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 Abstract Search and Itinerary Builder.

**Emerging Trends and Hot Topics**

**107 amblyopia – EY**


#5609. Effect of Compliance to Glasses Wear on the Outcome of Visual Acuity after Refractive Adaptation. Gail Maconachie. May 10, 8:30am.

#5610. Pre-operative Visual Acuity and Contrast Sensitivity Deficits in Children with Small, Partial, or Non-Central Cataracts. Eileen E. Birch. May 10, 8:30am.

**110 AMD: clinical research – RE**


#847. The Development of AMD in Participants with No or Small Drusen in the Age-Related Eye Disease Study (AREDS). Grace C. Shih. May 6, 11:15am.


#865. Aggravation Of Neovascular Age-related Macular Degeneration During The Induction Period Of Intravitreal Ranibizmab. Yusaku Yoshida. May 6, 11:15am.

Complete meeting information is available at www.arvo.org/am
Emerging Trends and Hot Topics

#867. Prevalence and Progression of Retinal Pigment Epithelial Atrophy in Patients with Neovascular Age-Related Macular Degeneration treated with Intravitreal Anti-VEGF Injections. Nishant Kumar. May 6, 11:15am.


#2032. The Superdose Anti-VEGF (SAVE) Trial: 2.0-mg Intravitreal Ranibizumab for Recalcitrant Neovascular AMD, Two Year Endpoint Results. Eric Chen. May 7, 1:45pm.


#2041. OCT response to 2mg ranibizumab for AMD Pigment Epithelial Detachments refractory to conventional dosing in the HiPED study. Brandon G. Busbee. May 7, 1:45pm.

#2042. Cumulative Incidence of Visual Acuity Change in the VIEW 1 and VIEW 2 Studies of Patients with Neovascular Age-related Macular Degeneration. Daniel B. Roth. May 7, 1:45pm.

#2045. Efficacy Of The Systemic Complement Inhibitor Eculizumab In AMD Patients With Drusen: The COMPLETE Study. Carlos Alexandre A. Garcia Filho. May 7, 1:45pm.

#2046. Systemic Complement Inhibition With Eculizumab For The Treatment Of Geographic Atrophy In AMD Patients: The Complete Study. Zohar Yehoshua. May 7, 1:45pm.

#2054. Index of Non-Circularity of Areas of Geographic Atrophy (GA) Is Related to Progression Rate. Ronald P. Danis. May 7, 1:45pm.

#2893. Correlation of Retinal Morphology and Visual Acuity in the Comparison of Age-Related Macular Degeneration Treatment Trial (CATT). Glenn J. Jaffe. May 8, 8:30am.

#2894. Comparison of RC and Investigator Determined Retinal and Subretinal fluid in the Comparison of Age-Related Macular Degeneration Treatment Trials (CATT). Cynthia A. Toth. May 8, 8:30am.

#2905. Acquired Vitelliform Lesion Associated with Large Drusen. Luiz H. Lima. May 8, 8:30am.

#2925. Untreated Obstructive Sleep Apnea Hinders Functional And Anatomical Response To Bevacizumab In Age Related Macular Degeneration. Yoreh Barak. May 8, 8:30am.

#2926. Treat and Extend Therapy Cause Significant Changes to the Vitreous Proteome in Patients with Wet AMD. Bert M. Glaser. May 8, 8:30am.

Emerging Trends and Hot Topics

#2935. Omega-3, Essential and Monounsaturated Fatty Acid Deficiency in Exudative Age-related Macular Degeneration: A survey from the NAT-2 Study. Pascale Benlian. May 8, 8:30am.

#3081. Wide-field Spectral-domain Polarization-sensitive OCT (PS-OCT) For Imaging Of The Retinal Pigment Epithelium (RPE) In Age-related Macular Degeneration (AMD): From Bench To Bedside. Ursula Schmidt-Erfurth. May 8, 8:30am.


#3677. HARBOR Study: One-Year Results of Efficacy and Safety of 2.0 mg versus 0.5 mg Ranibizumab in Patients with Subfoveal Choroidal Neovascularization Secondary to Age-Related Macular Degeneration. Ivan J. Suner. May 8, 3:45pm.

#3678. Subgroup Efficacy Analyses of the VIEW 1 and VIEW 2 Studies of Intravitreal Aflibercept Injection and Ranibizumab for Treatment of Neovascular AMD. Allen C. Ho. May 8, 3:45pm.


#3680. Incidence of Choroidal Neovascularization in the Fellow Eye Among Patients Treated with Ranibizumab or Bevacizumab in the Comparison of Age-related Macular Degeneration Treatments Trials (CATT). Maureen G. Maguire. May 8, 3:45pm.


#4180. Visual Acuity and Injection Frequency Results of 2mg Ranibizumab for Pigment Epithelial Detachments Refractory to Conventional Dosing in the HiPED study. Anne E. Fung. May 9, 8:30am.

#5144. Passive Subretinal Space Associated With Retinal Pigment Epithelium Detachment As False Positive For Exudative Age-related Macular Degeneration. Iuri Golubev. May 9, 1:45pm.

#5148. Prediction Of Retinal Pigment Epithelial Tears In Serous Vascularized Pigment Epithelium Detachments. Christoph R. Clemens. May 9, 1:45pm.

#5153. Comparison Of Different Treatments For Retinal Angiomaticus Proliferation. Marta Oldani. May 9, 1:45pm.

#5162. Feeder Vessel Navigated Laser Treatment In Non-responder Exudative Age-related Macular Degeneration. Andrea Giani. May 9, 1:45pm.
Emerging Trends and Hot Topics

#5180. A Randomized Controlled Trial of Vision Self-Monitoring Tools in Non-Neovascular Age-Related Macular Degeneration Subjects. Mark C. Roser. May 9, 1:45pm.


#6515. Impact Of Visceral Fat, Serum Leptin Levels And High-sensitive Crp Levels On The Pathogenesis Of Age-related Macular Degeneration. Paulina Haas. May 10, 11:15am.


111 AMD: epidemiology - CL
#6936. After Multiple Rounds of Mass Drug Administration for Trachoma, are there only “Trachoma families” left? Sheila K. West. May 10, 1:15pm.

