

ARVO Annual Meeting, May 7-11, 2017
Baltimore, Maryland

Sunday, May 7, 2017

AMD Imaging 1
Exhibit/Poster Hall
8:30am-10:15am

Posterboard Number: A0036

Martin Hammer, Lukas Kreilkamp, Lydia Sauer, Thomas Ach, Theodore Smith, **Christine Curcio**. “Fundus autofluorescence from drusen is spectrally different from that of lipofuscin”

Retinal Degeneration. Models and Mechanisms

Exhibit/Poster Hall
8:30am-10:15am

Posterboard Number: B0328

Delores Stacks, Marci DeRamus, Carrie Huisingsh, **Gerald McGwin**, Timothy Kraft, Steven Pittler. “ERG analysis of the Murine GARP2 Knockout: Abnormal retinal function”

Adaptive Optics in Ophthalmoscopy

Exhibit/Poster Hall
8:30am-10:15am

Posterboard Number: B0504

Yuhua Zhang, Xiaolin Wang, Boyu Gu, Mark Clark, **C. Douglas Witherspoon**, **Gerald McGwin Jr**, **Cynthia Owsley**, **Christine Curcio**. “Do subretinal drusenoid deposits have a spectral fingerprint?”

Dry Eye, Non-Clinical

Exhibit/Poster Hall
1:30pm-3:15pm

Posterboard Number: A0416

Cameron Postnikoff, Carrie Huisingsh, **Gerald McGwin Jr**, Kelly Nichols. “Variation of the leukocyte composition in the open eye of normal and dry eye subjects”

Determinants of PR Development and Repair

Exhibit/Poster Hall
1:30pm-3:15pm

Posterboard Number: A0208

Tamara Jasmin Mittermueller, Jeffrey Messinger, Kenneth Sloan, Alexandra Weinhandl, Emily Benson, Grahame Kidd, Ursula Schmidt-Erfurth, **Christine Curcio**, Andreas Pollreisz. “Organelle subclasses in human retinal pigment epithelium (RPE) in younger and older eyes seen with 3-dimensional serial block face scanning electron microscopy (3D SBFSEM)”

AMD Imaging 2**Exhibit/Poster Hall****1:30pm-3:15pm**

Posterboard Number: A0249

Taariq Mohammed, Yuehong Tong, Julia Agee, Neel Dey, Sungmin Hong, Rainer Heintzmann, Martin Hammer, **Christine Curcio**, Thomas Ach, Zsolt Ablonczy, Theodore Smith. "Improved spectral recovery and tissue localization of autofluorescence (AF) signatures in donor eyes with age-related macular degeneration (AMD) using multi excitation hyperspectral AF imaging."

AMD Imaging 2**Exhibit/Poster Hall****1:30pm-3:15pm**

Posterboard Number: A0265

Neel Dey, Sungmin Hong, Yuehong Tong, Taariq Mohammed, Rainer Heintzmann, Martin Hammer, Guido Gerig, **Christine Curcio**, Thomas Ach, Zsolt Ablonczy, Theodore Smith. "Consistent Automatic Spectral Signature Recovery of Human retinal pigment epithelium (RPE) Lipofuscin Components and Drusen in Donors with Age-related Macular Degeneration (AMD) using Multi-Excitation Hyperspectral Autofluorescence (AF) Imaging."

AMD Imaging 2**Exhibit/Poster Hall****1:30pm-3:15pm**

Posterboard Number: A0270

Yuehong Tong, Julia Agee, Taariq Mohammed, Neel Dey, Sungmin Hong, Rainer Heintzmann, Martin Hammer, Guido Gerig, **Christine Curcio**, Thomas Ach, Zsolt Ablonczy, Theodore Smith. "Hyperspectral Autofluorescence (AF) and Mechanisms of Retinal Pigment Epithelium (RPE) Lipofuscin Loss in Age-Related Macular Degeneration (AMD)"

