



HARVARD
MEDICAL SCHOOL

DEPARTMENT OF
Ophthalmology

ARVO 2015

Abstracts and Presentations

ARVO-ISIE/Imaging Conference
May 2

ARVO Annual Meeting
May 3–7

Colorado Convention Center
700 14th St, Denver, CO 80202



Harvard Medical School Department of Ophthalmology

ARVO 2015

Presentations at the ARVO-ISIE/Imaging Conference and the ARVO Annual Meeting*

MAY 2, 2015 (SEPARATE REGISTRATION REQUIRED)

ARVO-ISIE/Imaging Conference	1
ARVO Education Courses	1
ARVO Foundation and Dowling Society Gala	1

MAY 3–7, 2015 (ARVO ANNUAL MEETING)

May 3, 2015 Sunday	2–6
May 4, 2015 Monday	7–10
May 5, 2015 Tuesday	11–15
May 6, 2015 Wednesday	16–21
May 7, 2015 Thursday	22–23

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

Saturday, May 2, 2015

**ISIE Imaging Conference
(SEPARATE REGISTRATION REQUIRED)
Colorado Convention Center
700 14th St, Denver, CO 80202
Saturday, May 2, 2015
8:00 - 5:30 pm**

**ARVO EDUCATION COURSES
(SEPARATE REGISTRATION REQUIRED)
Colorado Convention Center
700 14th St, Denver, CO 80202
Saturday, May 2, 2015
8:30 PM – 4:30 PM**

PAPER SESSIONS

5:00 PM – 5:15 PM

Four Seasons Ballroom 1

27

Localization of transplanted human neuronal cells within the inner retinal layers using in 3-dimensional modeling of confocal image stacks: Application in experimental glaucoma

J. Ma*; Y. Sun; F. López; k. Lashkari

Schepens Eye Research Institute; Ophthalmology IPE US

POSTER SESSIONS

10:00 AM – 10:30 AM

Four Seasons Ballroom 2-3

P33

The impact of blood vessel locations on abnormality profiles of Spectral-Domain Optical Coherence Tomography measurements

T. Elze*; Q. Jin; G. Wollstein; P. J. Bex

Harvard Medical School; Northeastern University; Jilin University; University of Pittsburgh

P34

Comparison of Swept Source OCT and Enhanced Depth Imaging OCT in the Measurement of Optic Nerve Head Parameters

D. Li*; E. Taniguchi; E. Paschalis; H. Wang; G. Scott H; B. Stacey; A. Turalba; L. Shen

Massachusetts Eye and Ear Infirmary

P37

Motion artifacts and missing data in Cirrus Spectral-Domain Optical Coherence Tomography measurements

Q. Jin*; G. Wollstein; L. Pasquale; L. Shen; P. J. Bex; T. Elze

Jilin University; Harvard Medical School; Harvard Medical School; Northeastern University; University of Pittsburgh

P55

The utility of ultrasound biomicroscopy in open globe trauma patients

A. Patel*; S. Barb; L. Hart; A. Lorch; Y. Chee; A. Turalba

Massachusetts Eye and Ear Infirmary

Strategies for effective grant writing

8:30 AM - 4:00 PM

2C/3C Mile High Blrm

10:15 AM - 10:45 AM

Specific Aims and Objectives

P. A. D'Amore*

Schepens Eye Res Inst, MEEI

11:00 AM - 11:20 AM

The Importance of Preliminary Data and How to Use It

P. A. D'Amore*

Schepens Eye Res Inst, MEEI

1:40 PM - 2:00 PM

Fatal Flaws found in Review Process – Experimental Design and Research Team

A. Kazlauskas*

Schepens Eye Res Inst/ Harvard

Primary cilia in eye development and disease

1:00 PM - 4:30 PM

1AB Mile High Blrm

2:55 PM - 3:20 PM

The role of intraflagellar transport in the photoreceptor sensory cilium and retinal degeneration

Q. Liu*

Harvard Medical School

**ARVO FOUNDATION AND DOWLING SOCIETY GALA
(SEPARATE REGISTRATION REQUIRED)
Pinnacle Club, Grand Hyatt Denver
1750 Welton St, Denver, CO 80202
Saturday, May 2, 2015
7:00 PM**

