology Department, Catholic University of Chile, Santiago, Chile; 2Ophthalmology Department, Sotero del Rio Hospital, Santiago, Chile.

5945 — A170 Success Rates And Risk Factors For Failure Of Bleb Needling Post Trabeculectomy. Andrew Toren1, S. Kulkarni2, L. Shuba3, M. Nicolodi4. 1Ophthalmology & Visual Sciences, Dalhousie University, Halifax, NS, Canada; 2Ophthalmology, University of Ottawa, Ottawa, ON, Canada.


5948 — A173 Outcome And Structural Evolution Of Mytomycin Assisted Trabeculectomy In Inflammatory Glaucoma. Friederike Mackensen1, B.C. Dobner2, A.B. Knoll1, A.F. Scheurer1, K. Rohrscheib1. 1Department of Ophthalmology, Interdisciplinary Uveitis Center, University of Heidelberg, Heidelberg, Germany; 2Department of Ophthalmology, University of Heidelberg, Heidelberg, Germany.


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

5953 — A178 The Influence Of Seleral Flap Thickness, Shape, Suture Number And Position
On Pressure Change And Aqueous Flow
Direction In A New Trabeculectomy Model. Amir Samsudin1,2, S. Brocchini1, T.P. Khaw1, I. Eames1.
1University of Malaya, Kuala Lumpur, Malaysia; 2NIHR Biomedical Research Centre, Moorfields
Eye Hospital and UCL Institute of Ophthalmology, London, United Kingdom; *UCL School of
Pharmacy, London, United Kingdom; *UCL Department of Mechanical Engineering, London,
United Kingdom.

5954 — A179 Outcomes Of Combined
Glaucoma And Cataract Surgery: Comparison
Of Non-penetrating Deep Sclerectomy Vs
Millà Giró. Ophthalmology, Hospital Clinic de Barcelona, Barcelona, Spain.

5955 — A180 Eyes With Occulacde Angles
Despite Patent Iridotomy: How Efficient Is Laser
Iridoplasty In These Cases? Vitor G. Prado1, P.A. Moreno1,2, E.D. Almeida, Jr1, A.S. Sousa1, T.S.
Prata1,2. *Ophthalmology, Federal University of São Paulo, São Paulo, Brazil; 2Hospital Medicina dos
Olhos, São Paulo, Brazil.

5956 — A181 Short-Term Efficacy of Selective
Laser Trabeculoplasty in Primary Angle Closure
Disease - Results of a Randomized Controlled
Trial. Arun Kumar Narayanawaswamy1, S.A. Perera1,2, C. Hu1, C.K. Leung1, D.V. Istianuor1, M.E.
Nongpiur1, H.M. Hoon1, T.T. Wong1,2, D. Goh1, T. Aung1,2. *Glaucoma, 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, G

5957 — A182 Eximer Laser Trabeculoplasty
(ELT) combined with Phacoemulsification
and Lens Implantation: 5 Year Post-OP
Observations. Ulrich F. Giers1, L. Kleineberg1, R.P. Stodmeister1, M.S. Berlin1, L.E. Pillunat1.
1Dermolde Eye Clinic, Detmold, Germany; 2Ophthalmology, University Hospital Carl Gustav Carus,
Rodalben, Germany; 3Ophthalmology, Ludwig-Maximilians-University, Munich, Germany.

5958 — A183 Selective Laser Trabeculoplasty
Promotes Phagocytosis In Cultured Trabecular
Meshwork Cells. Grayson A. Roumeliotis, D.
Kagian, C.M. Hatnik. Ivey Eye Institute, Schuchil
Sch of Med & Dentistry, London, ON, Canada.

5959 — A184 Primary and Repeat Selective
Laser Trabeculoplasty in Pseudophakic
Eyes: 2 year follow-up. Tamara L. Berezina1, A.S. Khouri1, B.A. Maltzman1, K. Shah1, R.D.
Fechter1. *Ophthalmology, 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.

5961 — A186 The Effectiveness Of Selective
Laser Trabeculoplasty on Eyes of Different
Corneal Thicknesses. Joseph A. Donnelly1, E.
Miglino2, L.F. Jindra3. 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. Tom1, S.
Loon1, P.T. Chew2-3. *Ophthalmology, National
University Hospital, National University Health
System, Singapore, Singapore; 2Ophthalmology,
National University of Singapore, Singapore.

5963 — A188 Predictive Factors Of Selective
Laser Trabeculoplasty Success In Medically
Uncontrolled Glaucoma. Ulrich Brandhuber, K.
Sekura, A. Neubauer, C. Hørneff. Department of
Ophthalmology, Ludwig-Maximilians-University,
Munich, Germany.

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

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

5966 — A191 The Cost Effectiveness And
Duration Of Effectiveness Of SLT As Primary
And Secondary Therapy Relative To Medications
In The Treatment Of Primary Open Angle
Glaucoma. Ernesto D. Golez, I.P., A. Shabu2, A.
Porta1, F. Ferentini1, M.A. Latina1. *Ophthalmology,
Massachusetts Eye and Ear Infirmary, Reading,
MA; 2Ophthalmology, MEIEI / HMS, Reading, MA;
3Ophthalmology, Eye Unit, Ospedale “C. Cantu”,
Abbiagiarasso, Italy; 4Reading Health Center,
Reading, MA.*CR

5967 — A192 Subsequent Slt Can Be Effective
After Initially Less Responsive Slt: 4 Year
Follow-up. Albert S. Khouri1, T.L. Berezina1,
B. Maltzman1, K. Shah1, R.D. Fechter1. *Ophthalmology, UMDNJ- New Jersey Med
Sch, Newark, NJ; 2Ophthalmology, Hudson Eye
Physicians and Surgeons, Jersey City, NJ; 3Drexel
University, Philadelphia, PA.

5968 — A193 Selective Laser Trabeculoplasty:
12 Years Follow Up. Audrey Giocanti-Auregan, Y.

5969 — A194 Baseline Intraocular Pressure
Strongly Predicts Response to Selective Laser
Trabeculoplasty for Open Angle Glaucoma.
J D. Nussdorf1, A C. Janot1, D.W. Hanson1, P.J.
DeMarco2. 1Department of Ophthalmology,
Ochsner Clinic Foundation, New Orleans, LA;
2Psychological and Brain Sciences, University
of Louisville, Louisville, KY.

5970 — A195 Laser Surgery in the United
Kingdom. Gordon Bowler1, H. Saedon1, R.
Thomas2, W. Chan1. 1Ophthalmology, Princess
Royal University Hospital, Orpington, United
Kingdom; 2Ophthalmology, University Hospitals
Coventry Warwickshire & Warwick Medical School,
Coventry, United Kingdom; 3Ophthalmology,
Croydon University Hospital, Croydon, United
Kingdom; 4Ophthalmology, Great Ormond Street Hospital, London, United Kingdom.

5971 — A196 Repeat SLT In Comprehensive
Ophthalmology Practices. Jeffrey D. Henderes1-4,
E.S. Tung1, A. Johnston1, S.K. Luminais1,2,
R. Sherry1, J.P. Gaughan1-3. *Ophthalmology,
#Epidemiology and Biostatistics, #Temple
University, Philadelphia, PA.

5972 — A197 Quantification of Short-
Term Endothelial Cell Loss and Intraocular
Pressure Reduction Following Laser Peripheral
Iridotomy. Gabriela C. Barretto1, L. Trancoso1, M.
Cota1, L. Bilel1, T.S. Prata1. *Glaucoma, 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. Patriankos1,2. 1University of Chicago,
Chicago, IL; 2John H. Stroger Jr. Hospital of Cook
County, Chicago, IL.

5974 — A199 Effectiveness of Selective Laser
Trabeculoplasty with Regard to Influence of
Pseudophakia and Prostaglandin Analogues.
Cornelia Hirn, M. Toetember-Harms, G. Bauer,
S. Zehnder, D. Lindegger, J. Funk. Ophthalmology,
University Hospital Zurich, Zurich, Switzerland.

5975 — A200 Change in Lens Vault after Laser
Iridotomy in Asian Indian Eyes with Angle
Closure. Dhaval Haria1, R. Sasikumar2, S. A V2,
D.A. Rao1, R. Bale2, N. K P1. *ophthalmology,
Narayana Nethralaya Super Speciality Eye hospital,
Bangalore, India; 2ophthalmology, Narayana
Nethralaya Super Speciality Eye hospital and Post
Graduate institute of ophthalmology, Bangalore,
India.

5976 — A201 Effectiveness of Selective Laser
Trabeculoplasty on Pigmentary Glaucoma.
Claire Scensana Tossis, E. Blumen Ohana, J.

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

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

Cornea

523 Corneal Endothelium

Moderator: Ula V J arkunas


5988 — D809 Successful Culture Of Human Corneal Endothelial Cells Isolated From Patients With Fuchs Endothelial Corneal Dystrophy. Marie-Claude Perron1, K. Zaninolo1, C. Bostan1, O. Rochette Drouin1, A. Deschambeault1, I. Brunette1,3, S. Proulx2. 'Maisonneuve-Rosemont Hospital Research Center, Montreal, QC, Canada; 'Centre LOEX de l’Universite Laval, Genie tissulaire et regeneraison; 'Centre de recherche FRSQ du CHA universitaire de Quebec and Department of ophthalmology and ORL, Laval University, Quebec, QC, Canada; 'Department of ophthalmology, University of Montreal, Montreal, QC, Canada.


5990 — D811 Regional variability in endothelial cell density in Fuchs Endothelial Corneal Dystrophy; An HRT3 Study. Christina R. Prescott, P. Hamrahi, U. 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 Proulx1, M. Haydari1, B. Goyer1, O. Roy1, S. Laprise1, O. Rochette Drouin1, I. Brunette1. 'Centre LOEX de l’Universite Laval, Genie tissulaire et regeneraison; 'Centre de recherche FRSQ du CHA universitaire de Quebec and Departement d’ophthalmologie, Universite Laval, Quebec, QC, Canada; 'Departement d’ophthalmologie, Universite de Montreál and Centre de Recherche de l’Hôpital Maisonneuve-Rosemont, Montreal, QC, Canada.


5994 — D815 Fabricating Bioengineered Corneal Endothelial Cell Sheet Through Chitosan-polycaprolactone-blended Membranes. Tsung-Jen Wang1,2, I-J. Wang3,4, T-H. Young2. 'Department of Ophthalmology, Taipei Medical University Hospital, Taiepi, Taiwan; 'Institute of Biomedical Engineering, College of Medicine and College of Engineering, National Taiwan University, Taiepi, Taiwan; 'Department of Ophthalmology, National Taiwan University Hospital, Taiepi, Taiwan; 'Department of Ophthalmology, National Taiwan University College of Medicine, Taiepi, Taiwan.

5996 — D817  Kinetics of Intracellular Pro-apoptotic Bax Protein Inducing Cell Death in Corneal Endothelial Cells. Marko Pastak1,2, B.B. Singer3, A. Kovtun4, M. Czugała2, B. Seitz1, M. Epple2, K-P. Stuhl4, S. Ergin1, T.A. Fuchs2,3. 1Institute of Anatomy, 2Department of Ophthalmology, Essent 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 Endothelium Wound Healing In A Primate Model. Naoki Okumura1, N. Koizumi1, M. Ueno2, S. Sakamoto1, H. Takahashi1, K. Yamasaki2, J. Hamuro1, S. Kinoshita1, 1Biomedical Engineering, Doshisha University, Kyotanabe, Japan; 2Ophthalmology, Kyoto Prefectural Univ of Med, Kyoto, Japan; 3Research Center for Animal Life Science, Shiga University of Medical Science, Otsu, Japan.

6000 — D821  Culture of Human Corneal Endothelial Cells (HCECs) for therapeutic purposes. Jesinta Navaratnam1, J.K. Slettedal, E. Gulliksen4, S. Boye1, M.C. Moe1, L. Drosdum4, B. Nicolaiessen1, A. Shahdadfar1,4. 1Center for Eye Research, 2Oslo University Hospital, Oslo, Norway.

6001 — D822  Increased Proliferation and Replicative Lifespan of Isolated Human Corneal Endothelial Cells with L-Ascorbic acid 2-phosphate. Satoru Yamagami1,2, N. Shinma1, M. Kinot1, M. Yamane1. 1Ophthalmology, 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, J.L. Funderburgh, A. Feinberg1. 1Ophthalmology, University of Pittsburgh School of Medicine, Pittsburgh, PA; 2Biomedical Engineering, Carnegie Mellon University, Pittsburgh, PA.

6004 — D825  Lentinus Mediated Interference With the ZO-1/ZONAB Pathway Induces Cell Cycle Progression in Human Corneal Endothelial Cells. Daniel Kampaik2, M. Basche1, A. Georgiadi1, U.F. Luhmann1, A.J. Smith1, F. Larkin1, R.R. Al2. 1Department of Genetics, UCL Institute of Ophthalmology, London, United Kingdom; 2Moorfields Eye Hospital, London, United Kingdom.

6005 — D826  Functional Study of SLIC4A11 in HEK293 cells. Diego G. Ogando1, S.S. Jalimarada1, E.N. Vithana1, 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. Zavala1, V. Treviño1, E. Martínez. 1Dean’s Office, Tecnologico de Monterrey School of Medicine, Monterrey, Mexico; 2Cátedra de Oftalmología - Tecnologico de Monterrey, Monterrey, Mexico; 3Cátedra de Bioinformatica - Tecnologico de Monterrey, Monterrey, Mexico.

6009 — D830  CD147 Expression Required for Lectin Transportes MCT1 and MCT4 in Rabbit Corneal Endothelium. Shimin 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. Ryoshi Numata1, N. Okumura1, M. Nakahara1, M. Ueno2, S. Kinoshita1, Y. Kanemura1, T. Sawa1, N. Koizumi1. 1Biomedical Engineering, Faculty of Life and Medical Sciences, Doshisha University, Kyotanabe, Japan; 2Ophthalmology, Kyoto Prefectural Univ of Med, Kyoto, Japan; 3Division of Regenerative Medicine, Institute for Clinical Research Osaka National Hospital, National Hospital Organization, Osaka, Japan; 4Center for Developmental Biology, Riken, Kobe, Japan.

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

6012 — D833  NF-κB 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. 1Ophthalmology, University of Southern California, Los Angeles, CA; 2Doheny Eye Institute, Los Angeles, CA.

6013 — D834  Isolation and Propagation of Human Corneal Endothelial Cells Using a Dual Media Culture System. Gary S. Peh1, K-P. Toh1, 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. Wang2,3, T. Epping2, A. Langenbucher2, B. Seitz2, N. Szentmáry2. 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. Valtin1, M. Sahmlüller1, P.S. Reinacl1, K. Engelmann1, U. Pleyer. 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 Neculation Time on in-vitro Culture of Human Corneal Endothelial Cells. Himi Singh1, R. Tandon1, S. Mohanty1, A. Kumar1,2. 1Ophthalmology, Dr.R.P. Centre for Ophthalmic Sciences, 2Stem Cell Facility, 3All India Institute of Medical Sciences, New Delhi, India.

6020 — D841 Cytotoxicity of Ganciclovir on Cultured Human Corneal Endothelial Cells.

Young Joo Shin, J. Koh, T. Chung, J. Hyon.


Axen A. Alqudah, M.A. Terry, M. Straiko, M. Greiner, D. Davis-Boozer, Cornea, Corneal Services, Devers Eye Institute, Portland, OR; Lions Eye Bank of Oregon, Portland, OR. *CR


6029 — D850 Evolution Of Corneal Transplantation in the Province of Quebec from 2000 to 2011. Louis-Pierre Gauvin


6030 — D851 Average Waiting Time before Keratoplasty and Possible Variation of this Deadline According to the Seasons: Retrospective Study about 318 cases and 10 Years of Follow-up.

Jean-Marc Perone, A. Agapie, O. Guechi, O. Gheorghe, I. Botez, P-J. Bertaux, A. Ferte. Ophthalmology, Regional Hospital Center of Metz Bon Secours, Metz, France.


Ophthalmology, University of California San Francisco, San Francisco, CA; SightLife, Seattle, WA.


Ophthalmology, Pathology, University Hospital of St-Etienne, Saint-Etienne, France; Corneal Graft Biology, Engineering and Imaging Laboratory, EA2521, Federative Institute of Research, Faculty of Medicine, Jean Monnet University, Saint-Etienne, France; The French Health Products Agency (Afssaps), Saint-Denis, France.


Ophthalmology, UNIFESP, Sao Paulo, Brazil.


Flaum Eye Institute, University of Rochester Medical Center, Rochester, NY; Moran Eye Center, University of Utah, Salt Lake City, UT.


Biomedical Engineering, Johns Hopkins University, Baltimore, MD; Ophthalmology, Johns Hopkins Wilmer Eye Inst, Baltimore, MD.


Ophthalmology, University Hospital Erlangen, Erlangen, Germany; Department of Ophthalmology, University of Erlangen-Nürnberg, Erlangen, Germany; RESORBA Wundversorgung GmbH & Co. KG, Nuremberg, Germany; Department of Ophthalmology, University of Erlangen Nuremberg, Erlangen, Germany. *CR


Department of Ophthalmology, Leiden University Medical Center, Leiden, The Netherlands; Department of Research, Aeon Astron Europe B.V., Leiden, The Netherlands. *CR


1Dept of Ophthalmology, Juntendo Univ School of Med, Bunkyo-Ku, Japan; 2Research and Development, SEED Co., Ltd., Kounosu-Shi, Japan.
Thursday Posters 8:30 am – 10:15 am

6040 — D861 Reduced Hem-And Lymphangiogenesis Into A Fishscale-derived Collagen Scaffold Used As Biological Artificial Cornea (BioCornea). Deniz Hor1, F. Bock2, B. Regenfuss3, J. Onderka4, C.C. Lin5, H.J. Lai5, C. Cursiefen1. 1Department of Ophthamology, University of Cologne, Cologne, Germany; 2Department of Ophthamology, University of Erlangen-Nuremberg, Erlangen, Germany; 3Aeon Astron Corp., Taipei, Taiwan; 4Aeon Astron Europe B.V., Leiden, The Netherlands. *CR


6042 — D863 The Fate Of Collagen-based Hydrogels As Corneal Substitutes In “High Risk” Graft Recipients. Lucia Kuffova1, R. Fordyce1, M. Robertson1, M. Griffith1, J-J. Ahn1, K. Merritt1, R.L. Hendricks2, J.V. Forrester2. 1Department of Ophthamology, University of Aberdeen, Aberdeen, United Kingdom; 2Integrative Regenerative Medicine Centre, Linköping University, Linköping, Sweden; 3Department of Ophthamology, University of Ottawa Eye Institute, Ottawa, ON, Canada; 4GMP Laboratories, Linköping University Hospital, Linköping, Sweden; 5Department of Ophthamology, University of Pittsburgh School of Medicine, Pittsburgh, PA. *CR

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


6045 — D866 Cosmetic And Refractive Results Of Lamellar Grafts In Corneal Dermoids. Fasika A. Woreta, A. Vedula, D. Goldman, R. Forster. Ophthamology, Bascom Palmer Eye Institute, Miami, FL.

6046 — D867 Repair of Acute Perforated Cornea with Modified Conjunctival Flap, Tissue Adhesive and Bandage Contact Lens. Naomi Y. Odell, T.T. Shen. Ophthamology, University of Washington, Seattle, WA.


6049 — D870 Graft Failure And Intracocular Pressure Control After Keratoplasty In Iridocorneal Endothelial Syndrome. Desmond T. Quie4, S. Han5, T. Wong1, D. Tan1,2, J. Mehta1,2. 1Singapore National Eye Center, Singapore, Singapore; 2Singapore Eye Research Institute, Singapore, Singapore; 3Ophthamology, 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; 2Ophthalmology, Westchester Medical Center, Valhalla, NY.

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


6056 — D877 Results Of Excimer Laser Penetrating Keratoplasty In Aphakic Eyes. Koursir Ninios, P. Matoula, N. Szentmary, F. Schirra, B. Seitz. Department of Ophthamology, University of Illinois at Chicago, Chicago, IL; 2Department of Ophthalmology, Bascom Palmer Eye Institute, Miami, FL; 3Department of Biomedical Engineering, Biomedical Optics and Laser Laboratory, University of Miami, Coral Gables, FL; 4Department of Maxillofacial Surgery, University of Miami Miller School of Medicine, Miami, FL.


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


6060 — D881 Optical Functional Properties Of The Osteo-odontokeratoprosthes (ookop). Richard M. Lee1, G. Ong1, J. White1, F. Lam1, C.S. Liu1, C.C. Hall1. Ophthamology, Sussex Eye Hospital, Sussex Eye Hospital, United Kingdom; Optometry & Visual Science, City University, London, United Kingdom.

6061 — D882 In Vitro Effect of Microbial Infection on Candidate Biomaterials for Osteo-odontokeratoprosthesis. Jodhib S. Mehta1, X. Tan1,2, A. Riau1, A. Tan1, R.W. Beuerman1, D. Tan1,2, K. Khor1. Cornea Refractive Tissue Engineering, 1Tissue Engineering, 2SNEC / SERI, Singapore, Singapore; 3Tissue Engineering, SERI, Singapore, Singapore; 4Cornea, SNEC, Singapore, Singapore.

6062 — D883 Field of View of Modified Osteo-odontokeratoprosthesis. Victor M. Hernandez1,2, C. de Freitas1, G.C. Falcinelli1, Y. Sawatari2, V. Perez1,2, D. Sathiyah3, F. Mann1,2, E.C. Alfonso3, J-M.A. Pare1,2. Ophthalmic Biophysics Center, 1Department of Ophthamology, 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 Keratoprosthes. Amelia L. Zellaneder1, M. Mukhos2, M. Cho3. 1Bioengineering, University of Illinois at Chicago, Chicago, IL; 2Physical Therapy and Human Movement Sciences, Orthopaedic Surgery and Physical Medicine, Northwestern University, Chicago, IL. *CR

6064 — D885 Boston Type I Keratoprosthesis: Microbial Colonization and Antibacterial Resistance. Elie P. Eid1, M-C. Robert1, P. Saint-Antoine1, M. Harissi-Dagher1. 1Ophthamology, 2Microbiology, Centre Hospitalier de l’Université de Montréal (CHUM), Hôpital Notre-Dame, Montréal, QC, Canada.

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6090 — D911 Comparison Of Two Dual-Disinfection Systems For Ocular Comfort, Corneal Staining And Corneal Infiltrative Events. Daniel Tilia1, P. Lazon De La Jara2, N. Peng1, H. Zhu1, M.D. Willcox2, B.A. Holden2, 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 Dutot1A, J. Vincent2, I. Fabre1C, R. Fagon1B, P. Rat1C, 1Toxicology, 2Research & Development, 1YSLAB, 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, Paris, France.

6092 — D913 — 6090 — D911 — 6092 — 6090 — D911
Ozkan1A, M.D. Willcox2, P.L. Zagon De La Jara1, V.M. Lazo De La Jara1, V.M. Rathi1, B.A. Holden1, 1Clinical Research & Trials Centre, 1Brien Holden Vision Institute, Sydney, Australia; 2Brien Holden Vision Institute, Univ of New South Wales, Sydney, Australia; 3Cornea, Chemical & Biomolecular Eng, Univ of California at Berkeley, Berkeley, CA. ▲

6093 — D914 Morning Cleaning or Replacement of Lenses Reduces Complications with Extended Wear of Contact Lenses. Jerome Ozkan1A, M.D. Willcox2, P. Lazon De La Jara1, J.M. Uruena1, H.A. Ketelson2, 1Chemical Engineering, 2R & D, Alcon Research Ltd, Fort Worth, TX. *CR

6094 — D915 Effect of Soft Contact Lens Storage Solutions on Lens Wettability In-Vitro. Raised Fageh1A, A. Tomlinson1A, V. Manahilov1A, Vision Sciences, Glasgow Caledonian University, Glasgow, United Kingdom.

6095 — D916 Robust Contact Lens Lubricity using Surface Gels. W.G. Sawyer1A, A.C. Dunn1A, J.M. Uruena1A, H.A. Ketelson2, 1Mechanical and Aerospace Eng, University of Florida, Gainesville, FL; 2R & D, Alcon Research Ltd, Fort Worth, TX. *CR

6096 — D917 Improving The Wettability Of Silicone Hydrogel Contact Lenses. Alonso Cook1A, M. Skinner1B, J. Li1C, C. Loose1, K. Schultz1, Z. Zhang1; Semprus BioSciences, Cambridge, MA. *CR

6097 — D918 Protoglycan 4 (lubricin) Enhances the Wettability Of Model Conventional And Silicone Hydrogel Contact Lenses. Lakshman N. Subbaraman1A, T.A. Schmidt1, H. Sheard1A, 'Chemical Engineering, McMaster University, Hamilton, ON, Canada; 'Biomedical Engineering, University of Calgary, Calgary, AB, Canada.