113 AMD: immunobiology – IM

#1235. Low Influence Of C5A On Retinal Pigment Epithelial Cells. Susanne Wasmuth. May 6, 3:15pm.

#5489. Cytokines in Patients with HLA-B27 + Acute Anterior Uveitis. Eva Jakob. May 9, 3:45pm.

#6161. Non-professional Phagocytosis Can Play A Role In Herpesvirus Entry Into Ocular Cells. Deepak Shukla. May 10, 8:30am.

116 AMD: preclinical studies - RC
#2023. Intravitreal Bevacizumab Activates Müller Cells And Astrocytes And Reduces Carbonic Anhydrase In Retinas Of Monkeys: A Possible Explanation For The Reduction Of Retinal Edema. Sylvie Julien. May 7, 1:45pm.

#2990. In-vivo Imaging Of A Fluorescent Probe Linked To Bevacizumab. Alexander R. Cunea. May 8, 8:30am.

117 AMD: translational studies – RE

#5560. The Role Of Serping1 In Age-Related Macular Degeneration (AMD) Development. Charles O. Pierce. May 9, 3:45pm.

Emerging Trends and Hot Topics


123 antiangiogenic agents - PH
#2940. Treatment of Complicated Retinal Arterial Macroaneurysm with Intravitreal Bevacizumab. Simona Romano. May 8, 8:30am.

128 artificial vision, nanobiodevices, manipulation and engineering - NT
#327. Electro-Mechanical Tactile Corneal Stimulation System for Vision Substitution. Michael Belkin. May 6, 8:30am.

131 bipolar cell structure and function - VN


133 cataract surgery - LE
#1722. The Relationship of Cataract and Cataract Extraction to Age-related Macular Degeneration: The Beaver Dam Eye Study. Barbara E. Klein. May 7, 1:45pm.


#6669. Retrospective Evaluation of Tecnis Multifocal (ZMA00 or ZMB00) and ReSTOR (SN60D1) Intraocular Lenses Following Phacoemulsification. Gabriela Perez. May 10, 11:15am.

#6683. Is Topical Ketorolac Tromethamine 0.4% Ophthalmic Solution Needed for Cataract Surgery? A Randomized Controlled Trial. Flavia G. Ticly. May 10, 11:15am.


#6697. Intraocular Pressure Response in Glaucoma Patients Using Difluprednate 0.5% Post Operatively after Phacoemulsification. Melissa M. Cable. May 10, 11:15am.


#6716. The accuracy of intraocular lens formulas in children ages 2 to 18 at Children's Medical Center of Dallas. Zachary Vest. May 10, 11:15am.


135 cataractogenesis - LE

#1723. FYCO1 Mutation Hotspot in Congenital Cataract. Hana Abouzeid. May 7, 1:45pm.

#3049. Age-related Light Scattering Development in Non-Cataractous Lenses from Diabetic Patients and Possible Biochemical Mechanisms to Explain this Observation. Alfred R. Wegener. May 8, 8:30am.

137 choroidal neovascularization - RE


138 circadian rhythms: basic mechanisms - RC
#4329. Circadian Clock Gene Rhythms In Human Retina Müller Cells And Their Inhibition By Sirna Knockdown Of Period Genes. Lili Xu. May 9, 8:30am.

144 contact lens - CO
#4692. Association Of Single Nucleotide Polymorphisms Of Interleukins 1β, 6 And 12b With Contact Lens Keratitis Susceptibility And Severity. Nicole A. Carnt. May 9, 1:45pm.

#6112. Contact Lens/Contact Lens solution Combinations Determine the Inflammatory Changes on the Ocular Surface: A Laser In Vivo Confocal Microscopy Study. Bernardo M. Cavalcanti. May 10, 8:30am.

**148 cornea: stroma and keratocytes - CO**


**153 corneal dystrophies and genetics - CO**

#1740. An Association between an Expanded Trinucleotide Repeat in Transcription Factor 4 (TCF4, E2-2) and Fuchs Corneal Dystrophy. Keith H. Baratz. May 7, 1:45pm.

**159 corneal transplantation - CO**


**160 corneal wound repair and healing - CO**


**161 cytokines and growth factors - PH**

#6288. Human Tears Reveal Insights Into Corneal Neovascularization. Nadia Zakaria. May 10, 8:30am.

**162 diabetic macular edema: clinical research - RE**


#387. Twelve-month Treatment With Intravitreal Bevacizumab For Diabetic Macular Edema In A “Real World” Clinical Setting. Paolo Lanzetta. May 6, 8:30am.


#1337. Integrin Peptide Therapy: A New Class of Treatment for Vascular Eye Diseases - The First Human Experience in DME. David S. Boyer. May 7, 8:30am.

#4664. Efficacy And Safety Of Ranibizumab 0.5 Mg As Monotherapy Or Adjunctive To Laser Versus Laser Monotherapy In Asian Patients With Visual Impairment Due To Diabetic Macular Edema: 12-month Results Of The REVEAL Study. Masahito Ohji. May 9, 1:45pm.
Emerging Trends and Hot Topics

#4668. Comparison of Treatment of Fellow Eyes treated with Ranibizumab with Study Eye of Patients Enrolled in the READ-3 Study. Afsheen A. Khwaja. May 9, 1:45pm.

#5282. 6 Month Results of the READ 3 Study: Ranibizumab for Edema of the Macula in Diabetes. Diana V. Do. May 9, 3:45pm.

163 diabetic retinopathy: angiogenesis – RC
#5758. COMPAng1 Prevents Decreases in Visual Acuity and Retinal Thinning in the Diabetic Mouse. Judd M. Cahoon. May 10, 8:30am.

164 diabetic retinopathy: biochemical and molecular disease mechanisms - BI

#5584. Alzheimer Retina Pathology in a Novel Animal Model of Neuropathology in Diabetes. Peter Frederikse. May 10, 8:30am.

165 diabetic retinopathy: cell biology - RC
#360. Angiofibrotic Response To VEGF Inhibition In Membranes Extracted During Diabetic Vitrectomy: Results Of A Randomized, Controlled, Translational Study. Elliott H. Sohn. May 6, 8:30am.

