

## ARVO 2014 Annual Meeting Emerging Trends and Hot Topics

The following abstracts have been identified by members of the Annual Meeting Program Committee as representing the newest and most innovative research being conducted in the various specialties. To view abstracts, enter the program number below in the "Search" field of the Online Planner.

### Sunday, May 4

#### Biochemistry/Molecular Biology

#400 - C0171. The role of Decorin in ocular ageing and disease. Felicity de Cogan. May 4, 8:30am.

#412 - C0183. A fragment of netrin-1 is implicated in the induction of permeability in diabetic retinopathy. Khalil Miloudi. May 4, 8:30am.

#413 - C0184. Fetal hemoglobin induction by monomethylfumarate: relevance to prevention and treatment of sickle cell retinopathy (SR). Wanwisa Promsote. May 4, 8:30am.

#### Clinical/Epidemiologic Research

#165 - A0352. Visual and somatosensory contributions to Center of Pressure (COP) balance in a legally blind and normally sighted group using the Nintendo Wii Balance Board™. Pamela Jeter. May 4, 8:30am.

#166 - A0353. Afferent visual function in Veterans after combat blast. Glenn Cockerham. May 4, 8:30am.

#841. Effect sizes of myopia-related genes on ocular biometry in childhood and later in life. Willem Tideman. May 4, 3:15pm.

#843. Development of refractive errors – what can we learn from retinal dystrophies? Michelle Hendriks. May 4, 3:15pm.

#### Cornea

#511 - A0100. Platelet Lysate as Replacement for Fetal Bovine Serum in Limbal Stem Cell Cultures: Preliminary Results. Kunal Suri. May 4, 1:30pm.

#512 - A0101. CNTF Promotes Self-Renewal of Limbal Stem Cell and Accelerates Corneal Epithelial Wound Healing. Peng Chen. May 4, 1:30pm.

#523 - A0112. Generation of Induced Pluripotent Stem Cells from Normal and Keratoconus Corneal Fibroblasts using Viral- and Non-Viral Methods. Roy Joseph. May 4, 1:30pm.

#526 - A0115. Induction of corneal endothelial cells from human pluripotent stem cells through derived neural crest like cells. Yoshinori Nakai. May 4, 1:30pm.

### Eye Movements/Strabismus/Amblyopia/Neuro-ophthalmology

#814. Unmasking potential brain plasticity in amblyopic vision. Zhong-Lin Lu. May 4, 3:15pm.

#815. Initial Evaluation of the Novel EFG Therapy for the Treatment of Amblyopia. Fuensanta Vera-Diaz. May 4, 3:15pm.

### Glaucoma

#530 - A0166. Blindness in Patients with Normal Tension Glaucoma: A Hospital-based Study. Daisuke Takagi. May 4, 1:30pm.

#821. Three-Year IOP-Lowering Efficacy of Selective Laser Trabeculoplasty in Afro-Caribbeans with Open-Angle Glaucoma. Tony Realini. May 4, 3:15pm.

### Immunology/Microbiology

#857. Neutralization of TNF- $\alpha$  significantly impairs corneal lymphangiogenesis in response to HSV-1 infection. Katie Hudson. May 4, 3:15pm.

#858. Temporal transcriptome and systems biology analysis to identify key pathways and hub genes in experimental Staphylococcus aureus endophthalmitis. Ashok Kumar. May 4, 3:15pm.

### Retina

#1187 - C0215. Effects of COMP-Ang1 on Neovascularization in a Mouse Model of Age-related Macular Degeneration. Nathan Lambert. May 4, 3:15pm.

#465 - D0084. Characterization and evaluation of sugar-chain modified liposome encapsulated with human immunoglobulin for intravitreal administration. Maki Iwasa. May 4, 8:30am.

#314 - B0292. An international multi-center investigation of macular holes: the European Vitreo-Retinal Society Macular Hole Study. Ron Adelman. May 4, 8:30am.

#589 - B0116. Relationship of Posterior Vitreous Detachment to Frequency of Intravitreal Injection of Anti-Vascular Endothelial Growth Factor for Age-Related Macular Degeneration. Lisa Faia. May 4, 1:30pm.

#604 - B0131. Efficacy and Safety of Intravitreal Aflibercept Injection (IAI) for Treatment of Macular Edema Secondary to Branch Retinal Vein Occlusion (BRVO): 24-Week Results of the VIBRANT Study. David Boyer. May 4, 1:30pm.

