



HARVARD
MEDICAL SCHOOL

DEPARTMENT OF
Ophthalmology

ARVO 2017

Abstracts and Presentations

**ARVO Imaging in the Eye Conference and
Education Course**

May 6

ARVO Annual Meeting

May 7-11

Baltimore Convention Center

One West Pratt Street, Baltimore, MD 21201



Harvard Ophthalmology

ARVO 2017

Saturday, May 6, 2017

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May 7-11, 2017 (ARVO ANNUAL MEETING)

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KEY:

Session Type

Session Title

Session Time

Session Location

Presentation ID or Time

Abstract Title

Authors



Indicates a hot topic

This collection of presentations was extracted from the complete conference programs. Any errors or omissions are inadvertent.

A PDF copy of this book is available online at eye.hms.harvard.edu/arvo

ARVO IMAGING IN THE EYE CONFERENCE

Saturday, May 6, 2017

8:00 - 5:30 pm

Poster Session
Cornea and lens
10:00 AM - 10:30 AM
Ballroom II

PB033
Conjunctival vessel density measured by Anterior Segment Optical Coherence Tomography Angiography (AS-OCTA) in healthy subjects and patients with ocular surface diseases
R. Nose*; N. Pondelis; A. Jamali; P. Kataguir; A. Akhlaq; G. Dieckmann; K. R. Kenyon; P. Hamrah

Poster Session
Glaucoma
10:00 AM - 10:30 AM
Ballroom II

PB01
Retinal nerve fiber layer thickness (RNFLT) and inter-eye symmetry in a population-based study
N. Baniasadi*; F. Rauscher; M. Wang; D. Li; K. Wirkner; M. Nuechter; J. Thiery; M. Loeffler; C. Engel; P. Wiedemann; T. Elze

PB02
Smoking and drinking are correlated with retinal nerve fiber layer thickness (RNFLT) in a large German population – the LIFE study
D. Li*; T. Elze; N. Baniasadi; M. Wang; K. Wirkner; C. Enzenbach; M. Nuechter; J. Thiery; M. Loeffler; C. Engel; F. Rauscher

PB05
Predicting glaucomatous visual field progression with spectral-domain optical coherence tomography
K. Qiu*; T. Elze; E. Z. Yan; L. R. Pasquale ; L. Q. Shen

PB06
Correlation of three-dimensional neuroretinal rim thickness and visual fields in glaucoma: A broken stick model
M. A. McClurkin*; E. Tsikata; Z. Khoueir; R. Gou; A. Celebi; R. Lee; E. Shieh; H. Simavli; C. Que; T. Chen; T. Elze

Poster Session
OCT Angiography
10:00 AM - 10:30 AM
Ballroom II

PB074
Evaluating deep choroidal vasculature with optical coherence tomography angiography
J. D. Diaz*; P. Oellers; J. Wang; I. Lains; D. Vavvas; J. Miller

PB075
Microvascular imaging of macula off retinal detachments with OCT Angiography (OCT-A)
K. M. McKay*; J. Wang; T. Papakostas; I. Lains; D. Vavvas; J. Miller

Poster Session
Retina
10:00 AM - 10:30 AM
Ballroom II

PB042
Novel grid combined with peripheral distortion correction for ultra-widefield image grading of age-related macular degeneration
P. Oellers*; I. Lains; S. Garas; S. Mach; I. Kim; D. Vavvas; J. Miller; D. Husain; J. Miller

PB048
Acuity and the fovea in retinopathy of prematurity
J. D. Akula*; E. A. Swanson; I. Arellano; L. E. Fess; T. S. Bowe; R. M. Hansen; A. Moskowitz; A. B. Fulton

Paper Session

Glaucoma and the anterior eye

10:30 AM - 12:00 PM

Ballroom I

10:30 AM – 10:45 AM

A personalized macular vulnerability zone based on individual retinal anatomy improves structure-function modeling of glaucomatous central vision loss

T. Elze*; H. Wang; N. Baniyadi; D. Li; Q. Jin; M. Wang

10:45 AM - 11:00 AM

The relationship between the full circumpapillary Retinal Nerve Fiber Layer Thickness (RNFLT) profile and age in healthy subjects

M. Wang*; T. Elze; D. Li; N. Baniyadi; K. Wirkner; T. Kirsten; M. Nuechter; J. Thiery; M. Loeffler; C. Engel; F. Rauscher

ARVO EDUCATION COURSES

Saturday, May 6, 2017

8:30 – 4:30 pm

Education Course (separate registration fee required)
Diabetic retinopathy: Past, present and future
8:30 AM - 4:30 PM
Room 316

10:20 AM - 10:45 AM

Update on the genetics of diabetic retinopathy

L. Sobrin*

11:10 AM - 11:35 AM

Inflammation and angiogenesis in diabetic retinopathy - role of lipid metabolites

L.E. Smith*

ARVO ANNUAL MEETING

Sunday, May 7, 2017

Poster Session

Diabetic retinopathy: Medical (non-surgical)

8:30 AM - 10:15 AM

Exhibit/Poster Hall

64-A0114

Comparison of diabetic retinopathy severity identified on ultrawide field retinal images and ultrawide field fluorescein angiograms

J. T. Rocha*; A. N. Bustamante; M. H. Arroyo; J. K. Sun; L. P. Aiello; P. S. Silva

83-A0163

Retinal layer thickness across 8 decades of type 1 diabetes (DM): Strong correlations with PDR

W. Fickweiler*; S. R. Peterson; H. Keenan; G. L. King; L. P. Aiello; J. K. Sun

Poster Session

Cornea wound healing and repair

8:30 AM - 10:15 AM

Exhibit/Poster Hall

135-A0325

FAK signaling regulates the difference in T1 and T3's ability to stimulate SMA

S. Sriram*; X. Q. Guo; A. E. Hutcheon; J. D. Zieske

136-A0326

Potential approach to reverse corneal myofibroblast formation

X. Q. Guo*; S. Sriram; J. A. Tran; A. E. Hutcheon; J. D. Zieske

146-A0336

The effect of human growth hormone on corneal wound healing in mice

X. Han*; X. Chen; Y. Liu; W. R. Kam; D. A. Sullivan; J. Ding

Poster Session

Retina; RPE; Mechanisms

8:30 AM - 10:15 AM

Exhibit/Poster Hall

Alternate Moderator

Yang Liu, Joslin Diabetes Center

243-B0274

Association between IOP and retinal thickness following intravitreal triamcinolone injections in DME patients

M. Dahrouj*; J. A. Kylstra; B. Wolf; Z. Ablonczy; C. E. Crosson

Poster Session

Retinal degeneration. Models and mechanisms

8:30 AM - 10:15 AM

Exhibit/Poster Hall

272-B0325

The complement system is required in maintaining retinal function

R. Mukai*; Y. Okunuki; G. Klokman; S. Inafuku; C. Kim; D. Park; D. Husain; K. M. Connor

Cross-sectional Group Session

GEN Group: New tools and methodologies for ocular genetics: Promises and challenges

1:30 PM - 3:00 PM

Ballroom 2

2:23 PM - 2:40 PM

RNA sequencing for novel genetic discovery

E. A. Pierce*

Workshop

Addressing global blindness and eye diseases through research

1:30 PM - 3:00 PM

Room 310

1:30 PM - 1:39 PM

US-INDO collaborations and genetic eye disease

J. L. Wiggs*

Special Interest Group (SIG)
Lasker/IRRF Initiative on amblyopia
1:30 PM - 3:00 PM
Ballroom 3

Moderator

John Dowling, Harvard University

1:30 PM - 3:00 PM

Lasker/IRRF initiative on amblyopia

J. E. Dowling*; D. Maurer*; D. G. Hunter*; L. Kiorpes*; M. P. Stryker*; D. Mitchell*

Special Interest Group (SIG)
Conclusions and recommendations from the TFOS Dry Eye Workshop II
1:30 PM - 3:00 PM
Ballroom 4

Moderator

David Sullivan, Schepens Eye Research Institute of Mass. Eye and Ear

1:30 PM - 3:00 PM

Conclusions and recommendations from the TFOS Dry Eye Workshop II

D. A. Sullivan*; J. Nelson*; J. P. Craig*; D. A. Sullivan*; F. Stapleton*; M. D. Willcox*; C. Belmonte*; A. J. Bron*; J. A. Gomes*; J. Wolfssohn*; J. Wolfssohn*; G. D. Novack*

Special Interest Group (SIG)
Inflammasome activation in the pathogenesis of glaucoma
1:30 PM - 3:00 PM
Room 308

Moderator

Meredith Gregory-Ksander, Schepens Research Institute of Mass. Eye and Ear

1:30 PM - 3:00 PM

Inflammasome activation in the pathogenesis of glaucoma

V. I. Shestopalov*; M. S. Gregory-Ksander*; C. H. Mitchell*; L. R. Pasquale*

Poster Session
Determinants of PR development and repair
1:30 PM - 3:15 PM
Exhibit/Poster Hall

359-A0201

Deciphering the molecular identity, development and dysfunction of retinal neurons using single-cell transcriptomics

K. Shekhar*; A. Regev; J. Sanes; C. Cepko; S. Lapan; I. E. Whitney; Y. Peng

Poster Session
AMD imaging 2
1:30 PM - 3:15 PM
Exhibit/Poster Hall

375-A0241

Choroidal vascular density and volume in intermediate age-related macular degeneration – the influence of subretinal drusenoid deposits

G. W. Armstrong*; I. Láíns; J. Wang; J. Providencia; P. Gil; J. Gil; S. Mach; D. G. Vavvas; I. K. Kim; J. W. Miller; R. Silva; D. Husain; J. B. Miller

393-A0259

Choroidal thickness in age-related macular degeneration: The role of subretinal drusenoid deposits

J. Providencia Costa*; I. Láíns; J. Wang; P. Gil; G. W. Armstrong; J. Gil; S. Mach; D. Vavvas; I. K. Kim; J. W. Miller; D. Husain; J. B. Miller; R. Silva



Poster Session

Dry eye, non-clinical

1:30 PM – 3:15 PM

Exhibit/Poster Hall

466-A0391

Substance P mediates dysfunction of NK1R+ Tregs in dry eye disease

A. Marmalidou*; Y. Chen; C. Shao ; T. Nakao; S. Chauhan; R. Dana

469-A0394

Dynamic sensitivity of corneal TRPM8 receptors to menthol instillation in dry eye vs normal subjects

P. Corcoran*; M. Watson; G. W. Ousler; E. Angjeli; K. J. Lane; M. B. Abelson; D. A. Hollander

494-A0419

A galectin-3-based slot blot affinity assay for MUC16

A. F. Ablamowicz*; A. Woodward; J. J. Nichols; P. Argüeso

Poster Session

Uveitis therapeutics: Remedy and relief

1:30 PM - 3:15 PM

Exhibit/Poster Hall

513-B0068

Treatment of scleritis and uveitis in granulomatosis with polyangiitis using cyclophosphamide or rituximab

A. Ahmed*; C. Foster

524-B0079

Delayed acceleration of severity in recurrent acute HLA-B27 associated anterior uveitis