#5405. Retinopathy in a Cone-Rich Rodent Model of Spontaneous Type 2 Diabetes. Mandy Hong. May 9, 3:45pm.

#5408. Epigenetic Alterations of Endothelial Cell Junction Molecules: Role of Metabolic Memory in the Development of Diabetic Macular Edema. Sampathkumar Rangasamy. May 9, 3:45pm.

#5423. Notch-mediated Cell-cell Interactions In The Pathophysiology Of Diabetic Retinopathy. Joseph F. Arboleda-Velasquez. May 9, 3:45pm.

#5427. Loss Of Bone Marrow Innervation Leads To Inadequate Repair Of Retinal Vessels In Diabetic Retinopathy Animal Model. Priyanka Pandey. May 9, 3:45pm.

166 diabetic retinopathy: clinical research - RE
#346. Comparison Of Intravitreal Bevacizumab Alone Or Combined With Triamcinolone Versus Triamcinolone In Diabetic Macular Edema: A Randomized Clinical Trial. Minchul Shin. May 6, 8:30am.

#358. The Diabetic Retinopathy Repair Project - Prevalence And Prognostic Significance Of Ischaemia In Diabetic Macula Disease. Dawn A. Sim. May 6, 8:30am.

#1335. Ranibizumab Dose and Treatment Interval Comparison for the Treatment of Diabetic Macular Edema: Final Two Year Results. Philip J. Ferrone. May 7, 8:30am.

#2860. Phenotypes of Diabetic Retinopathy Progression to CSME based on Non-Invasive Examinations. Sandrina Nunes. May 8, 8:30am.

#2864. Scotopic Microperimetry in Diabetes. Edoardo Midena. May 8, 8:30am.

#2870. Skin Autofluorescence Is Associated with Current Stage of Diabetic Retinopathy. Masayuki Yasuda. May 8, 8:30am.

#2884. Reliability of Patient-reporting of Pan-retinal Photocoagulation (PRP) Compared to Fundus Photograph Assessment in Sixteen Years of the Epidemiology of Diabetes Interventions and Complications Study (EDIC). Wanjie Sun. May 8, 8:30am.

#5278. Protection from Proliferative Diabetic Retinopathy in Patients with 50 or More Years of Type 1 Diabetes. Jerald E. Wisdom. May 9, 3:45pm.

#5281. The Relationship of Diabetic Nephropathy to Retinopathy and Macular Edema in Type 2 Diabetes: The Diabetes Management Project. Ecosse L. Lamoureux. May 9, 3:45pm.

171 diabetic retinopathy: preclinical studies - RC

#306. Regenerative Therapeutic Potential of Adipose Stromal Cells in Early Stage Diabetic Retinopathy. Gangaraju Rajashekkhar. May 6, 8:30am.

#5764. Overexpression of IL-1 Receptor Antagonist in the Rat Retina by AAV2-mediated Gene Transfer Prevents Capillary Loss in Experimental Diabetes. Chiara Gerhardinger. May 10, 8:30am.

172 drug and gene delivery systems - PH

#483. Pharmacokinetics of intravitreal bevacizumab (Avastin) In vitrectomized eyes. Se Joon Woo. May 6, 8:30am.

#503. Development Of Drug Loaded Nanofiber Sutures For Ophthalmologic Application. Fabiana K. Kashiwabuchi. May 6, 8:30am.

#4642. Update on QLT091001 in Subjects with Leber Congenital Amaurosis (LCA) due to Lecithin:Retinol Acyltransferase (LRAT) or Retinal Pigment Epithelial 65 Protein (RPE65) mutations: Longer-term follow-up of subjects originally treated with 7-day therapy. Robert K. Koenekoop. May 9, 1:45pm.

173 drug delivery: iris-ciliary body/intraocular fluids/posterior segment - PH

#496. Degradation And The Routes Of Clearance Of Intravitreal Hydrosilylated Porous Silicon Particles. Lingyun Cheng. May 6, 8:30am.

174 dry eye disease - CO


#1283. A Newly Developed Noninvasive and Mobile Pen-shaped Meibography System. Reiko Arita. May 7, 8:30am.
Emerging Trends and Hot Topics

178 endophthalmitis: clinical - RE
#1675. Bacterial Susceptibility Profiles in Trauma Associated Endophthalmitis. Duncan A. Friedman. May 7, 8:30am.

#1678. Infectious Keratitis Progressing To Endophthalmitis: A 15-year-study Of Risk Factors, Microbiology, And Clinical Outcomes. Christopher R. Henry. May 7, 8:30am.

#1691. Antibacterial Properties of 2% Lidocaine on Staphylococcus Aureus, Staphylococcus Epidermidis, and Streptococcus Viridans and Reduced Rate of Post-injection Endophthalmitis. Stephen J. Kim. May 7, 8:30am.

#2252. An Outbreak of Streptococcus Endophthalmitis After Intravitreal Bevacizumab. Roger A. Goldberg. May 7, 3:45pm.

#4181. Changes in Ocular Flora in Eyes Exposed to Macrolide or Fluoroquinolone Ophthalmic Antibiotics: A Prospective, Controlled, Longitudinal Study. Sarita B. Dave. May 9, 8:30am.


#4183. Laboratory Investigation of an Endophthalmitis Outbreak Caused by Streptococcus Mitis/Oralis Group After Intravitreal Injection of Avastin. Harry W. Flynn, Jr. May 9, 8:30am.

179 epigenetics - BI
#5585. Rescue Of Photoreceptor Degeneration In Rd1 Mice By Systemic Treatment With Valproic Acid. Kenneth P. Mitton. May 10, 8:30am.

181 extraocular muscles and associated tissues - EY

182 eye movements - EY
#513. Optical Treatment Of Nystagmus - A Randomised, Controlled, Cross-over Study. Pavitra Jayaramachandran. May 6, 8:30am.


#4852. The Use of Eye Movements to Accurately Diagnose Combat-Related Mild TBI. Paul A. Wetzel. May 9, 1:45pm.

#4868. The Effect Of 3D Displays Upon Adaptative Components Of The Accommodation And Vergence Systems. Laura E. Sweeney. May 9, 1:45pm.