6098 — D919 Estimating in-vivo Contact Lens Wettability Through Tear Film Hydrodynamics. Jalahia P. Varikooty1A, N.J. Keir1A, T.L. Simpson1A, 1School of Optometry, 2School of Optometry, 3University of Waterloo, Waterloo, ON, Canada.

6099 — D920 Hyaluronan Release from Contact Lenses in vitro and in vivo. Krista M. Fridman, C.A. Scheuer1, S. Su1, L. Zhang1, S.E. Burke1B, A. Bausch + Lomb, Rochester, NY. *CR, ▲

6100 — D921 Solute Release From Soft-contact-lens Hydrogels. Csaba Kotsmar1A, J. Vincent2, I. Fabre1A, I. Fabre1C, P. Rat1B, P. Fagon1B, 1Toxicology, 2Research & Development, 1YSLAB, 3Chemie-Toxicologie Analytique et Cellulaire, EA 4463, Université Paris Descartes, Sorbonne Paris Cité, Paris, France; 3Direction des Laboratoires et des Contrôles, Agence Française de Sécurité Sanitaire des Produits de Santé, Vendargues, France. ▲

6101 — D922 Ocular Delivery Of Ketotifen Fumarate By Silicone Hydrogel And Conventional Hydrogel Contact Lens Materials. Anthony Soluri1A, A. Hui1B, L. Jones1B, Centre for Contact Lens Research, University of Waterloo, Waterloo, ON, Canada.

6102 — D923 Development of a Drug released Soft Contact Lens that Releases Antibiotics in a Sustained Manner. Shinichiro Kobayakawa1A, T. Matsunaga1A, K. Kaki1A, Y. Yamazaki1A, T. Sato1B, T. Tochikubo1A, 11st Dept of Ophthalmology, Toho University, Tokyo, Japan; 2SEED Co Ltd, Kounosu-shi, Japan. ▲


6104 — D925 Understanding Lens Shape Dynamics During Off-Eye Dehydration of Contact Lens Materials with Varying Water Content. Ian G. Cox1A, R.H. Lee1A, 1Materials Science and Engineering, University of Florida, Gainesville, FL. ▲


6106 — D927 Rapid Measurement of Tear Oxygen Tension Underneath Soft Contact Lenses by Frequency-Domain Phosphorimetry. Sangly P. Srinivas1A, G. Guidoboni1A, L. Carichino1A, Y. Jiang1C, J.A. Bonanno1A, 1Optometry, Indiana University, Bloomington, IN; 2Mathematics, IUPUI, Indianapolis, IN.

6107 — D928 Surface Characterization of a Water Gradient Silicone Hydrogel Contact Lens (delefilcon A). John Pruitt1A, Y. Qiu1B, S. Thekveli1B, R. Hart1B, Alcon, Johns Creek, GA. *CR

6108 — D929 Corneal Nerve Morphology In Soft And Orthokeratology Contact Lens Wear. Edward Lum, B. Golebiowski, H.A. Swarbrick, Sch of Optometry/Vision Sci, Univ of New South Wales, Sydney, Australia. *CR

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


6111 — D932 Interfacial Interactions Of Cationic And Anionic Artificial Tears With Ironic Hydrogel Contact Lens Surface. Muhammad Abdulaziz1A, S. Benita1A, 1Ophthalmology/Innovative Interventions, East Jerusalem Biomedical Institute, East Jerusalem, Palestine; 2Institute of Drug Research, Hebrew University of Jerusalem, Jerusalem, Israel. ▲


6113 — D934 Stress Induced Fractional Transitions in Cross-Linked Surface Gels. Thomas E. Angelini1A, V.C. Dunn1A, J.M. Uruena1A, 1Materials Science and Engineering, University of Florida, Gainesville, FL; 2R & D, Alcon Research Ltd, Fort Worth, TX. *CR


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6117 — D938 Evaluation of In Vitro Cytotoxicity Assays for Contact Lens Multi-Purpose Solutions. Mercedes Salvador-Silva1, L.C. Huang2, C.H. Powell3, L. Hoong3, R.M. Yetemeni2. 1R&D - Biological Sciences, 2Corneal R&D, 3Abbott Medical Optics (AMO), Santa Ana, CA; *CR

6118 — D939 Cytotoxic and Inflammatory Effects of Contact Lens Multipurpose Solutions on Human Corneal Epithelial Cells. Nir Erdinstein1, A. Grossman1, R. Harari1, H. Ovadia1, A. Solomon1. 1Ophthalmology, Neurology, Hadassah 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. Lorenzo, M. Heynen, W. Khan, D. Trieu, L. Jones. Centre for Contact Lens Research, University of Waterloo, Waterloo, ON, Canada. *CR


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

6125 — D946 Measuring The Kinetics and Activity of Adsorbed Proteins: In Vitro. Lysozyme Deposited Onto Contact Lenses Over Short Time Periods. Brad Hall1, L. Jones1, J.A. Forrest1. 1School of Optometry, 2Department of Physics & Astronomy, University of Waterloo, Waterloo, ON, Canada.

6126 — D947 Regenerated Cellulose Hydrogels with High Optical Transparency and Mechanical Strength for Corneal Applications. Marcia W. Patchan1, J. Graham1,2, Z. Xia1, J. Maranchi2, E. Felder2, J. Elisseeff2, O.D. Schein1, M. Trexler1. 1Milton Eisenhower Research Center, Johns Hopkins University Applied Physics Lab, Laurel, MD; 2Biomedical Engineering, Johns Hopkins University, Baltimore, MD. *Ophthalmology, Hopkins Wilmer Eye Inst, Baltimore, MD. *CR


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

6129 — D989 Cxcl1 Contributes To Host Resistance Following Pseudomonas Aeruginosa Corneal Infection But Not To Herpes Simplex Virus Type 1. Katie M. Hudson1,4, D.J. Carr2,3,10, B. Liles1,4, G. Rebecchi1,4, S.K. Overby1,4, C. Heath1, K. Broucher1,4, M. Zhou1,4, A. Elsahn1,2, C. Heath1, M. Christodoulides1, P. Hossain2,3,4. *Infection, Inflammation & Immunity, University of Southampton, Southampton, United Kingdom; 2Eye Unit, University Hospital Southampton NHS Foundation Trust, Southampton, United Kingdom.


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


6133 — D993 Virulence factors in Pseudomonas aeruginosa keratitis. Henri Suecke1, J. Shankar1,2, T. Neal1, S. Aldwinkle1, C. Winstanley1, S. Tufn1, S.B. Kaye2. Microbiology Ophthalmic Group. 1Ophthalmology, 2Microbiology, Royal Liverpool University Hospital, Liverpool, United Kingdom; 3Microbiology, University of Liverpool, Liverpool, United Kingdom; 4Ophthalmology, 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. Sivaganess Karthikveyan2, 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 aeruginosa with human corneal fibroblasts in vitro. Ahmad Elsahn1,2, C. Heath1, M. Christodoulides1, P. Hossain2,3,4. *Infection, 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 Sui, S. Hayashi, Y. Ohashi. Department of Ophthalmology, Ehime University,Graduate School of Medicine, Toon-shi, Japan. *CR

6140 — D1000 Molecular Characterization of Virulence Genes Associated with MRSA Keratitis isolates. Jorge Maestre1, E. Perez2, M. Diaz2, E. Alfonso2, D. Miller3,4. Ophthalmology, 2Bascom Palmer Eye Institute, 4University of Miami, Miami, FL.
6141 — D1001 Involvement of Corneal Epithelial Cells in the TLR7 Response in an In Vitro Bacterial Infection Model. Isabel Arranz-Vá-slero1, U. Schultz2, L. Contreras-Ruiz2, L. García-Possadas2, A. Lopez-García2, F. Pausen4, Y. Diebold4. Ocular Surface Group, IOBA-University of Valladolid, Valladolid, Spain; 2Networking Research Center on Bioengineering, Biomaterials and Nanomedicine (CIBER-BBN), Valladolid, Spain; 3Department of Anatomical and Cell Biology, Martin Luther University Halle/Wittenberg, Halle/Saale, Germany; 4Department of Anatomy II, Friedrich Alexander University Erlangen/Nuremberg, Erlangen, Germany.

6142 — D1002 Role of Antimicrobial Peptides in the Defense against E. coli infection. Satya Sree N. Kolar1, H. Baidouri1, A. McDermott1. University of Houston College of Optometry, Houston, TX.

6143 — D1003 Reprogramming Induced by TLR2/4 Agonists Regulates Corneal Immune Responses to Fungal Infection. Xinyi Wu1, J. Wang1, L. Wang1, Y. Li1. Ophthalmic QLu Hosp/Ophthalm, Shandong University, Jinan, Shandong, China.

6144 — D1004 Analysis of Acanthamoeba cysts isolated from contact lenses with the Raman spectroscopy microscope. Pablo L. Goldschmidt1, D. Di Cave1, S. Degorge1A, D. Benallaoua1A, E. Borsali1A, L. Le Bouter1A, L. Battelier1A, V. Borderie1A, L. Laroche1A, C. Chaumeil1A. Laboratoire, Service 5, Quinze Vingts N°1, Ophthalmologic Ctr, Paris, France; 2Dept. of Public Health and Cell Biology, University of Rome Tor Vergata, Rome, Italy.

6145 — D1005 Acanthamoeba Associated Microbial Communities. Darlene Miller1, J. Maestre-Mesa1, M. Diaz1, E. Perez1, V. Shostapalov1, R. Van Gelder2, E.C. Alfonso3. Bascom Palmer Eye Institute, Univ of Miami Miller Sch of Med, Miami, FL; 2Ophthalmology, Univ of Washington School of Medicine, Seattle, WA.

6146 — D1006 Experimental Induction of Acute Acanthamoeba castellanii Keratitis in Cats. Eric C. Ledbetter1, E.C. da Silva1, L. Dong1, S.P. McDonough1B. 1Clinical Sciences, 1Biomedical Sciences, Cornell University, Ithaca, NY; 2Ophthalmology, Ophthalmology, Massachusetts Eye & Ear Infirmary, Boston, MA; 3Surgery/Ophthal Research, Cedars-Sinai Medical Center, Los Angeles, CA; 4Immune Disease institute, Boston, MA; 5Immu Institute Disease, Boston, MA.

6147 — D1007 The Herpes Simplex Virus Type 1 Latency Associated Transcript Inhibits Phenotypic and Functional Maturation of Dendritic Cells. Lbchar BenMohamed1, A.A. Chentoufi1, X. Deriville1, G. Dassaputra1, C. Nguyen1, K.K. Kabbara1, S.L. Wechsler1, A.B. Nesburn1. Gavin Herbert Eye Institute, Univ of California-Irvine, Irvine, CA.

6148 — D1008 Gene Transfer Of Hsv1-specific Meganeuclease To The Murine Cornea Using Electroporation. Antoine Rousseau1, A. Ergani1, E.E. Gabison1, M. Corral1, N. Huot2, M. Gaillerdat3, C. Desseaux3, R. Chapellier1, J.R. Roy1, M. Labetoulle2. 1Ophthalmology, Hospital Bicetre, South Paris University, Le Kremlin Bicetre, France; 2Laboratoire de Virologie Moléculaire et Structurale, Centre National de la Recherche Scientifique, Gif-sur-Yvette, France; 3Institut de la Vision, Paris, France; 4Cellmetics Therapeutics, Paris, France; 5OPIA Therapeutics SAS, Paris, France.

6149 — D1009 Bilateral Herpetic Keratoconjunctivitis in Cancer Patients. Elvia Canseco1, J. Modak2, A. Kingham2, Y. Arevalo2, S.K. Kim1. 1Ophthalmology, UT Houston Health Science Center (UThSCh), Houston, TX; 2Ophthalmology Section/Head and Neck Surgery, UT MD Anderson Cancer Center, Houston, TX.

6150 — D1010 Hsv1-specific Meganeclease May Reduce Ocular Infection In A Mouse Model Of Herpes Keratitis. Marc Labetoulle2, E.E. Gabison1, N. Huot1, A. Rousseau1, S. Barradeau1, C. Mahier1, M. Gaillerdat3, C. Desseaux3, B. Chapellier1, A. Ergani1. 1Ophthalmology, Hospital Bicetre, South Paris University, Le Kremlin Bicetre, France; 2Curs, upr 3296, Laboratoire de Virologie Moléculaire et Structurale, Gif sur Yvette, France; 3Hôpital Bichat AP-HP Cornea, Fondation A de Rothschild, Paris, France; 4Institut de la Vision, Paris, France; 5Genomic Vision, Bagneux, France; 6Celletrics therapeutics SAS, Paris, France.

6151 — D1011 CD8+ T Cells Inhibit Viral Replication but Become a Source of VEGF Expression During Corneal Herpes Simplex Type I Infection. Christopher D. Conrado1, M. Zheng1, D. U. Stone1, D.J. Carr2. 1Microbiology and Immunology, Univ of Oklahoma Hlth Sci Ctr, Oklahoma City, OK; 2Ophthalmology, University of Oklahoma, University of Oklahoma/Oklahoma City, OK.

6152 — D1012 Protective Asymptomatic Human Leukocyte Antigen (HLA)-A*0201-Restricted CD8+ Cytotoxic T-Lymphocyte Epitopes Identified from Herpes Simplex Virus Glycoprotein B. Anthony B. Nesburn1, X. Deriville2, A.A. Chentoufi1, G. Dassaputra1, K.K. Kabbara1, M.C. Villacres2, C. Nguyen1, S.L. Wechsler1, L. BenMohamed1. 1Gavin Herbert Eye Institute, University of California, Irvine, Irvine, CA; 2University of Southern California, Los Angeles, CA.

6153 — D1013 Non-Muscle Myosin II Mediates HSV-1 Entry Into the Cells of the Human and Pig Corneas. Thessicar E. Antoine1, R. D. Dickey3, D. Shukla4,5. 1Ophthalmology and Visual Sciences, 2Microbiology and Immunology, 3University of Illinois at Chicago, Chicago, IL.

6154 — D1014 Corneal Dendritic Cells Suppress Local Corneal Damage and Mediate Systemic Viral Dissemination in Herpes Simplex Keratitis. Kai Hu1, H. Ghias1, U. Von Andrian1, P. Hanrahan4. 1Ophthalmology, Massachusetts Eye & Ear Infirmary, Boston, MA; 2Surgery/Ophthal Research, Cedars-Sinai Medical Center, Los Angeles, CA; 3Immune Disease institute, Boston, MA; 4Immune Institute Disease, Boston, MA.


6157 — D1017 Mistyping of Human Adenovirus Type 19 Associated with Epidemic Keratoconjunctivitis. Xiao-hong Zhou1, C.M. Robinson1, J. Rajayal1, D. Seto1, M.S. Jones1, D.W. Dyet1, J. Chodosh1. 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.

6158 — D1018 Apoptosis and Expression of Antiviral Response Genes during Ocular HSV-1 Infection in TNFR1 or TNFR2 Knockout Mice. Wen Chen1, M. Zhang1, J. Covar2, N. Zhang1, S.S. Atherton2. Cellular Biology and Anatomy, GHSU, Augusta, GA.

6159 — D1019 Treatment of VZV-induced Chronic Pain in a Rat Model of Post-Herpetic Neuropathia Using Replication Defective HSV-1 Expressing the Tonal Modulator Proteinkinase. Paul R. Kinchington1, M.B. Yeo1, M. Zhang2, W.F. Goins1. 1Ophthalmology/Mol Micro & Genetics, Univ of Pittsburgh Eye & Ear Inst, Pittsburgh, PA; 2Mol Micro & Genetics, Univ of Pittsburgh, Pittsburgh, PA.

6160 — D1020 Neutralizing Kc (cexI) Ameliorates Recurrent Hsk. Patrick M. Stuart1, Patrick M. Sturt1, D. West. Ophthalmology, St Louis University, St Louis, MO.

6161 — D1021 Non-professional Phagocytosis Can Play A Role In Herpesvirus Entry Into Ocular Cells. Deepak Shukla, V. Tiwari. Ophthalmal/ Visual Sciences, University of Illinois at Chicago, Chicago, IL.
6162 — D1022 Association between Atopy and Herpetic Eye Disease in a Hawaiian population. John A. Gonzales1, D. Borkar1, V. Thani2, A. Vinoya3, E. Esterberg1, N. Acharya1. 1F.I. Proctor Foundation, University of California San Francisco, San Francisco, CA; 2Ophthalmology, Kaiser Permanente Honolulu, Honolulu, HI.

6163 — D1023 Pattern of Herpetic Eye Disease In A Referral Centre In Milan, Northern Italy. Giulio Modorati1, E. Miserocchi1, I. Bianchi1, A. Colucci1. Dept of Ophthalmology, Univ Hospital San Raffaele, Milan, Italy.


6165 — D1025 Practice Patterns in the Management of Anterior Herpes Simplex Virus Eye Disease Compared to Herpetic Eye Disease Study Group Findings. Tabassum F. Ali1, D. Liang1, I.U. Scott. Department of Ophthalmology, Penn State Milton S. Hershey Medical Center, Hershey, PA.

6166 — D1026 Findings In Detection Of Herpesviridae By Real-time Polymerase Chain Reaction And Intraocular Antibody Production In A Case-series Of Anterior Uveitis. Marie-Helene Ererra1, P. Goldschmidt2, L. Batellet3, S. Degorge4, E. Heron5, L. Laroche6, J.-A. Sahel7, M. Westcott5, C. Chauvet2. 1Ophthalmology Department IV, 2Laboratory, 3Internal Medicine, 4Pathology Department, 5Hospital des Quinze-Vingts, Paris, France; 6Moorsfield Eye Hospital, London, United Kingdom.

6167 — D1027 The Immune Response To 3 Different Therapies In Herpetic Stromal Keratitis. Mauricio Cedillo Sarabia, Sr1, R. Velasco Ramos, II1, S. Perez Tapia, III1, A. Babayyan Sosa, IV1, O. Bara Lozada, V1, O. Fernandez Viscaya1, R. Suárez1, Velasco1, V. G. Cortés Sanchez1, V. M. Navarro Pena1, V.1. Cornea, Fundacion Hospital de Nuestra Senora de la Luz, MEXICO DF, Mexico; 2Department of Immunology, National School of Biological Sciences ENCB-IPN, MEXICO DF, Mexico.

6168 — D1028 Diagnosis of Herpetic Uveitis is Aided by Confocal Microscopy with the HRT RCM. Alexandra B. Knoll1, J. Metzger2, F. Mackensen. Ophthalmology, Interdisciplinary Uveitis Center, University Hospital Heidelberg, Heidelberg, Germany.

6169 — D1029 Clinical and epidemiological characteristics of infectious keratitis at Fundación Banco de Ojos “Fernando Oca del Valle” in Paraguay. Martin M. Nentwich1, M. Bordin1, D. Sánchez di Martino1, A. Ruiz Cusmano1, W. Martínez Torres2, S. Lichi2, M. Samudio2, N. Fariña2, F. Laspina2, H. Mino de Kaspar1. 1Department of Ophthalmology, Ludwig-Maximilians-University, Munich, Germany; 2Fundación Banco de Ojos “Fernando Oca del Valle”. Instituto de Investigaciones en Ciencias de la Salud, Asunción, Paraguay.

6170 — D1030 10 year experience of fungal keratitis at the University of Iowa. Gina M. Rogers1, K.M. Goins1, A.S. Kitzmann1, N.A. Syed1, M.D. Wagoner. Ophthalmology & Visual Science, University of Iowa, Iowa City, IA.


6172 — D1032 Growth Of Acanthamoeba On Contact Lens Storage Case Bacteria And Their Survival Within The Cyst Stage. Anthony Lam1, S. Kilvington. Corneal R&D Microbiology, Abbott Medical Optics, Santa Ana, CA.

6173 — D1033 Characterization Of Bacteria From Contact Lens Storage Cases Of Corneal Infiltrative Event Patients. Simon Kilvington1, J.P. Shovlin1, M. Nikolic1. Corneal R&D Microbiology, Abbott Medical Optics, Santa Ana, CA; 2Northeastern Eye Institute, Scranton, PA.


6175 — D1035 Rapid Identification of Microorganisms Using the Two-Photon Ophthalmoscope. Yinhong Qu1,2, K.E. Thomas2. 1Baylor College of Medicine, Houston, TX; 2Nutrition Rsrch Ctr, 1Baylor College of Medicine, Houston, TX.

6176 — D1036 Reduced Corneal Inflammation By Birch Leave Extract In Combination With Sub-therapeutic Cyclosporin A. Katrin Wacker1, C. Gründemann1, R. Huber1, T. Reinhard1, J. Schwartzkopff1. University Eye Hospital, Freiburg, Germany; 2Department of Environmental Health Sciences, University Medical Center, Freiburg, Germany.

6177 — D1037 Topical sCD83 Induces Graft Tolerance In High-risk Corneal Transplantation. Felix Bock1, A. Steinkasserer1, C. Cursiefen2, E. Zinner1. 1Department of Ophthalmology, University of Cologne, Cologne, Germany; 2Department of Dermatology, University of Erlangen, Erlangen, Germany.

6178 — D1038 Effect Of Rapamycin And IL-2 On Regulatory CD4+CD25+Foxp3+ T Cells In Mice After Allogenic Penetrating Keratoplasty. Qihua Le1, X. Wang1, W. Wang1, J. Xu1. 1Ophthalmology, Eye & ENT Hospital of Fudan University, Shanghai, China; 2Ophthalmology, Eye & ENT Hospital of Fudan University, Shanghai, China.

6179 — D1039 Clinical Similarities among Meibomitis-Related Keratoconjunctivitis, Phlyctenal Keratitis and Ocular Rosacea in Childhood. Tomo Suzuki1, Y. Sanō1, Y. Koyoi1, S. Kinoshita1. 1Department of Ophthalmology, Kyoto Prefectural University of Medicine, Kyoto, Japan; 2Kyoto City Hospital, Kyoto, Japan.

6180 — D1040 ICAM-1 is Necessary for Efficient Accumulation of CD11c+ Cells in Healing Corneal Epithelium. Yuan Gao1, Z. Li2, C.W. Smith3. 1Lasker-Bellevue Biology, 2Ped-Children’s Nutrition Rsrch Ctr, 3Baylor College of Medicine, Houston, TX.

6181 — D1041 Expression Of Adhesion Molecules During Development Of Conjunctiva-Associated Lymphoid Tissue. Uta Gehlsen1, S. Siebelmann1, M.E. Sterne1, J.Y. Niederkorn2, P. Siever1. 1Ophthalmology, University Hospital of Cologne, Cologne, Germany; 2Biological Sciences, Allergan, Inc, Irvine, CA; 3Department of Ophthalmology, UTSouthwestern Medical Center, Dallas, TX.*CR

6182 — D1042 Estrogen And Lipoxin A4 Have Opposing Bioactions In Driving Macrophage Polarization And Function. Karsten Gronert1, D.W. Lin1, Y. Wang1, K.M. Hu1, S.B. Wang1. Vision Science, School of Optometry, University of California, Berkeley, Berkeley, CA.

6183 — D1043 Peripheral Antigen Presenting Cells Are Differentially Distributed in Normal and Inflamed Murine Corneas. Albert H. Altshuler1, U.H. von Andrian1, P. Hamrah1. 1Cornea Service and Department of Ophthalmology, Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston, MA; 2Immune Disease Institute, Program in Cellular and Molecular Medicine at Children's Hospital Boston, Harvard Medical School, Boston, MA.

6184 — D1044 IL-17 Deletion Accelerates Onset and Severity of Dacryoadenitis in CD25KO mice. Rosa M. Corrales1, F. Pelegrino1, E. Volpe2, D-Q. Li2, S.C. Pfugfelder2. Ophthalmology, Baylor College of Medicine, Houston, TX.
Thursday Posters

8:30 am – 10:15 am

6185 — D1054 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. 1Neuroscience, Ophthalmology, 2Department of Laboratory Medicine, 1University of Padova, Padova, Italy.

6187 — D1047 Inhibitory Role of ICOS in Antigen-specific T cell-mediated Ocular Tissue Damage. Misao Terada1A, H. Taniguchi1B, R. Abe2, J. Hori2A. 1Division of Lab Animal Science, 2Ophthalmology, Nippon Medical School, Bunkyo-ku, Japan; 3Research Institute for Biological Science, Tokyo University of Science, Noda, Japan.


6190 — D1050 Etiologic Diversity Of Atypical And Severe Anterior Uveitis. Audrey Fel1, M. Bojanova2, V. Toutou1, P. Le Hoang1, F. Rozenberg3, B. Bodaghi4. 1Ophthalmology, Hopital la Pitié Salpêtrière, Paris, France; 2Virology, Hopital Cochin, Paris, France.

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


6194 — D1054 Emergence Of Pan-drug Resistant Pseudomonas Aeruginosa As A Cause Of Microbial Keratitis. Merle Fernandes1A, A. Pathangay2, N. Kumar3A, 1Cornea and Anterior Segment, 2Ocular Microbiology Service, 1L V Prasad Eye Institute, Visakapatnam, India; 2Retina, Bascom Palmer Eye Institute, Miami, FL.