K. Small*; J. Hua; A. Cohn; S. D. Anesi; C. Foster

525-B0080

Long-term outcomes in juvenile idiopathic arthritis-associated uveitis

S. Syeda*; N. Nakhoul; B. Kubaisi; C. Foster

Poster Session

Autoimmune ocular disease: Selfies gone wrong

1:30 PM - 3:15 PM

Exhibit/Poster Hall

551-B0106

Interleukin-7 and -15 maintain memory T helper 17 cells in dry eye disease

Y. Chen*; S. Chauhan; X. Tan; R. Dana

557-B0112

Characterization of corneal endothelial pseudoguttata in the setting of anterior uveitis

D. Spencer*; S. D. Anesi; C. Foster

Poster Session

Structural/functional genomics and gene variants

1:30 PM - 3:15 PM

Exhibit/Poster Hall

Alternate Moderator

Connie Cepko, Harvard Medical School

569-B0137

Characterizing lincRNA expression during RPE development

M. H. Farkas*; E. D. Au; R. Fernandez-Godino; T. J. Kaczynski; M. E. Sousa

571-B0139

Clinical features of family members with Stickler syndrome from a mutation of COL11A1 gene

M. Roh*; S. Mukai

578-B0146

A functional genomics approach for characterizing variants of unknown significance: assaying known and novel rhodopsin variants

J. Comander*; A. Wan

Poster Session

Biochemistry and molecular biology of the retina
1:30 PM - 3:15 PM
Exhibit/Poster Hall

601-B0169

Absent in melanoma 2 (AIM2) recognizes cytosolic DNA and mediates inflammation in RPE cells

A. Al Moujahed*; B. Tian; J. W. Miller; H. Lin; D. G. Vavvas

603-B0171

Characterize growth factor expression in the developing and aging mouse retina *in vivo* and *in vitro*

M. Alavi*; P. Baranov

623-B0191

Copy number variation in the inherited retinal degenerations

K. M. Bujakowska*; E. Place; D. Navarro-Gomez; A. Mazzone; M. Maher; E. A. Pierce

Poster Session

Imaging: Macula retina, blood flow, OCT angiography
1:30 PM - 3:15 PM
Exhibit/Poster Hall

Moderators

Louis Pasquale, Massachusetts Eye and Ear
Lucy Shen, Massachusetts Eye and Ear

Poster Session

Cataract surgery outcomes and epidemiology
1:30 PM - 3:15 PM
Exhibit/Poster Hall

763-B0602

Cataract surgery practices in the United States Veterans Health Administration

A. G. Havnaer*; P. B. Greenberg; G. C. Cockerham; M. A. Clark; A. Chomsky

788-B0627

Assessment of intra and postoperative complications of cataract surgery in glaucoma suspects

E. A. Gross*; D. S. Borkar; N. Koulisis; T. van Zyl; S. Chen; M. Gardiner; S. Borboli-Gerogiannis; S. Brauner; A. Lobo; Z. Luo; C. Kloek

789-B0628

Glycated hemoglobin levels and risk of clinically significant macular edema after cataract surgery in veterans: results from the Veterans Affairs (VA) Ophthalmic Surgery Outcomes Data (OSOD) Project

M. M. Lin*; A. R. Payal; D. Siracuse-Lee; T. Cakiner-Egilmmez; A. Chomsky; D. Vollman; E. Baze; M. G. Lawrence; M. K. Daly

Paper Session

Retinal glia
3:15 PM - 5:00 PM
Ballroom 1

Alternate Moderator

Tatjana Jakobs, Massachusetts Eye and Ear



Paper Session

Biochemistry and molecular biology of AMD I
3:15 PM - 5:00 PM
Ballroom 4

4:45 PM - 5:00 PM

Adiponectin mediates dietary omega-3 long-chain polyunsaturated fatty acid protection against choroidal neovascularization

R. Liegl*; Z. Fu; Z. Wang; Y. Gong; Y. Sun; S. Meng; S. Burnim; J. SanGiovanni; C. Lofqvist; A. Hellström; L. E. Smith

Paper Session

Frequency of visual impairment and eye disease and their risk factors
3:15 PM - 5:00 PM
Room 309

4:00 PM - 4:15 PM

Epidemiologic assessment of avoidable blindness and diabetic retinopathy in the Philippines

L. D. Cubillan*; E. Lamento; L. Manganip; G. L. Yau; J. K. Sun; L. P. Aiello; P. S. Silva

4:45 PM - 5:00 PM

Global prevalence of blindness and distance and near vision impairment: Magnitude, temporal trends, and projections

R. R. Bourne*; S. Flaxman; T. Braithwaite; J. B. Jonas; J. Keeffe; J. H. Kempen; J. L. Leasher; H. Limburg; K. S. Naidoo; K. Pesudovs; S. Resnikoff; G. Stevens; N. Tahhan; T. Wong; H. Taylor

Paper Session

Systemic influences on ocular disease
3:15 PM - 5:00 PM
Room 310

Alternate Moderator

Lucia Sobrin, Massachusetts Eye and Ear

4:15 PM - 4:30 PM

Low vitamin D is associated with different types of ocular inflammation

S. M. Llop*; S. Davoudi; L. Grotting; L. Tom; G. Papaliadis; L. Sobrin

Paper Session

Pharmacology and cellular mechanisms
3:15 PM - 5:00 PM
Room 316

3:45 PM - 4:00 PM

Does estrogen deficiency promote the development of glaucoma?

X. Chen*; Y. Liu; Y. Zhang; W. R. Kam; L. R. Pasquale; D. A. Sullivan

Poster Session

Diabetic macular edema clinical research
3:15 PM - 5:00 PM
Exhibit/Poster Hall

935-A0114

Bayesian adaptive contrast sensitivity function as a sensitive indicator of diabetic macular edema

L. P. Aiello*; J. Rhee; L. A. Lesmes; A. K. Bittner; J. K. Sun

Poster Session

Corneal neovascularization, immunology and neuropathy
3:15 PM - 5:00 PM
Exhibit/Poster Hall

Moderator

Sunil Chauhan, Schepens Eye Research Institute of Mass. Eye and Ear

970-B0002

Interferon gamma-positive natural killer cells contribute to corneal allograft rejection in young mice

T. Nakao*; T. Inomata; M. Tahvildari; R. Dana

971-B0003

Topical pigment epithelium-derived factor suppresses corneal epitheliopathy and inflammation in dry eye disease

M. Yu*; J. Hong; A. Amouzegar; M. Fernandes; Y. Chen; T. Nakao; R. Dana

1000-B0032

Inhibition of corneal neovascularization by dexamethasone-eluting contact lenses in a rabbit model

H. Kobashi*; L. Bengani; A. Ross; H. Zhai; S. Mittal; S. Chauhan; D. Kohane; J. B. Ciolino

1022-B0054

Potential role of IL-10-producing Th17 cells in pathogenesis of dry eye disease

Q. Hong*; Y. Chen; T. Inomata; R. Liu; R. Dana

Poster Session
Outer retina function
3:15 PM - 5:00 PM
Exhibit/Poster Hall

1035-B0217

Restricted cone connections of horizontal cells in the human foveal center

O. S. Packer*; R. Schalek; R. O. Wong; C. Curcio; J. E. Dowling; J. Lichtman; D. M. Dacey

1036-B0218

Connectomic reconstruction links human foveal cones to distinct circuitry in the center of the foveal pit

D. M. Dacey*; O. Packer; R. Schalek; C. Curcio; R. O. Wong; J. E. Dowling; J. Lichtman

Poster Session
New insights in RPE anatomy and physiology
3:15 PM - 5:00 PM
Exhibit/Poster Hall

1048-B0304

Loss of ABCB5 leads to progressive visual loss due to sphingolipid accumulation in Retinal Pigment Epithelium

Y. Sasamoto*; G. Gonzalez; P. Banerjee; J. D. Akula; V. Poulaki; G. Berg; M. H. Frank; B. Ksander; N. Frank

Poster Session
Intraocular pressure; aqueous humor dynamics
3:15 PM - 5:00 PM
Exhibit/Poster Hall

Alternate Moderator

Yang Liu, Joslin Diabetes Center

ARVO ANNUAL MEETING

Monday, May 8, 2017

Paper Session

Corneal wound healing

8:30 AM - 10:15 AM

Ballroom 2

Alternate Moderator

James Zieske, Schepens Eye Research Institute of Mass. Eye and Ear

9:00 AM - 9:15 AM

Hepatocyte growth factor promotes corneal epithelial repair by inhibiting the antiproliferative effect of inflammation on epithelial cells

M. Li*; A. Amouzegar; S. Mittal; S. Sahu; S. Chauhan

Minisymposium

Optic nerve regeneration: Barriers past and future

8:30 AM - 10:15 AM

Ballroom 4

9:00 AM - 9:20 AM

Amacrine cells regulate the survival and regenerative potential of retinal ganglion cells

L. Benowitz*

9:40 AM - 10:00 AM

Challenges from axon regeneration to functional recovery

Z. He*

Paper Session

Emerging treatments for uveitis

8:30 AM - 10:15 AM

Room 310

Alternate Moderator

Lucia Sobrin, Massachusetts Eye and Ear

8:45 AM – 9:00 AM

A randomized, comparator-controlled phase 2 clinical trial of ADX-102 ophthalmic solution in noninfectious anterior uveitis

J. D. Sheppard*; T. Brady; C. Foster; K. J. Mandell; S. L. Young

9:30 AM - 9:45 AM

Clinical, adaptive optics imaging and electrophysiologic outcomes in autoimmune retinopathy patients with rituximab

S. Davoudi*; D. Sevgi ; C. Yasa; N. Ebrahimiadib; I. Laíns; R. Roohipoor; E. Papavasiliou; J. Comander; L. Sobrin



Poster Session

Stem cells for ganglion cell regeneration and repair

8:30 AM - 10:15 AM

Exhibit/Poster Hall

1361-A0382

Exploring mouse retinal ganglion cell diversity within iPSC derived optic cups

J. Oswald*; P. Baranov

1373-A0394

Differentiation and transplantation of iPSC derived retinal ganglion cells

T. Minelli*; M. J. Young; P. Baranov



Poster Session
Corneal biology and regenerative medicine
8:30 AM - 10:15 AM
Exhibit/Poster Hall

Moderator

Petr Baranov, Massachusetts Eye and Ear

Alternate Moderator

James Zieske, Schepens Eye Research Institute of Mass. Eye and Ear

1430-B0080

Fibroblasts induce MMP9 in corneal keratinocytes through a galectin-3-dependent mechanism

J. Mauris*; P. Argüeso

Poster Session
Corneal endothelium
8:30 AM - 10:15 AM
Exhibit/Poster Hall

Alternate Moderator

Viridiana Kocaba, Schepens Eye Research Institute of Mass. Eye and Ear

1439-B0088

CTG18.1 trinucleotide repeat expansion in African-Americans with Fuchs' Corneal Dystrophy

S. Vahedi*; S. Vasanth; S. Riazuddin; J. Gottsch; A. O. Eghrari

1446-B0096

Ascorbic acid and hydrogen peroxide levels in the aqueous humor in Fuchs' endothelial corneal dystrophy

R. Gupta*; A. Ross; J. B. Ciolino; S. Vasanth; U. V. Jurkunas

1483-B0133

In vivo confocal microscopy demonstrates bilateral corneal endothelial cell loss in patients with unilateral Herpes zoster ophthalmicus

P. Hamrah*; A. Sahin; C. Chirapapaisan; R. T. Muller; A. Abbouda; A. Cruzat; B. Cavalcanti; A. Jamali; D. Pavan-Langston

Poster Session
Retinal diseases
8:30 AM - 10:15 AM
Exhibit/Poster Hall

1507-B0188

Variation in the use of bevacizumab and ranibizumab for branch retinal vein occlusion

F. Yu*; A. Wu; C. Wu; P. B. Greenberg; F. Lum; A. Coleman

Poster Session
AMD
8:30 AM - 10:15 AM
Exhibit/Poster Hall

1514-B0195

Centenarians with age-related macular degeneration

M. S. Stem*; D. Mammo; Y. Yonekawa; B. Todorich; B. J. Thomas; G. A. Williams

Poster Session
Retinal vascular diseases I (excluding diabetes)
8:30 AM - 10:15 AM
Exhibit/Poster Hall

1532-B0364

Pro-angiogenic role of amino acid transporter Slc38a5 in retinal vascular endothelial cells

Z. Wang*; C. Liu; Y. Sun; S. Burnim; S. Meng; Z. Fu; Y. Gong; J. Chen

1542-B0374

The presence of the LAPPEL sign in multiple inherited and acquired retinal vascular diseases and temporal correlation with capillary dropout.