#5607. Fatigue and Hypoglycemia Impair Saccade Velocity and Accuracy but not Visual Perception. Benjamin Thompson. May 10, 8:30am.
184 ganglion cell structure and function - VN

186 gene therapy and delivery - PH


#5576. A Comparative Evaluation Of Translational Read-through Inducing Drugs For Treatment Of USH. Kerstin Nagel-Wolfrum. May 10, 8:30am.


187 gene therapy: nonviral and viral vectors - PH


#1919. AAV2/5 Mediated Gene Augmentation Rescues Photoreceptors in Canine Models of RPGR-XLRP. William A. Beltran. May 7, 1:45pm.

191 glaucoma: neuroprotection - GL
#4676. TGFβ Potentiates Retinal Ganglion Cell Death After Optic Nerve Injury. James T. Walsh. May 9, 1:45pm.

192 glaucoma: biochemistry and molecular biology, genomics and proteomics - BI

#3841. Comparison of Serum Homocysteine, Vitamin B12, Vitamin B6, and Folate Levels in Different Types of Glaucoma. Joo Hwa Lee. May 8, 3:45pm.
Emerging Trends and Hot Topics


#6315. Hmgb-1 Induces Apoptosis In Retinal Ganglion Cells And Intraocular Inflammation By Activation Of Tlr4 And Cytokine Release. Maurice Schallen-berg. May 10, 11:15am.


193 glaucoma: biomechanics - GL


#3182. 3D Deformation Mapping of the Human Optic Nerve Head In Vivo. Michael J. Girard. May 8, 1:45pm.

#3184. Median Pore Size And Beam Thickness Are Good Predictors Of Median IOP-Induced Shear Strain Within The Lamina Cribrosa Microarchitecture. Ian A. Sigal. May 8, 1:45pm.


#5062. Parapapillary Atrophy in Patients with Intracranial Tumors. Jost B. Jonas. May 9, 1:45pm.

194 glaucoma: clinical drug studies and clinical trials - GL

#5095. A Phase 2 Study Evaluating Safety and Efficacy of the Latanoprost Punctal Plug Delivery System (L-PPDS) in Subjects With Ocular Hypertension (OH) or Open-Angle Glaucoma (OAG). Damien F. Goldberg. May 9, 1:45pm.

#6355. Three Year Results of the Ahmed Baerveldt Comparison (ABC) Study. Donald L. Budenz. May 10, 11:15am.

196 glaucoma: epidemiology - CL

#4417. Fear of Falling in Glaucoma. Pradeep Y. Ramulu. May 9, 8:30am.

#4479. A Critical Evaluation of Evidence for Visual Field Improvement in the CIGTS. David C. Musch. May 9, 8:30am.

197 glaucoma: genetics - GL

#4493. CDKN2BAS Genotype - Glaucoma Phenotype Correlations In The GLAUGEN Study And The NEIGHBOR Consortium. Louis R. Pasquale. May 9, 8:30am.
#4516. Parameterized Analysis of Weighted Variants in Blended Cohorts Optimizes Analysis of Exomes from Primary Open Angle Glaucoma Cases from the NEIGHBOR Study. Terry Gaasterland. May 9, 8:30am.

#5291. Genome-wide Analysis Of Central Corneal Thickness In POAG Cases From The NEIGHBOR Consortium. Megan Ulmer. May 9, 3:45pm.

#5292. Common Variants in 9p21 and 8q23 are associated with Normal Tension Glaucoma: Results From The NEIGHBOR and GLAUGEN Genome-wide Association Studies. Janey L. Wiggs. May 9, 3:45pm.

#5293. Targeted Resequencing of CDKN2BAS Locus Identifies Variants Associated with Primary Open Angle Glaucoma. Michael A. Hauser. May 9, 3:45pm.

#5295. Open Angle Glaucoma In Soluble Guanylate Cyclase α1-deficient Mice And Its Association With The Gucy1a3/gucy1b3 Locus In Humans. Emmanuel S. Buys. May 9, 3:45pm.

198 glaucoma: IOP measurement and characterization - GL
#4171. Safety And Reproducibility Of Patterns Of Repeated Continuous 24-hour IOP Monitoring With An Ocular Telemetry Device. Kaweh Mansouri. May 9, 8:30am.

199 glaucoma: laser therapy - GL

201 glaucoma: pharmacological intervention or cellular mechanism - GL
#1749. Latanoprost Stimulates Lymphatic Drainage from the Mouse Eye. Alex L. C. Tam. May 7, 1:45pm.


202 glaucoma: structure/function relationships - GL
#215. Does Glaucoma have a Short Memory? Shaban Demirel. May 6, 8:30am.

#218. Latent Class Regression (LCR) Analysis for Detecting Glaucoma Progression. Gadi Wollstein. May 6, 8:30am.

#1748. Mice with an Induced Mutation in Collagen 8A2 Exhibit Axial Elongation and Are Resistant to Retinal Ganglion Cell Damage in an Experimental Glaucoma Model. Frances E. Cone. May 7, 1:45pm.

#5619. Evaluating A 'Random Forest' Decision Tree Classifier To Identify Eyes With Glaucomatous Visual Field Loss Applied To Measurements From Multiple Imaging Devices. Ryo Asaoka. May 10, 8:30am.
Emerging Trends and Hot Topics

#5624. Correlation of Brain Volumes and Functional Deficits in Glaucoma. Alice L. Williams. May 10, 8:30am.

#6604. Retinal ganglion cell morphology is not affected by chronic experimental glaucoma in mice selectively expressing Yellow Fluorescent Protein. Giedrius Kalesnykas. May 10, 11:15am.

204 glaucoma: trabecular meshwork and ciliary body - GL

205 glaucoma: visual fields and psychophysics - GL
#1751. Seasonal Variations in Sensitivity and Intraocular Pressure (IOP) in the Ocular Hypertension Treatment Study (OHTS). Stuart K. Gardiner. May 7, 1:45pm.

#2264. Examining Visual Field Loss In Patients With Glaucoma During Their Predicted Remaining Lifetime. David P. Crabb. May 7, 3:45pm.

