

Don't miss our presentations and posters at ARVO. Below is a list of the various offerings from our researchers. We look forward to seeing you.

Sunday, May 7, 2017

8:30 – 8:47 AM. **Randy Kardon***, **New Approaches for Assessing the Short and Long Term Effects of Trauma on the Visual System**. Special Session: "Eyes and Vision Trauma." Location: Room 316

8:30 - 10:15 AM. *Lorenzo Lones**, *Erin Burnight*, *Dalyz Ochoa*, *Joseph Giacalone*, *Robert Madumba*, **Robert Mullins**, **Edwin Stone**, **Budd Tucker**, **Luke Wiley**, **Using pathway-specific reporter and direct conversion constructs to investigate Juvenile Neuronal Ceroid Lipofuscinosis**. Session: "Retinal degeneration. Models and mechanisms." Poster #B0316 Abstract #263. Location: Exhibit/Poster Hall.

1:30 - 3:15 PM. *James Peairs**, **Michael Abramoff**, *Kyungmoo Lee*, *Zhihui Guo*, *Douglas Critser*, **James Folk**, **OCT- Predictive Visual Threshold Sensitivity Predicts Visual Field Loss in Patients with Ocular Inflammatory Disease**. Session: "Uveitis therapeutics: remedy and Relief." Poster #B0057 Abstract #502. Location: Exhibit/Poster Hall.

1:30 - 3:15 PM. **Robert Mullins***, *S Scott Whitmore*, *Kathleen Chirco*, *Grefachew Workalemahu*, *Shemin Zeng*, *Adam DeLuca*, *XiuYing Liu*, *Jessica Penticoff*, **Luke Wiley**, **Edwin Stone**, **Budd Tucker**, **The human RPE-choroid in short term organ culture: evaluation of gene expression changes**. Session: "Biochemistry and molecular biology of the retina." Poster #B0187 Abstract #619. Location: Exhibit/Poster Hall.

1:30 - 3:15 PM. *Jean-Claude Mwanza**, *Gary Lee*, *Joshua Warren*, *John Flanagan*, *Paul Artes*, **Michael Wall**, *Thomas Callan*, *Donald Budenz*, **Validation of the Performance of the UNC Optical Coherence Tomography Index for Early Glaucoma Diagnosis**. Session: "Imaging: Macula Retina, Blood Flow, OCT Angiography." Poster #B0452 Abstract #705. Location: Exhibit/Poster Hall.

3:15 - 5 PM. *Kyungmoo Lee**, **Ian Han**, *Douglas Critser*, *Andreas Wahle*, **Milan Sonka**, **Michael Abramoff**, **Layer-Specific Vascular Analysis of OCT Angiography in Diabetic Macular Edema**. Session: "Image Processing and Interpretation." Poster #B0391 Abstract #644. Location: Exhibit/Poster Hall.

3:15 - 5 PM. *Beerend Winkelman**, *Johanna Maria Colijn*, *Pieter Bonnemaaijer*, *Fernanda Fujihara*, **Michael Abramoff**, *Kristine Lee*, *Anthony Fairbanks*, *Stacy Meuer*, *Barbara Klein*, *Ronald Klein*, *Caroline Klaver*, **Retinal layer segmentation results differ between two generations of OCT devices**. Session: "Image Processing and Interpretation." Poster #B0419 Abstract #672. Location: Exhibit/Poster Hall.

4:15 - 4:30 PM. *S Scott Whitmore**, *Kyungmoo Lee*, *Adam DeLuca*, **Young Kwon**, *Jeremy Hoffman*, *Jennifer Halder*, **Robert Mullins**, **Todd Scheetz**, **Edwin Stone**, **Michael Abramoff**, **How to Distill Disease-Differentiating, Quantitative Phenotypic Patterns from OCT Data**. Session: "Deep learning for image segmentation and classification." Presentation #826 Abstract #826. Location: Room 301.

7:30 PM - 9:30 PM. **ARVO Meeting - Iowa Eye Reception**. Forno Restaurant – 17 N. Eutaw Street, Baltimore, MD, 21201. www.fornobaltimore.com. To RSVP or for questions, contact Joe Schmidt, joe-schmidt@uiowa.edu or 319-384-8529.