P. Rao*; A. Thanos; J. D. Wolfe; M. T. Trese

1559-B0391

Impact of baseline retinal nonperfusion on best corrected visual acuity in eyes with central retinal vein occlusion: post hoc analyses of COPERNICUS and GALILEO

D. M. Brown*; Y. Ogura; F. Boscia; F. G. Holz; J. Korobelnik; J. Heier; K. D. Rittenhouse; F. Asmus; C. Ahlers; F. Hiemeyer; C. Lu; R. Vitti; N. Saroj; N. Feltgen

Minisymposium

Barrier function of the ocular surface

11:00 AM - 12:45 PM

Ballroom 2

Moderator

Ilene Gipson, Schepens Eye Research Institute of Mass. Eye and Ear

11:03 AM - 11:20 AM

Ocular surface glycocalyx barrier function

P. Argüeso*

Paper Session

Gene therapies

11:00 AM - 12:45 PM

Ballroom 1

12:15 PM - 12:30 PM

Master modifier Nr2e3 rescues disease and promotes retina homeostasis in multiple models of RP

N. B. Haider*; A. Olivares; K. Flattery; Y. Han; J. Capri; M. M. DeAngelis

Paper Session

Imaging posterior segment and progression

11:00 AM - 12:45 PM

Ballroom 4

Alternate Moderator

Teresa Chen, Massachusetts Eye and Ear

Paper Session

RPE metabolism, autophagy and cell death

11:00 AM - 12:45 PM

Room 307

Alternate Moderator

Demetrios Vavvas, Massachusetts Eye and Ear

12:15 PM - 12:30 PM

Chloroquine-induced retinal toxicity *in vitro* and *in vivo*

D. Amarnani*; E. Kim; P. A. D'Amore; L. A. Kim

Paper Session

Immunological influences on AMD

11:00 AM - 12:45 PM

Room 310

11:30 AM - 11:45 AM

Deletion of complement factor H is associated with accumulation of subretinal Iba-1-positive cells and retinal degeneration in aged mice

S. Liao*; N. Buchanan; J. Demirs; B. Leehy; C. Lewis; J. Yang; V. Davis; N. V. Rangaswamy; M. Crowley; K. Anderson; C. E. Bigelow; T. P. Dryja; B. D. Jaffee

Poster Session

Clinical applications of OCT angiography

11:00 AM - 12:45 PM

Exhibit/Poster Hall

1653-A0084

Quantitative spectral-domain optical coherence tomography angiography (OCTA) of diabetic retinopathy (DR) severity

T. Lin*; P. Gogte; N. Palejwala; A. Shahidzadeh; S. Itty; M. S. Humayun; A. A. Moshfeghi; H. Ameri; Z. Chu; R. K. Wang; J. D. Wolfe; P. U. Dugel; A. H. Kashani

1657-A0088

Diabetic choroidopathy: Choroidal vessel density and volume in diabetic retinopathy with swept-source optical coherence tomography

J. Wang*; I. Laíns; J. Providencia; G. Armstrong; K. E. Talcott; P. Gil; J. Gil; J. Marques; J. Figueira; D. Husain; I. K. Kim; J. W. Miller; R. Silva; J. B. Miller

Poster Session

Ganglion cells: Development, axotomy, trauma

11:00 AM - 12:45 PM

Exhibit/Poster Hall

1761-A0372

Retinal microgliosis, functional sequelae, and traumatic brain injury (TBI) in an impact concussion mouse model

L. E. Goldstein*; O. Minaeva; M. W. Wojnarowicz; J. A. Moncaster; A. M. Fisher; E. S. Franz; I. Arellano; R. D. Ferguson; M. Mujat; B. R. Huber; A. B. Fulton; D. G. Hunter; J. D. Akula

Poster Session
Cataract surgery procedures
11:00 AM - 12:45 PM
Exhibit/Poster Hall

1821-B0154

Outcomes in cataract surgery using ReSure® Sealant for the intraoperative management of clear corneal incisions: Results from a registry evaluation for pre-specified adverse ocular events

D. Mulani*; R. Malhotra; Y. Chu; M. Jackson; K. Jong; C. Matossian; N. Peters; I. Singh; J. Solomon; N. Tekwani; T. R. Walters; E. Ankerud; J. Metzinger; N. Rissman; J. H. Talamo

1825-B0158

Results of a phase 3, randomized, double-masked, vehicle controlled study (Phase 3c) Evaluating the safety and efficacy of DEXTENZA™ (dexamethasone insert) 0.4 mg for the treatment of ocular inflammation and pain after cataract surgery

J. H. Talamo*; S. L. Tyson; S. Bafna; G. P. Joseph; D. F. Goldberg; J. J. Jones; M. P. Jones; J. K. Kim; J. B. Martel; M. L. Nordlund; I. K. Piovanetti; I. Singh; J. Metzinger; D. Mulani

1826-B0159

DEXTENZA™ (extended release dexamethasone) 0.4 mg vs. placebo for the treatment of ocular pain after cataract surgery: Results of three phase 3 studies

S. Sane*; S. Bafna; J. P. Berdahl; M. Endl; J. P. Gira; E. Protzko; I. Singh; S. L. Tyson; T. R. Walters; G. Wortz; J. Metzinger; D. Mulani; J. H. Talamo

Poster Session
Genetics of macular degeneration
11:00 AM - 12:45 PM
Exhibit/Poster Hall

Alternate Moderator

Baojian Fan, Massachusetts Eye and Ear

Poster Session
Clinical retinal imaging 1
11:00 AM - 12:45 PM
Exhibit/Poster Hall

1882-B0354

Evaluation of choroidal nevi with swept-source optical coherence tomography

C. Ung*; I. Laíns; R. L. Woods; A. M. Lane; D. Husain; J. W. Miller; E. S. Gragoudas; I. K. Kim; J. B. Miller

Poster Session
Diabetic macular edema and anti-VEGF therapy
11:00 AM - 12:45 PM
Exhibit/Poster Hall

1910-B0414

Dexamethasone implant (Ozurdex) for diabetic macular edema in naïve compared to refractory cases: A retrospective 24 months study

M. Iglicki*; D. Zur; C. Colutta ; I. Laíns; H. P. Negri

Poster Session
AMD therapies (excluding anti-VEGF)
11:00 AM - 12:45 PM
Exhibit/Poster Hall

1933-B0437

Cytochrome P450 monooxygenase lipid metabolites regulate choroidal neovascularization in the eye: contribution of the soluble epoxide hydrolase.

K. M. Connor*; S. Inafuku; C. Kim; D. Husain; J. W. Miller; E. Hasegawa

Poster Session

AMD: New drugs, delivery systems
11:00 AM - 12:45 PM
Exhibit/Poster Hall

1956-B0460

Tolerability of a 6 month sustained hydrogel delivery system for tyrosine kinase inhibitors in dutch belted rabbits

P. K. Jarrett*; R. F. Elhayek; T. Jarrett; Z. Lattrell; M. McGrath; S. Takach; J. H. Talamo; A. Sawhney

1968-B0472

Efficacy of a 6 month sustained hydrogel delivery system for tyrosine kinase inhibitors in a VEGF induced retinal leakage model

R. F. Elhayek*; T. Jarrett; Z. Lattrell; S. Takach; P. K. Jarrett; M. McGrath; J. H. Talamo; A. Sawhney

1980-B0484

Tolerability of a shape changing intravitreal hydrogel depot

A. Driscoll*; C. D. Blizzard; J. H. Talamo; P. K. Jarrett; R. F. Elhayek; T. Jarrett; Z. Lattrell; M. McGrath; S. Takach; A. Sawhney

Poster Session

AMD-Novel therapies
11:00 AM - 12:45 PM
Exhibit/Poster Hall

1984-B0488

Pharmacokinetics of a 6 month sustained hydrogel delivery system for tyrosine kinase inhibitors in Dutch belted rabbits

T. Jarrett*; R. F. Elhayek; Z. Lattrell; M. McGrath; S. Takach; P. K. Jarrett; J. H. Talamo; A. Sawhney

Special Interest Group (SIG)

TGF beta signal transductions in ocular health and disease
1:00 PM - 2:30 PM
Room 307

1:00 PM - 2:30 PM

TGF beta signal transductions in ocular health and disease

S. Chakravarti*; S. Saika*; H. Imanishi*; S. C. Pflugfelder*; J. D. Zieske*; S. Tamiya*; H. J. Kaplan*

Special Session

Update on treatments for diabetic retinopathy: Clinically relevant results from the Diabetic Retinopathy Clinical Research Network (DRCR.net)
2:30 PM - 3:45 PM
Ballroom 2

3:35 PM - 3:45 PM

Comparison of diabetic retinopathy severity grading on 7-field images with severity grading on UWF images: baseline factors

J. K. Sun*

Paper Session

Corneal development and repair
3:45 PM - 5:30 PM
Ballroom 2

Moderator

Darlene Dartt, Schepens Eye Research Institute of Mass. Eye and Ear

4:30 PM - 4:45 PM

Using template anisotropy to optimize the structure and function of corneal stromal substitutes

R. M. Gouveia*; E. González-Andrades; J. Cardona; A. Ionescu; M. Alaminos ; M. González-Andrades; C. J. Connon

Paper Session

Biomarkers based on vasculature imaging
3:45 PM - 5:30 PM
Ballroom 1

4:15 PM - 4:30 PM

Diabetic retinal microaneurysm (MA) perfusion analysis based on computational fluid modeling and adaptive optics scanning laser ophthalmoscopy (AOSLO)

Y. Lu*; M. O. Bernabeu; O. Abu Qamar; K. Sampani; L. P. Aiello; J. K. Sun

Paper Session
Inherited retinal diseases and MACTEL
3:45 PM - 5:30 PM
Ballroom 3

Moderator

Rachel Huckfeldt, Massachusetts Eye and Ear

4:00 PM - 4:15 PM

The effect of vitamin A on progression of retinitis pigmentosa is not determined by the underlying genetic cause of disease

E. A. Pierce*; K. M. Bujakowska; E. Place; D. Navarro-Gomez; M. Maher; C. Weigel-DFranco; J. Comander

Paper Session
Neurodegeneration
3:45 PM - 5:30 PM
Ballroom 4

Moderator

Tatjana Jakobs, Massachusetts Eye and Ear

4:45 PM - 5:00 PM

Destructive neuroinflammation triggered by activation of the NLRP3 inflammasome in the glaucomatous optic nerve head