GALA HONOREE

Martine J. Jager, MD, PhD, FARVO

Past-President of ARVO

Department of Ophthalmology

Leiden University Medical Center, Leiden, The Netherlands

Adjunct Scientist, Schepens Eye Research Institute

Sunday, May 3, 2015

KEY:**SESSION TYPE**

Session Title

Session Time

Session Location

Presentation Time (if within Session Time)

Abstract ID

Abstract Title

Authors

Affiliations

MINISYMPOSIUM**Aging and proteostasis in the eye: The molecular basis of disease in an aging population**

3:15 PM - 5:00 PM

2A/3A Mile High Blrm

3:15 PM - 3:32 PM

914

Age-related Diseases of the Ocular Surface and Cornea

I. K. Gipson*

Schepens Eye Research Institute/MEE; Harvard Medical School

PAPER SESSION**Corneal immunology and infections**

3:15 PM - 5:00 PM

601/603

4:00 PM - 4:15 PM

941

Herpes Zoster Vaccination: Impact on the Incidence and Complications of Herpes Zoster Ophthalmicus.

S. Aggarwal*; R. Müller; . Pavan-Langston

Massachusetts Eye & Ear Infirmary

POSTER SESSION

8:30 AM - 10:15 AM

Exhibit Hall

12 - A0001

The effect of Cytochrome P450 lipid metabolites on leukocyte recruitment in intraocular inflammation.E. Hasegawa*; R. Yanai; L. Muluki; D. Husain; J. W. Miller; K. M. Connor
Harvard Medical School, Massachusetts Eye & Ear Infirmary

25 - A0014

The effect of dietary supplementation with omega-3 and omega-6 long-chain polyunsaturated fatty acids on retinal detachment

Y. Okunuki*; E. Hasegawa; R. Yanai; K. Smith; A. Castillejos; K. M. Connor

Massachusetts Eye and Ear Infirmary

32 - A0021

Sulforaphane Inhibits Retinal Cell Death in Ischemia/Hypoxia

L. Ambrecht*; Z. Yougan; J. F. McDonnell; J. I. Perlman

Loyola Univ Med Center

47 - A0036

MicroRNA expression array analysis in a mouse model of oxygen-induced retinopathy

R. Z. Cui*; C. Liu; A. M. Juan; L. Evans; K. Tian; J. Chen

Mayo Medical School; Boston Children's Hospital; University of Pennsylvania School of Medicine

POSTER SESSION

8:30 AM - 10:15 AM

Exhibit Hall

54 - A0043

Role of endocytosis in Norrin/Frizzled4 signaling

C. Zhang*; M. Lai; H. J. Junge

Department of Molecular, Cellular, and Developmental Biology,
University of Colorado, Boulder, Colorado, USA

57 - A0046

Optimization of laser-induced choroidal neovascularization in the mouse using the Phoenix Micron IV platform

Y. Gong*; J. Li; Z. Fu; C. Liu; L. Evans; K. Tian; N. Saba; T. Fredrick; L. E. Smith; P. Morss

Boston Children's Hospital, Harvard Medical School

68 - A0100

HLA class I expression in cell lines derived from conjunctival melanoma and retinoblastoma using allele-specific monoclonal antibodies and flow cytometry

R. Smesseim*; J. Cao; T. H. Van Essen; A. Mulder; E. van Zeeburg; B. R. Ksander; M. J. Jager

Leiden University Medical Center; The Rotterdam Ophthalmic Institute and the Rotterdam Eye Hospital; Schepens Eye Research Institute, Massachusetts Eye and Ear Infirmary, Harvard Medical School

138 - B0272

Resident compliance with the American Academy of Ophthalmology (AAO) Preferred Practice Patterns (PPPs) for Primary Open-Angle Glaucoma Suspects (POAGS)

M. Mihalstin*; J. Yin; M. S. Juzych; K. Heidi; F. Hwang

Kresge Eye Institute; Wayne State University School of Medicine

148 - C0003

Dexamethasone-Eluting Contact Lens Drug Delivery For The Ocular InflammationJ. B. Ciolino*; B. Salvador; R. Tulsan; A. Ross; K. Taghizadeh; D. Kohane
Massachusetts Eye and Ear Infirmary; Massachusetts Institute of Technology; Boston Children's Hospital

248 - C0120

Gene therapy restores vision in rd1 mice after removal of a confounding mutation in Gpr179L. S. Carvalho*; K. Nishiguchi; M. Rizzi; K. Powell; S. Kleine Holthaus; Y. Duran; U. F. Luhmann; J. W. Bainbridge; A. J. Smith; R. R. Ali
UCL Institute of Ophthalmology; Schepens Eye Research Institute/Mass Eye and Ear, Harvard Medical School