#2266. Regression Modeling for Pointwise Visual Field Perimetry Data for Patients with Glaucoma. Dennis Mock. May 7, 3:45pm.

206 glial cells - RC

211 imaging of the retina in health and disease - MOI

213 imaging: clinical applications - MOI
#4986. Pharmacokinetic Properties Of Intravitreally Placed I-124 Radiolabeled Bevacizumab And Ranibizumab After Vitrectomy And Lensectomy In A Rabbit Model. John B. Christoforidis. May 9, 1:45pm.

214 imaging: cornea - CO
#4192. Evaluation of Treatment with Cyclodextrin, Allopregnanolone and Miglustat for Niemann-Pick Disease type C1 in a Knock-out Mouse Model. Marine Hovakimyan, May 9, 8:30am.


215 imaging: glaucoma - GL

Emerging Trends and Hot Topics

#2744. Schlemm’s Canal (SC) Cross-sectional Area (CSA) and Shape Fluctuation. Jessica E. Nevins. May 8, 8:30am.


#3697. High-resolution Longitudinal Examination Of The Lamina Cribrrosa And Optic Nerve Head In Living Non-human Primates With Experimental Glaucoma. Kevin M. Ivers. May 8, 3:45pm.

216 imaging: image guided therapy and monitoring - PH
#5397. Assessment of Macular Hole Dynamics Utilizing Intraoperative Optical Coherence Tomography. Justis P. Ehlers. May 9, 3:45pm.

219 imaging: new technologies and techniques - MOI

#3090. High-Resolution Confocal Full Polarimeter For The Living Human Retina. David Lara. May 8, 8:30am.

220 imaging: OCT advances in technology - MOI


#2129. Choroidal Thickness Measurements During CSCR Treatment. Caroline Brandl. May 7, 1:45pm.

#3623. Anterior Segment OCT (RTVue) for Diagnostic Imaging of Ocular Surface Pathology. Fouad E. Sayyad. May 8, 1:45pm.

#5257. Split-Spectrum Amplitude-Decorrelation Angiography with Optical Coherence Tomography.Yali Jia. May 9, 3:45pm.

#5259. Ultra high-speed swept source Fourier domain mode locking (FDML) OCT at 1.68, 3.3 and 6.7 MHz - Image quality of retinal cross sectional scans. Lukas Reznicek. May 9, 3:45pm.
Emerging Trends and Hot Topics

221 imaging: posterior segment, clinical - RE
#1754. Baseline Indocyanine Green Angiography Characteristics of Polypoidal Choroidal Vasculopathy in a Randomised Controlled Trial. Tock H. Lim. May 7, 1:45pm.


#2643. Optical Coherence Tomography Imaging of Sub-Retinal Pigment Epithelium Lipid. Sri Krishna Mukkamala. May 7, 3:45pm.

#2651. Quantitative Reproducibility Assessment Of RPE Lesions In Patients With Choroidal Neovascularization Related To Neovascular Age-related Macular Degeneration Using Polarization-sensitive OCT. Christopher Schuetze. May 7, 3:45pm.


#3171. Choroidal Thickness In Patients With Central Serous Chorioretinopathy And Myopia. Irene A. Barbazetto. May 8, 1:45pm.

222 imaging: small animal models - MOI
#4987. Analysis of Total Retinal Blood Flow in Normal and Diabetic Rats with Ultrahigh-Speed Spectral / Fourier Domain OCT. Woo Jhon Choi. May 9, 1:45pm.

223 imaging: ultrasound - MOI

225 immunohistochemistry - AP

227 intraocular pressure/physiology pharmacology - PH
Emerging Trends and Hot Topics


#3670. Dopamine-3 Receptor Modulates Intraocular Pressure. Claudio Bucolo. May 8, 3:45pm.

228 intravitreal/periocular local therapies - RE


#884. Needle Size in Intravitreal Injections-Preliminary Results of a Randomized Clinical Trial. Christiane I. Falkner-Radler. May 6, 11:15am.

#904. Combined Inhibition of Tumor Necrosis Factor (TNF) and Vascular Endothelial Growth Factor (VEGF) for the Treatment of Macular Edema of Various Etiologies: A Short-term Pilot Study. Martin A. Serrano. May 6, 11:15am.

#1696. Endophthalmitis After Intravitreal Injections: In-office Setting Vs Operating Room Setting. Alessandra Sborgia. May 7, 8:30am.

#1880. Superselective Intra-arterial Chemotherapy For Retinoblastoma Treatment: Comparative Pharmacokinetics Of Topotecan And Melphalan In The Swine Model. Emiliano F. Buitrago. May 7, 1:45pm.


236 laser - RE

#417. Sub-threshold Laser Treatment of Macular Edema in Patients with Diabetes. Anat Loewenstein. May 6, 8:30am.

237 lens - LE


#1726. iSyTE: integrated Systems Tool for Eye Gene Discovery. Salil A. Lachke. May 7, 1:45pm.

#3048. Efficient Generation of Lens Progenitor Cells from Cataract Patient-specific Induced Pluripotent Stem Cells. Xiaodi Qiu. May 8, 8:30am.

#3059. Clinical Study of alpha crystallin, the lens molecular chaperone, in the various lens compartments in normal subjects and cataract patients using Dynamic Light Scattering. Qing Pan. May 8, 8:30am.
Emerging Trends and Hot Topics


#4145. Mesenchymal and Neural Crest Markers in the Embryonic Lens. A S. Menko. May 9, 8:30am.

#4147. Expression of the Small Heat Shock Protein αβ-crystallin is Controlled by a Gene-specific Sequence in its Promoter. Suraj P. Bhat. May 9, 8:30am.


238 lens development and differentiation - LE

240 low vision - VI

241 macular degeneration: inherited - RC

242 macular diseases except AMD - RE
#1752. Staging of Progression of Macular Telangiectasia Type 2 Using Power-Doppler Optical Coherence Tomography and Macular Pigment Optical Density. Eric K. Chin. May 7, 1:45pm.

#1753. Adaptive Optics Scanning Laser Ophthalmoscopy Demonstrates Reduced Foveal Cone Density in Early Idiopathic Macular Telangiectasia. Mina M. Chung. May 7, 1:45pm.