M. S. Gregory-Ksander*; F. Fei; A. Krishnan; T. Tzeng; D. Subramanian; D. Golenbock; A. Marshak-Rothstein; B. Ksander

Paper Session
Diabetic macular edema clinical and anti-VEGF research
3:45 PM - 5:30 PM
Hall G

Alternate Moderator

Dean Elliott, Massachusetts Eye and Ear

4:45 PM - 5:00 PM

Optical coherence tomography (OCT) screening at diabetes visits increases retina referral for patients with diabetic macular edema (DME)

J. K. Sun*; R. Weinstock; M. Warren; M. Twahirwa; J. I. Barzilay; M. K. Mohan; T. E. Clemons

5:00 PM – 5:15 PM

Topline results from prospective, double-masked, placebo controlled phase 2b clinical study evaluating Luminate® in patients with diabetic macular edema

P. K. Kaiser*; D. S. Boyer; P. A. Campochiaro; J. Heier; J. Kornfield; B. D. Kuppermann; H. Quiroz-Mercado; L. Karageozian; L. Kutscher; M. Karpus; J. Y. Park; H. L. Karageozian; V. Karageozian

Paper Session
The impact of low vision on mobility
3:45 PM - 5:30 PM
Room 308

Alternate Moderator

Alex Bowers, Schepens Eye Research Institute of Mass. Eye and Ear

Paper Session

Corneal immunology and neuropathy

3:45 PM - 5:30 PM

Room 321

Alternate Moderator

Reza Dana, Massachusetts Eye and Ear

4:00 PM - 4:15 PM

Corneal epithelium-derived thrombospondin-1 regulates dendritic cell maturation in dry eye disease

W. Foulsham*; X. Tan; Y. Chen; A. Amouzegar; Y. liu; S. Chauhan; R. Dana

4:45 PM - 5:00 PM

The role of corneal plasmacytoid dendritic cells in immune sensitization after corneal transplantation

M. Tahvildari*; H. Moein; A. Jamali; M. J. Lopez; D. L. Harris; R. Dana; P. Hamrah

Poster Session

Clinical trials and drug studies I

3:45 PM - 5:30 PM

Exhibit/Poster Hall

211-A0172

Results of a randomized, double-masked, parallel-arm phase 2b study evaluating the safety and efficacy of OTX-TP (Travoprost insert) compared to timolol drops for the treatment of patients with open-angle glaucoma or ocular hypertension

C. Wilson*; K. N. Sall; S. Bafna; J. P. Gira; E. B. McLaurin; E. Protzko; R. Sampson; N. Tekwani; M. Tepedino; S. Vold; T. R. Walters; J. Metzinger; D. Mulani; J. H. Talamo

Poster Session

Genetics of glaucoma

3:45 PM - 5:30 PM

Exhibit/Poster Hall

2127-A0233

The myocilin GLN368Stop mutation in normal tension glaucoma

C. Lewis*; J. Kam; T. E. Scheetz; B. R. Roos; E. M. Stone; C. Khanna; K. Kawase; R. Ritch; A. J. Lotery; S. Sivaprasad; J. Cooke Bailey; L. R. Pasquale; J. L. Wiggs; Y. H. Kwon; W. L. Alward; J. Fingert

2128-A0234

A novel nonstop MYOC mutation in a large Filipino family with juvenile-onset open-angle glaucoma

E. A. Collantes*; B. Fan; Q. Zhang; T. Collantes; M. Delfin; A. Wan; K. Linkroum; Q. Liu; J. L. Wiggs

2130-A0236

Whole exome sequencing suggests that mutations in known glaucoma genes do not contribute to pigmentary dispersion syndrome

B. Fan*; K. Linkroum; D. Wang; E. DelBono; J. Borchert; L. R. Pasquale; J. L. Wiggs

2138-A0244

Characteristics of zebrafish with morpholino knockdown of SYDE2, a candidate gene for optic atrophy

J. Borchert*; A. Gauthier; A. Larson; J. L. Wiggs

2139-A0245

Improved understanding of the disease mechanism of steroid induced glaucoma using gene editing techniques

X. Gai*; Y. Jing; M. E. Sousa; M. H. Farkas; Q. Liu





Poster Session
Visual impairment
3:45 PM - 5:30 PM
Exhibit/Poster Hall

2197-A0335

Estimated prevalence of visual impairment in sub-Saharan Africa (2015)

J. H. Kempen*; R. R. Bourne; T. Y. Wong; H. Taylor; N. Tahhan; G. Stevens; S. Resnikoff; K. Pesudovs; H. Limburg; J. L. Leasher; J. E. Keeffe; J. B. Jonas; T. Braithwaite; S. Flaxman; K. S. Naidoo

Poster Session
Lacrimal glands and Meibomian glands
3:45 PM - 5:30 PM
Exhibit/Poster Hall

2255-B0022

Androgen suppression of proinflammatory gene expression in human meibomian gland epithelial cells.

D. A. Sullivan*; Y. Liu; W. R. Kam; R. Rahimi Darabad; A. Sahin



Poster Session
RPE dysfunction in macular diseases
3:45 PM - 5:30 PM
Exhibit/Poster Hall

2279-B0233

Atorvastatin promotes phagocytosis and attenuates pro-inflammatory response in human retinal pigment epithelial cells

B. Tian*; A. Al Moujahed; P. Bouzika; Y. Hu; S. Notomi; P. Tsoka; J. W. Miller; H. Lin; D. G. Vavvas

2281-B0235

CRISPR/Cas9 gene-edited RPE cells to model early stages of AMD

R. Fernandez-Godino*; K. M. Bujakowska; E. A. Pierce

2288-B0242

The PPAR- γ agonist troglitazone protects RPE Cells from oxidized LDL induced NLRP3-inflammasome-mediated cell death

A. Mackey*; G. Gnanaguru; E. Choi; D. Amarnani; P. A. D'Amore; Y. Ng

Poster Session
AMD translational studies and choroidal neovascularization
3:45 PM - 5:30 PM
Exhibit/Poster Hall

2313-B0267

Cytochrome P450 lipid metabolites alter leukocyte kinetics in a mouse model of choroidal inflammation

C. B. Kim*; E. Hasegawa; S. Inafuku; D. Husain; J. W. Miller; K. M. Connor

2321-B0275

3-Year Interim Safety Profile of Adeno-Associated Virus Serotype 2-soluble Variant of the Vascular Endothelial Growth Factor Receptor Type 1 (AAV2-sFLT01)

R. Varona; A. Le-Halpere; P. A. Campochiaro; J. Heier; P. U. Dugel; M. Barsamian; A. Purvis; M. Cabrera-Salazar; C. Delacono; N. Mostafa; A. Scaria; R. Buggage

Poster Session

AMD clinical research 1

3:45 PM - 5:30 PM

Exhibit/Poster Hall

2327-B0302

Plasma levels of VEGF-C and soluble VEGF receptor-3 are elevated in neovascular AMD

G. C. Teague*; W. Johnson; M. Shatos; M. E. Baldwin;
K. Lashkari

2328-B0303

Systemic and local sources of interferon-gamma inducible chemokines in the pathogenesis of AMD

T. Turunen*; M. Shatos; G. C. Teague; F. Absar; K. Lashkari

2332-B0307

Angiopoietin-like 4 correlates with response to intravitreal ranibizumab injections in neovascular age-related macular degeneration

D. Park*; J. Kim; J. Shin; I. Kim

2347-B0322

Use of a computer-based critical flicker fusion test discriminates between young, old, and dry AMD patients

C. Slocum*; K. J. Lane; J. D. Rodriguez; A. Shapiro; M. Abelson; D. Hollander

Poster Session

Amblyopia I

3:45 PM - 5:30 PM

Exhibit/Poster Hall

Moderator

David Hunter, Boston Children's Hospital



ARVO ANNUAL MEETING

Tuesday, May 9, 2017

Paper Session
Angiogenesis
8:30 AM - 10:15 AM
Ballroom 1

10:00 AM - 10:15 AM
Inflammatory signals from photoreceptor modulate pathological retinal angiogenesis via c-Fos
Y. Sun*; Z. Lin; C. Liu; Y. Gong; R. Liegl; S. Meng; S. Burnim; Z. Wang; J. D. Akula; J. Chen; L. E. Smith

Paper Session
The impact of low vision on function and everyday activities
8:30 AM - 10:15 AM
Room 308

Alternate Moderator
Russell Woods, Schepens Eye Research Institute of Mass. Eye and Ear

9:30 AM - 9:45 AM
Video scanpath with central vision loss
R. L. Woods*; F. Costela; D. J. Rose; D. R. Saunders; S. Kajtezovic

9:45 AM - 10:00 AM
Viewing video with homonymous hemianopia
F. Costela*; D. R. Saunders; S. Kajtezovic; D. J. Rose; S. Sheldon; R. L. Woods

Paper Session
Surprising human visual processes revealed with advanced techniques
8:30 AM - 10:15 AM
Room 316

9:30 AM - 9:45 AM
Neural re-adaptation to improved optical quality with customized aberration correction
A. Barbot*; R. Sabesan; T. C. Vaz; D. S. Jacobs; D. Tadin; K. R. Huxlin; G. Yoon

Poster Session
Diabetic retinopathy: Basic mechanisms
8:30 AM - 10:15 AM
Exhibit/Poster Hall

2511-A0045
Linear discriminate analysis for design of high-value biomarkers in proliferative diabetic retinopathy
A. Hua*; W. Johnson; N. Nandakumar; G. C. Teague; M. E. Baldwin; K. Lashkari

Poster Session
Neurodegeneration and neuroprotection
8:30 AM - 10:15 AM
Exhibit/Poster Hall

Alternate Moderator
Meredith Gregory-Ksander, Schepens Eye Research Institute of Mass. Eye and Ear

2561-A0151
Evaluation of intraocular pressure and inflammation after Boston K-Pro implantation in rabbits
V. Kapoulea*; E. Taniguchi; Y. Li; C. Zhou; F. Lei; J. Chodosh; D. F. Chen; C. H. Dohman; E. I. Paschalis

2563-A0153
New role of pyruvate dehydrogenase kinase 4 in retinal ganglion cell death after ischemia/reperfusion injury
J. Do*; I. Lee; D. Park

Poster Session
Ganglion cells and beyond
8:30 AM - 10:15 AM
Exhibit/Poster Hall

2592-A0182
Promoting optic nerve regeneration with a novel biocompatible fibrous scaffold
K. Chang*; J. Wu; K. Cho; S. Luo; T. Chen; M. Chen; W. Su; D. F. Chen

2593-A0183
Regulation of neurite growth by IGF1 family members
Y. Li*; K. Cho; D. F. Chen

Poster Session

Corneal epithelium

8:30 AM - 10:15 AM

Exhibit/Poster Hall

2630-A0220

Mucin N-glycans contribute to the ocular surface glyocalyx barrier

P. Argüeso*; T. Taniguchi; A. Woodward; P. Magnelli; S. M. Jacopo; J. Mauris

Poster Session

Dry eye, clinical

8:30 AM - 10:15 AM

Exhibit/Poster Hall

2654-A0244

Is the Ocular Surface Disease Index (OSDI©) the right tool to measure patient perception of ocular surface symptoms?