6200 — D1060 N-chloretaurine-n-monochloro-deimethylaurine And N,n-dichloro-dimethylaurine Are Safe And Effective Bactericidal Agents In Cornea Models. Barbara Teuscher1A, E. Schmidt1A, M. Nagl1A, N. Bechrakis2A. Ophthalmology, Microbiology, Innsbruck Medical University, Innsbruck, Austria.


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

6205 — D1065 Treatment of Numular Keratitis with Intracorneal Ganciclovir. Eduardo Arenas1A, A. Mielke1. 1ophthalmology, Santa Fe Foundation, BOGOTA, Colombia; 2Asocornea, Bogota, Colombia.

6206 — D1066 In Vitro Effectiveness Of Photodynamic Therapy Against Multi-resistant Pathogens. Katrin Winkler1A, M. Finke1A, J. Wang1A, N. Szentmáry2A, T. Eppig2A, H-J. Foth2, D. Hüttenberger2, A. Langenbacher4A, B. Seitz2A, M. Bischoff2A. 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.


Hall B/C  D1052-D1077

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

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

528 Anti-Infectives and Ocular Disease

Moderator: Ellen J Lee


*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures  –  Refer to Program Number in the Clinical Trial (CT) Registration Index  –  Travel Grant Awardee
Thursday – Posters – 6209 – 6226


6210 — D1070 In Vitro Investigation of Riboflavin/UVA-mediated Elimination of Acanthamoeba Castellani. Karim Maktoumi1,2, A. Backman1,2, J. Mortensen1, S. Crafoord1. Portland, OR; 2Ophthalmology, Emory Eye Center, Decatur, GA.

6211 — D1071 In Vitro Efficacy Of Amoebicidal Treatment Using Riboflavin/UV-A (365nm) Combination. Jonathan Letch, Jr1, A. Sauer1, C. Speeg-Schatz1, A. Abou-Bacar2, E. Candolfi2, 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. Joslin1. 1Ophthalmology, University of Illinois at Chicago, Glenview, IL; 2CDRH/OSEL/DB, FDA, Silver Spring, MD. *CR


6216 — D1076 Systemic vs. Combination Antiviral Therapy and Retinal Outcomes in Acute Retinal Necrosis. Stephanie K. cramer1, C. Flaxel1, S. Yeh1. 1Ophthalmology, Casey Eye Institute, Portland, OR; 2Ophthalmology, Emory Eye Center, Decatur, GA.

6217 — D1077 Organo-selenium Coatings Inhibit Multiple Species Of Bifilm Formation On Different Types Of Ophthalmic Device Material. Kelly T. Mitchell1, P. Tran1, A. Arnett1, T. Mosley1, R. Hanes2, C. Jarvis3, A. Hamood4, L. Dominguez4, T. Reid5, 1Ophthalmology, 2Microbiology and Immunology, 3Texas Tech University HSC, Lubbock, TX; 4Selenium Ltd., Austin, TX.

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

529 AIDS-Related Ocular Disease

Moderator: Gary N Holland

6218 — D1078 Risk Of Cataract In Persons With Acquired Immune Deficiency Syndrome And Cytomegalovirus Retinitis. Elizabeth A. Sugar1,2, A.T. Lyon3, R.A. Lewis4, D.A. Jabs5, M-H. Heinemann6, J.P. Dunn2, J.H. Kemper6. Studies of Ocular Complications of AIDS Research Group. *Biostatistics, Epidemiology, Bloomberg School of Public Health, The Johns Hopkins University, Baltimore, MD; 2The Sidney Kimmel Comprehensive Cancer Center, 3Ophthalmology, 4The Johns Hopkins University School of Medicine, Baltimore, MD; 5Ophthalmology, Northwestern University, Chicago, IL; 6Ophthalmology, Medicine, Pediatrics, Molecular and Human Genetics, Baylor College of Medicine, Houston, TX; 7Ophthalmology, Internal Medicine, Mount Sinai School of Medicine, New York, NY; 8Ophthalmology, Weill Cornell Medical College, New York, NY; 9Ophthalmic Oncology Service, Department of Surgery, Memorial Sloan Kettering Cancer Center, New York, NY; 10Ophthalmology, 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. Afnas Khan1,3, 1Department of Biology, Viral and Immunology Center, Georgia State University, Atlanta, GA; 2Ophthalmology, Emory University School of Medicine, Atlanta, GA.


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, Ninane E. Coyne Kombo1, O. Nkomazana1, S.H. Forster1, R.A. Adelman1. 1Ophthalmology and Visual Science, Yale University School of Medicine, New Haven, CT; 2University of Botswana School of Medicine, Gaborone, Botswana.


6225 — D1085 The Caspase-1-induced Pyroptotic Cell Death Pathway (Pyroptosis) Is Upregulated During Progression Of Experimental Murine Cytomegalovirus (MCMV) Retinitis in Mice With Retrovirus-induced Immunosuppression (MAIDS). Hsin Chien1, E.L. Blaock2, L.R. Bush1, C.J. Alston3, R.D. Dix4. 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. Dix4. 1Department of Biology, Viral Immunology Center, Georgia State University, Atlanta, GA; 2Department of Ophthalmology, Emory University School of Medicine, Atlanta, GA.
530 Autoimmune Ocular Disease

Moderator: Dale Gregerson


6229 — D1089 Cd4+ Foxp3+ Cd25Bright T Regulatory Cells Population In Ocular Sarcoidosis. Alexis Pinel1A, A. Mathian1B,2, M. Miyara3, C. Chapelon-Abric1B, C. Parizot4, D. Boatin4, Z. Amoura4, G. Gorochov5, P. Lehoang6, B. Bodaghi6,7. 1Ophthalmology, University of Medicine-Florda International University, Miami, FL; 2Ophthalmology, Bascom Palmer Eye Institute, Miller School of Medicine, Miami, FL.


6232 — D1092 Clinical Course of Patients with Behcet’s Uveoretinitis that Discontinued Infliximab Therapy. Tatatsuki Kiwaguchi3, Y. Iwasaki1, S. Kanda1, S. Sugita1, M. Mochizuki1. 1Ophthalmology, Tokyo Metropolitan Komagome Hospital, Tokyo, Japan; 2Ophthalmology & Visual Science, Tokyo Medical and Dental University, Tokyo, Japan.

6233 — D1093 Anti-DEC205 Mediated Delivery of Self-Antigen to Dendritic Cell Restores Tolerance in Spontaneous EAU. Koju Kano1, C. Martin-Granados1, C. Bobe1, M.E. Wikstrom1, M.A. Degli-Esposti1, R.M. Steinman2, J.V. Forrest3. 1Ophthalmology, University of Aberdeen, Aberdeen, United Kingdom; 2Lion Eye Institute, University of Western Australia, Nedlands, Western Australia, Australia; 3Rockefeller University, New York, NY.

6234 — D1094 Monocyte-derived Macrophages in EAU Resolution. Inbal Benhar1, A. London1, R.R. Caspi3, M. Schwartz7. 1Neurobiology, 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 (TGFb). Paola A. Durand1, Y. Tani2, D. Fatmir3, X. Xia4, E. Suarez5, V.L. Perez6, J.L. Vega7. 1Neurology, Herbert Wertheim College of Medicine-Florida International University, Miami, FL; 2Ophthalmology, Bascom Palmer Eye Institute, Miller School of Medicine, Miami, FL.


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

6239 — D1099 DAP-12, a Major Immunomediator, Either Promotes or Suppresses EAU Development. Barbara P Vistica1, V. Montalvo-Reddin3, G. Shi1, L. Nugent1, L. Quigley2, D.W. McVicar1, J. Gery1. 1Lab of Immunology, National Eye Institute, Bethesda, MD; 2Cancer and Inflammation Program, NCI-Frederick, Frederick, MD.

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

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

D1125 —  D1127  A Comparative Study in the Clinical and Microbial Efficacy of Topical Besifloxacin Ophthalmic Suspension 0.6% with Erythromycin Ophthalmic Ointment 0.5% for Management of Acute Blepharitis. George John. VA Medical Center, Louisville, KY. *CR, CR


D1129 —  D1130  Susceptibility Of Methicillin-Resistant Staphylococci Clinical Isolates To In Vitro Antimicrobial Activity. Diana Gabriela Zapopan, Mexico. *CR


D1131 —  D1132  Travel Grant Awardee
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 Acetonide (Retisert) And Dexamethasone (Ozurdex) Implants In Uveitis. Cheryl A. Arcinue1, C. Foster1, O. Ceron1, L. Almukji1. Uveitis and Ocular Immunology, Massachusetts Eye Research & Surgery Institute, Cambridge, MA; Ophthalmology, Massachusetts Eye and Ear Infirmary, Boston, MA; *CR

6275 — D1135 A Novel Peptide from Adiponectin Suppresses LPS-induced Pro-inflammatory Signaling in Macrophages by Inducing Interleukin-10 Expression. Huaiji 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, K. Kitachi1, K. Noda3, R. Ando3, Z. Dong3, K. Namba1, K. Namba1, S. Ohino3, S. Ishida1. Laboratory of Ocular Cell Biology and Visual Science, Department of Ophthalmology, Department of Ocular Inflammation and Immunology, Hokkaido University, Sapporo, Japan; Department of Ophthalmology, Harvard Medical School, Boston, MA.

6277 — D1137 Lutein-rich Marigold Extract Induces Gene Expression Of Phase II Antioxidants In The PC12D Neuronal Cells. Seiji Miyake1, M. Takahashi1, M. Sasaki1, S. Kobayashi1, K. Tsutoba1, Y. Oza1. Laboratory of Retinal Cell Biology, Department of Ophthalmology, Keio University School of Medicine, Tokyo, Japan; Wakasa Seikatsu Co., Ltd., Tokyo, Japan. *CR

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

6279 — D1139 Topical Application Of Infliximab (Remicade®) In The Treatment Of Corneal Cauteration. Fabio Bignami1, G. Ferrari1, C. Giacomini1, S. Franchini1, P. Rama1. Cornea Unit - Eye Repair Lab, Ophthalmic, Cornea and Ocular Surface Unit, San Raffaele Scientific Institute, Milan, Italy; Bietti Eye Foundation, Rome, Italy.

6280 — D1140 Identification Of The Anti-Inflammatory Annexin-A1 Protein In Tears Of Normal Subjects and Association of its Cleaved-Inactive Form with Active Vernal Keratoconjunctivitis Patients. Samia Yazi1, A. Leonard1, V. Calder1, R. Flower1. Molecular Therapy, UCL, Institute of Ophthalmology, London, United Kingdom; Medicine School, University of Padua, Padua, Italy; Biochemical Pharmacology, QMUL, William Harvey Research Institute, London, United Kingdom.

6281 — D1141 HC-HA but not High Molecular Weight HA Polarizes LPS-Activated Macrophages toward M2 Phenotype via CD44-Mediated Suppression of TLR4 Signaling. Hua He*, S.C. Tseng1. TissueTech and Ocular Surface Center, Miami, FL; Ocular Surface Center, Ocular Surface Res & Educ Fndtn, Miami, FL. *CR

6282 — D1142 Genetically Engineered IL-30 (IL27p28) Suppresses Experimental Autoimmune Uveitis. Ren-Xi Wang, C-Y. Yu, R. Dentone, B. Pearlman, P. Asbell. Massachusetts Eye Research & Surgery Institution, Cambridge, MA; B. Department of Ocular Inflammation and Immunology, Hokkaido University, Sapporo, Japan; Department of Ophthalmology, 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, J.A. Khell1, B. Henderson1. General & Surgical Ophthalmology, Center for Excellence in Eye Care, Miami, FL; Cornea, Center for Excellence in Eye Care, Miami, FL; *CR


6272 — D1132 Retinal Damage in Severe Chemical Burn and the Use of Inflimixim Therapy. Fabiano Cade1, E. Paschal1, C.V. Regattieri1, R. Dana1, C.H. Dohlman1. Cornea and Refractive Surgery, Massachusetts Eye & Ear Infirmary, Harvard Medical School, Boston, MA; *CR

6270 — D1130 Multicenter Comparison of Loteprednol 0.5% vs Prednisolone Acetate 1% in Patients Post-Phacoemulsification with IOL implants. Carlos Buzeño1, G. Perez1, W. Trattler1, J.A. Khell1, B. Henderson1. General & Surgical Ophthalmology, Center for Excellence in Eye Care, Miami, FL; *CR.

6269 — D1129 Increased Antibiotic Resistance Of Ocular Surface Flora After Repeated Use Of Prophylactic Topical Fluoroquinolone Post Intravitreal Injection For Neovascular Age-related Macular Degeneration (amd). Vivian T. Yin1, D. Weisbrod1, E. Mandelcorn1, C. Schwartzz1, R. Kohly1, K. Eng1, W-C. Lam1. *CR

*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures  —  *CR Refer to Program Number in the Clinical Trial (CT) Registration Index  —  *CR Travel Grant Awardee
Cytokine Profile In Active Ocular Toxoplasmosis. Amanda Rey Torrente, B. Molins, V. Llorens, L. Pelegrín, M. Mesquida, M. Figueras, A. Adán Civera. Ophthalmology, Hospital Clinic Barcelona, Barcelona, Spain.
### 532 Experimental ROP

**Moderators: John Flannery and Faizah N Bhatti**

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<tr>
<td>6293</td>
<td>11:15 Tyrosinase Function Determines Retinal Vascular Regeneration and Retinal Vascular Endothelial Progenitor Cell Recruitment in the Oxygen-Induced Retinopathy Model.</td>
<td>Robert C. Symons1, R.S. White1, B.E. O’Byrhim1.</td>
<td>1Pediatrics &amp; 2Ophthalmology, University of Western Sydney, Sydney, Australia; 3Ophthalmology, University Hospital Erlangen, Erlangen, Germany; 4College of Health and Science, University of Houston, Houston, TX; 5Cornea and Strabismus, Amblyopia &amp; Neuro-Ophthalmology, Regensburg, Regensburg, Germany.</td>
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<tr>
<td>6294</td>
<td>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.</td>
<td>Bliss H. O’Byrhim1, R. White1, A. Symons2.</td>
<td>1Pediatrics &amp; 2Ophthalmology, University of Western Sydney, Sydney, Australia; 3Ophthalmology, University Hospital Erlangen, Erlangen, Germany; 4College of Health and Science, University of Houston, Houston, TX; 5Cornea and Strabismus, Amblyopia &amp; Neuro-Ophthalmology, Regensburg, Regensburg, Germany.</td>
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<tr>
<td>6295</td>
<td>11:45 Altered Vascular Response in MicroRNA 132-212 Knockout Mice in the Model of Oxygen-Induced Retinopathy.</td>
<td>Michael R. Powers1, M.H. Davies1, S.T. Magill.</td>
<td>1Pediatrics &amp; 2Ophthalmology, University of Western Sydney, Sydney, Australia; 3Ophthalmology, University Hospital Erlangen, Erlangen, Germany; 4College of Health and Science, University of Houston, Houston, TX; 5Cornea and Strabismus, Amblyopia &amp; Neuro-Ophthalmology, Regensburg, Regensburg, Germany.</td>
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<td>6296</td>
<td>12:00 Activation of the Endothelin System in Models of Ischemic Retinopathy.</td>
<td>Chintan Patel1, W. Zhang2, Z. Xu2, S.P. Narayanant3, N-T. Tsai3, W. Caldwell3, R.B. Caldwell3.</td>
<td>1Pediatrics &amp; 2Ophthalmology, University of Western Sydney, Sydney, Australia; 3Ophthalmology, University Hospital Erlangen, Erlangen, Germany; 4College of Health and Science, University of Houston, Houston, TX; 5Cornea and Strabismus, Amblyopia &amp; Neuro-Ophthalmology, Regensburg, Regensburg, Germany.</td>
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<td>6297</td>
<td>12:15 Progressive Central Photoreceptor Damages and Retinal Pigment Epithelium Abnormalities in Oxygen Induced Retinopathy.</td>
<td>Zhou Shao1, J. Rivera2, T.E. Zhou1, P. Sapieha1, P. Lachapelle1, S. Chemto1.</td>
<td>1Pediatrics &amp; 2Ophthalmology, University of Western Sydney, Sydney, Australia; 3Ophthalmology, University Hospital Erlangen, Erlangen, Germany; 4College of Health and Science, University of Houston, Houston, TX; 5Cornea and Strabismus, Amblyopia &amp; Neuro-Ophthalmology, Regensburg, Regensburg, Germany.</td>
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<td>6298</td>
<td>12:30 Nectin-1 Promotes Vascular Regeneration in a Mouse Model of Ischemic Retinopathy.</td>
<td>Francois Binet1, G-S. Mavambo-Tagne1, S. Favret1, N. Sitaras1, N. Térèault1, A. Cerami1, E. Lapalme1, F. Rezende1, T. Kennedy2, P. Sapieha1.</td>
<td>1Research Center, Maisonneuve Rosemont Hospital, Montreal, QC, Canada; 2Montreal Neurological Institute, McGill University Montreal, QC, Canada.</td>
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### Floridian BCD

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

**Conferences**

**533 New Technologies in Corneal Disease**

**Moderator: Thomas J Millar**

<table>
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<td>6300</td>
<td>11:15 Decreasing Peripher Hyperopia With Distance-centre Relatively-plus Powered Periphery Contact Lenses Reduced The Rate Of Progression Of Myopia: A 5 Year Vision Crc Study.</td>
<td>A. Holden1, P.R. Sankardurg1, P. Lazon De La Jara1, T. Naduvilath3, A. Ho2, B. Sweeney2, M. Markoulli1, E.L. Smith.</td>
<td>1Pediatrics &amp; 2Ophthalmology, University of Western Sydney, Sydney, Australia; 3Ophthalmology, University Hospital Erlangen, Erlangen, Germany; 4College of Health and Science, University of Houston, Houston, TX; 5Cornea and Strabismus, Amblyopia &amp; Neuro-Ophthalmology, Regensburg, Regensburg, Germany.</td>
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<td>6301</td>
<td>11:30 Impact of a Novel Silicone Hydrogel Material on Meibomian Gland Structure.</td>
<td>Jason J. Nichols1, K.E. Osborn1, T. Henderson.</td>
<td>1Pediatrics &amp; 2Ophthalmology, University of Western Sydney, Sydney, Australia; 3Ophthalmology, University Hospital Erlangen, Erlangen, Germany; 4College of Health and Science, University of Houston, Houston, TX; 5Cornea and Strabismus, Amblyopia &amp; Neuro-Ophthalmology, Regensburg, Regensburg, Germany.</td>
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<tr>
<td>6302</td>
<td>11:45 A Novel Method Of Measuring Tear Evaporation Rates Using Infrared Thermography.</td>
<td>Andrea Petznick1, S. Lee1, J. Tan2, U. Acharya2, E. Ng4, L. Tong5, J. Paul1.</td>
<td>1Pediatrics &amp; 2Ophthalmology, University of Western Sydney, Sydney, Australia; 3Ophthalmology, University Hospital Erlangen, Erlangen, Germany; 4College of Health and Science, University of Houston, Houston, TX; 5Cornea and Strabismus, Amblyopia &amp; Neuro-Ophthalmology, Regensburg, Regensburg, Germany.</td>
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### Floridian A

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

**Conferences**

**534 Ocular Immune Responses**

**Moderators: Holly L Rosenzweig and Paul G McMenamin**

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<tr>
<td>6303</td>
<td>11:15 The Role of Interleukin-17A in a Spontaneous Model of Autoimmune Uveitis Elicited by Retina-specific T Cells.</td>
<td>Benjamin C. Chao1, R. Horai1, J. Chen1, C. Zárate-Bladés1, R. Villasmil1A, C-C. Chan1A, R.R. Caspi1.</td>
<td>1Pediatrics &amp; 2Ophthalmology, University of Western Sydney, Sydney, Australia; 3Ophthalmology, University Hospital Erlangen, Erlangen, Germany; 4College of Health and Science, University of Houston, Houston, TX; 5Cornea and Strabismus, Amblyopia &amp; Neuro-Ophthalmology, Regensburg, Regensburg, Germany.</td>
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<td>6304</td>
<td>12:15 Vitrified Collagen Gels with Optimized Material Properties for Repair of Ocular Injuries.</td>
<td>Xia1, Q. Guo1, J.E. Tiffany1, J.P. Maranchi, R.L. McCully1, O. Schein1, J.H. Elleslieff1, M.M. Trellet1.</td>
<td>1Pediatrics &amp; 2Ophthalmology, University of Western Sydney, Sydney, Australia; 3Ophthalmology, University Hospital Erlangen, Erlangen, Germany; 4College of Health and Science, University of Houston, Houston, TX; 5Cornea and Strabismus, Amblyopia &amp; Neuro-Ophthalmology, Regensburg, Regensburg, Germany.</td>
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### Immunology & Microbiology / Eye Movements, Strabismus, Amblyopia & Neuro-Ophthalmology / Retina / Retinal Cell Biology

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

**Conferences**

**534 Ocular Immune Responses**

**Moderators: Holly L Rosenzweig and Paul G McMenamin**

<table>
<thead>
<tr>
<th>Paper Number</th>
<th>Title</th>
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<tr>
<td>6307</td>
<td>11:15 The Role of Interleukin-17A in a Spontaneous Model of Autoimmune Uveitis Elicited by Retina-specific T Cells.</td>
<td>Benjamin C. Chao1, R. Horai1, J. Chen1, C. Zárate-Bladés1, R. Villasmil1A, C-C. Chan1A, R.R. Caspi1.</td>
<td>1Pediatrics &amp; 2Ophthalmology, University of Western Sydney, Sydney, Australia; 3Ophthalmology, University Hospital Erlangen, Erlangen, Germany; 4College of Health and Science, University of Houston, Houston, TX; 5Cornea and Strabismus, Amblyopia &amp; Neuro-Ophthalmology, Regensburg, Regensburg, Germany.</td>
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<td>6308</td>
<td>11:30 Abundant II-17’’ T Cells Induced In Immunized C57bl6 Mice Are Not Autoreactive.</td>
<td>Deming Sun1, D. Liang1, A. Zuo1, H. Shao1, H.J. Kaplan1, H. Nian1.</td>
<td>1Pediatrics &amp; 2Ophthalmology, University of Western Sydney, Sydney, Australia; 3Ophthalmology, University Hospital Erlangen, Erlangen, Germany; 4College of Health and Science, University of Houston, Houston, TX; 5Cornea and Strabismus, Amblyopia &amp; Neuro-Ophthalmology, Regensburg, Regensburg, Germany.</td>
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<td>6309</td>
<td>11:45 Identification of a MCCr’ Gr-1low F4/80+ CD11b+ APC Associated with EAU Recovery.</td>
<td>Darren J. Lee1, A.W. Taylor.</td>
<td>1Pediatrics &amp; 2Ophthalmology, University of Western Sydney, Sydney, Australia; 3Ophthalmology, University Hospital Erlangen, Erlangen, Germany; 4College of Health and Science, University of Houston, Houston, TX; 5Cornea and Strabismus, Amblyopia &amp; Neuro-Ophthalmology, Regensburg, Regensburg, Germany.</td>
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*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures. 
Refer to Program Number in the Clinical Trial (CT) Registration Index. 
Travel Grant Awardee.
Thursday – Papers – 6310 – 6331

Room 305
Thursday, May 10, 2012, 11:15 AM-1:00 PM
Biochemistry & Molecular Biology

535 Biochemistry and Molecular Biology of Glaucoma

Moderators: Michael A Walter and Tonya S Rex

6314 — 11:15 Innate Immune Network in the Retina Activated by Optic Nerve Crush. Eildon G. Geisert1, J. Templeton1, J.M. Nickerson2, X. Wang1, M.M. Jablonski1, R.W. Williams1, T.S. Rex1. ophthalmology, Emory University, Atlanta, GA.

6315 — 11:30 Hmgb-1 Induces Apoptosis In Retinal Ganglion Cells And Intraretinal Inflammation By Activation Of Tlr4 And Cytokine Release. Maurice Schallenberg1, M. Chen, Z. Zhou. Ophthalmology and Visual Neuroscience, Yale New Haven, CT.

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

6317 — 12:00 Amyloid Fibril Formation By The Oflaactomedin Domain Of Myocilin. Raquel L. Lieberman1, S.D. Orwig1, C.W. Perry1, L.Y. Kim1, K.K. Turnage2, R. Zhang1, D. Vollrath1, I. Schmidt-Krey1, 2School of Chemistry & Biochemistry, 3School of Biology, 2Georgia Institute of Technology, Atlanta, GA; 3Department of Genetics, Stanford University School of Medicine, Palo Alto, CA.