#606 - B0133. Efficacy and safety of ranibizumab 0.5 mg in patients with visual impairment due to macular edema secondary to central retinal vein occlusion: Design and baseline characteristics of the CRYSTAL study. Francesco Boscia. May 4, 1:30pm.

### Retinal Cell Biology

#696 - C0239. *In vivo* retinal development using hand held ultra-high resolution spectral domain optical coherence tomography in premature and full term infants. Samira Anwar. May 4, 1:30pm.

#697 - C0240. Microphthalmia-associated Transcription Factor (MITF) affects optic vesicle cell proliferation and retinal pigment epithelium maturation in human ES cell (hESC) cultures. Anna Petelinsek. May 4, 1:30pm.

#710 - C0253. Hedgehog signaling regulates cell movements underlying choroid fissure formation. Kristen Kwan. May 4, 1:30pm.

### Physiology/Pharmacology

#832. Improved visual function in patients with choroideremia undergoing subretinal gene therapy. Robert MacLaren. May 4, 3:15pm.

#833. AAV-mediated gene therapy in Dystrophin-Dp71 deficient mouse leads to blood-retinal barrier permeability restoration. Ophelie Vacca. May 4, 3:15pm.

## Monday, May 5

### Biochemistry/Molecular Biology

#2353 - B0029. Thermoresponsive Reversible Adhesive for Temporary Intervention in Ocular Trauma. Yi Zhang. May 5, 3:45pm.

#2355 - B0031. Targeting Galectin-3 Attenuates both Corneal Fibrosis and Retinal Gliosis. Zhiyi Cao. May 5, 3:45pm.

#2356 - B0032. Bispecific anti-VEGF/ANG2 antibody exhibits superior efficacy to VEGF monotherapy in a model of spontaneous CNV. Peter Lundh von Leithner. May 5, 3:45pm.

### Clinical/Epidemiologic Research

#1268. Myopia prevalence in Europe: cohort effect of increasing prevalence not fully explained by higher educational levels. Christopher Hammond. May 5, 8:30am.

#1271. Outdoor exposure determines axial length already at the age of 6 years: The Generation R Study. Jan Roelof Polling. May 5, 8:30am.

#1272. Increased Outdoor Time Reduces Incident Myopia – The Guangzhou Outdoor Activity Longitudinal Study. Ian Morgan. May 5, 8:30am.

#1273. Myopia is associated with lower Vitamin D status in young adults. Alex Hewitt. May 5, 8:30am.

#1671. A Longitudinal Study of the Impact of First and Second Eye Cataract Surgery on Falls in Vietnam. Lynn Meuleners. May 5, 11am.

#1672. Costs of follow-up visit and uptake of glasses and complication treatment after cataract surgery in developing countries: PRECOG, a multi-center observational study. Mirjam Meltzer. May 5, 11am.

## Cornea

#2197. Tissue engineering the human limbal crypts: further characterisation of an *in vitro* model. Hannah Levis. May 5, 3:45pm.

#2198. Limbal melanocytes support limbal epithelial stem cells in 2D co-culture and RAFT collagen tissue equivalents. Marc Dziasko. May 5, 3:45pm.

#2199. Nerve induced gene expression in corneal epithelial cells during embryonic development. James Kubilus. May 5, 3:45pm.

## Eye Movements/Strabismus/Amblyopia/Neuro-ophthalmology

#2570 - C0274. Oculomotor System Plasticity After Sustained Unilateral Brain-Derived Neurotrophic Factor Treatment of the Extraocular Muscles: A Novel Treatment for Strabismus. Christy Willoughby. May 5, 3:45pm.

## Glaucoma

#1662. Common mechanisms underlying intraocular pressure identified in functional analysis of gene lists from genome-wide association study results in IGGC cohorts. Cristina Venturini. May 5, 11am.

#1664. Short-term IOP Spikes Constitute Over 11% of the IOP Energy the Eye Must Absorb During Waking Hours. J Crawford Downs. May 5, 11am.

#1665. Experimental scleral cross-linking increases glaucoma damage in a mouse model. Harry Quigley. May 5, 11am.

#1668. Targeting aging: Geroprotective Drug Metformin Reduces Risk of Adult-onset Open-angle Glaucoma. Julia Richards. May 5, 11am.

#2144. BioGeographical Ancestry in the African Descent and Glaucoma Evaluation Study (ADAGES): Association with corneal thickness and disc area. Christopher Girkin. May 5, 3:45pm.