F. Amparo*; R. Dana

2657-A0247

***In Vivo* confocal microscopy demonstrates increased density of immune dendritiform cells in the peripheral cornea of patients with dry eye disease compared to normal controls**

A. Akhlaq*; P. Kataguir; G. Dieckmann; A. Jamali; S. Aggarwal; R. T. Muller; B. Cavalcanti; Y. Qazi; A. Cruzat; A. Kheirkhah; P. Hamrah

2658-A0248

Patients with dry eye disease demonstrate significant decrease in central and peripheral corneal nerve density

Z. Salem*; G. Dieckmann; A. Tanaka; P. Kataguir; S. Aggarwal; R. T. Muller; B. Cavalcanti; A. Cruzat; A. Kheirkhah; P. Hamrah

2659-A0249

Ocular pain in patients with dry eye disease

Z. Sun*; V. Satitpitakul; A. Kheirkhah; A. Crnej; P. Hamrah; R. Dana

2660-A0250

Improvement of key clinical parameters of dry eye disease after 12 months treatment with cyclosporine 0.05% eye drops

T. P. Utheim*; X. Chen; S. Raeder; Ø. Utheim; A. Stojanovic; D. A. Dartt; B. Tashbayev

2664-A0254

Clinical signs of dry eye disease are correlated to peripheral corneal immune cell alterations by *in vivo* confocal microscopy

P. Kataguir*; G. Dieckmann; S. Aggarwal; R. T. Muller; B. Cavalcanti; Y. Qazi; A. Cruzat; A. Kheirkhah; P. Hamrah

2668-A0258

Safety and efficacy of 0.05% and 0.1% RGN-259 for subjects with dry eye syndrome (DES): ARISE I

G. W. Ousler*; J. B. Ciolino; W. S. Yang; G. Sosne

2673-A0263

Effect of intranasal neurostimulation on tear protein content in patients with dry eye

A. Woodward*; M. Senchyna; M. Franke; M. Holdbrook; P. Argüeso

Poster Session

Vitreoretinal surgery I

8:30 AM - 10:15 AM

Exhibit/Poster Hall

Alternate Moderator

Jeffrey Heier, Massachusetts Eye and Ear



Poster Session
Visual fields, vision function, psychophysics I
8:30 AM - 10:15 AM
Exhibit/Poster Hall

2849-B0452
Predicting false-positive glaucoma hemifield test results by representative glaucomatous visual field patterns
M. Wang*; L. R. Pasquale; L. Q. Shen; M. V. Boland; S. R. Wellik; C. G. De Moraes; J. S. Myers; H. Wang; N. Baniyadi; P. J. Bex; T. Elze

2871-B0474
Validation and reproducibility of the Heidelberg Edge perimeter in the detection of visual field defects in glaucoma participants
J. M. Lam*; L. A. Hark; J. S. Myers; L. Katz; S. Siraj; M. Waisbourd; P. Gogte; Q. J. Cui

Poster Session
Diabetic eye disease
8:30 AM - 10:15 AM
Exhibit/Poster Hall

2909-B0555
Variation in the use of bevacizumab and ranibizumab for diabetic macular edema
A. Wu*; C. Wu; P. B. Greenberg; F. Yu; F. Lum; A. Coleman

Poster Session
Strabismus
8:30 AM - 10:15 AM
Exhibit/Poster Hall

2919-B0565
Incidence of superior oblique palsy after spacer surgery for treatment of Browns syndrome: An honest look at residual superior oblique function.
M. Sharma*; S. MacKinnon; L. Dagi

2923-B0569
Depression in attempted abduction: A common feature in Duane syndrome.
S. Rhiu*; S. M. Michalak; W. Phanphruk; D. G. Hunter

2929-B0575
What can we learn about strabismus from a 90 second gaze recording?: Rapid evaluation of oculomotor deficits in strabismus
A. Kosovicheva*; M. Kazlas; D. G. Hunter; P. Bex

2932-B0578
Validation of StrabisPIX, a mobile application for home measurement of ocular alignment
W. Phanphruk*; Y. Liu; K. Morley; J. Gavin; A. S. Shah; D. G. Hunter

Paper Session

Diabetic retinopathy clinical

11:00 AM - 12:45 PM

Ballroom 3

Alternate Moderator

Dean Elliott, Massachusetts Eye and Ear

11:15 AM - 11:30 AM

Hemorrhages and/or microaneurysm distribution and counts identified on ultrawide field imaging and the risk of diabetic retinopathy progression over 4 years

P. S. Silva*; H. El Rami; R. Barham; A. Gupta; A. Fleming; J. Hemert; J. K. Sun; L. P. Aiello

11:30 AM - 11:45 AM

Association of predominantly peripheral diabetic retinopathy lesions (PPL) with oximetry-measured retinal ischemia and nonperfusion on ultrawide field angiography

K. Sampani*; P. S. Silva; N. Spanos; G. L. Yau; J. Rhee; A. Gupta; A. Tolson; C. M. Pitoc; J. K. Sun; L. P. Aiello

Paper Session

Neuroprotection

11:00 AM - 12:45 PM

Ballroom 4

Moderator

Cynthia Grosskreutz, Massachusetts Eye and Ear

Paper Session

Retina/RPE 2

11:00 AM - 12:45 PM

Room 301

Alternate Moderator

Demetrios Vavvas, Massachusetts Eye and Ear

11:00 AM - 11:15 AM

Verteporfin-induced formation of protein oligomers is mediated by light and leads to cell toxicity

E. Konstantinou*; S. Notomi; K. Brodowska; A. Moujahed; F. Nicolaou; P. Tsoka; E. S. Gragoudas; J. W. Miller; L. Young; D. G. Vavvas

Paper Session

Factors affecting ocular development

11:00 AM - 12:45 PM

Room 321

11:00 AM - 11:15 AM

Ocular motor nerve development in the presence and absence of extraocular muscle

S. M. Michalak*; J. Park; M. Whitman; M. Tischfield; E. Engle



Poster Session

Cellular metabolism of the retina and RPE

11:00 AM - 12:45 PM

Exhibit/Poster Hall

3014-A0009

PGC-1 α is required to maintain RPE metabolism, integrity and function.

M. B. Rosales*; S. Jacobo; J. Iacovelli; M. Saint-Geniez

3020-A0015

Role of PPAR-alpha in retinal mitochondrial function

R. Cheng*; E. P. Moran; K. Zhou; M. Gantner; J. Ma

Poster Session

AMD clinical research 2

11:00 AM - 12:45 PM

Exhibit/Poster Hall

3198-B0331

Dark-adaptation in age-related macular degeneration: The influence of health conditions and lifestyle factors

S. Mach*; I. Laíns; J. B. Miller; R. Mukai; D. G. Vavvas; I. K. Kim; J. W. Miller; D. Husain



Poster Session

Retinitis pigmentosa (clinical)

11:00 AM - 12:45 PM

Exhibit/Poster Hall

3244-B0377

Central visual function over two-year follow-up of patients with RLBP1 retinitis pigmentosa enrolled in a prospective natural history study

K. Stasi*; M. Wald; M. Burstedt; J. Green; J. Whelan; M. Rosol; X. Ni; Z. Su; J. Deslandes; C. L. Grosskreutz; K. Holopigian

3246-B0379

Humphrey visual field and flicker electroretinogram changes over two-year follow-up in patients with RLBP1 retinitis pigmentosa enrolled in a prospective natural history study

K. Holopigian*; J. Green; J. Whelan; M. Burstedt; Z. Su; J. Deslandes; X. Ni; M. Wald; C. L. Grosskreutz; K. Stasi

3249-B0382

Full-field stimulus threshold dark-adaptation kinetics over two-year follow-up in patients with RLBP1 retinitis pigmentosa enrolled in a prospective natural history study

X. Ni*; M. Wald; M. Burstedt; J. Green; J. Whelan; Z. Su; J. Deslandes; C. L. Grosskreutz; K. Stasi; K. Holopigian

3251-B0384

Cross-sectional evaluation of patient-reported outcomes (PROs) in patients with RLBP1 retinitis pigmentosa enrolled in a natural history study

A. Mullins*; M. Burstedt; J. Green; J. Whelan; B. Sloesen; X. Ni; Z. Su; M. Wald; C. L. Grosskreutz; K. Stasi; K. Holopigian; J. Deslandes

3254-B0387

Baseline characteristics of patients with RLBP1 retinitis pigmentosa enrolled in a prospective natural history study

J. Green*; M. Burstedt; J. H. Whelan; Y. He; Z. Su; X. Ni; M. Wald; G. Normand; J. Deslandes; C. L. Grosskreutz; K. Holopigian; K. Stasi

3255-B0388

Longitudinal evaluation of optical coherence tomography and color fundus photography over 2 year follow up in patients with RLBP1 retinitis pigmentosa

J. H. Whelan*; G. Normand; M. Maker; M. Burstedt; J. Green; M. Wald; Z. Su; X. Ni; K. Holopigian; C. L. Grosskreutz; K. Stasi

Poster Session

Functioning with low vision

11:00 AM - 12:45 PM

Exhibit/Poster Hall

3287-B0420

Looming and bearing effects on pedestrian collision judgment in open-space walking simulations

C. Qiu*; L. Spano; M. Tuccar-Burak; R. B. Goldstein; E. Peli

3290-B0423

Development and validation of a portable visual navigation challenge for assessment of retinal disease in multi-centered clinical trials

A. Shapiro*; P. Corcoran; C. Sundstrom; E. Angjeli; J. D. Rodriguez; M. B. Abelson; D. A. Hollander

3293-B0426

Do people with hemianopia spontaneously adapt their gaze scanning to differing hazard detection demands?

A. R. Bowers*; C. F. Alberti; R. B. Goldstein; E. Peli

3294-B0427

Strabismic hemianopic field expansion and mobility

P. Bronstad*; E. Peli; A. Doherty; A. B. Fulton

Poster Session

Tumors: Inside and around the eye, II

11:00 AM - 12:45 PM

Exhibit/Poster Hall

3349-B0625

Hepatitis C-associated ocular surface squamous neoplasia

N. G. Lee*; A. Sanchez; A. Stagner; C. J. Choi

3359-B0635

Effective immunopathology protocol for diagnostic challenges of patients suspected of having ocular cicatricial pemphigoid (OCP), the MERSI experience

J. Hua*; A. Ahmed; K. Small; T. Zhao; S. D. Anesi; C. Foster

Special Interest Group (SIG)

New advancements in SD-OCT assessment of neuroretinal rim and fiber layer tissue for glaucoma detection and follow-up

1:00 PM - 2:30 PM

Room 308

1:00 PM - 2:30 PM

New advancements in SD-OCT assessment of neuroretinal rim and fiber layer tissue for glaucoma detection and follow-up

L. M. Heindl*; L. M. Heindl*; A. B. Hommer*; A. B. Hommer*; C. F. Burgoyne*; B. C. Chauhan*; P. Enders*; S. K. Gardiner*; T. C. Chen*; D. Huang*

Special Interest Group (SIG)

Mechanisms of ocular surface immunity in graft vs host disease and sjogren syndrome

1:00 PM - 2:30 PM

Room 324

1:00 PM - 2:30 PM

Mechanisms of ocular surface immunity in graft vs host disease and Sjogren syndrome

V. L. Perez*; R. Dana*; S. C. Pflugfelder*; S. Jain*; Y. Ogawa*

Paper Session

Macular degeneration-cell biology

3:45 PM - 5:30 PM

Ballroom 1

Moderator

Patricia D'Amore, Schepens Eye Research Institute of Mass. Eye and Ear

4:30 PM - 4:45 PM

PGC-1beta promotes oxidative damage and dysfunction of the retinal pigment epithelium