Monday, May 8, 2017

8:30 - 10:15 AM. **Luke Wiley***, *Laura Bohrer*, *Erin Burnight*, *Elizabeth Kennedy*, **Edwin Stone**, **Mark Greiner**, **Michael Wagoner**, **Budd Tucker**, **Development of corneal endothelial cell-specific reporter constructs and a CRISPR-Cas9 genome editing approach to study Fuchs Dystrophy..** Session: "Corneal Endothelium." Poster #B0094 Abstract #1444. Location: Exhibit/Poster Hall.

11 AM- 12:45 PM. *Prashant Parekh**, **James Folk**, **Stephen Russell**, **Elliott Sohn**, **Michael Abramoff**, **Does fluorescein angiography add value in the management of suspected choroidal neovascularization?**. Session: "Clinical retinal imaging 1." Poster #B0329 Abstract #1857. Location: Exhibit/Poster Hall.

1 - 2:30 PM. *Frank Proudlock*, **Arlene Drack**, *Joseph Carroll*, *Murray Brilliant**, *Helena Lee*, *Brian Brooks*, **Controversies in Albinism - Why is Their Vision Poor and How Do We Fix It?.** - SIG. Location: Room 324.

3:45 - 5:30 PM. *Carly Lewis**, *Jason Kam*, **Todd Scheetz**, *Ben Roos*, **Edwin Stone**, *Cheryl Khanna*, *Kazuhide Kawase*, *Robert Ritch*, *Andrew Lotery*, *Sobha Sivaprasad*, *Jessica Cooke Bailey*, *Louis Pasquale*, *Janey Wiggs*, **Young Kwon**, **Wallace Alward**, **John Fingert**, **The myocilin GLN368Stop mutation in normal tension glaucoma**. Session: "Genetics of glaucoma." Poster #A0233 Abstract #2127. Location: Exhibit/Poster Hall.

3:45 - 5:30 PM. *Lorraine Provencher**, *Aaron Fairbanks*, **Nasreen Syed**, **Investigating the clinical value of urine β 2-microglobulin (U β 2M) in patients with tubulointerstitial nephritis and uveitis (TINU) syndrome**. Session: "Uveitis: Diagnosis, Epidemiology, Quality of Life." Poster #A0294 Abstract #2188. Location: Exhibit/Poster Hall.

Sunday, May 7

Monday, May 8

5:15 - 5:30 PM. *Mark Yorek**, **Randy Kardon**, **Decreased Cornea Sensation and Loss of Corneal Nerves after Chronic Hyperglycemia is Reversible with Combination Therapy Consisting of Menhaden Oil, α -Lipoic Acid and Enalapril**. Session: "Corneal immunology and neuropathy." Presentation #2070 Abstract #2070. Location: Room 321.

Tuesday, May 9, 2017

8:30 - 10:15 AM. *Steffi Daniel**, **Michael Anderson**, *Abbot Clark*, *Colleen McDowell*, **RGC subtype specific death in acute and chronic models of glaucoma**. Session: "Neurodegeneration and Neuroprotection." Poster #A0132 Abstract #2542. Location: Exhibit/Poster Hall.

8:30 - 10:15 AM. *Adam DeLuca**, *Heather Daggett*, *Jade East*, **Arlene Drack**, **Todd Scheetz**, **Val Sheffield**, **Edwin Stone**, **Whole genome sequencing to find missing alleles in patients with retinal disease..** Session: "Whole Genome Analysis, Genetic Screening in Retinal Dystrophies and Others." Poster #B0083 Abstract #2756. Location: Exhibit/Poster Hall.

8:30 - 10:15 AM. *Scott Brodie**, **Arlene Drack**, **Edwin Stone**, **Severe congenital stationary night blindness due to GUCY2D mutations**. Session: "Whole Genome Analysis, Genetic Screening in Retinal Dystrophies and Others." Poster #B0100 Abstract #2773. Location: Exhibit/Poster Hall.

8:30 - 10:15 AM. *Kent Small**, *Fadi Shaya*, *Svetlana Yelchits*, *Adam DeLuca*, *Richard Lewis*, *Monique Leys*, *Nitin Udar*, *Benjamin Bakall*, *Klaus Rohrschneider*, *Bernard Puech*, *Virginie Puech*, *Elise Heon*, **James Folk**, *Gerald Fishman*, *Christine Garabetian*, **Edwin Stone**, **North Carolina macular dystrophy: mutations found in 12 additional families**. Session: "Whole Genome Analysis, Genetic Screening in Retinal Dystrophies and Others." Poster #B0106 Abstract #2779. Location: Exhibit/Poster Hall.