#5207. Modelling Best Vitelliform Macular Dystrophy with human embryonic stem cells. Michael D. O’Connor. May 9, 1:45pm.

#5208. Distinct Patterns of Foveal Degeneration in Occult Macular Dystrophy. Sarwar Zahid. May 9, 1:45pm.

#5209. Photoreceptor Structure in the Spectrum of Best Vitelliform Macular Dystrophy. Megan E. Land. May 9, 1:45pm.

#5212. Clinical and SD-OCT Findings in Focal Choroidal Excavation. Stefano Erba. May 9, 1:45pm.

#5224. Metamorphopsia in Eyes with Chronic Central Serous Chorioretinopathy; One year after Half-dose Verteporfin Photodynamic Therapy. Yoshihiro Mizutani. May 9, 1:45pm.
**243 macular edema - RE**

#415. The Effect of Hemoglobin A1c on Bevacizumab Response in Patients with Diabetic Macular Edema. Irene Rusu. May 6, 8:30am.

#923. The Efficacy Of Intravitreal Bevacizumab For Macula Edema Of Retinal Vein Occlusion. Shigehiro Iwabuchi. May 6, 11:15am.

#6928. 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. May 10, 1:15pm.


#6930. Macular Edema After Uneventful Phacoemulsification Detected By Ocular Coherence Tomography (OCT). Luiz Felipe Q. Silveira. May 10, 1:15pm.


**244 macular pigment and carotenoids - BI**


#3380. The Ring Like Distribution Profile Of Macular Pigment Appears Highly Heritable: A Twin Study. Erik F. van Kuijk. May 8, 1:45pm.

**251 molecular pharmacology - PH**

#5321. Effect of Fenugreek on Severe Evaporative Dysfunctional Tear Syndrome. Caterina Gagliano. May 9, 3:45pm.

**252 myopia - AP**

#4444. Genetic Factors For Choroidal Neovascularization Associated With High Myopia. Nicolas Leveziel. May 9, 8:30am.

**255 nanomedicine, nanopharmaceuticals, nanotherapy - NT**

#3638. Sustained Therapeutic Effects of Nanoceria In A Mouse Model For AMD. Xue Cai. May 8, 3:45pm.

**256 nanoparticles, nanobiosensors, nanobiomarker, nanophotonics, nanobioelectronics, nanofluids - NT**


**258 neural retina: dysfunction in disease - VN**

#4650. Retinal Ganglion Cell Dendritic Degeneration in a Mouse Model Of Alzheimer's Disease. Marcela Votruba. May 9, 1:45pm.
Emerging Trends and Hot Topics

260 neuro-ophthalmology - EY
#1312. Non-mydriatic Ocular Fundus Photography Read by Emergency Department (ED) Physicians: FOTO-ED Study. Beau B. Bruce. May 7, 8:30am.

#1313. Overview of Progress on the 256+ Channel Boston Retinal Prosthesis. Joseph F. Rizzo, III. May 7, 8:30am.

#4896. Ethnic Differences In The Presentation And Characteristics Of Oculo-motor Nerve Palsy. Matthew M. Kruger. May 9, 1:45pm.

#4898. Non-Mydriatic Fundus Photography of the Ocular Fundus in Headache Patients Presenting to an Emergency Department. Praneetha Thulasi. May 9, 1:45pm.

261 neuro-ophthalmology: visual fields and psychophysics - EY
#4838. Web-accessible Visual Field Test and Analysis System for Multi-Center Studies and Touchpad Device Access. Wolfgang Fink. May 9, 1:45pm.


264 non-infectious uveitis - IM
#4163. CFH and HTRA1 risk alleles in Caucasian and African American ocular sarcoidosis patients. Ian A. Thompson. May 9, 8:30am.

#4169. Methotrexate vs. Mycophenolate Mofetil for Ocular Inflammatory Diseases. John H. Kempen. May 9, 8:30am.

#5273. Canonical WNT Signalling Is Active During The Peak Of Uveitis And Can Regulate Macrophage Activation. Tarnjit K. Khera. May 9, 3:45pm.

#5481. Soluble Interleukin 2 Receptor, Angiotensin Converting Enzyme, And Neopterin in Screening Ocular Sarcoidosis And Monitoring Disease Activity. Thomas Ness. May 9, 3:45pm.

#5497. Glucocorticoid Increases Cd14HighCd16+ Monocyte Population And Contributes To Uveitis Therapy. Baoying Liu. May 9, 3:45pm.

#5498. Idiopathic Panuveitis Associated With Retinitis Pigmentosa. Diana Pachon. May 9, 3:45pm.

272 optic nerve - EY


275 optical coherence tomography - MOI
#2106. Prevalence of Macular Anatomic Abnormalities in Eyes with High Myopia. Andree Henaine-Berra. May 7, 1:45pm.

#2108. An SD-OCT Assessment of Retinal Pigment Epithelium Tears Risk in Pigment Epithelium Detachment. Francesco Pichi. May 7, 1:45pm.

Complete meeting information is available at www.arvo.org/am
#2118. Change in Choroidal Thickness Measurements in Diabetic Patients using Spectral Domain OCT. Steven L. Williams. May 7, 1:45pm.

281 photoreceptors: development - RC

290 regenerative medicine - NT
#268. Induction Of Corneal Epithelial Cells From Human-induced Pluripotent Stem Cells On The Amniotic Membrane Matrix. Morio Ueno. May 6, 8:30am.

292 retina/RPE: biochemistry and molecular biology - BI
#1592. Interphotoreceptor Retinoid Binding Protein (IRBP) - a Thiol Based Antioxidant in the Subretinal Space. Dongjin Sung. May 7, 8:30am.
#1630. Zebrafish snow white as a model for Hermansky-Pudlak Syndrome. Christina M. Daly. May 7, 8:30am.
#2216. Spatial Distribution Of Lipid Molecular Species In Photoreceptors And Other Cells By Maldi Imaging Mass Spectrometry Of The Human Retina. Nicolas G. Bazan. May 7, 3:45pm.