Outer Retina Function**Exhibit/Poster Hall****3:15pm-5:00pm**

Posterboard Number: B0217

Orin Packer, Richard Schalek, Rachel Wong, **Christine Curcio**, John Dowling, Jeff Lichtman, Dennis Dacey. "Restricted cone connections of horizontal cells in the human foveal center"

Outer Retina Function**Exhibit/Poster Hall****3:15-5:00pm**

Posterboard Number: B0218

Dennis Dacey, Orin Packer, Richard Schalek, **Christine Curcio**, Rachel Wong, John Dowling, Jeff Lichtman. "Connectomic reconstruction links human foveal cones to distinct circuitry in the center of the foveal pit"

Special Interest Group

Room 307

1:30pm-3:00pm

Anthony Kuo, Terri Young, Seang-Mei Saw, **Rafael Grytz**. “Beyond Axial Length: Modern Imaging Biomarkers for Better Understanding Myopia Development and Progression”

Monday, May 8, 2017

IOP Measurement and Characterization I

Room 301

11:30am-11:45am

Presentation Number: 1598

J Crawford Downs, Christopher Girkin, Brian Samuels. “Testing and Validation of a New IOP Telemetry Sensor Suitable for Implantation Directly into the Anterior Chamber”

IOP Measurement and Characterization I

Room 301

12:30pm-12:45pm

Presentation Number: 1602

Brian Samuels, Nathan Hammes, Chris Bernabe, Lauren Federici, Andrei Molosh, Seema Bhatnagar, Anantha Shekhar, Philip Johnson. “Stimulation of Hypothalamic Orexin Neurons using DREADD Technology Increases Intraocular Pressure”

Reading with Low Vision

Room 308

1:10pm-1:30pm

Presentation Number: 246836

MiYoung Kwon. “Understanding perceptual factors limiting reading speed in people with visual field defects”

Bruch’s Membrane and Choroid in Macular Disease

Exhibit/Poster Hall

3:45pm-5:30pm

Posterboard Number: B0220

Matthew Pilgrim, Anna Tan, Sarah Fearn, Elena Tsolaki, Sergio Bertazzo, Imre Lengyel, **Christine Curcio**. “A mineralomic study of the retinal pigment epithelium-Bruch’s membrane complex in human eyes with age-related macular degeneration”

The Impact of Low Vision on Mobility

Room 308

4:40pm-4:45pm

Presentation Number: 2047

Carrie Huisinck, **Gerald McGwin**, Joanne Wood, **Cynthia Owsley**. “Visual risk factors for motor vehicle collision (MVC) involvement 3 years later: a population-based study”

Tuesday, May 9, 2017

Biomechanics II

Ballroom 3

9:30am-9:45am

Presentation Number: 2456

Massimo Fazio, Mark Clark, Christopher Girkin. Optic Nerve Head (ONH) In Vivo Biomechanics Assessed by Quantification of the IOP Fluctuations caused by the Ocular Pulse Pressure (OPP)"

Biomechanics II

Ballroom 3

9:45am-10:00am

Presentation Number: 2457

Kapil Krishnan, Vincent Libertiaux, Rafael Grytz, Christopher Girkin, J Crawford Downs. "Eye-Specific Finite Element Modeling of Human Optic Nerve Head (ONH) Biomechanics"

Biomechanics II

Ballroom 3

10:00am-10:15am

Presentation Number: 2458

Rafael Grytz, Kapil Krishnan, Vincent Libertiaux, Christopher Girkin, J Crawford Downs. "Incorporating Realistic Anisotropic and Heterogeneous Material Properties Into Eye-Specific Multi-Scale Models of the Human Optic Nerve Head"

Biomechanics II

Exhibit/Poster Hall

11:00am-12:45pm

Posterboard Number: B0055

Gianfranco Bianco, Luigi Bruno, **Massimo Fazio.** "Characterization Method for the IOP-time-dependent Cornea and Sclera Biomechanics"

Macular Degeneration-Cell Biology

Ballroom 1

4:45pm-5:00pm

Presentation Number: 3382

Thomas Ach, Sungmin Hong, Rainer Heintzmann, Jost Hillenkamp, Kenneth Sloan, Neel Dey, Guido Gerig, Theodore Smith, **Christine Curcio**, Katharina Bermond. "High-resolution and multispectral imaging of autofluorescent retinal pigment epithelium (RPE) granules"