M. Saint-Geniez*; Q. Charles; M. Rosales; A. Khadka; G. Gnanaguru; J. Iacovelli

Paper Session

Capillaries, blood flow, OCT angiography

3:45 PM - 5:30 PM

Ballroom 4

4:00 PM - 4:15 PM

Investigation of optic nerve head microvascular changes in primary open angle glaucoma and chronic angle closure glaucoma using OCT-angiography

L. C. Custo Greig*; K. Qiu; S. Awasthi; J. B. Miller; S. Brauner; S. H. Greenstein; A. V. Turalba; L. R. Pasquale; L. Q. Shen

Paper Session

AMD imaging II and visual function

3:45 PM - 5:30 PM

Hall G

4:15 PM - 4:30 PM

Foveal vs. total geographic atrophy as a predictor of visual acuity in AMD

S. Bagheri*; I. Koulouri; L. Saad; D. G. Vavvas

4:45 PM - 5:00 PM

Correlation of dark adaptation with macular morphology in age-related macular degeneration

D. Husain*; I. Laíns; J. B. Miller; D. Park; E. Tsikata; S. Davoudi; S. Rahmani; J. Pierce; R. Silva; T. C. Chen; I. K. Kim; D. Vavvas; J. W. Miller

Paper Session

New insights and animal models
3:45 PM - 5:30 PM
Room 314

Moderator

Janey Wiggs, Massachusetts Eye and Ear

5:15 PM - 5:30 PM

Abnormal ocular development and reduced vision in zebrafish after morpholino-mediated knockdown of ARHGAP33

A. Gauthier*; J. Borchert; A. Larson; J. L. Wiggs

Poster Session

ROP: Basic mechanisms
3:45 PM - 5:30 PM
Exhibit/Poster Hall

Moderator

Kip Connor, Massachusetts Eye and Ear

3464-A0087

Therapeutic effects of insulin-like growth factor-1 in hyperglycemic retinopathy of prematurity

E. P. Moran*; R. Liegl; Z. Fu; Y. Sun; S. Burnim; S. Meng; C. Lofqvist; A. Hellström; L. E. Smith

Poster Session

Ocular gene expression, proteomics and lipidomics
3:45 PM - 5:30 PM
Exhibit/Poster Hall

3572-B0131

Tear cytokine profile in a Scandinavian cohort of congenital aniridia

E. C. Landsend*; H. Pedersen; Ø. Utheim; H. Aass; B. Tashbayev; N. S. Lagali; D. A. Dartt; R. C. Baraas; T. Utheim

Poster Session

Retinal vascular diseases II (excluding diabetes)
3:45 PM - 5:30 PM
Exhibit/Poster Hall

3651-B0276

Regulation of neurovascular coupling in proliferative retinopathy through a functional interaction between ROR α and semaphorin 3E

C. Liu*; Y. Sun; Z. Wang; S. Meng; S. Burnim; J. Chen

Poster Session

Macular diseases (non-inherited)
3:45 PM - 5:30 PM
Exhibit/Poster Hall

3703-B032

ORBIT: A phase IV clinical study – efficacy and safety outcomes from ocriplasmin intravitreal injection

B. C. Joondeph*; A. M. Khanani; J. S. Duker; D. S. Boyer; J. Heier; P. K. Kaiser; M. W. MacCumber; D. J. Pieramici

Poster Session

Glaucoma
3:45 PM - 5:30 PM
Exhibit/Poster Hall

3710-B0490

A protective association of selective serotonin reuptake inhibitors and a harmful association of calcium channel blockers for primary open-angle glaucoma identified in a healthcare database analysis

A. P. Khawaja*; T. P. Dryja; Z. Wei; D. Song; H. Tian; K. Kahler; W. Zheng

3718-B0498

Racial differences in the effect of hormone therapy on incident open-angle glaucoma

T. S. Vajaranant*; R. Ray; L. R. Pasquale; P. M. Maki; J. A. Mares; R. Ritch; E. W. Gower; M. N. Haan; R. D. Jackson

ARVO ANNUAL MEETING

Wednesday, May 10, 2017

Paper Session

Dry eye II

8:30 AM - 10:15 AM

Ballroom 2

Alternate Moderator

Ahmad Kheirkhah, Massachusetts Eye and Ear

9:15 AM - 9:30 AM

A one-day, randomized, double-masked study to evaluate instantaneous efficacy of lubricin (150 µg/mL) eye drops

T. A. Schmidt*; B. D. Sullivan; A. Lambiase; D. A. Sullivan; G. Jay; E. R. Truitt; A. Bruscolini; M. Sacchetti; F. Mantelli

9:30 AM - 9:45 AM

A randomized trial on safety and efficacy of a novel topical combined inhibitor of janus kinase 1/3 and spleen tyrosine kinase for GVHD-associated Ocular surface disease

A. Kheirkhah*; A. Di Zazzo; V. Satitpitakul; M. Fernandez; D. Magilavy; R. Dana

9:45 AM - 10:00 AM

***In vivo* confocal microscopy in patients with dry eye disease demonstrates decreased peripheral corneal nerve density and correlation to clinical signs**

A. Tanaka*; Z. Salem; G. Dieckmann; P. Kataguirri; S. Aggarwal; R. T. Muller; B. Cavalcanti; A. Cruzat; A. Kheirkhah; P. Hamrah

Paper Session

Stem cells: New approaches and disease modeling

8:30 AM - 10:15 AM

Ballroom 1

Alternate Moderator

Petr Baranov, Schepens Eye Research Institute of Massachusetts Eye and Ear



Paper Session

AMD clinical research

8:30 AM - 10:15 AM

Ballroom 3

Alternate Moderator

Joan W. Miller, Massachusetts Eye and Ear

9:00 AM - 9:15 AM

Plasma mass-spectrometry metabolomics in age-related macular degeneration

I. Laíns*; R. S. Kelly; J. Lasky-Su; R. Silva; J. N. Murta; J. B. Miller; I. K. Kim; D. Vavvas; J. W. Miller; D. Husain



Paper Session

Trabecular meshwork, ciliary body and anterior segment imaging

8:30 AM - 10:15 AM

Ballroom 4

10:00 AM - 10:15 AM

Transplantation of iPSC-TM decreases IOP in aged sGC^{-/-} mice

W. Zhu*; E. S. Buys; M. H. Kuehn

Minisymposium

Inflammaging and eye

8:30 AM - 10:15 AM

Room 301

8:35 AM - 8:55 AM

Aging and ocular surface immunity

R. Dana*

Paper Session
Corneal endothelium and Fuchs' corneal dystrophy
8:30 AM - 10:15 AM
Room 308

9:45 AM - 10:00 AM
Mitochondrial fragmentation and upregulation of PINK1 and Parkin-mediated mitophagy in Fuchs' Endothelial Corneal Dystrophy
S. Vasanth*; T. Miyai; A. Benischke; Y. Chen; M. Price; F. Price; U. V. Jurkunus

10:00 AM - 10:15 AM
Corneal endothelial cell and guttae interaction in Fuchs' endothelial corneal dystrophy
V. Kocaba*; K. Katikireddy; M. Price; F. Price; U. V. Jurkunus

Paper Session
New genes and loci
8:30 AM - 10:15 AM
Room 321

Moderator
Janey Wiggs, Massachusetts Eye and Ear

8:45 AM - 9:00 AM
Evaluation of ATXN2 intermediate polyglutamine expansions in primary open-angle glaucoma
S. Rong*; L. R. Pasquale; J. L. Wiggs

9:15 AM - 9:30 AM
Rare variants in methionine synthase reductase are associated with iridociliary cysts
L. Prasov*; S. Garnai; C. Gherasim; R. Banerjee; S. E. Moroi; H. Pawar; A. Ozel; J. Z. Li; F. Rozsa; L. Fine; V. Elner; L. R. Pasquale; R. Ritch; J. E. Richards

10:00 AM - 10:15 AM
Association of ANGPT1 with primary open angle glaucoma
J. Cooke Bailey*; P. Gharahkhani; S. W. Tompson; T. Souma; O. Siggs; T. L. Young; A. P. Tanna; L. R. Pasquale; S. E. Quaggin; S. MacGregor; J. E. Craig; J. L. Haines; J. L. Wiggs

Paper Session
Amyblopia II
8:30 AM - 10:15 AM
Room 324

Moderator
David Hunter, Boston Children's Hospital

Poster Session
Optic neuropathy
8:30 AM - 10:15 AM
Exhibit/Poster Hall

3851-A0022
Utility of optical coherence tomographic angiography in evaluation of afferent neuro-ophthalmic disease
E. D. Gaier*; A. L. Gilbert; J. F. Rizzo; D. M. Cestari; J. B. Miller

Poster Session
Clinical microbiology
8:30 AM - 10:15 AM
Exhibit/Poster Hall

3888-A0059
Invasive orbital Aspergillosis in immunocompetent patients from the northeastern United States
J. D. Diaz*; S. K. Freitag; M. Durand

Poster Session
Corneal stroma and keratocytes
8:30 AM - 10:15 AM
Exhibit/Poster Hall

Alternate Moderator
Pablo Argüeso, Schepens Eye Research Institute of Mass. Eye and Ear



Poster Session

Ocular surface health and disease

8:30 AM - 10:15 AM

Exhibit/Poster Hall

3942-A0181

Mechanism of ocular surface staining by clinical dyes

S. Jeong*; J. Kim; M. Ngan; A. Webster; J. T. Barr; P. Argüeso; M. Fini

3946-A0185

Influence of lipopolysaccharide on proinflammatory gene expression in human corneal, conjunctival and meibomian gland epithelial cells.

A. Sahin*; W. R. Kam; R. R. Darabad; Y. Liu; D. A. Sullivan

Poster Session

Imaging: Optic nerve head and nerve fiber layer

8:30 AM - 10:15 AM

Exhibit/Poster Hall

3982-A0291

A novel quantitative approach for analyzing glaucomatous disc hemorrhages: Identifying the source of the blood

J. Chou*; C. C. Cousins; J. B. Miller; L. Q. Shen; B. J. Song; M. O. Gordon; M. A. Kass; L. R. Pasquale

3991-A0300

The effects of refractive error and related optic nerve head (ONH) anatomical parameters on optical coherence tomography (OCT) retinal nerve fiber layer (RNFL) deviation map

N. Baniyadi*; M. Wang; H. Wang; Q. Jin; M. Mahd; L. Q. Shen; L. R. Pasquale; T. Elze

3997-A0306

Retinal nerve fiber layer defects on ultrawide field imaging and spectral-domain optical coherence tomography: Significance for glaucoma detection in adult diabetic patients

B. J. Song*; A. Hoguet; L. R. Pasquale; P. S. Silva; L. P. Aiello

4003-A0312

Relationship between minimum-rim width at Bruch's membrane opening and paracentral visual field loss in glaucoma

D. Li*; M. Wang; T. Elze; E. I. Paschalis; E. Taniguchi; D. Li; A. V. Turalba; L. R. Pasquale; L. Q. Shen

Poster Session

Diabetic retinopathy: New targets and emerging therapies

8:30 AM - 10:15 AM

Exhibit/Poster Hall

4029-B0002

Inhibition of RUNX1 by the Ro5-3335 benzodiazepine derivative reduces aberrant retinal angiogenesis

L. A. Kim*; J. D. Lam; A. Sanchez; D. Amarnani; J. Cardona-Velez; J. Arboleda-Velasquez

Poster Session

Angiogenesis: Basic mechanisms
8:30 AM - 10:15 AM
Exhibit/Poster Hall

4058-B0031

Endomucin depletion inhibits pathologic retinal vascularization *in vivo*

P. A. D'Amore*; C. Park-Windhol; M. Saint-Geniez

4077-B0050

The role of fibrosis and endothelial mesenchymal transition (EndoMT) in choroidal neovascularization (CNV) pathogenesis.