8:30 - 10:15 AM. *Luke Chong**, *Paul Artes*, **Michael Wall**, *Thomas Callan*, *Vincent Michael Patella*, *Gary Lee*, *Matthias Monhart*, *John Flanagan*, **Perimetric Threshold Predictability Between Goldmann Size III and V Stimuli**. Session: "Visual Fields, Vision Function, Psychophysics I." Poster #B0445 Abstract #2842. Location: Exhibit/Poster Hall.

8:30 - 10:15 AM. **Michael Wall***, *K Zamba*, *Paul Artes*, **The Effective Dynamic Ranges for Visual Field Progression with Standard Automated Perimetry with Stimulus Sizes III and V**. Session: "Visual Fields, Vision Function, Psychophysics I." Poster #B0463 Abstract #2860. Location: Exhibit/Poster Hall.

8:30 - 10:15 AM. *Barbara Klein**, *Kayla Horak*, *Kristine Lee*, *Stacy Meuer*, **Michael Abramoff**, *Elsayed Soliman*, *Mary Reчек*, *Ronald Klein*, **Associations of peripheral sensory, autonomic and anatomic neural characteristics and proliferative retinopathy in persons with type 1 diabetes**. Session: "Diabetic Eye Disease." Poster #B0536 Abstract #2890. Location: Exhibit/Poster Hall.

8:30 - 8:35 AM. **Elliott Sohn***, **Introduction to minisymposium: Novel therapies and imaging techniques for retinal disorders**. Session: "Novel therapies and imaging techniques for retinal disorders - Minisymposium." Minisymposium Presentation #2466 Abstract #. Location: Hall G.

8:30 - 8:45 AM. **Todd Scheetz***, *Adam DeLuca*, *Nicole Tatro*, *Benjamin Faga*, *Douglas Oppedal*, *Meagan Luse*, *Richard Weleber*, **Edwin Stone**, **Symmetry of inherited eye disease**. Session: "The Impact of Low Vision on Function and Everyday Activities." Presentation #2479 Abstract #2479. Location: Room 308.

8:35 - 8:52 AM. **Budd Tucker***, **Patient specific stem cell therapy for inherited retinal diseases**. Session: "Novel therapies and imaging techniques for retinal disorders - Minisymposium." Presentation #2467 Abstract #2467. Location: Hall G.

11 AM - 12:45 PM. **Randy Kardon***, *Cole Starkey*, *Jan Full*, *Anna Ketcham*, *Brian Tong*, *Gary Pierce*, *Seth Holwerda*, *Jess Fiedorowicz*, **Human Retinal Vascular Reactivity to Flickering Light and Cold Water Immersion Measured by Laser Speckle Flowgraphy**. Session: "Blood flow." Poster #A0038 Abstract #3043. Location: Exhibit/Poster Hall.

11 AM - 12:45 PM. **Christine Sindt***, *Bruno Lay*, *Ronan Danno*, *David Slater*, **Modeling the limbus as an elliptical toric to optimize scleral lens fitting**. Session: "Contact Lenses." Poster #A0334 Abstract #3080. Location: Exhibit/Poster Hall.

11 AM - 12:45 PM. *Bruno Lay**, **Christine Sindt**, *David Slater*, **Normative Scleral Lens Landing Data**. Session: "Contact Lenses." Poster #A0335 Abstract #3081. Location: Exhibit/Poster Hall.

11 AM - 12:45 PM. *Kasra Zarei**, *Pieter Poolman*, *Mona Garvin*, **Randy Kardon**, **eyeFusion: Mobile, Objective Quantification of Critical Flicker Fusion Thresholds**. Session: "Innovations in imaging." Poster #B0032 Abstract #3129. Location: Exhibit/Poster Hall.

11 AM - 12:45 PM. *Jesse Sengillo**, *Thiago Cabral*, *Kaspar Schuerch*, *Jimmy Duong*, *Winston Lee*, *Katherine Boudreault*, *Sally Justus*, *Yu Xu*, *Janet Sparrow*, **Vinit Mahajan**, *Stephen Tsang*, **Hearing Loss as a Prognostic Indicator of Visual Function in USH2A-associated Retinal Degeneration..** Session: "Retinitis pigmentosa (clinical)." Poster #B0356 Abstract #3223. Location: Exhibit/Poster Hall.