6318 — 12:15 Clusterin in Age-Related Ocular Exfoliation Syndrome. Jorge Ghio1, I. Douddevski1, M. Cowman1, J. Liebmann1, C. Tello1, C. Teng1, R. Ritch1, A. Rostagno1. Pathology, New York University School of Medicine, New York, NY; 3Chemical and Biological Sciences, Polytechnic Institute of New York University, New York, NY; 4Einhorn Clinical Research Center, New York Eye and Ear Infirmary, New York, NY.

6319 — 12:30 LOXL-1-Associated Pathomechanisms in Exfoliation Syndrome. Katalin Csizsar1, R. Laczkó1, K. Molnarne Szastner1, R. Ritch1. John 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, M. Walter1. Medical Genetics, Surgery, Univ of Alberta, Edmonton, AB, Canada.

Room 315
Thursday, May 10, 2012, 11:15 AM-1:00 PM
Visual Neurophysiology

536 Horizontal and Amacrine Cells: Structure and Function

Moderators: Z Jimmy Zhuo and Bryan W Jones

6321 — 11:15 Retinal Circadian Clock Enhances GABA, Receptor-Mediated Horizontal Cell Feedback to Cones at Night, Compared to the Day. Hee Joo Choi, M. Ishii, Y. Cao, A. Adelaja, C. Ribelavaya, 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. Atkinson2, D-Q. Zhang2. 1Eye Research Institute, Oakland University, Rochester, MI; 2Department of Physiology and Pathophysiology, Xi’an Jiaotong University School of Medicine, Xi’an, China.

6327 — 12:45 Genetic Modulation of the Ratio of Cholinergic Amacrine Cells in the GCL and INL of the Mouse Retina. Irene E. Whitney1, B. Raven1, B.E. Reese1, M. Chen, Z. Zhou. 1Molecular, Cellular, and Developmental Biology, 2Neuroscience Research Institute, 3Psychological and Brain Sciences, University of California, Santa Barbara, CA.

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

537 New Directions for Bipocularity, Multifocality and Restoration of Accommodation

Moderators: Jim Schwiegerling and Sanjeev Kashyupiranag

6328 — 11:15 Optimizing Modified Monovision to Improve Binocular Through-Focus Visual Performance. Len Zheleznyakov1, R. Sabesan1, S. MacRae2, G. Yoon3. 1The Institute of Optics, 2Flaum Eye Institute, University of Rochester, Rochester, NY, 3CR.

6329 — 11:30 Depth Of Focus With Induced Coma At Different Orientations. Christina Schwarz1, C. Canovas2, S. Manzanera2, P.M. Prieto1, H.A. Weeber4, P.A. Piers2, P. Artaud2. 1Laboratorio de Optica, Universidad de Murcia, Murcia, Spain; 2R&D, 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. Wolffsohn1. 1Midland Eye Institute, Birmingham, United Kingdom; 2School of Life and Health Sciences, Aston University, Birmingham, United Kingdom.

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

*CR  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
6332 — 12:15 Improving Through-Focus Visual Performance Using Primary And Secondary Spherical Aberrations. Myoung Joon Kim1, L. Zheleznyak2,3, R. Sabesan4, S. MacRae2, G. Yoon5,6. 1Department of Ophthalmology, Asan Medical Center, Seoul, Republic of Korea; 2The Institute of Optics; 3Flaim Eye Institute, 4University Medical Center, University of Houston, Houston, TX; 5Department of Ophthalmology, University of Washington, Seattle, WA.


6334 — 12:45 Range of Vision Provided by Dual-Optic Accommodating Intraocular Lens. Sanjeev Kasthurirangan1, L.G. Vargas2, V. Bohorquez3, R. Alarcon4. 1R&D, Abbott Medical Optics, Milpitas, CA; 2R&D, Abbott Medical Optics, Santa Ana, CA; 3Department of Ophthalmology, ServiOftalmos, Bogota, Colombia.

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

Moderators: Tunde Peto and Gavin S Tan

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. Ikrarn1,2, E. Tai1,3, T.Y. Wong1,4. 1Singapore Eye Research Institute, Singapore, Singapore; 2Department of Ophthalmology, 3Department of Medicine, 4Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore.


6344 — 11:45 Prevalence, Causes and Risk Factors for Visual Impairment in a Multi-ethnic Asian Population with Diabetes. Gavin S. Tan1, Y. Zheng1, W-L. Wong2, M.K. Ikrarn1, E.L. Lamoureux, III1, P. Mitchell1, J.J. Wang1, T.Y. Wong1. 1Singapore Eye Research Institute, 2Singapore National Eye Centre, Singapore; 3Singapore Eye Research Institute, 4University of Singapore, Singapore; 5Ophthalmology, University of Melbourne, Melbourne, Australia; 6Ophthalmology, University of Sydney, Sydney, Australia; 7Ctr for Vision Research/Ophthalmol, University of Sydney, Westmead, Australia; 8Singapore Eye Research Institute, 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, N. Cockburn3, P. Gomez1, M. Rabiu1. 1Tennent Institute of Ophthalmology, 2Gartnavel Hospital, Glasgow, United Kingdom; 3London School of Hygiene & Tropical Medicine, International Centre for Eye Health, London, United Kingdom; 4University of Cape Town, Cape Town, South Africa; 5Instituto de la Vision Universidad de Montemorelos, Montemorelos, N.L., Mexico; 6Prevention of Blindness Union, Riyadh, Saudi Arabia.

6346 — 12:15 The Responsiveness of the National Eye Institute Visual Function Questionnaire-25 (NEI VFQ-25) to Visual Acuity Gains in Diabetic Macular Edema. Patients. Adam Turpe1, S. Colman1, J.J. Saner2, N.M. Bressler1, R. Varma1, P. Lee1, C. Dohlman1, J. Ward1, L. Yau1. 1Genentech, South San Francisco, CA; 2Retina Associates of Florida, Tampa, FL; 3Ophthalmology, Wilmer Eye Institute, Baltimore, MD; 4Ophthalmology, USC, Doheny Eye Institute, Los Angeles, CA; 5Duke University Eye Center, Durham, NC; 6CMD Consulting, Palo Alto, CA.

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 Trabeceplasty In The Medicare Population. Henry D. Jampel1,2, S.D. Cassidy3, D.S. Friedman1, H.A. Quigley4, E.W. Gower5. 1Glaucoma Center of Excellence, 2Dana Center for Preventive Ophthalmology, 3Johns Hopkins Wilmer Eye Inst, Baltimore, MD; 4Epidemiology and Prevention, Wake Forest School of Medicine, Winston-Salem, North Carolina, MD.
6350 — 11:30  Transient Corneal Endothelial Changes Associated With Selective Laser Trabeculoplasty. Andrew J. White1, A. Mukherjee2, I. 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. Si1, S. Kent1, C.M. Hutnik1, C. Birt1, K. Damji2, P. Harasymowycz2, W.G. Hodge1, Y.I. Pav1, A. Crickton1. 1Ophthalmology, University of Western Ontario, London, ON, Canada; 2Ophthalmic & Vis Sciences, University of Toronto, Toronto, ON, Canada; 3Ophthalmology, University of Alberta, Edmonton, AB, Canada; 4Ophthalmology, University of Montreal, Montreal, QC, Canada; 5Ophthalmology, University of Calgary, Calgary, AB, Canada.


6355 — 12:45  Three Year Results of the Ahmed Baerveldt Comparison (ABC) Study. Donald L. Budenz1, K. Barton2, W.J. Feuer3, J.C. Schiffman3, V.P. Costa1, D. Godfrey4, Y.M. Boys5. 1Ahmed Baerveldt Comparison Study Group, 2Ophthalmology, University of North Carolina, Chapel Hill, NC; 3Gliaoma Service, Moorfields Eye Hospital, London, United Kingdom; 4Biostatistics, Univ of Miami-Hascom Palmer, Miami, FL; 5Ophthalmology, Bascom Palmer Eye Institute, Miami, FL. *CR.


6359 — 12:00  Postoperative Retinal Function After Recent-onset Retinal Detachment In Relation To The Topography Of The Affected Quadrants. Marcos J. Rubio Caso1, M. Martin-Baranera2, N. Vila Grane1, A. Arias Barquet1, J. Caminal Mitjana1, J. Catala Mora1, P. Garcia Bru1, O. Pujol Goya1, J. Arruga Ginebreda1, J. Garcia-Arun1. 1Ophthalmology, Hospital Universitari de Bellvitge, Barcelona, Spain; 2Epidemiology, Consorci Sanitari Integral, Barcelona, Spain; 3Ophthalmology, Hospital Vall d’Hebron, Barcelona, Spain.

6360 — 12:15  Retinal MMP12/MMP13 And TIMP1/TIMP2 Expression In Experimental Murine Retinal Detachment. Colleen M. Cebulla1, B. Kim2, T. Wang1, S. Poud1, M.H. Abdel-Rahman1, A. J. Fischer2. 1Ophthalmology, 2Ophthalmology and Division Human Genetics, 3Neuroscience, The Ohio State University, Columbus, OH.

6361 — 12:30  Protective Role of Soluble Fasl in Photoreceptor Cell Loss. Dimosthenis Mantopoulos1, Y. Murakami1, G. Trichonas1, M.S. Gregory-Ksander1, D. Cestari1, B.R. Ksander1, D. Vavvas1. 1Retina, 2Neuro-ophthalmology, 3Massachusetts Eye & Ear Infirmary, Harvard, Boston, MA; 4Department of Ophthalmology, Massachusetts Eye and Ear Infirmary, Boston, MA; 5Cleveland Clinic, Cleveland, OH; 6Schepens Eye Research Institute, Harvard Medical School, Boston, MA.

6362 — 12:45  A Mechanics Based Model Of A Detaching Retina. Howard F. Fine1, J.L. Premer1, P.L. Bishay1, D.B. Roth1, W.J. Bottega1. 1Ophthalmology, Robert Wood Johnson Univ Hosp, New Brunswick, NJ; 2Mechanical and Aerospace Engineering, Rutgers University, Piscataway, NJ. *CR.
Moderator: Nathan G Congdon

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

6364 — A2 Evaluation of a Novel Optic Disc Grading Software for used in Population-based Studies. Yih Chung Tham1 A, C.L. Cheung1 A, T. Wong1 A, M. Baskaran1, J. Liu1, B-H. Lee1, J. Wang1, P. Mitchell1, T. Aung1 B, C-Y. Cheng1 B, 1Singapore Eye Research Institute (SERI), Singapore National Eye Centre, Singapore, Singapore; 2Institute for Infocomm Research (I2R), Agency for Science, Technology and Research (A*Star), Singapore, Singapore; 3Centre for Quantitative Medicine, National University of Singapore, Singapore, Singapore; 4Institute of Biomedical Sciences, Agency for Science, Technology and Research (A*Star), Singapore, Singapore; 5Department of Ophthalmology, Centre for Vision Research, Westmead Hospital, University of Sydney, Sydney, Australia.

6365 — A3 Evaluation of Depression in Newly Diagnosed Patients of Glaucoma Before and After Starting Ocular Hypotensive Therapy. Neelima Aron1 A, V. Arora1 B, R. Sagar1 C, V Sreenivas1 D, A. Rathi1 E, S. Kumar1 F, M. Wadhwan1 G, T. Dada1 H, 1Department of Ophthalmology, Yonsei University College of Medicine, Seoul, Republic of Korea; 2Department of Ophthalmology, Yonsei University College of Medicine, Seoul, Republic of Korea; 3Kong Eye Clinic, Seoul, Republic of Korea; 4Department of Ophthalmology, Seongnam University Hospital, Seongnam, Republic of Korea; 5Department of Ophthalmology, Gangnam University Hospital, Seoul, Republic of Korea.

6366 — A4 Metabolic Syndrome and the Risk of Developing Normal Tension Glaucoma. Mijin Kim1 A, J. Jeoung1 A, W. Oh1 A, H. Choi1 A, M. Kim1 B, K. Park1 C, S. Kim1 D, T-W. Kim1 E, D. Kim1 F, 1Department of Ophthalmology, 2School of Medicine, Seoul National University, Seoul, Republic of Korea; 3Department of Ophthalmology, Seoul National University Bundang Hospital, Seongnam, Republic of Korea; 4Kong Eye Clinic, Seoul, Republic of Korea; 5Department of Ophthalmology, Seoul National University College of Medicine, Seoul, Republic of Korea.

6367 — A5 Clinical Characteristic Of Normal Tension Glaucoma In Young Patients. Jin Young Rhew1 A, K. Choi1 A, Ophthalmology, Ewha Womans University School of Medicine, Seoul, Republic of Korea.

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


6370 — A8 Blindness Profile in Glaucoma patients in a Tertiary eye-care hospital in India. Dewang Angmo1 A, Y. bhadange1 B, V Arora1 C, V. Srivivas1 D, A. Badduri1 E, A. Panda1 F, M. Wadhwan1 G, Mehndi1 H, Ophthalmology, Dr. R P Centre for ophthalmic sciences, AIIMS, New Delhi, India.

6371 — A9 Profile of Patients Assisted during the 2011 World Glaucoma Week in Aracuari - Minas Gerais - Brazil. fabia f. nogueira1 A, G.E. Carlos1 A, D.R. Martins1 A, G.R. Cunha1 B, M.S. Arcieri1 C, N.B. Ramos1 D, P.E. Rosa1 E, R.S. Arcieri1 F, R.L. Pereira1 G, E.S. Arcieri1 H, 1School of Medicine, Presidente Antonio Carlos University (UNIPAC), Aracuari, Brazil; 2School of Medicine of Ribeirao Preto, University of Sao Paulo (USP), Ribeirao Preto, Brazil; 3Ophthalmology, University of Campinas (UNICAMP), Campinas, Brazil.


6374 — A12 Refractive Status In Patients With Narrow Angles. Sarah M. Simpson1 A, D.C. Warder1 B, A. Moore1 C, I. Irrcher1 D, J. Ninapria1 E, Department of Ophthalmology, Queen’s University, Kingston, ON, Canada.


6377 — A15 Evaluation Of The Impact Of Topical Medical Therapy on Quality Of Life In Newly Diagnosed Glaucoma Patients Using The Indian Vision Function Questionnaire (VFQ33). Tanuj Dada1 A, V. Arora1 B, S.K. Gupta1 C, V. Sreenivas1 D, P. Vashist1 E, A. Pandala1 F, 1RP Centre for Ophthalmic Sciences, 2Centre for Community Medicine, 3Department of Biostatistics, 4All India Institute of Medical Sciences, New Delhi, India.

6378 — A16 Risk Factors for Four-year Incidence of Open-angle Glaucoma: The Los Angeles Latino Eye Study. Xuejuan Jiang1 A, S. Wu1 A, M. Torres1 B, P. Azem1 B, B.A. Francis1 B, V. Chopra1 B, B.B. Nguyen1 B, R. Varma1 A, 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.

6379 — A17 Undiagnosed And Overdiagnosed Glaucoma In The United States. Mark W. Swanson1 A, Optometry, Univ of Alabama at Birmingham, Birmingham, AL.

6380 — A18 Prevalence Of Glaucomatous Optic Neuropathy In A Telemedicine Population. Hana L. Takusagawa1 A, C. Sheppler1 A, C. VanAlstine1 A, S.K. Gardiner1 A, S.L. Mansberger1 A, 1Discoveries In Sight Laboratories, 2Devers Eye Institute, Portland, OR.


*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures  –  Refer to Program Number in the Clinical Trial (CT) Registration Index  –  Travel Grant Awardee
Hall B/C  A80-A98

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

Visual Psychophysics & Physiological Optics

543 Color Vision

Moderator: Dora F Ventura


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. Yoko Murakami1, C. Ung1, E. Zhang1, T. Affaro1, M.I. Seider1, K. Singh1, S.C. Lin2. Ophthalmology, Stanford University, Stanford, CA; Ophthalmology, 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. Muhannel4, B. Adams-Huet8, K. Kooner14. Ophthalmology, *Clinical Sciences, 1University of Texas Southwestern Medical Center, Dallas, TX.


3690 — A80 Learning to Name Colors Altered by Colored Filters. Thomas Kuyk1, A. Smith1, S. Kurni2. *TASC, Inc, Ft Sam Houston, TX; 3Air Force Research Laboratory, Ft Sam Houston, TX.


3697 — A87 Magno- And Dorsal Stream Processing Decline Slower Than Parvocellular Performance In Normal Aging. Maria F. Loureiro, C. Mateus1, B. Oliveira2, R. Lemos2, A. Reis3, M. Castelo-Branco4. ‘Visual Neuroscience, IBILI-Faculty of Medicine-University of Coimbra, Coimbra, Portugal; ‘Ophthalmology, University Hospital of Coimbra, Coimbra, Portugal.

3698 — A88 Binocular Enhancement of Color Contrast Sensitivity. Jeff C. Rabin1, B. Stewart2, V. Wong3, J. Boster4, M. Rueell1, T. Tran1, J. Gooch2, S. Wright1. *Optometry, UIW Rosenberg School of Optometry, San Antonio, TX; ‘Ophthalmology, USAF School Aerospace Medicine, Dayton, OH.


6400 — A90 Cone Isolating Electoretinograms In Individuals With A Mutant Opsin Allele Associated With Cone Dystrophy. James A. Kachenbecker1, S.H. Greenwald1, J. Carroll2, G.A. Fishman1, M.A. Genead3, T.B. Connor, Jr4, M. Neitz1, J. Neitz2. Ophthalmology, University of Washington, Seattle, WA; ‘Ophthalmology, 4Cell Biology, 1Medical College of Wisconsin, Milwaukee, WI; ‘Chicago Lighthouse for People Who Are Blind or Visually Impaired, Chicago, IL; ‘Ophthalmology and Visual Sciences, University of Illinois - Chicago, Chicago, IL; ‘The Pagnere Center for Hereditary Retinal Diseases, Chicago, IL.

6401 — A91 Color vision of female carriers and color vision deficiency subjects evaluated with the Cambridge Colour Test. Daniela M. Bonci1, M. Neitz2, J. Neitz2, M. Gualtieri3, M.T. Barboni, T.L. Costa1, L.L. Silveira1, D.F. Ventura1. Experimental Psychology, University of Sao Paulo, Sao Paulo, Brazil; ‘Ophthalmology, University of Washington, Seattle, WA; ‘Nucleo de Medicina Tropical, Universidade Federal do para, Belém, Brazil.


Thursday Posters

11:15 am – 1:00 pm

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.


6409 – A304 Neuroprotective Effects Of Eythropoietin In Mouse Models With Retinal Degeneration. Jasmin Balmer1, M. Tschopp2, M. Menke2, M. Gassmann1, S. Wolf, V. Enzmann1. 1Ophthalmology, University of Bern, Bern, Switzerland; 2Veterinary Physiology, University of Zurich, Zurich, Switzerland.

6410 – A305 Morphological Differences And Apoptotic Rate In An Experimental Model Of Retinal Detachment After Systemic Submission Of A Dhea-analogue. Pavlina A. Tso1, I. Charalampopoulos1, A. Gravanis1, A. M.K. Silitimbaris. 1Neurology & Sense Organs, 2Pharmacology, 1University of Crete, Heraklion, Crete, Greece; 3Ophthalmology-Research Act, University of Crete, Heraklion, Greece.

6411 – A310 The Effect Of Ketone Bodies On The Synthesis Of Kynurenic Acid In Bovine Retinal Slices. Tomasz Zarnowski1, M. Tuliwodzicz2, T. Choragiewicz2, R. Robert1, T. Kocki2, W. Turski2. 1Dept of Ophthalmology, 2Dept of Pharmacology and Toxicology, 1Medical University Lublin, Lublin, Poland.

6412 – A307 Neuroprotective Effects Of Sirna, Targeted Caspase9, And Atecloolagen Complex On Rat Retinal Damage Induced By Transient Ischemic Injury. Shinichiro Ishikawa1, A. Hirata1, J. Nakabayashi1, R. Ikiviri1, S. Okinami1. 1Saga Univ Faculty of Medicine, Saga, Japan; 2Saga Memorial Hospital, Saga, Japan.

6413 – A308 Subretinal Electrical Stimulation Preserves Visual Acuity In Dystrophic RCS Rats. Vincent T. Ciavatta1, M.H. Aung1, T.S. Obertone1, J.K. You1, M.T. Pardee1, 4Rehab R&D Center of Excellence, Atlanta VA Medical Center, Decatur, GA; 5Ophthalmology, 6Neuroscience, Emory University, Atlanta, GA.

6414 – A309 Neuroprotection And Neurotoxicity Of The Sustained Intracranial Delivery Of Gdnf In Retinal Degeneration. Elodie Touchard1, P. Heiduschka2, M. Berdugo1, L. Calandria. 1INSERM UMRS 872, Paris, France; 2Univ Eye Hosp Muenster, Muenster, Germany; 3CNRS UMR8151, Paris, France; 4Ecole Nationale Vétérinaire d’Alfort, Maisons-Alfort, France.

6415 – A310 Increased Susceptibility to Retinal Stress in Mice Lacking Sigma Receptor 1 (sR1). Yonju Ha1A, S. Saul1A, C. Williams1A, E. Zorrilla2, V. Ganapathy1D, S.B. Smith1C. 1Ophthalmology, Kagawa Univ Faculty of Medicine, Kagawa, Japan; 2Univ Eye Hosp Muenster, Muenster, Germany; 3V A Medical Center, Augusta, GA; 4Ecole Nationale Vétérinaire d’Alfort, Maisons-Alfort, France.

6416 – A311 Arginase2 Deficiency Reduces Hypoxia-induced Retinal Neurodegeneration through the Regulation of Polyamine Metabolism. S. P. Narayanan1, J. Sunwanpidit2, Z. Xie1, T. Lemtsalis1, N. Puthur1, A. Seekumar2, R.W. Caldwell3, R.B. Caldwell4, 5Vascular Biology Center, 6Department of Pharmacology and Toxicology, 1Georgia Health Science University, Augusta, GA; 2Department of Molecular and Cellular Biology, Baylor College of Medicine, Houston, TX; 3VA Medical Center, Augusta, GA.

6419 – A312 The Protective Effects Of Brimonidine For ARPE-19 And Muller Cells Exposed To Hydroquinone In Vitro. Mohamed Tarek1, C.A. Ramirez1, M. Chwa1, G. Limb2, B.D. Kuppermann3, C.M. Kenney1. 1Ophthalmology, Gavin Herbert Eye Institute, Irvine, CA; 2Ophthalmology, University of California, Irvine, Irvine, CA; 3Ocular Biology and Therapeutics, UCL Institute of Ophthalmology, London, United Kingdom; 4Gavin Herbert Eye Inst Dept Ophthalm, University of California Irvine, Irvine, CA; 5Ophthalmology, Univ of California-Irvine, Irvine, CA.


6421 – A314 Recombinant Rdcvf Protein Promotes Cone Photoreceptor Survival in S3344er Rat. Jiwen Li, L. Luo, X. Xia, Z. Wang, P. Chen, R. Wen. Bascom Palmer Eye Institute, University of Miami, Miami, FL.

6422 – A315 Quantum Dots As Neuroprotective Factor In A Model Of Retinal Photoreceptor Degeneration. Raul Velez-Montoya1, N. Mandava1, C.R. Stoldt2, J.L. Olson3. 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 Fan1, A. Montemari1, S. Ross1, G. Paris1, F. Lamoke1, F. Facchiano1, G. Ripandelli1, M. Bartoli1. 1Ophthalmology, Pharmacology and Toxicology, 1Georgia Health Sciences University, Augusta, GA; 2Experimental Medicine and Pathology, University of Rome La Sapienza, Rome, Italy; 3Hematology and Oncology, Istituto Superiore Di Sanita, Rome, Italy; 4Fondazione GB Bietti, Rome, Italy.


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

Hall B/C A302-A337

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

Retinal Cell Biology

544 Retinal Degeneration and Neuroprotection

Moderators: Patrice E Fort and Jorgelina M Calandria

6409 – A302 Activation of the Aldosterone/ Mineralocorticoid Receptor System and Protective Effects of Mineralocorticoid Antagonism in Retinal Ischemia- Reperfusion Injury. Katsuyuki Hirooka1, Y. Lii1, T. Fujita1, F. Shiraga1. 1Ophthalmology, Kagawa Univ Faculty of Medicine, Kita-gun, Japan; 2Ophthalmology, The Fourth Affiliated Hospital of China Medical University, Shenyang, China.

**Thursday – Posters – 6425 – 6444**


6426 — **A319** DHA Restores HNE And PDEF By Inhibiting Oxidative Damage In RPE At High Glucose Levels. Emma Arnauld1, S. Johnsen-Soriano, M. Miranda2, A. Navea1, J. Romero1,2. 1FOAM, Valencia, Spain; 2Dpto. Ciencias Biomédicas, UCH-CEU, Moncada, Spain; 3Facultad de Medicina, UCV, Valencia, Spain.