293 retina/RPE: cell biology - RC

294 retina/RPE: cell death, autophagy, oxidation, ER stress - RC
#4284. Effects of Bevacizumab on Bcl-2 Expression and Apoptosis in Retinal Pigment Epithelial Cells under Oxidative Stress. Suk Jin Kim. May 9, 8:30am.
#4299. The Further Opening Of The DHA Metabolome In Retinal Pigment Epithelial (RPE) Cells: Maresin Synthesis Diverges From NPD1 Synthesis By Enhanced Oxidative Stress. Bokkyoo Jun. May 9, 8:30am.

295 retina/RPE: development - RC
#1315. Olig2 Defines Subpopulations Of Retinal Progenitor Cells Biased Towards Specific Cell Fates. Brian P. Hafler. May 7, 8:30am.

297 retina/RPE: immunobiology and infection - IM
#1227. Treatment With Recombinant Interleukin-17A Reduces ARPE-19 Cell Viability. Daniel Ardeljan. May 6, 3:15pm.
#2782. Phagocytosis and Replication of Mycobacterium Tuberculosis in Retinal Pigment Epithelium. Hossein Nazari Khanamiri. May 8, 8:30am.
#5275. Neuronal Inflammasome Facilitates IL-1β Release And Ganglion Cell Loss In Retinal Ischemia-reperfusion. Valery I. Shestopalov. May 9, 3:45pm.
299 retina/RPE: transpantation, clinical - RE
#5843. Adipose derived Mesenchymal stem cells partially rescue the Mitomycin C treated ARPE19 from cell death in co-culture. Jose-Carlos Pastor. May 10, 8:30am.

301 retina: physiology/pharmacology - PH
#4157. Complement Factor H Gene Polymorphism Plays A Role In The Regulation Of Vascular Tone In The Choroid. Reinhard Told. May 9, 8:30am.

302 retinal detachment - RE
#4602. A Novel Surgical Technique For Encircling Scleral Buckle Surgery For Primary Retinal Detachment. Dimitra Skondra. May 9, 8:30am.

#5791. Triamcinolone-Assisted Internal Limiting Membrane Peeling During Primary Rhegmatogenous Retinal Detachment Repair Reduces Postoperative Macular Pucker Formation. Rajesh C. Rao. May 10, 8:30am.


303 retinal development: cell biology and morphology - RC

#3967. SOX2 Maintains the Quiescence of Müller Glial Cells. Tessa Crowl. May 8, 3:45pm.

309 retinal inflammation and infection - IM

#2779. CD40 Expressed on Endothelial Cells Enhances Resistance to Ocular Toxoplasmosis. Carlos Subauste. May 8, 8:30am.

311 retinal prostheses - RE
#5507. Subjects Blinded By Outer Retinal Dystrophies Are Able To Recognize Outlined Shapes Using The Argus® II Retinal Prosthesis System: A Comparison With The Full Shapes Recognition Task. Lyndon daCruz. May 9, 3:45pm.


#5509. Successful Target Identification with the Argus® II Retinal Prosthesis. Michael P. Barry. May 9, 3:45pm.

#5511. Functional vision and quality of life of Argus® II Retinal Prosthesis System users as measured by the Functional Low-vision Observer Rated Assessment (FLORA). Jessy D. Dorn. May 9, 3:45pm.
Emerging Trends and Hot Topics

#5512. A Safe CMOS Stimulation and Communications Chip for Retinal Implants. John L. Wyatt, Jr. May 9, 3:45pm.

#5526. Holographic Acoustic Retinal Stimulation. Omer Naor. May 9, 3:45pm.

#5527. Selectivity of Epiretinal Stimulation Depends on Waveform and Pulse Width. Susanne Pangratz-Fuehrer. May 9, 3:45pm.

#5533. Pulse Duration Optimization with Retinal Prosthetics. Shelley I. Fried. May 9, 3:45pm.

#5535. Evaluation of inner-retina using OCT and Transcorneal Electrical Stimulation (TES) in Candidates of Retinal Prosthesis by Suprachoroidal-transretinal Stimulation (STS). Takashi Fujikado. May 9, 3:45pm.

#5537. Mouse Retinal Ganglion Cell Responses to Sub-Retinal Electrical Excitation by High-Density Retinal Prosthesis Chips. Long-Sheng Fan. May 9, 3:45pm.


#5547. Retinal Prostheses: Monocular Depth Perception In the Low Resolution Limit. Noelle R. Stiles. May 9, 3:45pm.


#6952. Patients blinded by outer retinal dystrophies are able to perceive simultaneous colors using the Argus® II Retinal Prosthesis System. Paulo E. Stanga. May 10, 1:15pm.

#6953. Results Update from Second Sight's Argus® II Retinal Prosthesis Study. Mark S. Humayun. May 10, 1:15pm.

313 retinal (neural and RPE) degeneration - RC
#5506. Extinguished ERGs And Retinal Function In Usher Syndrome. Anne Kurtenbach. May 9, 3:45pm.

314 retinitis pigmentosa - RE
#4567. The Clinical Effect of Homozygous ABCA4 Alleles in 14 Patients. Kaoru Fujinami. May 9, 8:30am.

#4571. Neuroprotective Efficacy Of Topical Unoprostone Isopropyl In Patients With Retinitis Pigmentosa. Masato Akiyama. May 9, 8:30am.

#4581. Change in Visual Function after UF-021 Therapy for Retinitis Pigmentosa. Akira Hagiwara. May 9, 8:30am.

Complete meeting information is available at www.arvo.org/am
Emerging Trends and Hot Topics

#4590. Para-arterial Sparing Phenotype In Leber Congenital Amaurosis Associated With Homozygous p.R108X SPATA-7 Mutation. Anne Kuonen. May 9, 8:30am.

#4591. Retinal Structure and Function in a Pedigree Cosegregating Achromatopsia and a Rhodopsin Mutation. Andrea L. Vincent. May 9, 8:30am.


#4595. Clinical Features In Patients With Cone-Rod Dystrophy Or Retinitis Pigmentosa Due To Mutations In C8orf37. Ramon A. van Huet. May 9, 8:30am.

#4597. Structural and Functional Correlations of Hyperautofluorescent Foveal Patch in Usher Syndrome Patients. Ana Fakin. May 9, 8:30am.