11 AM - 12:45 PM. *Daniel Chung**, **Stephen Russell**, *Jean Bennett*, *Albert Maguire*, *Jennifer Wellman*, *Zi-Fan Yu*, *Amy Tillman*, *Katherine High*, **Correlation of multi-luminance mobility testing with visual function tests in a phase 3 trial of voretigene neparvovec for biallelic RPE65-mediated inherited retinal disease**. Session: "Functioning with Low Vision." Poster #B0425 Abstract #3292. Location: Exhibit/Poster Hall.

11 AM - 12:45 PM. *Eric Lee**, *Ashwin Subramani*, *Robert Wanzek*, *Trina Eden*, *Luke Chong*, *Andrew Turpin*, *Ivan Marin-Franch*, **Michael Wall**, **Patterns of Vision Loss in Idiopathic Intracranial Hypertension: The Central vs. Peripheral Visual Field**. Session: "Papilledema, IIH and Optic Nerve." Poster #B0590 Abstract #3314. Location: Exhibit/Poster Hall.

11 AM - 12:45 PM. *Ashwin Subramani**, **Michael Wall**, *Eric Lee*, *Andrew Turpin*, *Luke Chong*, **Detection of Visual Loss in Idiopathic Intracranial Hypertension with Static Automated Perimetry: The Far Periphery**. Session: "Papilledema, IIH and Optic Nerve." Poster #B0591 Abstract #3315. Location: Exhibit/Poster Hall.

1 - 2:30 PM. *Michael Simpson*, **Chris Johnson**, *James Wolffsohn*, *Paul Artes*, **Far peripheral vision: Review vision beyond 80o, where many people don't notice if there is a loss, but some intraocular lens patients report dark shadows** - SIG. Location: Ballroom 4.

1:11 - 1:21 PM. **Randy Kardon***, **What makes a productive mentor - mentee relationship**. Session: "Clinician-scientist forum: How to become a successful clinician-scientist." Forum Abstract #. Location: Room 316.

3:45 - 5:30 PM. *Louise Sclafani**, *David Slater*, *Bruno Lay*, **Christine Sindt**, **Topographic Elevation Data to Design Scleral Lenses**. Session: "Corneal Imaging, Topography, and Keratoconus." Poster #A0403 Abstract #3550. Location: Exhibit/Poster Hall.

3:45 - 5:30 PM. *Wesley Goar**, *Pierre Majdalani*, *Charles Searby*, *S Scott Whitmore*, *Adam DeLuca*, *Ahed Imtirat*, **Edwin Stone**, *Ruti Pavari*, **Todd Scheetz**, **Val Sheffield**, **Exome sequencing analysis in three Bedouin families with Keratoconus**. Session: "Corneal Imaging, Topography, and Keratoconus." Poster #A0409 Abstract #3556. Location: Exhibit/Poster Hall.

5 - 5:15 PM. *Kristan Worthington**, *Jessica Thompson*, *Brian Green*, *Spencer Bunn*, *Emily Kaalberg*, *Rebecca Johnston*, **Luke Wiley**, **Robert Mullins**, **Edwin Stone**, *C Guymon*, **Budd Tucker**, **Two-Photon Polymerization of High-Resolution 3D, Biodegradable Photoreceptor Cell Scaffolds**. Session: "Retinal gene therapy and stem cell transplantation." Presentation #3390 Abstract #3390. Location: Ballroom 3.

Wednesday, May 10, 2017

8:30 - 10:15 AM. **Stephen Russell***, *Jean Bennett*, *Jennifer Wellman*, *Daniel Chung*, *Katherine High*, *Zi-Fan Yu*, *Amy Tillman*, *Albert Maguire*, **Year 2 results for a phase 3 trial of voretigene neparvovec in biallelic RPE65-mediated inherited retinal disease**. Session: "Drug and gene therapy and delivery." Poster #B0122 Abstract #4122. Location: Exhibit/Poster Hall.

8:45 - 9 AM. *Stephanie Lynch**, *Abhay Shah*, **James Folk**, *Xiaodong Wu*, **Michael Abramoff**, **Catastrophic Failure in Image-Based Convolutional Neural Network Algorithms for Detecting Diabetic Retinopathy**. Session: "Diabetic retinal imaging." Presentation #3776 Abstract #3776. Location: Hall G.