F. Rossato*; A. Mackey; Y. Ng

Poster Session

Drug and gene therapy and delivery
8:30 AM - 10:15 AM
Exhibit/Poster Hall

4086-B0086

Evaluation of *in silico* reconstructed ancestral adeno-associated virus for gene augmentation therapy in a mouse model of LCA

S. Wassmer*; B. Pawlyk; J. Blake; M. Sandberg; E. A. Pierce; L. H. Vandenberghe

4106-B0106

A Single center study of the plasma pharmacokinetics of DEXTENZA™ (dexamethasone insert) 0.4 mg in healthy volunteers

E. B. McLaurin*; D. G. Evans; R. Noecker; J. Metzinger; D. Mulani; J. H. Talamo

Poster Session

Retinal detachment (clinical)
8:30 AM - 10:15 AM
Exhibit/Poster Hall

4169-B0464

Outcomes of relaxing retinectomy for recurrent rhegmatogenous retinal detachment with proliferative vitreoretinopathy

R. M. Tandias*; P. Sun; G. D. Amin; A. P. Stern; J. G. Arroyo

Paper Session

Diabetic retinopathy
11:00 AM - 12:45 PM
Ballroom 1

11:00 AM - 11:15 AM

Fibroblast growth factor 21 administration suppresses pathologic retinal vessel growth in oxygen-induced retinopathy

Z. Fu*; Y. Gong; R. Liegl; Z. Wang; C. Liu; S. Meng; S. Burnim; A. Hellström; S. Talukdar; L. E. Smith

12:00 PM - 12:15 PM

Elevated expression of RUNX1 by vascular endothelial cells in proliferative diabetic retinopathy

J. D. Lam*; D. Oh; P. A. D'Amore; L. A. Kim; J. Arboleda-Velasquez

Paper Session

Vitreoretinal surgery II and endophthalmitis
11:00 AM - 12:45 PM
Ballroom 3

11:30 AM - 11:145 AM

Progression to surgery for epiretinal membranes with good vision

X. Chen*; C. Shah; J. Heier

Minisymposium

Membrane domains: Polarity, trafficking and assembly in the eye
11:00 AM - 12:45 PM
Room 307

12:05 PM - 12:25 PM

Differential adenoviral entry and trafficking in corneal cells

J. Rajaiya*

Paper Session

ERG: Advances, disease and injury
11:00 AM - 12:45 PM
Room 308

Moderator

Anne Fulton, Boston Children's Hospital

12:30 PM - 12:45 PM

Changes in retinal function and glial reaction in an impact concussion mouse model

J. D. Akula*; O. Minaeva; R. D. Ferguson; M. Mujat; M. W. Wojnarowicz; J. A. Moncaster; E. S. Franz; A. M. Fisher; I. Arellano; D. G. Hunter; A. B. Fulton; L. E. Goldstein

Paper Session

Improving care for diabetic retinopathy
11:00 AM - 12:45 PM
Room 309

Alternate Moderator

Aditi Gupta, Joslin Diabetes Center

11:30 AM - 11:45 AM

Deficits in retinopathy self-awareness and timeliness of eye care follow-up over 6 years among diabetic patients

A. Gupta*; P. Silva; J. Cavallerano; A. Tolson; D. Tolls; J. Rodriguez; K. Morris; S. Rodriguez; B. Patel; M. Sehizadeh; K. Thakore; J. K. Sun; L. P. Aiello

Paper Session

Basic investigations in the treatment of ocular infections
11:00 AM - 12:45 PM
Room 310

Alternate Moderator

Meredith Gregory-Ksander, Schepens Eye Research Institute of Mass. Eye and Ear

Paper Session

Color vision, low vision
11:00 AM - 12:45 PM
Room 316

Moderator

Aparna Raghuram, Boston Children's Hospital

12:15 PM - 12:30 PM

Yellow nighttime driving glasses reduce pedestrian detection performance with headlight glare

M. Tuccar-Burak*; A. Hwang; E. Peli

Poster Session

Corneal biomechanics
11:00 AM - 12:45 PM
Exhibit/Poster Hall



4323-A0124

Effects of corneal hydration on Brillouin measurements

P. Shao*; A. Ramier; B. Tavakol; T. G. Seiler; G. Scarcelli; r. pineda; S. Yun

4346-A0147

Optimising biocompatibility of polymethyl methacrylate used for keratoprosthesis

M. Miotto*; R. M. Gouveia; M. González-Andrades; C. J. Connon



Poster Session

Conjunctival cell Biol and Meibomian glands
11:00 AM - 12:45 PM
Exhibit/Poster Hall

4370-A0209

The efficacy of intravenous immunoglobulin in ocular cicatricial pemphigoid

L. Ma*; C. You; S. D. Anesi; C. Foster

4379-A0218

The effect of solithromycin, a cationic amphiphilic drug, on the proliferation and differentiation of human meibomian gland epithelial cells.

Y. Liu*; W. R. Kam; P. Fernandes; D. A. Sullivan

4400-A0239

Vital staining of the cornea and conjunctiva following treatment of meibomian gland dysfunction in dry eye patients

A. T. McPherson*; J. V. Greiner; P. J. Oliver

Poster Session

Uveal melanoma clinical studies
11:00 AM - 12:45 PM
Exhibit/Poster Hall

4419-A0278

Management of suspicious melanocytic lesions of the iris

M. Oxenreiter*; A. M. Lane; I. K. Kim; E. S. Gragoudas

Poster Session

Drug delivery I
11:00 AM - 12:45 PM
Exhibit/Poster Hall

4467-B0080

Sustained topical delivery of very low-dose atropine avoids the periodic excessive pupil dilation, light sensitivity and blur of drop therapy

C. D. Leahy*; E. J. Ellis; J. Ellis



Poster Session

Gene editing and gene therapies
11:00 AM - 12:45 PM
Exhibit/Poster Hall

Alternate Moderator

Eric Pierce, Massachusetts Eye and Ear

4474-B0129

***In vivo* allele-specific CRISPR/Cas9 gene editing in the rhodopsin P23H knockin mouse model**

P. Li*; B. Kleinstiver; M. Leon; K. Joung; E. A. Pierce; Q. Liu

4503-B0158

Overexpression of human Nrf2 rescues cone photoreceptors and retinal pigment epithelial cells from degeneration in the rd1 mouse

D. M. Wu*; X. J. Ji; B. P. Hafler; Y. Xue; S. Zhao; P. Rana; W. Xiong; C. Cepko

Poster Session

Genetics of retinal dystrophies and functional analysis
11:00 AM - 12:45 PM
Exhibit/Poster Hall

4520-B0175

***Ift172* conditional knockout mice model human *IFT172*-associated retinal degeneration**

P. R. Gupta*; S. H. Greenwald; M. Leon; E. A. Pierce; K. M. Bujakowska



Poster Session

Photoreceptor degeneration and retinal rescue strategies

11:00 AM - 12:45 PM

Exhibit/Poster Hall

4533-B0188

Pathologic poly(ADP-ribose) polymerase (PARP) activation contributes to retinal degeneration in mice with retinal NAD⁺ deficiency

J. Lin*; A. Santeford; T. Chen; M. Yoshida; S. Imai; R. S. Apte

4540-B0195

Contrast sensitivity threshold correlates to the progressive degeneration of photoreceptors in a mouse model of retinitis pigmentosa

K. Cho*; J. Xiao; M. Adil; T. Utheim; D. F. Chen

Poster Session

Stem cells and tissue engineering for retinal repair

11:00 AM - 12:45 PM

Exhibit/Poster Hall

4579-B0234

Enrichment of mouse cone photoreceptors derived from pluripotent cells

H. Abdelgawad*; M. J. Young

Poster Session

Macular edema clinical and translational

11:00 AM - 12:45: PM

Exhibit/Poster Hall

Moderator

Demetrios Vavvas, Massachusetts Eye and Ear

4627-B0500

Increased subretinal fluid after treatment with aldosterone antagonists in patients with central serous chorioretinopathy

D. S. Borkar*; I. Koulouri; J. B. Miller; D. G. Vavvas

Poster Session

Macular diseases (inherited)

11:00 AM - 12:45 PM

Exhibit/Poster Hall

4651-B0524

Longitudinal analysis of quantitative autofluorescence in recessive Stargardt disease (STGD1)

K. Schuerch*; W. Lee; T. Duncker; F. C. Delori; R. Allikmets; S. H. Tsang; J. R. Sparrow

Poster Session

Low vision populations, services and treatments

11:00 AM - 12:45 PM

Exhibit/Poster Hall

Moderator

Francisco Costela, Schepens Eye Research Institute of Mass. Eye and Ear

4684-B0591

Optic radiation damage relates to reduced V1 and thalamus volume in cortical/cerebral visual impairment

C. M. Bauer*; E. S. Bailin; L. Mayer; B. Kran; D. Wright; G. Heidary; L. B. Merabet

Poster Session

Vision in aging and disease

11:00 AM - 12:45 PM

Exhibit/Poster Hall

4713-B0665

Critical flicker fusion scores across stimulus luminance ranges in young and old

K. J. Lane*; C. Sundstrom; E. Angjeli; P. Corcoran; J. D. Rodriguez; M. B. Abelson; D. A. Hollander

4714-B0666

Critical flicker fusion recovery following photo-bleach in young and old subjects

C. Sundstrom*; E. Angjeli; J. D. Rodriguez; P. Corcoran; K. J. Lane; M. B. Abelson; D. A. Hollander

Special Interest Group (SIG)

New knowledge of genetics and cell biology of exfoliation syndrome, a disorder of elastic tissue and ECM associated with ocular and systemic disease, offers novel means to treatment and prevention

1:00 PM - 2:30 PM

Ballroom 3

1:00 PM - 2:30 PM

New knowledge of genetics and cell biology of exfoliation syndrome, a disorder of elastic tissue and ECM associated with ocular and systemic disease, offers novel means to treatment and prevention

R. Ritch*; D. Reinhardt*; C. Khor*; U. Schlotzer-Schrehardt*; A. M. Bernstein*; L. R. Pasquale*

Special Interest Group (SIG)

Highlighting successful technologies in sustained drug delivery in ophthalmology: New polymer science and particle engineering platforms that drive future promising extended release therapies

1:00 PM - 2:30 PM

Room 321

1:00 PM - 2:30 PM

Highlighting successful technologies in sustained drug delivery in ophthalmology: New polymer science and particle engineering platforms that drive future promising extended release therapies

T. Navratil*; C. Semba*; J. H. Talamo*; T. Navratil*; I. Ahmad*

Paper Session

Conjunctiva, lacrimal and meibomian glands and contact lenses

3:45 PM - 5:30 PM

Ballroom 2

3:45 PM - 4:00 PM

Resolvin D2 increases conjunctival goblet cell intracellular [Ca²⁺] by increasing cellular cAMP to activate protein kinase A