#2167. Nanophotonics-based Intraocular Pressure (IOP) Sensor with Remote Optical Readout. Kun Huang. May 5, 3:45pm.

#2170. Stiffness of the Trabecular Meshwork In Living Eyes. Larry Kagemann. May 5, 3:45pm.

#5658 - D0151. Genomewide DNA methylation analysis of primary human trabecular meshwork cells with dexamethasone stimulation. Akira Matsuda. May 5, 8:30am.

## Immunology/Microbiology

#2493 - C0013. Suppression of experimental autoimmune uveitis (EAU) and recovery from uveitis correlate with expansion of regulatory B cells (Breg). Chengrong Yu. May 5, 3:45pm.

#2494 - C0014. Immunosuppressive function of exosomes isolated from circulating blood of the mice with experimental autoimmune uveitis (EAU). Guomin Jiang. May 5, 3:45pm.

#2497 - C0017. Altering the gut microbiota ameliorates experimental autoimmune uveitis. Yukiko Nakamura. May 5, 3:45pm.

### **Multidisciplinary Ophthalmic Imaging Group**

#1612 - D0027. Peek: Portable Eye Examination Kit. The Smartphone Ophthalmoscope. Iain Livingstone. May 5, 8:30am.

#1634 - D0049. Optical-Sensor Guided Intelligent Micro-injector for Retinal Therapy. Peter Gehlbach. May 5, 8:30am.

#2172. Long-term reduction of infrared autofluorescence caused by infrared light below the maximum permissible exposure. Jennifer Hunter. May 5, 3:45pm.

#2173. Optical coherent tomography of intrinsic optical signal response at photoreceptor outer segments. Benquan Wang. May 5, 3:45pm.

#2174. Retinal Changes Associated with Hibernation Revealed by OCT Imaging. Wei Li. May 5, 3:45pm.

#2175. Single Source Fluorescence Imaging/Blue Optical Coherence Tomography in a GFP Mouse Model. Ryan McNabb. May 5, 3:45pm.

#2176. Longitudinal In Vivo Imaging of Retinal Ganglion Cells Labeled with Cholera Toxin Subunit B. Corey Smith. May 5, 3:45pm.

### **Nanotechnology and Regenerative Medicine Group**

#1435 - B0037. Measure of the intraocular pressure with three sensors during manual Perfluorocarbon Liquid injection in UV photo-crosslinkable polymer model of the human eye. Marco Dal Vecchio. May 5, 8:30am.

#1437 - B0039. Evaluation of Bio-Immune Compatibility of Nanofibrous Scaffold for Corneal Tissue Engineering. Sahar Salehi. May 5, 8:30am.

#1441 - B0043. Isolation of Goblet Cells from Conjunctival Epithelium by Density-Gradient Centrifugation. Nicole Qiaozhi Lu. May 5, 8:30am.

#1446 - B0048. Transplantation of Ex-Vivo Genetically Modified Photoreceptor Precursors. Alona Cramer. May 5, 8:30am.

#1449 - B0051. Local Delivery of an Engineered Epithelial Monolayer by Micropatterned Polymeric Nanosheets. Hirokazu Kaji. May 5, 8:30am.

#1451 - B0053. Hybrid Gold Nanoparticles: Cellular and Molecular Toxicity to Human Corneal Fibroblasts. Brandie Morgan. May 5, 8:30am.

#2157. A polymer-based interface restores light sensitivity in blind rats. Diego Ghezzi. May 5, 3:45pm.

### **Physiology/Pharmacology**

#1261. Therapeutic potential of topical ROCK inhibitor K-115 in diabetic retinopathy. Ryoichi Arita. May 5, 8:30am.

#1937 - B0202. Generic, target-independent suppression of choroidal neovascularization by human IgG1 antibodies via Fc gamma receptor I. Tetsuhiro Yasuma. May 5, 11am.

#1947 - B0212. Intraocular contents of the vascular endothelial growth factor as a marker of diabetic retinopathy progression. Dmitry Lipatov. May 5, 11am.

#2177. Histone Deacetylases in Retinal Injury and Ischemic Preconditioning. Oday Alsarraf. May 5, 3:45pm.

### **Retina**

#1648. Gastrointestinal serious adverse events in patients treated with intraocular ranibizumab or bevacizumab for age-related choroidal neovascularisation, what do the recent trials tell us? Lauren Scott. May 5, 11am.