6427 — **A320** Transferrin Delivery In The Eye Protects Photoreceptors From Light-Induced Retinal Degeneration. Emilie Picard1,2, M. Berdugo1, M. El Sanharawi1, J-C. Jeannes1,2, Y. Courtois1,2. F.F. Behar-Cohen1. UMR 872 Team 17, INSERM, Paris, France; 2UMR 872 Team 17, Université Pierre et Marie Curie et Université Descartes, Paris, France; 3Ophthalmoology, Hotel Dieu de Paris, Université Paris DESCARTES. INSERM UMR872, Paris, France.

6428 — **A321** Iron Chelation Protects Against Murine Retinal Degeneration Induced Through Diverse Mechanisms. Joshua L. Dusatief1, M. Hadzialmetovic1, D. Song1, Y. Song1,2, Y. Li1,2, S. Grieco1,2, S. Chu1A, J. Connelly4, M. Spino4. 1University of Pennsylvania, Philadelphia, PA; 2University of California San Diego, La Jolla, CA; 3University of Victoria, Victoria, BC; 4FM Kirby Ctr/Ophthalmology, B Dept of Ophthalmology, University of Pennsylvania, Philadelphia, PA.

6429 — **A322** Iron Accumulation In Animal Models Of Genetic Retinal Degeneration: Human Transferrin As A Protector For Photoreceptors. Jean-Claude P. Jeanny1,2, L. Jonet2, M-H. Vesvre3, C. Sergeant1, F. Guilhou2, F.F. Behar-Cohen1, C. Yves1,2, E. Picard2. UMR 872 team 17, INSEMrm Centre des Cordeliers, Paris, France; 2UMR 872 Team 17, Université Pierre et Marie Curie et Université Descartes, Paris, France; 3UMR 5084, Nuclear and Bio-environmental Chemistry, CNRS, Bordeaux, France; 4UMR 5084, Physiologie de la Reproduction et des Comporthements, INRA, CNRS, Université de Tours, Tours, France.

6430 — **A323** TUDCA Prevents Microglial Activation In The P23H Rat Retina. Laura Fernandez-Sanchez1, A. Noailles2, I. Pinilla2, J. Martin-Nieto1, P. Lax2, N. Cuencas1. 1Physiology, Genetics & Microbiology, University of Alicante, Alicante, Spain; 2Ophthalmoology, University Hospital Lozano Blesa. Aragon Health Sciences Institute, Zaragoza, Spain.

6431 — **A324** Gentamicin-Induced Retinal Degeneration In Dutch Belted Rabbits. Omar Delgado1, J. Demiris1, S. Louie1, M. Crowley1, S. Poor1, S. Hanks1, C. Bigelow1, Y. Zhang1, B. Jaffe1, S-M. Liao. Ophthalmoology, 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. Voltairelli1, K.V. Messias1, R.S. Arcieri1, R. Jorge1. 1Retina, 2Bone Marrow Transplantation, 3Sao Paulo University, Ribeirao Preto, Brazil.

6433 — **A326** Retinal Sheet Transplants Benefit Rats with Rod Degeneration, Revealed By Optoletic Testing And Manganese-Enhanced MRI (MEMRI). Robert B. Aramant1, M.J. Seiler1, D.P. Bissig2, R. Roberts3, W. Qi4, Z. Chen5, S. Rana6, J. Almodovar6, H.S. Keirstead1A, B.A. Berkowitz8. 1Anatomy & Neurobiol/Reeve-Irvine Res Ctr, 2Biomedical Engineering, Beckman Laser Center, 3Univ of California, Irvine, Irvine, CA; 4Anatomy and Cell Biology, 5Anatomy and Cell Biology, 6Ophthalmoology, 7Wayne State Univ School of Med, Detroit, MI.

6434 — **A327** A SubmicroVolt Focal ERG Technique for Evaluating Macular Function in Stargardt/FF Dystrophy: Clinical Assessment of Test Reliability. Benedetto Falsini1, M. Piccardi1, D. Marangoni1, A. Minnella1, M. Bertelli1, S. Bisti1, A. Fadda1. 1Ophthalmoology, Catholic University, Rome, Italy; 2Ophthalmoology, MAGI Laboratory for molecular genetics in rare diseases, Rovereto, Trento, Italy; 3Physiology, University of L'Aquila, L'Aquila, Italy; 4Health and Technology, Istituto Superiore di Sanita, Rome, Italy.

6435 — **A328** The Expanded Clinical Spectrum of Enhanced S-cone Syndrome. Suzanne Yezzi1, S.H. Tsang1, L.A. Barbuzzeto1, R. Alkemets1, L.A. Yannuzzi1,2. 1Ophthalmoology, Columbia University, New York, NY; 2Vitreous Retina Macula Consultants NY, New York, NY; 3LuEsther T. Mertz Laser Center, 4Allergan, Inc, Irvine, CA.

6436 — **A329** Progressive RPE Dystrophy in Dutch Belt Rabbits. Meg Ramos1,2, I. Raymond1A, S. Whitcup1C. 1Allergan, Inc, Irvine, CA; 2Wayne State Univ College of Medicine, Detroit, MI.

6437 — **A330** Rod Photoreceptor Synaptic Ribbon In Aging Retinal Sheet Regeneration and Rats with Rod Degeneration, Revealed By Transferrin Delivery In The Eye. Suzanne Yzer1,2, C.C. Klaver, 2R. Allikmets1. 1Univ of California, Irvine, Irvine, CA; 2Biomedical Engineering, Beckman Laser Center, 3Univ of California, Irvine, Irvine, CA.

6438 — **A331** Modeling Photoreceptor Interactions in the Presence of Retinitis Pigmentosa. Erika T. Camacho1, S. Wirkus. 1UMRS 872 Team 17, Université Pierre et Marie Curie et Université Descartes, Paris, France; 2Dpto. Ciencias Biomédicas, UCH-CEU, Moncada, Spain; 3Facultad de Medicina, UCV, Valencia, Spain.

6439 — **A332** Early S Cone Loss And L/m Cone Opsin Delocalization In The Canine Model Of Rpe65 Deficiency. Daniela Klein1, A. Mendes-Madeira1, B. Lorenz2, F. Rolling1, S. Haverkamp3, K. Stieger1. 1Department of Ophthalmology, Justus Liebig University Giessen, Giessen, Germany; 2Laboratory for Gene Therapy, University of Nantes, Nantes, France; 3Neuroanatomy, Max-Planck-Institut for Brain Research, Frankfurt, Germany.

6440 — **A333** Degenerative Changes At The Rod Photoreceptor Synaptic Ribbon In Aging Db2/j Mice. Michael Scholz1,2, M. Fuchs6, J. Artof1, R. Enz1, J.H. Brandstatter1. 1Anatomy 2, 3Biology, 4Department of Biology, 5University of Erlangen-Nuremberg, Erlangen, Germany; 6Ophthalmology, 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. Rayborn3,4, V.L. Bonilha1, A. Bello5, J.M. Marino14, G.J. Pauer6, C.D. Beight1, E.I. Traboulsi7, S.A. Hagstrom8, J.G. Hollyfield1. 1Ophthalmoology, 2Center for Genetic Eye Diseases, 3Cole Eye Inst/Cleveland Clinic Lerner Coll Med, Cleveland, OH.

6444 — **A337** Retinal Histopathology from a Patient with Autosomal Recessive Retinitis Pigmentosa caused by EYS Mutations. Meghan J. Marino1, V.L. Bonilha1, M.E. Rayborn1, B.A. Bell5, J.M. Marino14, G.J. Pauer6, C.D. Beight1, E.I. Traboulsi7, S.A. Hagstrom8, J.G. Hollyfield1. 1OphthalmoLogic, 2Cole Eye Institute, Cleveland Clinic, Cleveland, OH; 3Casey Eye Institute Molecular Diagnostics Laboratory, Oregon Health Science University, Portland, OR.
545 Retinitis Pigmentosa III

Moderator: Hendrik P Scholl


6446 — A372 Role of ER Stress-Induced Caspase5 in Retinal Degeneration of T17M Rodhospin Transgenic Mice. Shreyasi Choudhury, M.S. Gorbatyuk. Cell Biology And Anatomy, University of North Texas Health Science Center, Fort Worth, TX.

6447 — A373 Additional Neuroprotective Effects Of Proinsulin On Vision And Retinal Structure In The Rd10 Mouse Model Of Retinitis Pigmentosa. Enrique J. de la Rosa1, N. Forns2, M. Marchena1, A. Hernandez-Pinto1, R. Steel1, Ophthamology, 1University of Florida, Gainesville, FL; 2Department of Veterinary Anatomy, Justus-Liebig-University Giessen, Giessen, Germany.

6448 — A374 Long-Term Rescue with Gene Therapy in a Mouse Model of Autosomal Dominant Retinitis Pigmentosa (ADRP). Haoyu Mao1,2, M.S. Gorbatyuk1, B. Rossomanno2, W.W. Hauswirth3, A.S. Levin4. 4Molecular Genetics & Microbiology, 2Molecular Genetics & Microbiology, Ophthalmology, 3University of Florida, Gainesville, FL; 4Department of Cell Biology and Anatomy, University of North Texas Health Science Center, Fort Worth, TX. *CR

6449 — A375 Mpp3 is Required for Maintenance of Adherens Junctions in the Retina during Light Exposure. Jacobus J. Dudok1, A. Sanz Sanz1, D. Lundvig1, V. Sotilhangan1, M. Garcia Garrido1, N. Tanimoto2, J. Klooster1, M. Janrich1, M. Seeliger1, J. Wijnholds1. 1Neuromedical Genetics, Neelands Inst for Neurosci, Amsterdam, The Netherlands; 2Division of Ocular Degeneration, Ctr Ophthal Inst Ophthalmic Resarch, Tuebingen, Germany; 3Molecular and Cellular Biology, Baylor College of Medicine, Houston, TX.

6450 — A376 Altered Fractalike Homeostasis In Rd10 Degenerating Mouse Retina. Marina Zieger1, C. Schubert1, P. Uhrin1, P.K. Ahnelt1. 1Neurophysiology and Neuropharmacology, 2Vascular Biology and Thrombosis Research, Medical University of Vienna, Vienna, Austria.

6451 — A377 Characterization of a Humanized Mouse-Model for X-linked Retinitis Pigmentosa caused by a point mutation in the Rprgr gene. Jutta U. Schlegel1, D. Rolf1, M. Bergmann2, B. Lorenz1, K. Stieger1. 1Department of Ophthalmology, 2Department of Veterinary Anatomy, Justus-Liebig-University Giessen, Giessen, Germany.


6453 — A379 ER Stress is Involved in Retinal Degeneration Induced by Human T17m Mutant Rodhospin. Mansi M. Kunte1, S. Choudhury1, VM. Shinde1, J.F. Manhimi1, M. Miura2, O.S. Gorbatyuk3, M.S. Gorbatyuk1. 1Cell Biology and Anatomy, UNT Health Science Center, Fort Worth, TX; 2Laboratory for Cell Recovery Mechanisms, Brain Science Institute, RIKEN, Tokyo, Japan; 3Department of Molecular Genetics and Microbiology, University of Florida, Gainesville, FL. *CR

6454 — A380 Ethanol Consumption Correlates with Retinal Degeneration and Vision Loss in the P23H Rat. Gema Esquivel1, P. Lax1, L. Fernandez-Sanchez1, A. Noailles1, J. Pinillos1, N. Cuenca1. 1Physiology, Genetics and Microbiology, University of Alicante, Alicante, Spain; 2Ophthalmology, University Hospital Lozano Blesa, Zaragoza, Spain.


6456 — A382 Crb1 And Crb2 Controls Cell Division During Retina Development. Lucie P. Pellissier1, C.H. Alves1, D. Lundvig1, M. Garcia-Garrido1, V. Sotilhangan2, N. Tanimoto2, F. Richard3, A. Le Bivic1, M. Seeliger1, J. Wijnholds1. 1Neuromedical Genetics, Neelands Inst for Neurosci, Amsterdam, The Netherlands; 2Division of Ocular Neurodegeneration, Institute for Ophthalmic research, Tuebingen, Germany; 3Institut de Biologie du Développement de Marseille Luminy, Marseille, France.

6457 — A383 Deficiency in the Pro-Apoptotic CHOP Protein, a UPR Downstream Marker, Does Not Prevent Vision Loss in T17M Rho Retina. Sonalli R. Nashes1, A.S. Levin1, 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 Rodopsin Mutants in vivo. Fernanda Balem1,2, P.S. Akamine1, G.L. Ishimoto1, B.V. Nagy1, D.F. Ventura2, J. Klein-Seetharaman1, D. Hamassaki1,3. 1Cell and Developmental Biology, 2Experimental Psychology, 3University 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. Rossomanno1,2,3, H. Mao1,2,4, A.S. Levin1,2,5. *Molecular Genetics & Microbiology, *Molecular Genetics & Microbio, *Department of Florida, Gainesville, FL; 4Department of Molecular Genetics and Microbiology, 5Department of Molecular Genetics and Microbiology, 6The University of Florida, Gainesville, FL.


6461 — A387 Long-term Preservation of Cone Photoreceptors by a Novel Multifunctional Drug in a Mouse Model of Human Retinitis Pigmentosa. Bin Lin1, K. Wang1, M.B. Youdim1. *Anatomy, Eye Institute, *Anatomy, University of Hong Kong, Hong Kong; 2Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel.

6462 — A388 Analysis of Photoreceptor Abnormality in Gucy2d Expressed Transgenic Pigs. Corinne Kostic1, T. King1, C. Sylvain1, S. Philippe2, S. Lilliac3, C. Sarkis1, J. Mallet1, Y. Arsenijevic1, B. Whitelaw2. *Gene Therapy & Stem Cell Biol, Jules-Gonin Eye Hosp, Univ Lausanne, Lausanne, Switzerland; 2Division of Developmental Biology, The Roslin Institute, University of Edinburgh, Scotland, United Kingdom; 3New Vectors, Paris, France; 4Team of Biotherapy and Biotechnology, CRICM, Paris, France. *CR

Hall B/C A389-A436

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

Biochemistry & Molecular Biology

546 AMD Disease Mechanisms II

Moderator: Anneke I Den Hollander

6463 — A389 Establishing a Human AMD Interactome. Paul Wong1, D.A. Ferrington2, T.W. Olsen1. 1Ophthalmology, Emory University, Atlanta, GA; 2Ophthalmology, University of Minnesota, Minneapolis, MN.
6468 — A412 Characterisation Of The Large Macromolecular MMP Complex Of Human Bruch’s Membrane With Respect To Stability, Activation And Effects Of Ginseng Compounds. Jong Doh Shin1, J. Seok1, C. Sim1, M. Kang1, H. Shin1, Y. Lee1, A. Hussain2. 1Jeonbuk National University, Jeonju-ri, Republic of Korea; 2Korea Atomic Energy Research Institute, Daejeon, Republic of Korea; 3Division of Molecular Therapy, UCL Institute of Ophthalmology, London, United Kingdom.*CR

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

6488 — A414 Translational diffusion of ranizubam and bevacizumab as measured by Fluorescence Recovery after Photobleaching (FRAP), Nishanath Srikantha1, A. Suhling1, K. Suhling1, 1Schepens Eye Research Institute, Massachusetts General Hospital, Boston, MA; 2Department of Pathology, Duke University Medical Center, Durham, NC.


6493 — A419 Impaired Vision in the DNA Double-Strand Break Repair Poly-mutant Mouse. Noemi L. Alvarez-Lindo1, J. Baliero-Roje1, J.M. Sammartini1, T. Suarez2, G. Terrados3, B. Escudero2, A. Bernad2, L. Blanco2, P. de la Villa1, E. de la Rosa1. 1Cellular and molecular medicine, Centro de Investigaciones Biologicas-CSIC, Madrid, Spain; 2Centro de Biologia Molecular CSIC-UMA, Madrid, Spain; 3Centro de Nacional de Investigaciones Cardiovasculares, Madrid, Spain; 4Physiology, University of Alcalá, Alcalá de Henares, Spain.

6494 — A420 Ginseng Mediated Improvement In The Hydraulic Conductivity Of Human Bruch’s Membrane: Potential For Preventive Therapy In AMD. Cheul Mu Sim1, J. Seok1, M. Kang1, Y. Shin1, H. Shin1, Y. Lee1, A. Hussain2. 1Neuron Science Department, Korea Atomic Energy Research Institute, Daejeon, Republic of Korea; 2KBioMix, Jeonju, Republic of Korea; 3Physic, Kings College London, London, United Kingdom.

6495 — A421 The Kinetics of Retinal Gene Expression Profile Of Col2/Cx3c1r Double Deficient Mice on rdb Background. De Fen Shen, Y. Wang1, K. Jin1, J. Tuo1, M. Xiang2, C.-C. Chan1. 1Laboratory of Immunology, National Eye Inst/NHI, Bethesda, MD; 2Center for Advanced Biotechnology and Medicine, University of Medicine and Dentistry of New Jersey, Piscataway, NJ.


6498 — A424 Understanding The Mechanism Behind Enhancing Survival Of Photoreceptors In Culture And Regulation Of Photoreceptor Metabolism. Ken Lindsay1, T.A. Reh1, B.A. Harley1, D. Lambe1, J. Gust1. 1Biochemistry, Biological Structure, University of Washington, Seattle, WA.


6502 — A428 Diet Can Influence Human Retinal n-3/n-6 VLC-PUFA Ratios. Aihua Liu1, R. Terry1, K. Nelson1, X. Sheng2, P.S. Bernstein1. 1Ophthalmal & Visual Sci, Univ of Utah/Moran Eye Center, Salt Lake City, UT; 2Department of Pediatrics, Univ of Utah/Department of Pediatrics, Salt Lake City, UT.


6505 — A431 Modifications Of Glycoproteins In The Bruch’s Membrane Via Glycolaldehyde Or Nitration: A Model For Aging And Inflammation. Mai T. Thao1, J.P. Dillon2, E.R. Guillard3. 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. Lauten2. 1Retina Specialty Institute, Panama City, FL; 2Retina Specialty Institute, Pensacola, FL.*CR

*Refer to Program Number in the Commercial Relationships (CR) Index for Disclosures – Refer to Program Number in the Clinical Trial (CT) Registration Index – Travel Grant Awardee
6508 — A434 Conditional Knock-Out of 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. Ferreira1, A. Saha1, E. Haque1, Y-Z. Le1, 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. Lewin1, M.P. Krebs2, S. Soo1A, K. Jones1A, H. Mao1B, P. Soo1B, P. Webster1B, P. Webster1B, H. Mao1B.

1Eye Slitlamp Lab, The New York Eye and Ear Infirmary of Mount Sinai, New York, NY; 2Radiology, Department of Imaging and Radiological Sciences, Duke University Medical Center, Durham, NC; 3Medicine, Univ of Oklahoma Hlth Sci Ctr, Oklahoma City, OK.

6510 — A436 Genetically-related Inflammatory Priming and Failing Retinal Maintenance of Patients With Neovascular Age-Related Macular Degeneration: Predispose to Age-Related Retinal Degeneration in Mice. Debarsha Mustafi1, H. Kohno1, K. Palczewski2, T. Maeda1B.

1Ophthalmology, University of California, San Francisco, CA; 2Signaling Pathways and Hallmark Features of AMD, Institute of Molecular Genetics & Microbiology, 1University of Vienna, Vienna, Austria; 2Institute for Laboratory Medicine/ SMZ-East, Vienna, Austria; 3Gynecology, Medical University of Vienna, Vienna, Austria.

6511 — A513 Associations Between Early Signs Of Age-related Macular Degeneration (AMD) And Risk Of AMD In The Fellow Eye In Patients With Unilateral AMD. Mariko Sasaki1,2, Mariko Sasaki1,2, A. Jovanovski3, A. Jovanovski3, K. Tsubota1, Y. Ozawa1, J. Blein3, J. Herry4, J. Giraud1, F. Maÿ1, J. Giraud1, F. Maÿ1, J. Herry4, J. Giraud1, F. Maÿ1, J. Giraud1, F. Maÿ1.


6512 — A514 Initial Clinical Experience With RetnaGene AMD™, A Genetic Test For Prediction Of CNV. Briania L. Sawyer1, D.Y. Harrison1, L. Perlee1, P.S. Bernstein1.

1Ophthalmology, John A. Moran Eye Center, Salt Lake City, UT; 2Seqenom, Inc, San Diego, CA.

6513 — A515 Genetics And Prevention Of Blindness: Risk Factors Associated With Age-related Macular Degeneration In A Brazilian Population. Priscila H. Rim1, A.P. Marques-de-Faria1, L.A. Magna2.

1Ophthalmology, 2Medical genetics, Univ Estadual de Campinas, Campinas, Brazil.

6514 — A516 Do Ultraviolet Radiations Induce Earlier Aged Ocular Pathologies Among Mountainare Guides? Hussan El Chehab1, C. Dot2, J. Blein3, J. Herry4, J. Giraud1, F. Maÿ1, J. Giraud1, F. Maÿ1.

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

6515 — A517 Impact Of Visceral Fat, Serum Leptin Levels And High-sensitive Crp Levels On The Pathogenesis Of Age-related Macular Degeneration. Paulina Haas1, K. Kubista1, W. Krugluger2, J. Huber2, 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. Stevenson1, G. Silvestri1.

1Ophthalmology, Royal Group Hospital, Belfast, Northern Ireland; 2Ophthalmology, Royal Hospital Trust, Belfast, United Kingdom; 3Ophthalmology, Royal Hospital Trust, Belfast, United Kingdom; 4Centre 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 (esRage) In Aqueous Humor Of Patients With Age-related Macular Degeneration. Pinio Matoual1,2, K. Ninios1,4, N. Szentmary1,2, R. Obeid2, B. Seitz2,4.

1Department of Ophthalmology, 2Department of Clinical Chemistry and Laboratory Medicine, 4University of Saarland, Homburg, Germany.

6518 — A520 Visual Impairments In Age-related Macular Degeneration To Process Spatial Frequencies During Natural Scene Categorization. Baxandra Hera1, B. Maes1, S. Chokron1, C. Chiquet1, J. Romanet1, J. Le Bas1,4, P. Carole1.

1Ophthalmology, Hospital Albert Michallon, Grenoble, France; 2Laboratoire de Psychologie et Neurociences, CNRS UMR 7105, Grenoble, France; 3Fondation Ophthalmologique Rothschild, Unité Fonctionnelle Vision et Cognition, Paris, France; 4Université Joseph Fourier - Institut des Neurosciences, INSERM U836, Grenoble, France.


1Vision Rehabilitation, Harvard Medical School/ Massachusetts Eye and Ear Infirmary, Boston, MA; 2Chemelex Eye Research Institute, Harvard Medical School, Boston, MA.

6520 — A522 A Canadian Registry Of Lucentis Treatment To Collect Effectiveness And Safety Data In Patients With Neovascular Age-related Macular Degeneration Over 36 Months (LENS): Findings From A 12-month Interim Analysis. Sebastien Olivier1, A. Charbonneau1, M. Giunta1, P. Saurel1, M. Bense1, B. Rebél1, F. De Takacsy1, B. Lé1.

1Ophthalmology, Hospital Maisonneuve-Rosemont, Montreal, QC, Canada; 2Polyclinique de Trois-Rivières, Trois-Rivières, QC, Canada; 3Universtè de Sherbrooke, Sherbrooke, QC, Canada; 4Clinique ChirurgieVision, Drummondville, QC, Canada; 5Health Sciences Centre-Eye Clinic St-John’s, St-John’s, NL, Canada; 6Everest Clinical Research Services Inc., Markham, ON, Canada; 7Novartis Pharmaceuticals Canada Inc., Dorval, QC, Canada.


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


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

6523 — A525 Spectral Domain Optical Coherence Tomography Treatment Guidance Of Monthly Follow-up Of Patients With Exudative Age-Related Macular Degeneration. Roberto Gallego-Pinazo1, E. Sanz-Marc2, J. Martinez-Castillo1, R. Dolz-Marco1, J. Arévalo1,2,3, M. Díaz-Llopis1,2,3.

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

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. Day1, S. Dev2.

1Vision Rehabilitation, Harvard Medical School/ Massachusetts Eye and Ear Infirmary, Boston, MA; 2Chemelex Eye Research Institute, Harvard Medical School, Boston, MA.

6525 — A527 One year’s treatment with intravitreal Ranibizumab (lucentis®) and Verteporfin PDTm Combination Therapy at Month 2 for Neovascular Age-related Macular Degeneration (AMD). Eric Fourmaux1, M. Dominguez1, L. Rosier2, L. Velasque2.

1Retina Touny, Bordeaux, France.

5627 — A529  Novel Methods to Enhance Reading Ability in Patients with Macular Disease. Anthony Fernandes1, D. Roth1, A. Shah1, H. Fine1, J. Prener1, W. Feuer1. *CR

5628 — A530  A French Version Of Skred Reading Difficulty Related To Central Scotoma. Anne Catherine Scherlen1, G. Faure1, M. Goldschmidt1, D. Raffort1, F. Vital-Durand1, C. Miege1. *CR


5632 — 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.