D. A. Dartt*; N. Botten; R. R. Hodges; D. Li; J. Bair; M. Shatos; T. Utheim; C. Serhan

Minisymposium

An eye on the eye microvasculature

3:45 PM - 5:30 PM

Ballroom 1

4:39 PM - 4:57 PM

Retinal pericytes in health and disease

P. A. D'Amore*

Paper Session

Retinopathy of prematurity

3:45 PM - 5:30 PM

Ballroom 3

4:00 PM - 4:15 PM

Preterm infants with late retinopathy of prematurity receive less dietary omega-3 and omega-6 the first two weeks of life

C. Lofqvist*; S. Najm; G. Hellgren; E. Engström; P. Lundgren; A. Hård; A. Lapillonne; K. Sävman; A. Nilsson; M. Andersson; L. E. Smith; A. Hellström

Paper Session

Low vision devices and rehabilitation

3:45 PM - 5:30 PM

Room 308

Moderator

Shrinivas Pundlik, Schepens Eye Research Institute of Mass. Eye and Ear

3:45 PM - 4:00 PM

Preliminary evaluation of a wearable video camera based collision warning device for blind individuals in an obstacle course

S. Pundlik*; M. Tomasi; A. Doherty; A. R. Bowers; G. Luo

Poster Session

Cornea and anterior chamber

3:45 PM - 5:30 PM

Exhibit/Poster Hall

4801-A0084

Stevens Johnson syndrome: A 6 year experience at Massachusetts Eye and Ear Infirmary

H. N. Saeed*; S. Shanbhag; J. Chodosh



Poster Session

Clinical electrophysiology

3:45 PM - 5:30 PM

Exhibit/Poster Hall

4887-B0276

Comparison of ERG responses obtained using a portable device and a conventional recording system

R. Kimia*; R. M. Hansen; A. Moskowitz; A. B. Fulton

4890-B0279

Evaluation of a soft, disposable, conformal ERG lens electrode prototype vs. Burian-Allen lens and DTL fiber electrodes

S. Rahmani*; T. Ban; S. Patangay; J. C. Park; J. McAnany; J. R. Hetling

Poster Session

Vitreoretinal surgery novel approaches and vitreoretinal interface

3:45 PM - 5:30 PM

Exhibit/Poster Hall

5012-B0430

Transitioning to the heads-up stereoscopic surgical display in a vitreoretinal fellowship program: impact on outcomes

I. De la Huerta*; Y. Yonekawa; O. Moinuddin; A. J. Ruby; T. S. Hassan; G. A. Williams

Poster Session

Diabetic retinopathy clinical and surgical

3:45 PM - 5:30 PM

Exhibit/Poster Hall

5031-B0476

Microaneurysm (MA) wall characteristics on adaptive optics scanning laser ophthalmoscopy (AOSLO) are related to MA perfusion status and local neural retina changes over time

O. Abu-Qamar*; Y. Lu; S. R. Peterson; K. Sampani; G. L. Yau; C. Cai; W. Fickweiler; P. Silva; L. P. Aiello; J. K. Sun

Poster Session

Eye care delivery and economic research

3:45 PM - 5:30 PM

Exhibit/Poster Hall

5058-B0611

Assessing and promoting the wellness of United States ophthalmology residents: A survey of program directors

E. M. Tran*; I. U. Scott; M. A. Clark; P. B. Greenberg

5065-B0618

Design and evaluation of a telemedicine program for diagnosis of urgent ophthalmic complaints

J. L. Romano*; K. Lo; S. Grob; U. Bains; M. Hymowitz; L. R. Pasquale; A. Lorch

ARVO ANNUAL MEETING

Thursday, May 11, 2017

Symposium

Genes and disease: How knowledge of genetics can guide treatment, now and in the future

8:30 AM - 10:30 AM

Ballroom 3

Moderator

Janey Wiggs, Massachusetts Eye and Ear

Symposium

The global problem of antibiotic resistance: Impact on ocular health worldwide and researching alternatives

8:30 AM - 10:30 AM

Ballroom 4

9:18 AM - 9:42 AM

Comparative genomics reveals the ancient origins of antibiotic resistance in hospital pathogens

M. Gilmore*

Poster Session

Neurodegenerative diseases and brain trauma

8:30 AM - 10:15 AM

Exhibit/Poster Hall

Alternate Moderator

David Hunter, Boston Children's Hospital

Poster Session

Orbital and thyroid eye disease

8:30 AM - 10:15 AM

Exhibit/Poster Hall

5141-B0028

Management of orbital fractures: A survey of common practices among oculoplastic surgeons

L. M. Cohen*; M. K. Yoon

5142-B0029

Posterior Orbital Floor Fractures

J. C. Jiménez-Pérez*; M. K. Yoon



Poster Session

Biochemistry and molecular biology of AMD II

8:30 AM - 10:15 AM

Exhibit/Poster Hall

5235-B0122

Accumulation of damaged nDNA promotes RPE cellular senescence and pro-inflammation

H. Lin*; B. Tian; A. Al Moujahed; J. W. Miller; D. G. Vavvas

Poster Session

IOP measurement and characterization II

8:30 AM - 10:15 AM

Exhibit/Poster Hall

5319-B0416

Comparison of Goldmann applanation tonometry and dynamic contour tonometry for measuring intraocular pressure in normal tension glaucomatous eyes

J. Wang*; M. A. Latina

Poster Session

Retinal function: ERG studies

8:30 AM - 10:15 AM

Exhibit/Poster Hall

5347-B0444

Effects of vascular endothelial growth factor (VEGF) on electroretinogram (ERG) amplitude in rats are mediated by bradykinin

A. C. Clermont*; N. Murugesan; T. Ustunkaya; B. Mastromarino; L. P. Aiello; E. P. Feener

Poster Session

Color vision, binocular and stereoscopic vision

8:30 AM - 10:15 AM

Exhibit/Poster Hall

5428-B0585

Oculomotor tracking deficits in children with dyslexia

K. Hannis*; S. Gowrisankaran; E. A. Swanson; D. Waber; A. Raghuram

5429-B0586

Ocular accommodation deficits and near work associated symptoms in children with dyslexia

K. Kerber*; S. Gowrisankaran; E. A. Swanson; D. Waber; A. Raghuram

Poster Session

Wide field retinal imaging

8:30 AM - 10:15 AM

Exhibit/Poster Hall

5450-B0607

Impact of ultrawide field retinal imaging (UWFI) on the rapid assessment of avoidable blindness and diabetic retinopathy (RAAB-DR) survey

G. L. Yau*; P. S. Silva; L. D. Cubillan; K. M. Claudio; K. M. Panggat; M. G. Ledesma; M. A. Villano; J. . Macenas; C. M. Pitoc; C. M. Paraz; J. K. Sun; L. P. Aiello

Poster Session

Endophthalmitis and trauma

8:30 AM - 10:15 AM

Exhibit/Poster Hall

5509-B0691

Vitreoretinal surgery after open globe injury

T. Stryjewski*; C. Ung; D. Elliott

5511-B0693

Retinal detachment in open globe injury with intraocular foreign body

Y. Wang*; S. R. Grob; Y. Chee; C. Andreoli; J. B. Miller

5516-B0698

Intimate partner violence: An important etiology to identify in patients with open globe injuries

S. R. Grob*; K. E. Talcott; T. Stryjewski; D. Elliott; A. Lorch; Y. Chee

Paper Session

Glaucoma: Frequency, risk factors, and care

11:30 AM - 1:15 PM

Room 309

1:00 PM - 1:15 PM

Exfoliation syndrome - the Maccabi Glaucoma Study

T. Zehavi-Dorin*; L. R. Pasquale; H. Levkovitch-Verbin

Paper Session

Genomics and proteomics to dissect normal and diseased ocular sites: an immunology and microbiology perspective

11:30 AM - 1:15 PM

Room 310

12:45 PM - 1:00 PM

Bacteria-driven evolution of human adenoviruses

J. Chodosh*; J. Lee; J. Lee; E. Materne; R. Rajala; A. Ismail; D. Seto; D. Dyer; J. Rajaiya

Poster Session
Corneal non-refractive surgery
11:30 AM - 1:15 PM
Exhibit/Poster Hall

5671-B0174
A systematic literature review of keratolimbal allograft after corneal chemical burn
S. Shanbhag*; H. Saeed; J. Chodosh

Poster Session
Immune mechanisms in eye disease: Perception and reality
11:30 AM - 1:15 PM
Exhibit/Poster Hall

5730-B0282
Corneal alkali injury induces retinopathy via inflammation that is preventable with anti-TNF- α treatment
F. Lei*; C. Zhou; V. Kapoulea; J. Chodosh; C. H. Dohlman; E. I. Paschalis

Poster Session
Diabetic retinopathy
11:30 AM - 1:15 PM
Exhibit/Poster Hall

5807-B0359
Analysis of vitreous biomarkers in proliferative diabetic retinopathy and macular edema
N. Nandakumar*; F. J. Lopez; G. C. Teague; K. Lashkari

Poster Session
Structure-function relationships II
11:30 AM - 1:15 PM
Exhibit/Poster Hall

11:30 AM - 1:15 PM
Glaucoma structure-function modeling improves by combining retinal nerve fiber layer thickness (RNFLT) with neuro-retinal rim thickness (NRRT) measurements
H. Wang*; N. Baniasadi; Q. Jin; M. Wang; L. Q. Shen; L. R. Pasquale; T. Elze



Poster Session
Paradigms of retinal degeneration and rescue
11:30 AM - 1:15 PM
Exhibit/Poster Hall

5892-B0484
The mechanism of retinal damage following ocular surface burn with alkali
C. Zhou*; F. Lei; N. Scott; V. Kapoulea; M. Robert; J. Chodosh; C. H. Dohlman; E. I. Paschalis

Poster Session
Ocular trauma
11:30 AM - 1:15 PM
Exhibit/Poster Hall

5949-B0712
Open globe injury associated with orbital fracture carries a poor prognosis
N. Wolkow*; E. D. Gaier; S. Tarabishy; S. R. Grob; D. Lefebvre; M. Gardiner

5950-B0713
Bilateral open globe injuries at a tertiary care center
H. V. Nguyen*; K. E. Talcott; A. Lorch; Y. Chee; C. Kloek; D. Elliott; S. R. Grob

Poster Session
Retinal detachment: Basic research
11:30 AM - 1:15 PM
Exhibit/Poster Hall

Moderator
Hetian Lei, Schepens Eye Research Institute of Mass. Eye and Ear

5964-B0764
The MDM2 T309G mutation in primary human retinal epithelial cells enhances experimental proliferative vitreoretinopathy
W. Wu*; Y. Duan; G. Ma; Y. Chee; A. Samad; J. Z. Cui; J. Matsubara; S. Mukai; P. A. D'Amore; H. Lei

5967-B0767
miR-155 regulates microglia activation in a murine model of retinal detachment
Y. Okunuki*; G. Klokman; K. M. Connor

Poster Session

Clinical retinal imaging 2 and lasers

11:30 AM - 1:15 PM

Exhibit/Poster Hall

Moderator

Demetrios Vavvas, Massachusetts Eye and Ear

Alternate Moderator

Jorge Arroyo, Beth Israel Deaconess Medical Center

5991-B0791

Correlation between macular features on spectral-domain optical coherence tomography images and visual outcome after vitreomacular traction surgery

P. Sun*; R. M. Tandias; G. Yu; J. G. Arroyo

NOTES

NOTES

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