#2318 - A0366. Free-Radical Formation during Vitrectomy Vitreous Substitutes. Nathan Ravi. May 5, 3:45pm.

#2329 - A0377. An Automatically Tracking Robotic Endo-Illuminator for Vitreoretinal Surgery. Ira Schachar. May 5, 3:45pm.

#2338 - A0386. A cross-linked hyaluronic acid hydrogel (Healaflo<sup>®</sup>) as a potential vitreous substitute. Henrik Barth. May 5, 3:45pm.

### **Retinal Cell Biology**

#1358 - A0114. The formation of primitive ocular structures and stratified neural retina from human pluripotent stem cells. Carla Mellough. May 5, 8:30am.

#1365 - A0121. Derivation, Characterization and Retinal Neural Induction of Human Tenon's -Derived iPS Cells. Jian Ge. May 5, 8:30am.

#1381 - A0137. Elucidating the role of FGF signaling using an iPS cell model of retinal development. Eric Clark. May 5, 8:30am.

#1386 - A0142. Generation of ciliary epithelium from mouse ES and iPS cells. Hirofumi Kinoshita. May 5, 8:30am.

## **Tuesday, May 6**

### **Biochemistry/Molecular Biology**

#3028. Rhodopsin binding-induced conformational changes in arrestin-1. Sergey Vishnivetskiy. May 6, 11am.

#3475 - D0075. PSMD13 Promotes Degradation of Disease-Causing RPE65s via the Ubiquitin-Proteasome Pathway. Songhua Li. May 6, 11am.

#3479 - D0079. Role of plasma HDL remodeling and intestinal ABCA1 activity in the uptake of dietary lutein and zeaxanthin. Eric Niesor. May 6, 11am.

### **Clinical/Epidemiologic Research**

#2679. Prevalence of Poor Vision among Individuals Hospitalized in the United States. Jeffrey Willis. May 6, 8:30am.

#2682. Visual impairment, age-related eye diseases and mortality: the Singapore Malay Eye Study (SiMES). Rosalynn Siantar. May 6, 8:30am.

### **Cornea**

#3054. A metabolome-wide study of dry eye disease. Jelle Vehof. May 6, 11am.

### **Glaucoma**

#3548. Preclinical Evaluation of ENV515 (travoprost) Intracameral Implant - Clinical Candidate for Treatment of Glaucoma Targeting Six-Month Duration of Action. Tomas Navratil. May 6, 3:45pm.

#3550. Observation periods of 1 year for clinical trials of neuroprotective agents in glaucoma are feasible. David Garway-Heath. May 6, 3:45pm.

### **Immunology/Microbiology**

#2817 - B0050. Retinal vascular changes and immune restoration in a cohort of HIV patients on highly active antiretroviral therapy. Petrina Tan. May 6, 8:30am.

#2866 - B0099. Regional heterogeneity in the endothelial glycocalyx and basement membrane of the retinal vasculature. Marie O'Connor. May 6, 8:30am.

### **Physiology/Pharmacology**

#2888 - B0286. Role of Caveolin-1 in Intraocular Pressure and Conventional Outflow Regulation. Michael Elliott. May 6, 8:30am.

#3025. Trabecular meshwork exosomes enhance cellular collagen uptake. W Michael Dismuke. May 6, 11am.

#3300 - B0240. CEP290 gene addition rescues ciliogenesis in LCA patient cells. Erin Burnight. May 6, 11am.

#3321 - B0261. RPGR gene augmentation delivered at early, mid and late stage disease in a canine model of XLRP rescues photoreceptor structure and function. William Beltran. May 6, 11am.

### **Retina**

#3062. Ranibizumab in the real world clinical setting: results from the one year interim analysis of the LUMINOUS study. Paul Mitchell. May 6, 11am.

#3066. United Kingdom Neovascular AMD Database study: Time to reactivation after a pause in treatment - outcomes from 92,000 intravitreal ranibizumab injections. Pearse Keane. May 6, 11am.

#3408 - C0101. Fast Fluid Detection in 3-D Macular OCT Scans. Gwenole Quellec. May 6, 11am.

#3890 - C0192. Ozurdex Outcomes in Retinal Vein Occlusion (RVO) with Macular Oedema (MO). Valerie Juniat. May 6, 3:45pm.

#3913 - C0215. United Kingdom national database study of intravitreal dexamethasone implant (Ozurdex®) for retinal vein occlusion related macular oedema. Patients' pre-treatment characteristics and treatment procedure. Ahmed Sallam. May 6, 3:45pm.