9:30 - 9:45 AM. *Ankur Jain**, *Wei Zhu*, *Qihong Zhang*, **Markus Kuehn**, *Abbot Clark*, **Val Sheffield**, **Role of Primary Cilia in Trabecular Meshwork Cell Function**. Session: "Trabecular Meshwork, Ciliary Body and Anterior Segment Imaging." Presentation #3772 Abstract #3772. Location: Ballroom 4.

10 - 10:15 AM. *Wei Zhu**, *Emmanuel Buys*, **Markus Kuehn**, **Transplantation of iPSC-TM decreases IOP in aged sGC^{-/-} mice**. Session: "Trabecular Meshwork, Ciliary Body and Anterior Segment Imaging." Presentation #3774 Abstract #3774. Location: Ballroom 4.

11: AM - 12:45 PM. *Joseph Giacalone**, **Luke Wiley**, *Erin Burnight*, *Jeanne Andorf*, *Luan Streb*, *Louisa Affatigato*, *Cathryn Cranston*, *Dalyz Ochoa*, **Robert Mullins**, **Budd Tucker**, **Edwin Stone**, **Characterization and Treatment of RPGR-associated Photoreceptor Disease**. Session: "Genetics of retinal dystrophies and Functional Analysis." Poster #B0170 Abstract #1209. Location: Exhibit/Poster Hall.

11 AM - 12:45 PM. *Brittini Scruggs**, *Erin Burnight*, *Chunhua Jiao*, **Luke Wiley**, **Robert Mullins**, **Edwin Stone**, **Budd Tucker**, **Elliott Sohn**, **Transduction of photoreceptors following subretinal injections of AAV5 and helper-dependent adenovirus in human retina ex vivo and pig retina in vivo**. Session: "Photoreceptor degeneration and retinal rescue strategies." Poster #B0189 Abstract #4534. Location: Exhibit/Poster Hall.

11 AM - 12:45 PM. *Ying Hsu**, *Janelle Garrison*, *Poppy Datta*, *Gunhee Kim*, *Darryl Nishimura*, *Charles Searby*, **Seongjin Seo**, **Val Sheffield**, **Photoreceptors show age-dependent ability to regain function after restoration of target gene expression in mouse models of Bardet Biedl Syndrome**. Session: "Photoreceptor degeneration and retinal rescue strategies." Poster #B0197 Abstract #4542. Location: Exhibit/Poster Hall.

11 AM - 12:45 PM. **Elliott Sohn***, *Kristan Worthington*, *Chunhua Jiao*, *Emily Kaalberg*, **Stephen Russell**, *Katherine Gibson-Corley*, **Robert Mullins**, **Edwin Stone**, **Budd Tucker**, **Compatibility of a biodegradable retinal cell graft for the treatment of retinal degenerative blindness**. Session: "Stem cells and tissue engineering for retinal repair." Poster #B0240 Abstract #4585. Location: Exhibit/Poster Hall.

11 AM - 12:45 PM. *Kathleen Chirco**, *Kristan Worthington*, *Miles Flamme-Wiese*, *Megan Riker*, *Allison Songstad*, *Malia Collins*, *Joshua Andrade*, *Beatrix Ueberheide*, **Edwin Stone**, **Budd Tucker**, **Robert Mullins**, **Preparation of Human Choroidal ECM Scaffolds**

Wednesday, May 10

to Study Cell Replacement Strategies. Session: "Stem cells and tissue engineering for retinal repair." Poster #B0241 Abstract #4586. Location: Exhibit/Poster Hall.

11 AM - 12:45 PM. *Ramesh Kasetti**, *Prabhavathi Maddineni*, *Pinkal Patel*, *J Cameron Millar*, *Tien Phan*, *Charles Searby*, *Abbot Clark*, **Val Sheffield**, *Gulab Zode*, **Inhibition of Transforming Growth Factor- β 2 Signaling Prevents ECM Remodeling, Endoplasmic Reticulum Stress and Ocular Hypertension in Steroid-induced Glaucoma.** Session: "Pharmacological Intervention and Cellular Mechanisms." Poster #B0304 Abstract #4603. Location: Exhibit/Poster Hall.