5634 — A536  Evaluation of Peripheral Fundusautofluorescence Changes in Patients with Wet ARMD: The OTELLO Study. Anita Zenger1, M.B. Rougier, II1, P.E. Stanga1, S. Schmitz-Valkenburg2, L. Reznicek1, U.E. Wolf-Schnarbusch1,2, 4. *CR


5636 — A538  Bilateral Multifocal Electroretinogram Changes After Nanosecond Laser In Subjects With Early Age-related Macular Degeneration. Chi D. Liu, K. Brassingston, G. Makeyeva, R.H. Guymer. Macular Research Unit, Centre for Eye Research Australia, East Melbourne, Australia.

5637 — A539  Within-visit And Between-visit Repeatability Of The Diagnosys Full-field Stimulus Threshold (D-FST) When Measuring Rod Sensitivity In Patients With Atrophic Age-related Macular Degeneration (ARMD). Martin Klein1, D.G. Birch1, J. Chandler1, J. Koester1, H. Hughes1, A. Reaves1, R. Kubota1. 4. Rose Silverthorne Ret. Degen. Lab, Retina Foundation of the Southwest, Dallas, TX; 4. Ophthalmology, UT Southwestern Medical Center, Dallas, TX; 4. Acucela, Inc., Seattle, WA. *CR

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**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

**5638 — A530  Neuropeptide Y Protects Retinal Neuron Cells From Glutamate-induced Toxicity Through The Activation Of NPY Y1 Receptor. Ana Santos-Carvalho1,2, A.F. Ambrósio1, C. Cavadas1,2. 1. Center for Neuroscience and Cell Biology, University of Coimbra, Coimbra, Portugal; 2. Faculty of Pharmacy, University of Coimbra, Coimbra, Portugal; 3. Center of Ophthalmology and Vision Sciences, IBILI, Faculty of Medicine, University of Coimbra, Coimbra, Portugal.


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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*
6549 — A551 Therapeutic Inhibition Of Retinoblastoma By Nanoceria. Kathryn E. Klump1, S.V. Kisseowa1, S. Seal1, M.A. Dyer1, J.F. McGinnis2,3,4. "Okahama Center for Neuroscience, 1Department of Ophthalmology, 2University of Oklahoma Health Science Center, Oklahoma City, OK, 3Mechanical Materials Aerospace Engineering, Nanoscience, and Technology Center, University of Central Florida, Orlando, FL, 4Department of Developmental Neurobiology, St. Jude’s Children’s Research Hospital, Memphis, TN; 5Howard Hughes Medical Institute, Chevy Chase, MD. ©CR.

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

6551 — A553 Absorption Of Spio Nanoparticles Using Different Media On Arpe-19 And Hecc Cell Cultures. Gustavo T. Grotton1, R.R. Loureiro1, J. Couvre1, L. Gamarra3, P. Cristovam1, J.P. Gomes1. "Ophthalmology, UNIFESP, Santos, Brazil; 3Department of Nanoscience, and Technology Center, University of Sao Paulo, Brazil; 2Department of Oncology, Instituto Israelita de Pesquisas Albert Einstein, Sao Paulo, Brazil.

6552 — A554 Secretion Of VEGF From Polarized RPE By Tnf-a Or Thrombin. Hiroto Terasaki1, M. Shirasawa1, A. Arimura1, S. Sonoda1A, T. Sakamoto1B. "Ophthalmology, 1Kagoshima University, Kagoshima, Japan; 2Mechanical Materials Aerospace Engineering, Oklahoma Health Sciences Center, Oklahoma City, OK.

6553 — A555 CEP290 is Required for Photoreceptor Ciliogenesis and Ventricular Epimembranous Cilia Function. Erin Tanamoto1, R. Rachel1, M. Dewanjee1, J. Munasinghe1, T. Li1, L. Dong1, A. Swaroop1. "Ophthalmology, 1University of Pennsylvania, Philadelphia, PA; 2Department of Ophthalmology, 1Kagoshima University, Kagoshima, Japan.

6554 — A556 Rapid Photoreceptor Degeneration Occurs In Zebrafish arl1Bb Mutants 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 Pasovic1, J.R. Elder1, P. Aasbol1, T. Lyberg1, X. Chen1, T.P. Utzheim1. "Center for Clinical Research, 1Department of Ophthalmology, 1Oslo University Hospital, Oslo, Norway; 2Syns Laser Kirurgi Oslo/Tromso, Oslo, Norway. ©CR.


6559 — A561 Changes In The Expression Of Genes Related To Oxidative Stress In Rdr Mice. Violeta Sanchez-vallejo1, M. Flores-Belver1, R. Alvarez-Noling1, S. Johnsen-Soriano1, M. Miranda1, P. Romero Gomez1,2. "Physiology, Univ CEU Cardenal Herrera, Valencia, Spain; 2Fondacion Oftalmologica del Mediterraneo, Valencia, Spain; 3Universidad Catolica ‘San Vicente Maritae’, Valencia, Spain.

6560 — A562 The Cysteine Prodrug L-2-Oxothiazolidine-4-Carboxylic Acid (OTC) Elicits Potent Antioxidant and Anti-inflammatory Effects in RPE: Relevance to Treatment of Age-Related Macular Degeneration. Wanvisa Promsote1, A. Ananth1, R. Veeranajan-Karmegam1, N. Lambert1, C-C. Chan1, R. Ganapathy1, P.M. Martin1. "Biochemistry and Molecular Biology, 1Pharmacology and Toxicology, 1Georgia Health Sciences University, Augusta, GA; 2Immunopathology Section, National Eye Institute, Bethesda, MD.


6562 — A564 Whole Number And Spatial Distribution Of The Pou4f Family Of Transcription Factors In The Adult Rat Retina. Francisco M. Nadal-Nicolás1, M. Jimenez-Lopez1, M. Salinas-Navarro2, L. Nieto-Lopez1, A. Ortin-Martinez1, C. Galindo-Romero2, M. Sanchez-Migallon2, P. Sobrado-Calvo2, M. Vidal-Sanz2, M. A.2. "Unidad de Investigación, Hospital Universitario Virgen de la Arrixaca, Murcia, Spain; 2Dpto Oftalmologia, 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. Covian, B. Kovacs. Ophthalmology, Rush University Medical Center, Chicago, IL.


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

6567 — A569 The Influence of Substrate Elastic Modulus on Retinal Pigment Epithelial Cell Phagocytosis. Kieron S. Boochoon1, J.T. Davis2, J.C. Manarang2, A.M. McDermott3, W.J. Foster2. "Biology & Ophthalmology, 1Physics, 2Optometry & Vision Science, 3University 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.


Hall B/C - A208 A255
Thursday, May 10, 2012, 11:15 AM-1:00 PM
Glucoma / Anatomy & Pathology / Retina / Retinal Cell Biology / Multidisciplinary Ophthalmic Imaging

549 Ganglion Cell Function, Injury, Protection and Imaging

Moderators: James E Morgan and Jonathan G Crowston

6570 — A208 Exogenous PACAP Acts as a Retinoprotective Agent and a Modulator on Microglia/Macrophages Status in Mice NMDA-induced Retinal Injury Model. Yoshhiro Wada1,2, T. Nakamachi1B, K. Endo1A, K. Endo1B, S. Shioda1, R. Koide1. "Department of Ophthalmology, 1Department of Anatomy, 2Showa University School of Medicine, Tokyo, Japan.

6571 — A209 Increased Neuro-retinal Injury After Intracocular Pressure Elevation In Xenonitochondrial Mice And Compensation By Ophxos Complex IV. Ian A. Trounce1, N. Van Bergen1, G. Kong1, V. Chrysostomou1, C.A. Pinkert2, J.G. Crowston3. "Center for Eye Research Australia, University of Melbourne, Melbourne, Australia; 2College of Veterinary Medicine, Auburn University, Auburn, AL.
6572 – 6597 – Thursday – Posters

6572 – A210 Elevated Intraocular Pressure Increases Serine Protease Levels In The Retina And Promotes Retinal Ganglion Cell Loss. Shriヴァン K. Chintala, X. Zhang, M. Cheung. Eye Institute, Oakland University, Rochester, MI.


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


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


6579 – A217 Neuroprotective Effect of Revosotal after Optic Nerve Transection. SeokHwan Kim1, J. Park2, M. Kim1, M. Kim1, D. Kim1, J. Jeoung2, T-W. Kim4, K. Park2. 1INRA, University of Paris, France; 2Ophthalmology, Seoul National University Bundang Hospital, Kyunggi, Republic of Korea; 3Ophthalmology, 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. Shengheng Zhang, X. Sun, J. Wu. Eye & ENT Hospital, Fudan University, Shanghai, China.

6584 – A222 Acid Phosphomolybdenum Plays a Role in IR-induced Retinal Degeneration. Jie Fan1, B.X. Wei1, Y.A. Hamman2, C.E. Crosson2. 1Ophthalmology-Storm Eye Institute, University of California San Diego, CA; 2Biophysics and Molecular Biology, 1Ophthalmology, 3Medical 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 Etafercept, A Widely Used Inhibitor Of Tumor Necrosis Factor-α (tnf-α), Prevents Retinal Ganglion Cell Loss In A Rat Model Of Glaucoma. Min Rok1, Y. Zhang1, Y. Murakami1, A. Thamox1, D.G. Vavvas1, L. Benowitz2, J.W. Miller1. 1Ophthalmology, MEEI, Angiogenesis Lab, Boston, MA; 2Neuroscience, Laboratories for Neuroscience Research in Neurosurgery, F.M. Kirby Neurobiolgy Center, Children’s Hospital Boston, MA.

6587 – A225 α2-adrenergic Receptor Agonist Restores Mitochondrial Transcription Factor A And Oxidative Phosphorylation, And Protects Retinal Ganglion Cells Against Retinal Ischemic Injury. Won-Kyu Ju1A, D. Lee1A,2, K-Y. Kim1B, Y. Zhang1. 1A226, 2Department of Ophthalmology, University of California, Davis, USA; 3Intensive Care Unit, Seoul National University Bundang Hospital, Korea.

6588 – A226 Oncostatin M Protects Retinal Ganglion Cells in an Optic Nerve Crush Mouse Model. Xin Xia1, Z. Li, Z. Wang, L. Luo, R. Wen. 1Bascom Palmer Eye Institute, University of Miami, Miami, FL; 2Department of Ophthalmology, Shanghai First People’s Hospital, Jiaotong University, Shanghai, China.


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

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

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


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


1661 – 2010  Reduced Laser Pulse Width Improves Cutting Efficiency in Laser Refractive Cataract Surgery. Simone Schneider1,2, H. Uy1, K. Edwards1,2, T. Olmsund8, V. Teumd9, S. Botz10. 1Clinical and Regulatory Affairs, 2Research & Development, 3LensAR, Orlando, FL; 4Asian Eye Institute, Makati, Philippines. *CR.

1662 – 2011  Morphology of Femtosecond Intrastromal Arcuate Incisions. Percy S. Binder1,2, B. Gray3, M. Brownell3, B. Martin3, M. Gwon4, J. Martiz3, MD5, A. Gwon4. 1Gavin Herbert Dept of Ophthalm, Univ of California, Irvine CA, San Diego, CA; 2Department of Ophthalm, Hietzing Hospital, Vienna, Austria; 3Department of Ophthalmology, Nakip Hospital, Inje University College of Medicine, Republic of Korea; 4Ophthalmology, Haeundae Paik Hospital, Inje University College of Medicine, Busan, Republic of Korea.

1663 – 2012  Posterior Capsule Opacification of a 1-piece and a 3-piece Microincision Intraocular Lens - 1 year Comparison. Ana Prinz1, B. Weingessel2, O. Findl3, P.V. Vescel-Marlovits4. 1Department of Ophthalmology, Hietzing Hospital, Vienna, Austria; 2Department of Ophthalmology, Hannusch Hospital, Vienna, Austria.


1665 – 2014  Corneal And Total Optical Quality After 2.2mm Coaxial Mini-incision Cataract Surgery Combined With Binaminal Irrigation-aspiration. Corinne Dot1, H. El Chehab1, P. Savary2, E. Agard3, A. Malcles4, N. Chave5, G. Ract-Madoix6, J. Giraud7. 1Ophthalmology, Hopital Desgenettes, Lyon Cedex 03, France; 2Department of Ophthalmology, Hopital Desgenettes, Lyon, France.


1667 – 2016  Major Breed Distribution and Common Histopathologic Findings in Canine Globes Enucleated as a Result of Glaucoma Following Cataract Surgery. Erin M. Scott1, D.W. E.xoon2, K.J. Fritz1, R.R. Dubielzig1. 1Pathobiological Sciences, UW-Madison School of Veterinary Medicine, Madison, WI; 2Eye Care for Animals, Tustin, CA.

1668 – 2017  Correlation Of Subjective Nuclear Sclerotic Cataract Grading And Intraoperative Cumulative Dispersed Energy During Phacoemulsification. Nakul Shekhawat1,2, A. Chomsky1,2. 1Vanderbilt University School of Medicine, Nashville, TN; 2VA Tennessee Valley Healthcare System, Nashville, TN.

1669 – 2018  Applanation Tonometry After 2.2mm Coaxial Mini-incision Cataract Surgery. Ciudad de Mexico, Mexico.


1671 – 2020  Continuous Intraocular Pressure Measurements During Small Incision Phacoemulsification Surgery In Porcine Eyes. Seung Youn Jeu1, M. Son2, T. Baek3, J. Lee4. 1Ophthalmology, GM St. Mary eye center, Busan, Republic of Korea; 2Ophthalmology, Haedae Paik Hospital, Inje University College of Medicine, Busan, Republic of Korea.


1674 – 2023  Corneal Astigmatism And Its Correction With The Toric Intraocular Lens And Peripheral Corneal Relaxing Incisions. Li Wang, D.D. Koch, M.P. Wiekert, R. Jenkins. Cullen Eye Institute, Dept Ophthalmology, Baylor College of Medicine, Houston, TX.

1675 – 2024  Viscoat Versus Visthesia During Phacoemulsification Cataract Surgery: Corneal And Foveal Changes. Marilitsa M. Moschos1,2, E.P. Chatzivalli3, T.N. Sergentanis4, I. Ladas4. 1st Department of Ophthalmology, 2Department of Epidemiology and Biostatistics, 3University of Athens, Athens, Greece.


1677 – 2026  A Comparative Study Of Phacoemulsification With The Ozil-Inelligent Phaco(IP) handpiece and Ozil handpiece: retrospective clinical study. Yoshinoa Setoguchi1, H. Ito1, H. Nakashiki2, K. Kuroda3, K. Amemiya1, M. Taniguchi1, Y. Okamoto1, A. Ootani1, Y. Tanaka2. 1Japanese Red Cross Wakayama Medical Center, Wakayama, Japan; 2Tanaka Eye Clinic, Wakayama, Japan.

1678 – 2027  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, J.L. van der Meulen1. 1Ophthalmic Research, Netherlands Inst for Neurosci, Royal Acad, Amsterdam, The Netherlands; 2Ophthalmology, Academic Medical Center, Amsterdam, The Netherlands.

*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 400
6644 — A633 Comparison of surgically-induced astigmatism after a 2.2 mm vs. 2.6 temporal corneal incisions in more than 2 years follow-up. Lei Zheng, J.C. Merriam.

Ophthalmology, University of Sao Paulo, Sao Paulo, SP, Brazil.

1Royal Victoria Infrimary, Newcastle upon Tyne, United Kingdom; 2Sunderland Eye Infrimary, Sunderland, United Kingdom.

1Ophthalmology, University of South Carolina, Columbia, SC; 2Ophthalmology, Dorn Veterans Hospital, Columbia, SC.

4648 — A637 Iris-sutured Posterior Chamber Intraocular Lenses: Visual Results And Complications About 76 Cases. Olivier Le Moigne, M. Mulaire, O. Genevois.
Rouen University Hospital, Rouen, France.

1Laboratorio de Optica, Universidad de Murcia, Murcia, Spain; 2Ophthalmology, Hospital Virgen de la Arrixaca, Murcia, Spain.*CR

General,Contact Lenses, Ocular Disease, Cape Coral Eye Center, Cape Coral, FL.*CR

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.

1Biological Sciences R&D, 2R&D Equipment, 3Abbott Medical Optics, Santa Ana, CA; 4University of California Irvine, Irvine, CA.*CR

Ophthalmology, Walter Reed National Military Medical Center, Bethesda, MD.

6654 — A643 Clinical Outcomes at a VAMC after the Introduction of Universal NSAID Therapy Perioperatively in Cataract Patients. Cameron C. Johnson1, R.A. Rombola, II1B, P.J. Krall1A.
1Ophthalmology, College of Medicine, University of Florida, Gainesville, FL.

Ophthalmology, Hopital Universitaire de Bicetre, AP-HP, Paris, France.

6656 — A645 Sutureless transcleral Intraocular Lens implantation after ocular trauma. Malek Khouasi1, D. Gaucher2, T. Bourciur1, C. Speeg1, M. Montard1, B.Y. Delbos1, M. Saleh1.
1ophthalmology, University Hospital of Besancon, Besancon, France; 2ophthalmology, University Hospital Civil de Strasbourg, Strasbourg, France; 3ophthalmology Dept SMOH Pole, University Hospital Strasbourg, Strasbourg, France; 4ophthalmology, University Hospital Strasbourg, Strasbourg, France; 5ophthalmology, Centre Hospitalier Universitaire Besancon, France; 6ophthalmology, Univ Hosp, Besancon, France.

Ophthalmology, Nagasaki Univ School of Medicine, Nagasaki, Japan.

6658 — A647 Change In Central Corneal Volume After Cataract Surgery. Melissa M. Wong1, A. Shukla1, W.M. Monir1.
1ophthalmology, Boston Univ School of Med, Boston, MA; 2ophthalmology, Massachusetts Eye and Ear Infrimary, Boston, MA.

Ophthalmology, John Moran Eye Center, Salt Lake City, UT.

1Tri Med Laser Eye Center, Barrie, ON, Canada; 2Abbott Medical Optics, Santa Ana, CA.*CR

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

1Anterior Segment, Inst de Oftalmologia CONVAL, Mexico City, Mexico; 2Cornea and refractive Surgery, Instituto de Oftalmologia Conde de Valenciana, Mexico City, Mexico.

Ophthalmology, University of Western Ontario, London, ON, Canada.

6664 — A653 Shadowphotography of IOL Injectors and Clear Cornea Incision Size. Alejandro Arboleda1, E. Arrieta1, D. Nankivil1, M.C. Aguilar1, K. Sotolongo1, S.H. Yoo2, J-M.A. Pare2.
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

6665 — A654 Refractive Results After Cataract Surgery In Patients With Previous Corneal Refractive Surgery. Astrid Queant, A. Saad, D. Gatinel.
Fondation A. de Rothschild, Paris, France.

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

1Department of Ophthalmology, Univ of Texas Health Sci Center, San Antonio, TX; 2Retina Associates of South Texas, San Antonio, TX.

1University of Chicago, Chicago, IL; 2NorthShore Univ Health System, Glenview, IL; 3ophthalmology, NorthShore Univ Hlth System, Glenview, IL.
11:15 am – 1:00 pm

Thursday Posters

11:15 am – 12:15 pm

- Thermal Infrared Lenses: C. Buznego, B. Mendelsohn.
- University, Hamilton, ON, Canada.
- Fndtn Hosp Nuestra Senora de la Luz, Mexico DF, Mexico.
- Pressure by Tonopen vs Palpation after Cataract Surgery. Henry C. Witelson Ocular Pathol Laboratory, 1Department of Pathology, 2Department of Ophthalmology, 3Center For Excellence in Eye Care, University of Toronto, Toronto, ON, Canada; 4Ocular Pathology, 5Clinical Trials Center, 6Ocular Immunology & Uveitis, 7Bausch & Lomb, Montpellier, France; ABiostatistics, Forchheimer, A. Kanellopoulos.
- Comparison of Intraocular Pressure by Tonopen vs Palpation after Cataract Extraction. Jeffery C. Hinson, Jr. Ophthalmology, University of South Carolina, Columbia, SC.
- New York Univ Medical Center, New York, NY.
- Cornea, Center For Excellence in Eye Care, Miami, FL; Ophthalmology, Bascom Palmer Eye Institute, Miami, FL; Bascom Palmer Eye Institute, Miami, FL.
- Hall B/C D701-D729
- Thursday, May 10, 2012, 11:15 AM-1:00 PM
- 552 Cataract Complications and Drugs
- Moderator: Paul G FitzGerald

6692 — D712 Effect of Modified Cyclosporine A on Lens Epithelial Cell and Corneal Endothelial Viability. Elizabeth A. Lutz1B, D.A. Wilkie2A, 3A.J. Gemeinsky-Metzler2, 4H.L. Chandler2B. 2Veterinary Clinical Sciences, 3Optometry, 4The Ohio State University, Columbus, OH.


6694 — D714 Incidence Of Postoperative Complications In Infants Undergoing Bilateral Simultaneous, Bilateral Sequential, Or Unilateral Cataract Surgery. Sheela Masiti1A, E. Agabegi2D, B. Schnell2A, M.B. Yang1A, A. Abrahamson Pediatric Eye Institute, Department of Ophthalmology, 2Department of Biostatistics, 3Cincinnati Children’s Hospital Medical Center, University of Cincinnati College of Medicine, Cincinnati, OH.


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 Dieleman1A, R.J. Wubbels1B, P.W. de Waard2B, 3Rotterdam Ophthalmic Institute, 4Glaucoma, 5Rotterdam Eye Hospital, Rotterdam, The Netherlands. CR


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


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

6706 — D726 Risk Factors For Developing Capsular Distension Syndrome. Maged Nessim1A, P. Pandy1A, M. Tahan1B, P. Good1B, A-J. Ghawi1. 2Glaucoma Services, 3Visual Sciences, 1Birmingham & Midland Eye Centre, Birmingham, United Kingdom; 2Sandwell General Hospital, Birmingham, United Kingdom.

6707 — D727 Intraoperative Floppy Iris Syndrome: An Association with Warfarin? Rashat I. Ali, O. Alsheikh. 1Department of Ophthalmology, 2Department of Vis Rsrch for Environ & Primary Eye Care Service, 3Division of Ophthalmology, 4Division of Uveitis, 5Department of Ophthalmology, 6Biostatistics, 7Columbia University, New York, NY.

6708 — D728 Factors Influencing Retinal Image Contrast in Eyes with Retrodots(Reykjavik Eye Study). Kota Nagai1A, N.Mita1A, N. Hatusaka1A, R. Honda1, H. Osada2A, E. Kubo1B, H. Sasaki2B, K. Sasaki2B, F. Jonasson5. 2Glaucoma Eye Clinic, Ibaraki, Japan; 3Department of Ophthalmology, 4Department of Ophthalmology, 5Department of Ophthalmology, 1Department of Ophthalmology, 2Kanazawa Medical University, Uchinada, Japan; 3Department of Ophthalmology, 4Department of Ophthalmology, 5Department of Ophthalmology, 1Department of Ophthalmology, 2Kanazawa Medical University, Kahoku-gun, Japan.

6709 — D729 Ultrastructural Changes In The Crystalline Lens Of Diabetic Patients Treated With Panretinal Argon Laser Photocoagulation. Zeljka Izier1A, M. Kilic1, E. Erdemli1B, F. Topal Celikkan1B. Ophthalmology, Ankara Numune Education and Research Hospital, Ankara, Turkey; 2Histology, Ankara University Medicine Faculty, Ankara, Turkey.

Hall B/C  D730-D762
Thursday, May 10, 2012, 11:15 AM-1:00 PM

553 Cataract Training, Modeling, Pediatrics

Moderator: Paul G FitzGerald


6713 — D733 Determination of Endotoxin Concentration in Hyaluronic Acid By The Light Scattering Method. Taiki Oshida1B, Y. Sugitani2B, T. Asano1B, T. Hirota2B, M. Sawa2B. 1Division of Ophthalmology, Department of Visual Sciences, Nihon University School of Medicine, Tokyo, Japan; 2Biophotonics Section, Research & Development Department, Electronics & Optics Division., Kowa Company, Ltd., Tokyo, Japan.

6714 — D734 Comparison of Predicted Refractions To Outcome Refractions in Patients Undergoing Combined Macula Surgery and Phacoemulsification Versus Patients Undergoing Phacoemulsification Alone. Amilia Schrier, E. Gavazi, J. Kerns, S. Chang. Ophthalmology, University of Texas Medical Branch, Galveston, TX.

6715 — D735 Improvement In The Achievement Of Targeted Post-Operative MRSE With Laser Anterior Capsulotomy Matches The Theoretical Model. Keith H. Edwards1A, W.E. Hill1B, H.S. Uy1B, S. Schneider1B. 1Clinical & Regulatory Affairs, LensAR Inc, Orlando, FL; 2East Hill Ophthalmology, Mesa, AZ; 3Asian Eye Institute, Makati City, Philippines. CR, ✔


6719 – D739  Resident Cataract Surgery Outcomes with Toric Intraocular Lenses. Helen R. Moreira2A, P.B. Greenberg, MD1B. *Anesthesiology, *Ophthalmology, Providence Veterans Affairs Medical Center, Providence, RI.