#3931 - C0233. Treat and Extend regimen versus Pro Re Nata regimen in a comparative study of ranibizumab in exudative age-related macular degeneration: 12 months results. Katja Hatz. May 6, 3:45pm.

#3970 - C0272. Long-Term Visual Outcomes for a Treat and Extend Anti-VEGF Regimen in Eyes with Neovascular Age-Related Macular Degeneration. Sarah Mrejen. May 6, 3:45pm.

### **Retinal Cell Biology**

#2675. Using patient-derived iPSCs to identify new drug treatments for JNCL. Luke Wiley. May 6, 8:30am.

#3986 - D0045. Using stem cells to develop gene therapy for Batten Disease. Budd Tucker. May 6, 3:45pm.

## **Wednesday, May 7**

### **Anatomy/Pathology**

#4446 - D0106. Mapping the entire nerve architecture and sensory neuropeptide distribution of rabbit iris. Jiucheng He. May 7, 8:30am.

#4462 - D0122. Mechanics of Optic Fissure Invagination. Benjamen Filas. May 7, 8:30am.

#4590. Absence of lymphatic vessels in the developing human sclera. Barbara Neuser. May 7, 11am.

#5068 - A0013. Uveal Melanoma Cytology : Computer Assisted Diagnosis. Arun Singh. May 7, 3:45pm.

### **Biochemistry/Molecular Biology**

#4992 - D0179. Expression of olfactory signaling genes in the eye. Alexey Pronin. May 7, 11am.

#5002 - D0189. Metabolic Memory and Diabetic Retinopathy: Epigenomic and Transcriptomic Signatures. Willard Freeman. May 7, 11am.

### **Clinical/Epidemiologic Research**

#4574. Evaluating the Impact of Glaucoma and Word Features on Out-Loud Reading. Priya Mathews. May 7, 11am.

#4579. Can the Alexander Technique improve balance and mobility in adults over 50 years of age with visual impairments? A single-blind randomized controlled trial. Lisa Keay. May 7, 11am.



### **Cornea**

#4608. Progenitor Cells Localize to the Periphery in the Mature Cornea where they Interact with Surrounding Cells. Edgar Espana. May 7, 11am.

#5142 - A0363. Recovery of the keratocyte phenotype in vitro is mediated through glucose response signalling. James Foster. May 7, 3:45pm.

#5168 - A0389. A new treatment for corneal thinning using a biocompatible cross linker and femtosecond laser. Takeshi Soma. May 7, 3:45pm.

### **Eye Movements/Strabismus/Amblyopia/Neuro-ophthalmology**

#4546. Efficacy and Safety of New Topical Sodium Pump Inhibitor (NSPI) in Reducing Eye Oscillations in A Canine model of Infantile Nystagmus Syndrome (INS). Richard Hertle. May 7, 11am.

### **Glaucoma**

#4556. Effect of translaminal pressure modification on the rat optic nerve head. Bang Bui. May 7, 11am.

#4744 - B0105. Automated discovery of optic nerve head structural features from image and genetic data. Mark Christopher. May 7, 11am.

### **Immunology/Microbiology**

#4062. Increased Blood CD1c(high) Myeloid Dendritic Cells with Low Antigen Uptake Enhance CD4 Helper T cell Responses in Noninfectious Uveitis. Ping Chen. May 7, 8:30am.

### **Multidisciplinary Ophthalmic Imaging Group**

#4827 - B0203. EyeMark: Automated Image-based Biomarker Computation Tools for Monitoring Diabetic Retinopathy. Chaithanya Ramachandra. May 7, 11am.

#5022. Investigating outer retinal oxygen supply using visible-light OCT. Hao Zhang. May 7, 3:45pm.

### **Nanotechnology and Regenerative Medicine Group**

#4622 - A0190. Nanoceria with Grp78/Bip produce enhanced inhibition of retinal degeneration in tubby mice. Xue Cai. May 7, 11am.

### **Retina**

#4048. Association of Vascular Endothelial Growth Factor and Its Receptor Polymorphisms with Polypoidal Choroidal Vasculopathy. Mongkol Tadarati. May 7, 8:30am.

#4534. The Progression of Hydroxychloroquine Retinopathy Depends on the Severity of Disease. Michael Marmor. May 7, 11am.

#4939 - D0049. Efficacy and cost-effectiveness of anti-VEGF treatments for age-related macular degeneration (AMD). Renata Portella Nunes. May 7, 11am.