Intraocular Pressure

Room 301

4:45pm-5:00pm

Presentation Number: 3408

Jessica Jasien, Daniel Turner, Jeffrey Morris, **Christopher Girkin, J Crawford Downs.** “IOP Asymmetry in Nonhuman Primates (NHPs) Measured with Continuous Telemetry”

Wednesday, May 10, 2017

ipRGCs and Circadian Rhythms

Exhibit/Poster Hall

8:30am-10:15am

Posterboard Number: B0244

Paul Gamlin, Christianne Strang, Kevin Chang, Li-Fang Hung, Baskar Arumugam, Laura Frishman, Earl Smith, Lisa Ostrin. “Immunotoxin-Induced Ablation of the Intrinsically Photosensitive Retinal Ganglion Cells in Rhesus Monkeys”

Vision and Driving

Room 309

8:53am-9:13am

Presentation Number: 3801

Cynthia Owsley. “Visual and ophthalmic risk factors for motor vehicle collision involvement by older drivers”

Stem Cells and Tissue Engineering for Retinal Repair

Exhibit/Poster Hall

11:00am-12:45am

Posterboard Number: B0225

Run-Tao Yan, Li He, **Shu-Zhen Wang.** “RPE-like cells emerging from chick glial cell culture”

Vision in aging and disease

Exhibit/Poster Hall

11:00am-12:45am

Posterboard Number: B0649

Lillian Chien, Rong Liu, **MiYoung Kwon.** “A higher contrast requirement for letter recognition in glaucoma”

Vision in Aging and Disease

Exhibit/Poster Hall

11:00am-12:45pm

Posterboard Number: B0662

Anna Zarubina, Carrie Huisingsh, Mark Clark, **Gerald McGwin, Christine Curcio, Cynthia Owsley.** “Association between visual function and macular pigment optical density (MPOD) in older eyes in normal macular health”

MOI: Advanced Interpretation of Structural Retinal Optical Coherence Tomography

Ballroom 2

1:53pm-2:09pm

Presentation Number: 246849

Christine Curcio. "Histology and multimodal imaging of age-related macular degeneration supports mitochondria as independent reflectivity sources - MOI Cross-sectional Group Session"

Thursday, May 11, 2017

Neurodegenerative Diseases and Brain Trauma

Exhibit/Poster Hall

8:30am-10:15am

Posterboard Number: B0015

Katherine Weise, Jennifer Christy, Mitchell Scheiman, Eric Borsting, Heath Hale, **Sarah Lee**, Sarah Terry, **Laura Dreer.** "Evaluation of Feasibility and Acceptability of the Convergence Insufficiency Symptom Survey for Concussion (CISS-CON) Among Concussed Youth"

IOP Measurement and Characterization II

Exhibit/Poster Hall

8:30am-10:15am

Posterboard Number: B0419

Daniel Turner, **Christopher Girkin, J Crawford Downs.** "The Relationship Between Ocular Pulse Amplitude (OPA) and Arterial Pulse Pressure"

IOP Measurement and Characterization II

Exhibit/Poster Hall

8:30am-10:15am

Posterboard Number: B0420

John Markert, Jessica Jasien, Daniel Turner, **Christopher Girkin, J Crawford Downs.** "The Relationship between IOP, IOP Transient Impulse, Ocular Perfusion Pressure (OPP), and Average Blood Pressure (BP) in Nonhuman Primates (NHP) Instrumented with Telemetry"

Clinical Retinal Imaging 2 and Lasers

Exhibit/Poster Hall

11:30am-1:15pm

Posterboard Number: B0800

Christine Curcio, Rosa Dolz-Marco, Mariano Cozzi, Orly Gal-Or, Marco Pellegrini, K Bailey Freund, Giovanni Staurenghi. "Choroidal and sub-retinal pigment epithelium caverns: multimodal imaging characteristics and relation to Friedman lipid globules."