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


6723 – D743  Relation between some IOL Injectors and Clear Cornea incision size in the rabbit model. Esdras Arrieta, D. Nankivil, K. Sotolongo, A. Arboleda, M.C. Aguilar, E. Hernandez, S. Yoo, J-M. Parel. 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. Wolffsohn1, U.K. Bhatt, A.L. Sheppard4, S. Shah2, H. Dua1, T. Mihasi1, T. Yamaguchi1. *School of Life and Health Sciences, Aston University, Birmingham, United Kingdom; *Midland Eye Institute, Birmingham, United Kingdom; *Ophthalmology, Nottingham University, Nottingham, United Kingdom; *Topcon, Tokyo, Japan. *CR


6727 – D747  In Situ Modification of Customized IOLs using the Phase Wrapping Algorithm. Ruth Sahler1A, J.F. Bille1A, R. Aguilerá1A, S. Zho1, D. Schanzlin1A. *Medical Physics, University of Heidelberg, Heidelberg, Germany; *Physics, University of Heidelberg, Mannheim, Germany; *Aaren Scientific Inc, Ontario, CA; *R&D, Aaren Scientific Inc, Irvine, CA; *Shiley 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 Shahar, 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. Moshin Chowdhury1, J.B. Rosenberg1A, J.G. Lee1, L.A. Eisen2A, A.A. Madue2A. Albert Einstein College of Medicine, Bronx, NY; *Department of Ophthalmology and Visual Sciences, *Division of Critical Care Medicine, *Department of Medicine, Montefiore Medical Center/Albert Einstein College of Medicine, Bronx, NY; Department of Ophthalmology and Visual Sciences, Case Western Reserve University, Cleveland, OH.


6737 – D757  Fluctuations in Corneal Curvature Limits Predictability of IOL Power Calculations. Sverker Norrbý1, N. Hirnschaff1, Y. Nishi1, O. Find1A. Pulab, Leek, The Netherlands; Moorfields Eye Hospital, London, United Kingdom; Moorfields Eye Hospital, London, United Kingdom. *CR


6740 – D760  Complication Rate and Corneal Endothelial Impact in Phacoemulsification Performed by Ophthalmology Residents at an Argentinian University Hospital. Enrique L. Nebot, Sr1A, P.R. Ruiséhór Vazquez1, L. Fernández Abuyú1, H. Fernández Mendy1, J.D. Galletti1A, P. Chiaradia1A, J.G. Galletti1A. *Ophthalmology, Hospital de Clinicas, University of Buenos Aires, Buenos Aires, Argentina; ECOS (Clinical Ocular Studies) Laboratory, Buenos Aires, Argentina.


6743 — D763 The Benefits of Ptosis Surgery. Richard A. Harrad, Richard A. Harrad; F. Kalapeti, H. Garrott; H. Herbert; H. Richards; L. Jenkinson; N. Rumsey. 1Ophthalmology, Bristol Eye Hospital, Bristol, United Kingdom; 2Psychology, University of the West of England, Bristol, United Kingdom.


6746 — D766 Evaluation of Modified Lateral 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.


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.

6754 — D774 Soft Tissue Perineurio Ma Of The Lacrimal Gland: A Case Report. Amanda B. Salter, Y. Enzer, B. Aswad, M. Chaump. 1Ophthalmology, 2Oculoplastics, 3Pathology, 4Brown University, Providence, RI.


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

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

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


6760 — D780 Catheter Assisted Conjunctivodacryocystorhinostomy (CDCR) for Improved Surgical Efficiency. Charline 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 Afari; K.A. Rose, A. Pai, J. Leone, P. Mitchell. 1Ophthalmology, University of Sydney, Sydney, Australia; 2Discipline of Orthoptics, University of Sydney, Lidcombe, Australia.


6766 — D786 Evolution Of Axial Length In Congenital Glaucoma. Bruno Sautiere, A. Duhamel, A. Galet. 1CDRH/ODE/DONED, Food and Drug Administration, Silver Spring, MD; 2Ophthalmology, 3Anesthesiology, 4Hirzey Hospital, 5CHRU Lille, Lille, France; 6Biostatistics unit, 7CHRU Lille, Lille, France.

6767 — D787 Central Corneal Thickness and Intraocular Pressure in Moderate-Late Premature School Aged Children. Lina H. Raffa, J. Dahlgren, A-K. Karlsson, M.A. Gronlund. 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? Kunyong Xie1, G. E. Trope2, K. Thavorn2, Y.-J. Jue2,2A, Michael G DeGroote Sch of Med, McMaster University, Hamilton, ON, Canada; 2Department of Ophthalmology and Vision Sciences, 2Institute of Health Policy, Management and Evaluation, 2Dalhousie School of Public Health, 2University 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. Soledo1, J.S. Rahi1,2, British Isles Congenital Cataract Interest Group. 1MRC Centre Epidemiology (Child Health), Institute Child Health, UCL, London, United Kingdom; 2Kingston Eye Hospital, London, United Kingdom; 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. Foster2, D. Comstock3, 1Department of Medical Education, Riverside Methodist Hospital, OhioHealth, Columbus, OH; 2Division of Ophthalmology, Section Oculofacial Plastic and Reconstructive Surgery, Ohio University, Doctor’s Hospital, Columbus, OH; 3Nationwide Children’s Hospital, Columbus, OH; 4Center for Injury Research and Policy, The Research Institute at Nationwide Children’s Hospital, Columbus, OH; 5Division of Epidemiology, The Ohio State University College of Public Health, Columbus, OH.

6771 – D791 Investigation on the reading ability in the hyperopic children at the Nishikasai Inouye Pediatric Eye Clinic, Mieko tsuruoka1, O. Katsumi1, M. Miyata1, M. Suzuki1, Y. Aoki1, Y. Miyanaga1, K. Inoue1, K. Oda1. 1Nishikasai Inouye Eye Hospital, Tokyo, Japan; 2Nishikasai Inouye Pediatric Eye Clinic, Tokyo, Japan; 3Tokyo Woman’s Christian University, Tokyo, Japan; 4Inouye Eye Hospital, Tokyo, Japan.


6775 – D795 Consumer Digital Cameras: A Feasible Strategy for the Early Detection of Childhood Blindness. Tirth N. Patel1, A.C. Maillipatur1, A. Merchant2, R. Batte2, K. Nischal1, R. W. Arnold1, V. Naresh1, J. Matulaitis2, H. Dimaras1, B. Gallie1. 1ophthalmology, 2Pediatric Ophthalmology, 3Narayana Nethralaya, Bangalore, India; 4Pediatric Ophthalmology, Narayana Nethralaya, Bangalore, India; 5Pediatric Ophthalmology, Childrens Hospital of Pittsburgh, Pittsburgh, PA; 6Pediatric Ophthalmology and Strabismus, Ophthalmic Associates, Anchorage, AK; 7Hematology Oncology, 8Ophthalmology, 9Hospital for Sick Children, Toronto, ON, Canada.

6776 – D796 Natural History And Risk Factors Analysis For Retinopathy Of Prematurity In Premature Infants In Taiwan: A Prospective Study At The Post Bevacizumab Era. Yi hsing Chen1, W-C. Wu2. 1Ophthalmology department, Chang Gung Memorial Hospital, Taoyuan county, Taiwan; 2Ophthalmology, Chang Gung Memorial Hosp, Taoyuan county, Taiwan.


6779 – D799 The Impact Of Amblyopia And Strabismus On Child Development And Quality Of Life In Young Chinese Children. Audrey Chia1, Y. Chan1, J. Thumboo2, T. Wong3, S. Saw4. 1Pediatric Services, Singapore National Eye Centre, Singapore; 2National University Singapore; 3Singapore, Singapore; 4University of Melbourne, Melbourne, Australia; 5Singapore General Hospital, Singapore; 6Singapore Eye Research Institute, Singapore; 7Singapore National University, Singapore.

6780 – D800 Sibling Motivation Cards - New Screening Initiative in South India for Pediatric Eye Disease. Brinda Muthusamy1, B. Dev2, V. Kannusamy1, F. Moutoupa2, H.J. Park2. 1Pediatric Ophthalmology & Strabismus, The Wilmer Eye Institute, Johns Hopkins Hospital, Baltimore, MD; 2Pediatric Ophthalmology & Strabismus, Aravind Eye Hospital, Pondicherry, India.


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

556 Corneal Biomechanics II

Moderator: Cynthia J Roberts

6784 – D948 Corneal Biomechanical Properties and their Change with Corneal UV-Riboflavin Cross-linking from 2D Flap-Extensometry. Sabine Kling1, H.S. Ginis1, S. Marcos Celestino1, 1Instituto de Optica, Consejo Superior de Invest Cientificas, Madrid, Spain; 2Institute of Vision & Optics, University of Crete, Heraklion, Greece; 3Instituto de Optica, Consejo Sup de Invest Sci, Madrid, Spain.


6786 – D950 To Evaluate Patient Outcomes Following Epithelium-on CXL In Patients Who Received The Treatment In One Or Both Eyes. Ray Rubinfeld1, W. Trattler2, G. Perez2, C.J. Kaiser3, A. Koreishi4, P. Majmudar5, R.J. Epstein6, S. Bajad7, R. Malhotra8. 1Washington Eye Physicians and Surgeons, Chevy Chase, MD; 2Cornea, Center For Excellence in Eye Care, Miami, FL; 3Ctr for Excellence in Eye Care, Miami, FL; 4Cornea Associates of Texas, Dallas, TX; 5Chicago Cornea, Chicago, IL; 6Cleveland Eye Clinic, Cleveland, OH; 7Ophthalmology Associates, St. Louis, MO. *CR

6788 — D952 Lack Of Influence Of Corneal Thickness On Biomechanical Waveforms And How That Impact In Distinguishing Candidates For Lasik Or Pk. Marcony R. Santiago1, R. Ambrosio, Jr.1, W.J. Dupp1, D. Smadja1, E.M. Espen1, E.S. Wilson1. Ophthalmology, Cleveland Clinic Foundation, Cleveland, OH; 2Ophthalmology, University of Sao Paulo and Rio Laser, Sao Paulo and Rio de Janeiro, Brazil; 3Ophthalmology, Instituto de Olhos Renato Ambrosio, Rio de Janeiro, Brazil; 4Cole Eye Inst and Lerner Resch Inst, 8Cole Eye Institute, Cleveland Clinic, Cleveland, OH; 5Refractive Surgery, Cole Eye Inst, Cleveland Clinic, Paris, France; 6Ophthalmology, Cole Eye Institute, Cleveland, OH.


6791 — D955 An Experimental Evaluation Of Know Computer Models Of The Porcine Cornea. Vito Romano1, M. Angellot1, A. Pandolfi1. Second University of Naples, Napoli, Italy; 2University of Salerno, Salerno, Italy; 3Politecnico of Milan, Milano, Italy.


6793 — D957 Biomechanical Response of Paire Donor Corneas to an Air Puff: Isolated Cornea vs Intact Whole Cornea. Kimberly Metzl1, A.M. Mahmoud1, J. Liu1,2,4, D. Lee1, S.J. Shiao1, C.J. Roberts1,2,4. 1Biomedical Engineering, 2Ophthalmology, 3College of Medicine, 4The Ohio State University, Columbus, OH.

6794 — D958 A Molecular-level Model For Swelling Pressure In The Corneal Stroma. Xi Cheng, P.M. Pinsky. Mechanical Engineering, Stanford University, Stanford, CA.


6796 — D960 The Role of Collagen Interweaving in Stromal Elasticity: A Model Based on the 3-D Collagen Architecture. Steven J. Petsche, P.M. Pinsky. Mechanical Engineering, Stanford University, Stanford, CA.

6797 — D961 Changes in Corneal Biomechanics after Descemet Stripping Endothelial Keratoplasty in Fuchs’ Dystrophy. Richard Y. Huang1, B. Goldhagen1, A.N. Kuo2, N.A. Afshari1. 1Ophthalmology, Vanderbilt University, Nashville, TN; 2Ophthalmology, Duke University Eye Center, Durham, NC.

6798 — D962 Comparative Diagnostic Performance of Pentacam Scheimplug Tomography and Ocular Response Analyzer Measurements for Subclinical Keratoconus. Marialinna Derliv1, J.D. Galletti1, F. Fuentes Bonhoe1, T. Pflörtner1, J.G. Galletti1, 2. ECOS (Clinical Ocular Studies) Laboratory, Buenos Aires, Argentina; 3Ophthalmology, Hospital de Clinicas, University of Buenos Aires, Buenos Aires, Argentina.

6799 — D963 Keratoconus Diagnostic Model Integrating Ocular Response Analyzer Measurements and Corneal Topography. Pablo R. Ruizérhor Vazquez, Sr1, E.L. Nebo1, F. Fuentes Bonhoe1, J.D. Galletti1, T. Pflörtner1, J.G. Galletti1. 1Ophthalmology, Universidad de Buenos Aires, Buenos Aires, Argentina; 2ECOS (Clinical Ocular Studies) Laboratory, Buenos Aires, Argentina. [CR]

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. Bercov1, J. Colin1. 1CHU de Bordeaux, Bordeaux, France; 2Institut Langevin - espri, Paris, France; 3SuperSonic Imagine, Aix-en-Provence, France. [CR]

6801 — D965 Natural history of Intacs in keratoconus and corneal ectasia. Jasmin R. Desai1, P.S. Hersh1,4. 1Ophthalmology, 2Cornea and Laser Eye Institute, Teaneck, NJ.

6802 — D966 A Simple, Inexpensive And Efficient Method To Measure Changes In Biomechanics Of The Entire Globe. Olivier Richoz, F. Hafezi. Ophthalmology, Geneva University Hospital, Geneva, Switzerland.

6803 — D967 Biomechanical Modeling of the Applanation Tonometry after Refractive Surgery. Svetlana M. Bauer1, I.A. Karamshina1, A.B. Kachanov1, E.B. Voronkov1. 1Theoretical & Applied Mechanics, St Petersburg State University, St Petersburg, Russian Federation; 2St-Petersburg Branch IROC AG, St Petersburg, Russian Federation.


6805 — D969 Implications of New Absorption and Fluorescence Measurements of Riboflavin for Corneal Cross-linking. Pavel Kamaev1, R. Pertaut2, M. Friedman1, D. Muller1. 1Research, 2Avedro, Waltham, MA. [CR]

6806 — D970 Ultrasound-enhanced Penetration of Topical Riboflavin into the Corneal Stroma. Ricardo Lamy1, E. Chan1, H. Zhang2, V. Saligaoanar1, C.J. Diederich1, J.M. Stewart1, 2. 1Ophthalmology, 2Radiation/Oncology, University of California, San Francisco, San Francisco, CA.

6807 — D971 Reducing Riboflavin Pre-soaking Time In Corneal Cross-linking. Silvia Schumacher, J. Werthi, 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]


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


6813 — D977 Rapid Collagen Photo-crosslinking method to Increase Cornea Mechanical Strength. Irene E. Kochevar1, D. Cherfar1, T.E. Gisel1, E.E. Verter1, R.W. Redmond1, S. Melki1. 1Wellman Center for Photomedicine, Massachusetts General Hospital, Boston, MA; 2Medical Sciences Program, Boston University, Boston, MA; 3Boston Eye Group, Boston, MA. [CR]


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

6817 — D981 Contralateral Eye Long-term Follow-up Of Prophylactic High-fluence Collagen Crosslinking Combined With Lasik For High Myopia. Kathy M. Trai1, S.L.Wang1, A.J. Kanellopoulos1, 2. 1New York University School of Medicine, New York, NY; 2Laservision.gr Institute, Athens, Greece.

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

6836 – D1166 Effect Of Breathing Pure Oxygen And A Mixture Of 92% O2 + 8% CO2 On Flicker Induced Vasodilatation. Stefan Palkovits1A, M. Lasta1, R. Told1A, G. Garhöfer1A, L. Schmetterer1A,1B. Clinical Pharmacology, Center for Medical Physics and Biomedical Engineering, Medical University of Vienna, Vienna, Austria.


6838 – D1168 Assessment of Oxygen Saturation in Retinal Vessels of Normal Subjects and Diabetic Patients without Retinopathy using the Johns Hopkins Flow Oximetry System. Rachel E. Annan1, M. A. Ibrahim1, L. Lua1, Y.J. Sepahi1, M. G. Bittencourt1, O. Agbedia1, H.S. Jang1, J. Yohannan1, J. Ramelia-Romani1, Q.D. Nguyen1. Johns Hopkins University, Wilmer Eye Institute, Baltimore, MD; 2Biomedical Engineering, Catholic University of America, Washington, DC; 3Diseases of the Retina, and Uveitis, Johns Hopkins Univ, Wilmer Eye Inst, Baltimore, MD.

6839 – D1169 Bloodflow Regulation In The Optic Nerve Head During Prolonged Elevation Of The Intraocular Pressure. John V. Lovassik1, H. Kergoat1, M. Parent1, M.G. Quigley1. School of Optometry, University of Montreal, Montreal, QC, Canada; 2Department of Ophthalmology, McGill Univ/Univ of Montreal, Montreal, QC, Canada.


6842 – D1172 Basal Blood Flow And Autoregulation Changes Within the Optic Nerve Head Of Rhesus Monkey With Idiopathic Bilateral Optic Atrophy. Chelsea Piper1, B. Fortune1, G. Colli1, C.F. Burgyne1, G.A. Cioffi1, L. Wang1. Optic Nerve Head Research Lab, Ophthalmal-Discoveries in Sight, Devers Eye Institute, Portland, OR; 2Devers Eye Institute, Legacy Health, Portland, OR; 3Devers Eye Institute, Legacy Research Institute, Portland, OR. *CR

**Hall B/C** D1153-D1196

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

**Physiology & Pharmacology**

### 557 Blood Flow

**Moderator:** Leopold Schmetterer

6823 – D1153 Coronary And Retinal Reactivity To Hyperoxia In Prediabetes And Type 2 Diabetes. Mary E. Lott1A, B. Smith1A, J.E. Slocumb1B, V. Shikumar1B, K. Bettman1B. Heart and Vascular Institute, *Neurology*, Penn State Milton S Hershey Med Ctr, Hershey, PA.


6825 – D1155 The Diameter Response To L-lactate And The Prostaglandin Analogine U46619 Is Different In Porcine Retinal Arterioles And Capillaries In Vitro. Simon M. Pedersen, T. Albrechtsen. 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. Mangiortaa1, E. Mendrinos1B, P. C. Rimensberger1A, C.J. Poumara1,1B. Laboratory of Neurobiology and Physiology of the Retinal Circulation, Department of Ophthalmology, Department of Pediatrics, Geneva University Hospitals, Geneva, Switzerland.


6828 — D1158 Measurement of retinal blood flow using dual beam bi-directional Fourier domain Doppler OCT - comparison with laser Doppler velocimetry. Rene M. Werkmeister1A, N. Dragostinoff1A, S. Palkovits1A, R. Told1A, L. Schmetterer1A. Med Physics and Biomed Eng, Clinical Pharmacology, Medical 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,1B, D. Schmidli1A, M. Lasta1A, S. Kaya1A, S. Palkovits1A, R. Told1A, G. Fuchsjaeger-Mayrl1A,1C, G. Garhofer1A, L. Schmetterer1A. Center for Medical Physics and Biomedical Engineering, Department of Ophthalmology and Pharmacology, Medical University of Vienna, Vienna, Austria.

6830 — D1160 Evaluation of Ultrasound-Assisted Thrombolysis Using Nontargeted Ultrasound Contrast Agents in a Model of Retinal Vein Occlusion. Walid F. Abdallahi1, H. Patel1A, E. Grant1A, G.J. Chader1A, M.S. Humayun1A. Ophthalmology, 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. Schallek1A, Y. Geng1A,1B, D.R. Williams1A,1C. The Institute of Optics, University 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,1B, S. Kaya1A, R.M. Werkmeister1A, N. Dragostinoff1A, M. Lasta1A, E. Polska1A, G. Garhofer1A, L. Schmetterer1A. Department of Clinical Pharmacology, Center for Medical Physics and Biomedical Engineering, Medical University of Vienna, Vienna, Austria.

6833 — D1163 Retinal Blood Flow In Healthy Young Subjects. Gerhard Garhofer1A, R.M. Werkmeister1A, N. Dragostinoff1A, L. Schmetterer1A,1B. Department of Clinical Pharmacology, Biomed Engineering & Physics, Medical University of Vienna, Vienna, Austria.

6834 — D1164 Hemodynamic and Hemodynamic Response of Conjunctival Microcirculation to Acute Hypotension in Rabbits. Bruce I. Gaynes1A, P-Y. Teng1A, J.M. Wanek2, J. Fortune1A, G. Cull1A, C.F. Burgyne1A, G.A. Cioffi1A, L. Wang1A. Ophthalmic Research Lab, Ophthalmal-Discoveries in Sight, Devers Eye Institute, Portland, OR; 2Devers Eye Institute, Legacy Health, Portland, OR; 3Devers Eye Institute, Legacy Research Institute, Portland, OR. *CR
Hall B/C  D1197-D1214

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 Palioura1,2, Y. Gobin1, S.E. Brodie4, I. Dunkel1, B. Marr1, D. Abramson1. 1Ophthalmic Oncology Service, Memorial Sloan-Kettering Cancer Center, New York, NY; 2Currently, Department of Ophthalmology, Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston, MA; 3Division of Interventional Neuroradiology, Departments of Radiology, Neurosurgery and Neurology, Weill Cornell Medical College, New York Presbyterian Hospital, New York, NY; 4Department of Ophthalmology, Mount Sinai School of Medicine, New York, NY; 5Department 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 Hu1, R.B. Rosen1, M. Chen1C, V. Eedunuri3, D. Bedoya2A, M.J. Jager4, B.W. Alfort, France. 1Ophthalmology, Ninth People’s Hospital, Shanghai, China; 2Department of Ophthalmology, Osaka University, Suita, Japan; 3Department of Ophthalmology, Osaka Koseinenkin Hospital, Osaka, Japan.

6869 — D1199 Intraocular Treatments of a New Ortophthic Primary Human Retinoblastoma Xenograft. Nathalie Cassoux1,2, A. Assayag1, O. Chouchane-Milik1, F. Nemat1, A. Thueau1,2, J-Y. Fontaine1, I. Acts1, L. Desjardins1,4, F. D’oz1, D. Decaudin1,4. 1Ophthalmology, 2Laboratory of preclinical investigation, 3Department of Ophthalmology, University of Lübeck, Lübeck, Germany. 1Pathology, 2New York Eye & Ear Infirmary, New York, NY.

6870 — D1200 RXRG Agonist Bexarotene Suppresses Retinoblastoma Growth by Enhancing TRB1 and p53 Tumor Suppressor Activity. Xiaoliang Li Xu1, R. Jia1,2, H. Huang1, W. Joseph1, N. Zhou1, D.H. Abramson1, X. Fari1, S.C. Jhanwar1,4. 1Department of Pathology, 2Ophthalmic Oncology Service, 3Memorial Sloan Kettering Cancer Center, New York, NY; 4Department of Ophthalmology, Shanghai Jiaotong University, Shanghai, China.

6871 — D1201 The Protein Kinase C (PKC)/Protein Kinase D (PKD)/Steroid Receptor Coactivator (SRC)-3 pathway is an important therapeutic target in Gu-mutant Uveal Melanomas. Vassiliki Poulaki1, S. Chew4, B. He2, V. Eedunuri3, D. Bedoya4, M.J. Jager4, B.W. O’Malley5, N. Mitsiades5,1. 1Ophthalmology, VA Boston Healthcare System, Boston University, Boston, MA; 2Medicine/Molecular and Cellular Biology, 3Molecular and Cellular Biology, 4Baylor College of Medicine, Houston, TX; 5Adrien Helis Malvin Medical Research Foundation, New Orleans, LA; 6Ophthalmology, Leiden University Med Center, Leiden, The Netherlands.

6872 — D1202 Periocular Tissue Concentration of Propranolol after Delivery with a Gel-forming Solution. Michael B. Yang1, J. Hao2, H. Liu2, S. Li3,4. 1Abrahamson Pediatric Eye Institute/ Ophthalmology, Cincinnati Children’s Hospital, College of Medicine, 2Division of Pharmaceutical Sciences/Winkle College of Pharmacy, University of Cincinnati, Cincinnati, OH. 5CR.


6876 — D1206 Therapeutic Efficacy By Targeting Correction Of Notch-1 induced Aberrants In Uveal Tumors. Xiaolin Huang1, L. Wang1, H. Zhang1, R. Jia1, H. Wang2, X. Zhao2, G. Qian1, A.D. Singh1, S. Ge1, X. Fan2. 1Ophthalmology, Ninth People’s Hospital, Shanghai Jiaotong University School of Medicine, Shanghai, P.R., China; 2Department of Biochemistry and Molecular Biology, Shanghai Jiaotong University School of Medicine, Shanghai, P.R., China; 3Center for Ocular and Molecular Biology, Shanghai Jiaotong University, Shanghai, China.