12 - 12:15 PM. *Jui-Kai Wang**, *Caitlin Danielson*, **Randy Kardon**, *Patrick Sibony*, *Mark Kupersmith*, *Mona Garvin*, **Three-Dimensional Bruch's Membrane Shape Change Over Time with Acetazolamide Treatment in the Idiopathic Intracranial Hypertension Treatment Trial (IIHTT).** Session: "Intracranial Hypertension and Optic Nerve Changes." Presentation #4308 Abstract #4308. Location: Room 324.

1 - 2:30 PM. **Michael Abramoff**, *Florence Thng*, *Glenn Jaffe*, *Steven Tolle*, *Kaushal Solanki*; *Michael Abramoff*, moderator, **Update on Automated Screening for Diabetic Retinopathy: Validation and Implementation.** - SIG. Location: Ballroom 1.

3:45 - 5:30 PM. *Benjamin Aldrich**, *Jessica Skeie*, *Gregory Schmidt*, *Cynthia Reed*, **Markus Kuehn**, **Mark Greiner**, **Proteomic Analysis of Aqueous Humor Reveals Progression of Diabetes Mellitus in the Anterior Chamber.** Session: "Cornea and Anterior Chamber." Poster #A0097 Abstract #4814. Location: Exhibit/Poster Hall.

3:45 - 5:30 PM. *Oliver Gramlich**, *Dina Ahram*, **Markus Kuehn**, **Expression of fibrotic and inflammation markers in the human glaucomatous optic nerve head.** Session: "Glaucoma: Biochemical and molecular disease mechanisms." Poster #B0336 Abstract #4918. Location: Exhibit/Poster Hall.

Thursday, May 11, 2017

8:30 - 10:15 AM. *Chunhua Jiao**, **Michael Abramoff**, *Kyungmoo Lee*, *Ipek Oguz*, *Peter Adamson*, *Adam Hedberg-Buenz*, **Michael Anderson**, **Elliott Sohn**, **Diabetes induced neurodegeneration in the retina and the brain of mice are associated and independent of microvasculopathy.** Session: "Diabetic Retinopathy: Neurodegeneration and pathology associated with the neurovascular unit.." Poster #B0082 Abstract #5195. Location: Exhibit/Poster Hall.

9:05 - 9:20 AM. **John Fingert***, **Autophagy genes and new insights into the pathogenesis and treatment of glaucoma.** Session: "Genes and disease: How knowledge of genetics can guide treatment, now and in the future." Presentation #5104 Abstract #5104. Location: Ballroom 3.

11:30 AM - 1:15 PM. *Theofilos Tourtas**, *Friedrich Kruse*, *Benjamin Aldrich*, *Julia Weller*, *Jessica Skeie*, *Gregory Schmidt*, *Cynthia Reed*, **Mark Greiner**, *Ursula Schlotzer-Schrehardt*, **Structural and biochemical alterations of the posterior cornea associated with diabetes mellitus.** Session: "Corneal Non-refractive Surgery." Poster #B0207 Abstract #5704. Location: Exhibit/Poster Hall.

11:30 AM - 1:15 PM. *Zihui Guo**, **Young Kwon**, *Kyungmoo Lee*, *Kai Wang*, **Chris Johnson**, *Mona Garvin*, **Milan Sonka**, **Michael Abramoff**, **Optical Coherence Tomography analysis based prediction of Humphrey 24-2 visual field thresholds in patients with glaucoma.** Session: "Structure-Function Relationships II." Poster #B0380 Abstract #5828. Location: Exhibit/Poster Hall.

11:45 AM - 12 PM. *John Chen**, *Jacqueline Leavitt*, *Jackson Abou Chehade*, *Raymond Iezzi*, *David Hodge*, **Randy Kardon**, **A comparison of optic neuritis and NAION with OCT and OCT angiography.** Session: "Retinal Abnormalities and Neuropathology." Presentation #5642 Abstract #5642. Location: Room 324.

12:45 - 1 PM. *Tasneem Sharma**, *Joseph Giacalone*, *Erin Burnight*, *Kristin Anfinson*, *Jill Wiley*, **John Fingert**, **Robert Mullins**, **Edwin Stone**, **Budd Tucker**, **Combining CRISPR based genome editing and patient specific iPSCs to elucidate the pathophysiologic role of WFS1 mutations in optic atrophy..** Session: "Novel methods and Mechanisms of Disease." Presentation #5585 Abstract #5585. Location: Ballroom 4.

Thursday, May 11