#4941 - D0051. Prospective evaluation of Tele-Ophthalmology in initial screening and recurrence monitoring for wet Age-related Macular Degeneration (AMD). Bo Li. May 7, 11am.

#4964 - D0074. Predictors of Sustained Intraocular Pressure Elevation in Patients Receiving Anti-Vascular Endothelial Growth Factor Therapy for Neovascular Age-Related Macular Degeneration. Fumitaka Sugiguchi. May 7, 11am.

#4977 - D0087. Morphological features and determinants of new geographic atrophy developing in participants in the IVAN trial. Frank Picton. May 7, 11am.

#5010. High Dose Docosahexaenoic Acid (DHA) Supplementation in X-Linked Retinitis Pigmentosa (XLRP): A 4-Year Randomized, Controlled Clinical Trial. Dennis Hoffman. May 7, 3:45pm.

#5011. Aberrant Dolichol Chain Length Distribution as Biomarkers for Retinitis Pigmentosa Associated with DHDDS Genotypes. Byron Lam. May 7, 3:45pm.

#5277 - C0073. Synthesis and Characterization of an In Situ Forming Hydrogel for Use as a Vitreous Substitute. Joshua Davis. May 7, 3:45pm.

## Thursday, May 8

### Biochemistry/Molecular Biology

#5717 - B0025. Adoptive cell transfer from a glaucoma mouse model induces retinal ganglion cell loss in healthy recipient mice. Qiong Ding. May 8, 8:30am.

#6012. Studies of Protein Interaction of the Chaperonin CCT in Photoreceptors. Maxim Sokolov. May 8, 12noon.

### Clinical/Epidemiologic Research

#6006. Better Eye Health for Aging Baby-boomers: Generational Differences in the 5-yr Incidence of AMD. Karen Cruickshanks. May 8, 12noon.

#6008. Higher Serum Leptin Levels Are Protective of Age-related Macular Degeneration. Charumathi Sabanayagam. May 8, 12noon.

#6087 - A0214. Prevalence of Near Vision Impairment in Middle-aged and Older Adults in an Urban Census Sector of Parintins, Brazilian Amazon Region. Solange Salomao. May 8, 12noon.

### Cornea

#5494 - A0068. Progression of the Meibomian Gland Disease and Lid Margin Keratinization in Conditional Notch1 Knockout mice. Sanaz Gidfar. May 8, 8:30am.

### Glaucoma

#5985. Laser Induced Mouse Glaucoma Model Suitable for Studying Stem Cell-based Therapy. Yiqin Du. May 8, 12noon.

### Multidisciplinary Ophthalmic Imaging Group

#5883 - C0069. EyeArt: Advanced Image Analysis Tools for Diabetic Retinopathy Screening and Telemedicine Applications. Kaushal Solanki. May 8, 8:30am.

### **Physiology/Pharmacology**

#5999. Oral Delivery of ACE2 or Ang-(1-7) Bioencapsulated in Plant Cells Protect against Experimental Uveitis and Autoimmune Uveoretinitis. Pollob Shil. May 8, 12noon.

### **Retina**

#5874 - C0060. Evaluation Of Multicolor Spectral Reflection Imaging (488 nm, 536 nm & 786 nm) In Comparison With Color Photography, Autofluorescence And Spectral Domain OCT imaging In A Consecutive Series Of Patients With Retinal Disorders. Simone Kellner. May 8, 8:30am.

#5890 - C0076. Intravitreal Erythropoietin in Eyes with Geographic Atrophy Secondary to Age-related Macular Degeneration. Stephen Sinclair. May 8, 8:30am.

#5899 - C0085. Ocular and Systemic Adverse Events Associated with Intravitreal Bevacizumab in the Treatment of Retinopathy of Prematurity. Victoria Gonzalez. May 8, 8:30am.

#5911 - C0097. Intravitreal Bevacizumab for the Treatment of Pediatric Retinal and Choroidal Diseases: Extended Follow Up. Christopher Henry. May 8, 8:30am.

#6385 - C0162. Micropulsed Laser Therapy Outcomes in the Treatment of Chronic Central Serous Choroidopathy Based on Leakage Pattern. Alessandro Dare. May 8, 12noon.

### **Retinal Cell Biology**

#5989. Analysis of the VEGFR-1,-2, and -3 distribution in the adult mouse retina and choroid and the effect of Notch activation on these receptors in laser-induced CNV. Anne Alex. May 8, 12noon.