Sunday, May 3, 2015

POSTER SESSION

8:30 AM - 10:15 AM

Exhibit Hall

251 - C0123

Retinal applications for novel, in silico designed adeno-associated viral gene therapy vector platformL. H. Vandenberghe*; E. Zinn; L. S. Carvalho
Schepens Eye Research, Mass Eye and Ear, Harvard Medical School

265 - C0150

Molecular typing and antimicrobial resistance of ocular methicillin-resistant *Staphylococcus aureus*A. L. Hofling-Lima*; K. Santin; S. F. Abdallah; R. C. Mingrone; M. V. Gaspari; A. C. Pignatari; P. J. Bispo
Universidade Federal de Sao Paulo; Universidade Federal de Sao Paulo

291 - C0176

Corneal Dendritic Cells as a Surrogate Biomarker of Therapeutic Efficacy in Dry Eye-Associated Corneal InflammationY. Qazi*; A. Kheirkhah; T. H. Dohlman; A. Cruzat; B. Cavalcanti; C. Colon; R. Dana; P. Hamrah
Massachusetts Eye and Ear Infirmary

303 - C0188

Prospective, Randomized, Double-Masked Clinical Trial Comparing Safety and Efficacy of Topical Tacrolimus vs. Methylprednisolone for Ocular Graft-Versus-Host DiseaseU. S. Saboo*; T. Abud; F. Amparo; J. B. Ciolino; P. Hamrah; R. Dana
Massachusetts Eye and Ear Infirmary

335 - C0220

Corneal Epithelial Pigment Epithelium Derived Factor is Reduced in a Murine Model of Dry Eye DiseaseM. Fernandes*; B. Subbarayal; S. Chauhan; R. Dana
Schepens Eye Research Institute

345 - C0230

Clusterin (CLU) Prevents Ocular Surface (OCS) Barrier Damage by an All-or-None Mechanism in a Preclinical Mouse Model of Dry Eye

S. Jeong*; A. Bauskar; W. J. Mack; J. Mauris; P. Argueso; N. A. Panjwani; S. C. Pflugfelder; M. Fini

USC Institute for Genetic Medicine of USC, Keck School of Medicine, University of Southern California; Keck School of Medicine of USC, University of Southern California; Keck School of Medicine of USC, University of Southern California; Harvard Medical School; Harvard Medical School; Tufts University School of Medicine; Baylor College of Medicine; Keck School of Medicine of USC, University of Southern California

353 - C0238

Recombinant Human Proteoglycan 4 as a Natural Lubricant for Scleral LensesM. Samsom*; G. D. Jay; D. S. Jacobs; T. A. Schmidt
University of Calgary; Brown University; Boston Foundation for Sight; University of Calgary

POSTER SESSION

8:30 AM - 10:15 AM

Exhibit Hall

372 - D0108

Simultaneous sustained release of VEGF and bFGF from a non-biodegradable implant in the supra-choroidal space induces experimental choroidal neovascularization in both New Zealand white and Dutch belt rabbits.

C. G. Wong*; L. H. Young; K. Osann; R. A. Carvalho; T. You; T. Bruce SCLERA LLC; Harvard; University of California Irvine; University of California; Orange County Retina Group; UCLA

397 - D0133

Sealing retinal breaks with FocalSeal® in experimental rhegmatogenous retinal detachment in rabbit eyesS. Hoshi*; F. Okamoto; Y. Sugiura; G. Kishino; T. Murakami; M. Arai; T. Hirose; T. Oshika
University of Tsukuba; Arai Eye Clinic; The Schepens Eye Research Institute, Harvard Medical School; Boston Eye Group

398 - D0134

A Role of Phosphatidylinositol 5-Phosphate 4-Kinases in Proliferative VitreoretinopathyH. Lei*; A. Kazlauskas
Schepens Eye Research Institute/MEEI/Harvard Medical School

399 - D0135

Phenotypic variability and utility of red-free and wide-field autofluorescence imaging in incontinentia pigmenti patients.K. E. Talcott*; S. Mukai
Massachusetts Eye and Ear Infirmary