#4598. An Adenine Insertion between Nucleotide Positions 4957 and 4958 in the EYS Gene Is a Possible Major Cause of arRP in the Japanese Population. Katsuhiko Hosono. May 9, 8:30am.

315 retinopathy of prematurity - RE

#4684. Systemic And Ocular Adverse Events After 334 Injections Of Intravitreal Bevacizumab In The Treatment Of ROP: Five-Year Follow-Up In 3 Centers. Maria A. Martinez-Castelanos. May 9, 1:45pm.

#5853. Long-term Follow-up Of The Adults With Retinopathy Of Prematurity Who Received Photocoagulation And Cryopexy Treatments. Hiroki Kaneko. May 10, 8:30am.

#5865. Plus Disease Diagnosis In Retinopathy Of Prematurity: Vascular Tortuosity As A Function Of Distance From Optic Disc Center. Katie M. Keck. May 10, 8:30am.


#5873. Macular Pigment Imaging in Infants and Children Using the RetCam. Paul S. Bernstein. May 10, 8:30am.


#5884. Systemic Safety After Intravitreal Bevacizumab Injection In Newborn Rabbit Eyes. Wei-Chi Wu. May 10, 8:30am.

316 ROP-basic mechanisms - RC

#2528. Mixed Arterial-Venous PO2 Levels Critical to Ocular Markers of Angiogenesis and Oxidative Stress in Neonatal Rats. William J. Brunken. May 7, 3:45pm.

#2532. A Descriptive Analysis of Surfactant Proteins in the Mouse Retina. Faizah N. Bhatti. May 7, 3:45pm.
#2534. Prolyl Hydroxylase Inhibition during Hyperoxia Prevents Oxygen-induced Retinopathy in the Rat 50/10 Model. George Trichonas. May 7, 3:45pm.


319 stem cells - RC
#342. Adult Dental Pulp Stem Cells Present Similarities Between Dental Pulp From Deciduous Teeth and Human Limbal. Priscila C. Cristovam. May 6, 8:30am.


#2693. Targeting Human Mak Mutant iPSCs For In Vitro Gene Replacement. Budd A. Tucker. May 8, 8:30am.


327 tumors - AP


#1293. Epigenetic therapy targeting SYK in Preclinical Models of Retinoblastoma. Rachel Brennan. May 7, 8:30am.


#1878. Effects of Supra-Selective Intra-Ophthalmic Artery Chemotherapy (SSIOAC) on Orbital Arteries in a Non-Human Primate Model. Brian C. Tse. May 7, 1:45pm.


#5251. BAP1 Protein Expression In UM; High Throughput Analysis Using Tissue Microarrays Of Primary Uveal Melanoma And Liver Metastases. Helen Kalirai. May 9, 3:45pm.

#5254. A Web-based Tool For Prognosis Of Patients With Choroidal Melanoma Using Accelerated Failure Time Model. Azzam F. Taktak. May 9, 3:45pm.

330 tumors: new drugs, delivery systems, and mechanisms of action - PH
Emerging Trends and Hot Topics

331 tumors: posterior segment, clinical - RE
#3388. Diffuse versus Non-diffuse Choroidal Melanoma: Comparative study. Swathi Kaliki. May 8, 1:45pm.

#3405. Brachytherapy of large uveal melanomas. Michael Freistuehler. May 8, 1:45pm.

#3412. Stereotactic Radiosurgery Of Uveal Melanoma With And Without Tumor Resection With Respect To Local Tumor Control And Eye Retention. Daniela Suesskind. May 8, 1:45pm.

#3423. Hepatic Arterial Chemoembolization (HACE) For Uveal Melanoma Metastatic To The Liver. Tahira Mathen. May 8, 1:45pm.

332 uveitis: posterior - RE
#1186. The Effect Of Pars Plana Vitrectomy On Macular Edema Sustained By Macular Pucker In Uveitis Patients: Long Term Results. Matteo G. Cereda. May 6, 3:15pm.


#1193. Indirect Supportive Evidence for Tuberculosis-Related Uveitis. From the Ancient TST to the New IGRAs. Victor Llorens. May 6, 3:15pm.


#2251. Primary Endpoint Results Of The SAVE Study - Sirolimus As Therapeutic Approach To Uveitis: A Randomized Study To Assess The Safety And Bioactivity Of Intravitreal And Subconjunctival Injections Of Sirolimus In Patients With Non-infectious Uveitis. Quan Dong Nguyen. May 7, 3:45pm.

#3200. Use Of Immunosuppressive Therapy In Patients With APMPPE, Ampiginous Chorioiditis And Serpiginous Choroiditis. Mirjam E. Van Velthoven. May 8, 1:45pm.


#3221. LPS-Activated Tolerogenic Dendritic Cells which Suppress Experimental Autoimmune Uveoretinitis fail to signal via TBK1/IRF3. Izabela P. Klaska. May 8, 1:45pm.
337 visual cycle and retinoids - BI
#2213. Primary Amines Protect The Retina From Degeneration In Mouse Models: Implications For Stargardt's Disease And Age-related Macular Degeneration. Akiko Maeda. May 7, 3:45pm.

340 visual function and quality of life - CL
#4627. What is the value of a mm Hg reduction in intraocular pressure? Results from the Glaucoma Health Policy Model. Andreas M. Pleil. May 9, 1:45pm.

341 visual impairment: prevalence, incidence and risk factors - CL

345 vitreoretinal surgery - RE

#2600. Vitreoretinal Traction of the new generation pneumatic cutters - up than 5000 CPM. Anderson Teixeira. May 7, 3:45pm.


#2751. Sutureless Small Gauge Vitrectomy for Relief of Symptomatic Vitreous Floaters. John O. Mason, Ill. May 8, 8:30am.


#3767. Long-Term In Vivo Biocompatibility of UV-Cross-Linked Hyaluronic Acid as Vitreous Replacement - 12 Months Results. Martin S. Spitzer. May 8, 3:45pm.

#3790. Use of Lutein and Zeaxanthin Alone or Combined with Brilliant or Trypan Blue to Identify Intraocular Structures Intraoperatively in Cadaveric Eyes. Mauricio Maia. May 8, 3:45pm.