6877 — D1207 Towards A Novel Therapy For Uveal Melanoma: Targeting Oncogenic Gαs. Timothy W. Corson, K. Sishtla. Glick Eye Institute, Department of Ophthalmology, Indiana University School of Medicine, Indianapolis, IN.


6879 — D1209 Association Of Ocular Findings And Preventive Therapy With Onset Of Cerebral Involvement In Patients With Primary Intraocular Lymphoma. Noriyasu Hashida1, K. Nakai1, N. Ohguro1, K. Nishida1. 1Dept of Ophthalmology, Osaka University, Suita, Japan; 2Department of Ophthalmology, Osaka Koseinenkin Hospital, Osaka, Japan.


6881 — D1211 Precise Modeling of the Eye for Proton Beam Radiotherapy of Intraocular Tumors. Michael B. Ruegezegger1, J.H. Kowa1, S. Wolf1. 1ARTORG Center Ophthalmic Technologies, 2Department of Ophthalmology, 3University of Bern, Bern, Switzerland.

6882 — D1212 In Vivo Confocal Microscopy Study Of Conjunctival Intraepithelial Neoplasia Treated With Interferon-alpha2b. Hyunjoo J. Lee1,4, J. Kim1,4, M. Daly1,4, D. Sircouse-Lee1,4. 1Ophthalmology, Boston Medical Center / Boston University School of Medicine, Boston, MA; 2Ophthalmology, 3Optometry, 4Veterans Affairs Boston Healthcare System, Boston, MA.


6884 — D1214 Sulindac Protects RPE Cells Against Oxidative Damage but Enhances the Killing of Retinoblastoma Cells Exposed To Oxidative Stress. Arunodoy Sur1, H.M. Prentice1, H. Weissbach1, J.C. Blanks1. 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.
Thursday, May 10, 2012, 1:15 PM-3:00 PM
Retinal Cell Biology / Genetics Group

559 AMD/Retinal Degeneration Models

Moderators: Martin-Paul G Agbaga and William A Beltran


6886 — 1:30   Acid Sphingomyelinase Deficiency Induces Age-related Degeneration In The Mouse Retina. Bill X. Wu, J. Fan, J.W. Jenkins, Y. Koultos3, R.K. Crouch1, C.E. Crosson2, M. Kono2, Y.A. Hannun1. Biochemistry and Molecular Biology, Medical University of South Carolina, Charleston, SC; 2Ophthalmology, Medical Univ of South Carolina, Charleston, SC.


6886 — 1:30 Acid Sphingomyelinase Deficiency Induces Age-related Degeneration In The Mouse Retina. Bill X. Wu, J. Fan, J.W. Jenkins, Y. Koultos3, R.K. Crouch1, C.E. Crosson2, M. Kono2, Y.A. Hannun1. Biochemistry and Molecular Biology, Medical University of South Carolina, Charleston, SC; 2Ophthalmology, Medical Univ of South Carolina, Charleston, SC.


6889 — 2:15 Integration, Survival and Function of Transplanted RPE Stem Cells into Mouse Models of Geographic Atrophy. C Nathaniel Royalh8, S.S. Sarfari5, C.X. Ruan1B, J. Hu1, S. Habib8, J. Kong8, G. Fan8, S. Nusinowitz8, D. Bok8, G.H. Travis8. 1Jules Stein Eye Institute, 2Human Genetics, 3UCLA School of Medicine, Los Angeles, CA.

6890 — 2:30 STGD3 Mutant Exerts A Dominant Negative Effect On Elov4 Enzymatic Activity During VLC-Pufa Biosynthesis. Sreemathi Logan1, M-P. Gaghagha2, M.D. Chai3, R.S. Brush4, R.E. Anderson5. 1Cell Biology, 2Ophthalmology, 3University of Oklahoma HSC, Oklahoma City, OK; 4Dean A. McGee Eye Institute, Oklahoma City, OK.

6891 — 2:45 Cell Death in rd2/rd3 Retina: An Apoptotic Process? Francois Paquet-Durand1, S. Bernhard-Kurz2, B. Arango-Gonzalez3, E. Zrenner2, M. Ueffing1. 1Experimental Ophthalmology, Institute for Ophthalmic Research, Tuebingen, Germany; 2Experimental Ophthalmology, 3Institute for Ophthalmic Research, Centre for Ophthalmology, Tuebingen, Germany; 4Institute for Ophthalmic Research, University Eye Hospital, Tuebingen, Germany.

**Florian BCD**

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

Cornea

560 Corneal Biomechanics III

Moderators: Jodhbir S Mehta and James V Jester

6892 — 1:15 Patient Specific Finite Element Cornea Model. David Varsano1,2, R. Ashley2, E. Moisseiev1,2, A. Gefen2. Ophthalmology, Tel Aviv Medical Center, Tel Aviv, Israel; 1Sackler School of Medicine, 2Tel Aviv University, Tel Aviv, Israel.

6893 — 1:30 Conservation of Arclength in Keratonic and Normal Corneas with Air Puff Induced Deformation. Cynthia J. Roberts1, A.M. Mahmoud2,3, J. Liti1,4, Z. Sharalaya5, T.F. Mauger6, R.G. Lembach1, A.J. Hendershot1, R. Kuennert1, S.D. Klyce2. 1Ophthalmology, 2Biomedical Engineering, 3College of Medicine, 4The Ohio State University, Columbus, OH; 5Ophthalmology, Mount Sinai School of Medicine, New York, NY.**CR**


6895 — 2:00 Numerical analysis of the influence of Intraocular Pressure on the photorefractive keratocilp correction. Maria A. del Buey1,2, E. Lanchares3, J. Jester4. 1:45


6897 — 2:30 Quantification of Changes in optical Properties of Cornea with Stress In Vitro. Ashutosh Richhariya1, Y.S. Sangwan2, S. Punjabi3, G. Yoon4,5, A. Gefen2. 1Flaum Eye Institute, 2The Institute of Optics, University of Rochester, Rochester, NY; 3Cornea & Ocular Immunology, LV Prasad Eye Institute, Hyderabad, India; 4Mechanical 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-recipient Mismatches In A Region Containing The Homologue Of The Mouse Zfp106 Gene Encoding The H3a Antigen. Susan M. Nicholls1, A.D. Dick1, A.L. Archibald2, M. Bailey1. 1Unit of Ophthalmology, School of Clinical Sciences, 2School of Veterinary Sciences, University of Bristol, Bristol, United Kingdom; 3Division of Genetics and Genomics, The Roslin Institute and R(D) SVS, University of Edinburgh, Edinburgh, United Kingdom.

6900 — 1:30 In Vivo Imaging Of T Cell Trafficking In Eyes During Spondyloarthritis. Ellen J. Lee1, H. Kim2, S.R. Planck1, J.T. Rosenbaum1, H.L. Roszenweg1. 1Casey Eye Institute, Oregon Health & Science Univ, Portland, OR; 2Ophthalmology, Inje University, Pusan, Republic of Korea.

6901 — 1:45 Ifn-γ Is Critical For Disease Pathogenesis In A Spontaneous Mouse Model Of Autoimmune Uveitis. Jun Chen, R. Horai, P. Silver, C.-C. Chan, R. Caspi. Lab of Immunology, National Eye Inst/NIH, Bethesda, MD.
6902 — 2:00 Different Subsets Of Tumor-infiltrating Lymphocytes Correlate With Macrophage Influx And Monosomy 3 In Uveal Melanoma. Inge H. Bronkhorst1, T. Vu1, E.S. Jordanova1, G.P. Layten1, S.H. van der Burg1, M.J. Jager. 1Ophthalmology, 2Pathology, 3Clinical Oncology, Leiden University Medical Center, Leiden, The Netherlands, 4Ophthalmology, Leiden University Med Center, Leiden, The Netherlands.

6903 — 2:15 II-4 Conditions Macrophage In Vitro and Retina In Vivo to Generate Soluble Flt-1 Expression and Inhibit Laser-induced CNV in Mice. Wei-Kang Wu1, L.B. Nicholson1A, A.D. Dick1B. 1School of Cellular and Molecular Medicine, 2School of Clinical Sciences, 3University of Bristol, Bristol, United Kingdom.


6905 — 2:45 Decreased Interleukin-27 Expression is Associated with Active Uveitis in Behcet’s Disease. Peizeng Yang1, C. Wang1, Y. Tian1, Z. Ye1, A. Kilstra2. 1Ophthalmal, The 1st Hosp, Chongqing Medical University, Chongqing, China; 2Ophthalmal, University Hospital Maastricht, Maastricht, The Netherlands.

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 Upadhyya, L. Reneker. Ophthalmology, Mason Eye Institute, Columbia, MO.

6908 — 1:45 Genome-wide Identification Of Genes And MicroRNAs Regulated By Fgf2 During In Vitro Lens Fiber Cell Differentiation. Louise V. Wolf1, C.C. Gaor, K. Gueta1, N. Podduturi1, P.S. Zelenka1, R. Asher-Padan1, J. Zavadil2, A. Cvekl1. 1Ophthalmology & Visual Sciences and Genetics, Albert Einstein College of Medicine, Bronx, NY; 2L MDB, NEI, Bethesda, MD; 3Sackler School of Medicine, Tel Aviv University, Tel Aviv, Israel; 4Langone Center, NYU, New York, NY.

6909 — 2:00 Inhibition Of Human Lens Epithelial Cell Contraction By Alkylphosphocholines For PCO Prophylaxis And Downregulation Of The PI3K Pathway. Raffael Liegl1, M. Kernt1, A. Wolf, D. Kook, C. Hartogloou, A. Kampik, K.H. Eibl-Lindner. Department of Ophthalmology, Ludwig-Maximilians-University, Munich, Germany.

6910 — 2:15 A Putative Role for Histamine Releasing Factor in Posterior Capsule Opacification. I.M. Wormstone1, J.K. Kular1, J.R. Reddan1, L.J. Dawes1. 1School of Biological Sciences, University of East Anglia, Norwich, United Kingdom; 2Biological Sciences, Oakland University, Rochester, MI; 3Save Sight Institute, University of Sydney, Sydney, Australia.

6911 — 2:30 Cataract EPFA2 SAM Domain Mutations Alter Receptor Stability and Function. Jeong Eun Park1, A.I. Son1, R. Hua2, X. Zhang2, R. Zhou1. 1Department of Chemical Biology, 2Department of Biological Chemistry, 3University of Michigan, Ann Arbor, MI; 4Ophthalmology & Visual Sciences, Yale University, New Haven, CT.

6912 — 2:45 Evaluation Of Doxorubicin Loaded Mepeg-pcl Nanoparticle For Prevention Of Posterior Capsular Opacification. Aditya Konar1, R. Guha1, S. Chowdhary1, H. Palai2, A. Mishra2, G.K. Vemuganti1, S. Basak1, T.K. Mandal2, S. Hazra3. 1ICCB, Kolkata, India; 2Veterinary Surgery & Radiology, 3Veterinary Pharmacology & Toxicology, 4West Bengal University of Animal & Fishery Sciences, Kolkata, India; 5Dean, School of Medical Sciences, University of Hyderabad, Hyderabad, India; 6Eye Bank, Disha Eye Hospital, Barrackpore, India.

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

6914 — 1:30 What Information Does The Eye Send To The Brain? Recording The Entire Visual Output At A Single Retinal Location. Tom Baden1, P. Berens1, M. Bethge1, T. Eider1. 1BCCCN / CIN, 2BCCN / CIN / MPI, University of Tuebingen, Tuebingen, Germany.


6916 — 2:00 Nicotinic Block Reduces Direction Selectivity to Moving Gratings by Increasing Amplitude and Shifting Phase of Null Direction Excitation. Mikhail Y. Lipin1, W.R. Taylor, R.G. Smith. 1Department of Biomedical Sciences, Colorado State University, Fort Collins, CO; 2Casey Eye Institute, Ophthalmology, Oregon Health Sciences University, Portland, OR; 3Dept of Neuroscience, University of Pennsylvania, Philadelphia, PA.


6918 — 2:30 Developmental Characterization Of NMDA Receptor Expression In Identified Retinal Ganglion Cells Of The Mouse Retina. Ben Stafford1, K.Y. Wong1, J.B. Dember2. 1Ophthalmology and Visual Sciences, University of Michigan, Ann Arbor, MI; 2Ophthalmology & Visual Sciences, Yale University, New Haven, CT.


Room 315
Thursday, May 10, 2012, 1:15 PM-3:00 PM Visual Neurophysiology

563 Ganglion Cells: Types, Modulation and Development

Moderators: Maureen McCall and William R Taylor

6919 — 1:15 Light Adaptation at Distinct Intensity Levels within the Photopic Regime. Alexandra Tikiidi-Jamburan, T.A. Münch. Centre for Integrative Neuroscience, University Tuebingen, Tuebingen, Germany.

6914 — 1:30 What Information Does The Eye Send To The Brain? Recording The Entire Visual Output At A Single Retinal Location. Tom Baden1, P. Berens1, M. Bethge1, T. Eider1. 1BCCCN / CIN, 2BCCN / CIN / MPI, University of Tuebingen, Tuebingen, Germany.


6916 — 2:00 Nicotinic Block Reduces Direction Selectivity to Moving Gratings by Increasing Amplitude and Shifting Phase of Null Direction Excitation. Mikhail Y. Lipin1, W.R. Taylor, R.G. Smith. 1Department of Biomedical Sciences, Colorado State University, Fort Collins, CO; 2Casey Eye Institute, Ophthalmology, Oregon Health Sciences University, Portland, OR; 3Dept of Neuroscience, University of Pennsylvania, Philadelphia, PA.


6918 — 2:30 Developmental Characterization Of NMDA Receptor Expression In Identified Retinal Ganglion Cells Of The Mouse Retina. Ben Stafford1, K.Y. Wong1, J.B. Dember2. 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

6920 — 1:15 The REPAIR Study: Prospective, Multi-center Trial of ranibizumab in Choroidal Neovascularization due to Pathological Myopia - Interim Analysis. Adnan Tufail, REPAIR Study Group. Ophthalmology, Moorfields Eye Hospital, London, United Kingdom.*CR, 🇬🇧

6921 — 1:30 Choroidal thickness associated with spherical equivalent in healthy young adults: The Raine Eye Health Study. Alexander X. Tan1, H. Forward1, C. McKnight1, S. Yazaz4, C. Pennell1, J. Mountain1, T.L. Young2, A.W. Hewitt3, D.A. Mackey1, F.K. Chen1. 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.

**Central and Peripheral Outer Nuclear Layer Thickness Differences between Myopes and Hyperopes/Emmetropes using Spectral Domain Optical Coherence Tomography.** Christopher A. Clark, A.E. Elsner. 1School of Optometry, University of Indiana, Bloomington, IN; 2Optometry, Indiana University, Bloomington, IN; 3Optometry, Indiana University, Bloomington, IN.

**Choroidal Changes in Myopic Eyes Affected by Choroidal Neovascularization.** Mario R. Romano, M. Rinaldi, F. Chiosi, E. dell'Omo, F. Parmeggiani, F. Semeraro, C. Costagliola. 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.

**Peripheral Refraction During Accommodation in Children Treated By Orthokeratology.** Zhi Chen, X. Zhou. Ophthalmology & Visual Science, Fudan University EENT Hospital, Shanghai, China.

**Association of Paired Box 6 gene with High Myopia in Japanese.** Masahiro Miyake, K. Yamashiro, H. Nakashi, H. Hayashi, I. Nakata, Y. Akagi-Kurashige, A. Tsujikawa, K. Ohno-Matsui, M. Mochizuki, N. Yoshimura. 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.

**Macular Edema**

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

**Bevacizumab for Macular Edema in Central Retinal Vein Occlusion: A prospective, randomized, double-blind clinical study.** David L. Epstein, P.Y. Algvere, G.C. von Werd, S. Seregard, A.P. Kvanth. 1Department of Ophthalmology, St Erik Eye Hospital, Stockholm, Sweden; 2Ophthalmic Path & Oncol Svc, 3Karolinska Inst; St Erik Eye Hosp, Stockholm, Sweden; 4Dept of Vitreoretinal Diseases, 5Ophthalmology, 6St Erik’s Eye Hospital, Stockholm, Sweden.

**Long Term Evaluation of the Visual Prognosis in Patients Treated With Dexamethasone Intravitreal Implant (Ozurdex) for Macular Edema Due to Retinal Vein Occlusion.** Elad Moisseiev, E. Yamagishi, M. Goldstein, M. Waissbord. 1Ophthalmology, Tel Aviv Medical Center, Tel Aviv, Israel; 2Ophthalmology, Tel-Aviv Medical Center, Tel-Aviv, Israel; 3Ophthalmology, Tel-Aviv Medical Center, Tel-Aviv, Israel.

**Intravitreal Alfibercept Injection for Macular Edema in Central Retinal Vein Occlusion: 1-year Results of the Phase 3 GALILEO Study.** Frank G. Holz, Y. Ogura, J. Roiser, J-F. Korenblik, B. Stemper, R. Vitt, A.J. Berliner, F. Hiemer, R. Sandbrink. O. Zeitz. 1Ophthalmology, University of Bonn, Bonn, Germany; 2Ophthalmology, Nagoya City University Graduate School of Medical Science, Nagoya, Japan; 3Ophthalmology, Klinik fur Ophthalmologie, University of Kiel, Kiel, Germany; 4Service d’Ophthalmologie, Hopital Pellegrin, Bordeaux, France; 5GCD TA NOHI, 6Bayer HealthCare, Berlin, Germany; 7Ophthalmology, Regeneron, Tarrytown, NY; 8Bayer Health Care, Berlin, Germany; 9Global Clinical Development, Bayer HealthCare AG, Berlin, Germany.

**Macular Edema After Uneventful Phacoemulsification Detected By Ocular Coherence Tomography (OCT).** Luis Felipe Q. Silveira, G.A. Pellegrini, M. Harasawa, G.A. Carlos, J.C. Souza, T. Leite, G.S. Pierozzi, A.F. Bordon. 1Retina, Hospital Oftalmologico de Sorocaba, Sorocaba, Brazil; 2Hospital Oftalmologico de Sorocaba, Manaus, Brazil; 3Retina, Hospital de Olhos de Sorocaba, Sorocaba, Brazil; 4Ophthalmology UNIFESP-EPM, Federal Univ of Sao Paulo, Sao Paulo, Brazil.

6938 — 2:15  Prevalence of Functional Low Vision and Need for Annualized Eye Evaluation in Adult Malays and Indians Living in Singapore. Tingfeng Zheng1,2, C-Y. Cheng1, E.L. Lamoureux, III1, P. Chiang1, A. Anuar1,2, T. Aung1,2, S-M. Saw1, T.Y. Wong1,2. 1Singapore Eye Research Institute, Singapore National Eye Centre, Singapore, Singapore; 2State Key Laboratory of Ophthalmology, Zhongshan Ophthalmic Centre, Sun Yat-sen University, Guangzhou, China; 3Department of Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore; 4Ophthalmology, University of Malaya, Kuala Lumpur, Malaysia; 5Saw Swee Hock School of Public Health, National University of Singapore, Singapore, Singapore; 6Centre for Eye Research Australia, University of Melbourne, Melbourne, Australia; 7University of Melbourne, Melbourne, Australia.

6939 — 2:30  Excess Expenditures, Excess Informal Care Days, and Quality of Life Decrements Associated with Self-Reported Visual Impairment and Blindness. Kevin D. Frick1, L.L. Grover2, E. Wehler2. 1Health Policy and Management, Johns Hopkins Bloomberg Sch of Public Hlth, Baltimore, MD; 2Ophthalmology, Johns Hopkins Univ Wilmer Eye Inst, Baltimore, MD.

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. 1Ophthalmology & 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. Kuehn1, H.D. von Pein1, B. Dick1, F.H. Grus3. 1Experimental Eye Research Institute, Ruhr University, Bochum, Germany; 2Experimental Ophthalmology, University Medical Center Mainz, Germany; 3Experimental Ophthalmology, Department of Neuropathology, Mainz, Germany.


6944 — 2:00  Overstimulation of TRPV4 in vivo Induces Selective Apoptosis of Retinal Ganglion Cells. An Acute in vivo Experimental Model for Glaucoma. Manny an m. frye1, D. Ryskamp2, S. Chaushan1, A. Jo1, D. Krizaj2. 1Moran Eye Institute, The University of Utah, Department of Ophthalmology & Visual Sciences, Salt Lake City, UT; 2Ophthalmology, The University of Utah, Salt Lake City, UT.


6946 — 2:30  Crossed Linked Actin Networks are Formed in Human Trabecular Meshwork Cells after treatment with Latrunculin B. Paul Russell1,2, K. Murphy3, J.V. Robertson4. 1Department of Ophthalmology, Johns Hopkins Univ Wilmer Eye Inst, Baltimore, MD; 2School of Veterinary Medicine, 3School of Biomedical Engineering, 4School of Medicine and School of Veterinary Medicine, University of California Davis, Davis, CA.

6947 — 2:45  Defects In Whole Cell Respiration In POAG Lymphoblasts. Jonathan G. Crowston1, L. Shek1, N.J. Van Bergeijk2, S. Lee3, V. Chrysostomou1, A.L. Vincent1, L.A. Trounce1. 1Department of Ophthalmology, 2Gliacoma Research Unit, Centre for Eye Research Australia, East Melbourne, Australia; 3Ophthalmology, University of Auckland, Auckland, New Zealand; 4Gliacoma Research Unit, Centre for Eye Research Australia, Melbourne, Australia; 5University of Melbourne, Centre for Eye Research Australia, Melbourne, Australia.

Grand H

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

568 Retinal Prosthesis II

Moderator: Eberhart Zrenner

6948 — 1:15  Seeing With Subretinal Electronic Implants: Study in Ten Patients With Wireless Implant Alpha-IMS. Eberhart Zrenner1, K-U. Bartz-Schmidt1, F. Gekeler1, U. Greppmaier2, S. Hipp3, G. Hoerdtendorf4, C. Kernstock5, A. Kusnyerik2, H. Sachs1, K. Stingl1. 1Institute for Ophthalmalic Research, Centre for Ophthalmology, Tuebingen, Germany; 2Retina Implant AG, Reutlingen, Germany; 3Mobility Training, Tuebingen, Germany; 4Sammelweis University, Budapest, Hungary; 5Städtisches Klinikum Dresden-Friedrichstadt, Dresden, Germany. *CR

6949 — 1:30  Cortical Responses to Repetitive Electrical Stimulation of the Retina using Suprachoroidal Visual Prostheses. Sam E. John1, M.N. Shivasasani1, J.B. Fallon2, G. Rathbone3, C.E. Williams4. 1Bionics Institute/Latrobe University, East Melbourne, Australia; 2Bionics Institute, East Melbourne, Australia.

6950 — 1:45  Low Contrast Trip Hazard Avoidance using Simulated Prosthetic Vision. Chris McCarthy1, P. Lieby2, J.G. Walker4, A.F. Scott1, V. Botea1, N. Barnes1. 1Canberra Research Laboratory, NICCTA, Canberra, Australia; 2Engineering, Australian National University, Canberra, Australia. *CR

6951 — 2:00  The influence of visual information on walking behaviour in the Graz Mobility Test. Thomas Georgi1, D. Ivastinovic1, T. Botea1, N. Barnes1, M. Brandner1, R. Hornig2, M. Velikay-Parel1. 1Ophthalmology, Medical University of Graz, Graz, Austria; 2MI 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, Jr.,3 L. da Cruz4, F. Hafezi5, F. Merlini6, B. Coley3, R.J. Greenberg3, 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, F

6953 — 2:30  Results Update from Second Sight’s Argus® II Retinal Prosthesis Study. Mark S. Humayun1, L. da Cruz2, G. Dagnelie3, J-A. Sahel4, P.E. Stanga5, E. Filley6, D. Elliott7, J. Duncan8, R.J. Greenberg9, Argus II Study Group. 1Ophthalmology, Doheny Eye Institute - USC, Los Angeles, CA; 2Moorfields Eye Hospital, London, United Kingdom; 3Centre Hospitalier National d’Ophtalmologie des Quinze-Vingts, Paris, France; 4Manchester Royal Eye Hospital, Manchester, United Kingdom; 5Retina Foundation of the Southwest, Dallas, TX; 6Ophthalmology, Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston, MA; 7University of California, San Francisco School of Medicine, San Francisco, CA; 8Second Sight Medical Products, Sylmar, CA. *CR, F

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. Chung3, S. Kim1A,1B, *Electrical Engineering & Computer Science, 1Inter-University Semiconductor Research Center, Seoul National University, Seoul, Republic of Korea; 2Department of Neurosurgery, Massachusetts General Hospital, Boston, MA; 3Ophthalmology, Seoul National University Hospital, Seoul, Republic of Korea.