POSTER SESSION

1:30 PM - 3:15 PM

Exhibit Hall

436 - A0149

Regulation of photoreceptor development by competitive activation of cell type-specific enhancersT. J. Cherry*; M. Andzelm; D. Harmin; M. Greenberg
Harvard Medical School

458 - A0182

Cone Driven Electroretinogram (ERG) in InfantsP. Altschwager*; R. M. Hansen; A. Moskowitz; A. B. Fulton
Boston Children's Hospital; Harvard Medical School

491 - A0215

Functional loss of the inner retina in childhood optic gliomas detected by photopic negative responseL. Ambrosio*; E. Abed; M. Piccardi; D. Rizzo; A. Chiaretti; A. Dickmann; S. Petroni; R. Parrilla; R. Riccardi; B. Falsini
University of Naples Federico II; Catholic University of Rome; Catholic University of Rome

499 - A0223

Vision impairment from hemianopiaR. L. Woods*; S. S. Sheldon
Schepens Eye Research Institute

Sunday, May 3, 2015

POSTER SESSION

1:30 PM - 3:15 PM

Exhibit Hall

545 - B0003

Preferred Retinal Loci and Fixation Stability in Patients with Bilateral Ischemic Optic NeuropathyA. Mishra*; A. Selivanova; M. Jackson
Harvard Medical School

546 - B0004

Do patients with Stargardt maculopathy fixate eccentrically or with their fovea when asked to look straight ahead?M. Jackson*; A. Selivanova; W. Seiple
MEEI, Harvard Department of Ophthalmology; Lighthouse Guild; NYU School of Medicine

549 - B0007

Binocular Microperimetry with Simulated Asymmetric Bilateral ScotomasE. K. Wiecek*; M. Jackson; P. J. Bex
University College London; Northeastern University; Massachusetts Eye and Ear Infirmary

599 - B0057

Relationship between distance-weighted peripheral non-perfusion and diabetic macular edemaM. Sagong*; J. van Hemert; C. C. Wykoff; R. Wang; S. R. Sadda; D. M. Brown
Yeungnam University College of Medicine; Doheny Eye Institute; Optos plc; Retina Consultants of Houston; Weill Cornell Medical College, Houston Methodist Hospital; David Geffen School of Medicine, University of California, Los Angeles, California

611 - B0069

Uncertainty in the diagnosis of Pre-plus Disease in Retinopathy of PrematurityA. R. Loh*; M. Ryan; K. Abrahams; E. Ataer-Cansizoglu; R. V. Chan; A. M. Berrocal; J. Kalpathy-Cramer; V. Bolon-Canedo; D. Erdogmus; M. F. Chiang
Oregon Health and Science University; Weill Cornell Medical College; Bascom Palmer Eye Institute; Northeastern University; Harvard Medical School; University of A Coruña

665 - B0231

The association of pseudo-exfoliation syndrome (PXF) with functional visual improvement after cataract surgery: Results of the Ophthalmic Surgical Outcomes Data (OSOD) ProjectT. Cakiner-Egilmez*; A. R. Payal; L. A. Gonzalez; A. Chomsky; E. F. Baze; D. Vollman; M. G. Lawrence; M. K. Daly
Veterans Affairs, Boston Healthcare System; Harvard Medical School, Department of Ophthalmology; VA Tennessee Valley Healthcare System; Vanderbilt Eye Institute, Vanderbilt University Medical School; Michael E. DeBakey VA Medical Center; Cullen Eye Institute, Baylor College of Medicine; Department of Ophthalmology and Visual Sciences, Washington University School of Medicine; St Louis VA Medical Center; DoD/VA Vision Center of Excellence; Boston University School of Medicine, Department of Ophthalmology

POSTER SESSION

1:30 PM - 3:15 PM

Exhibit Hall

668 - B0234

The association of American Society of Anesthesiologists (ASA) class with functional visual improvement after cataract surgery: Results of the Ophthalmic Surgical Outcomes Data (OSOD) ProjectA. R. Payal*; D. Sola-Del Valle; L. A. Gonzalez; T. Cakiner-Egilmez; A. Chomsky; E. F. Baze; D. Vollman; M. G. Lawrence; M. K. Daly
Harvard Medical School; Veterans Affairs Boston Healthcare System; VA Tennessee Valley Healthcare System; Vanderbilt Eye Institute, Vanderbilt University Medical Center; Michael E. DeBakey VA Medical Center; Cullen Eye Institute, Baylor College of Medicine; St. Louis VA Medical Center, Ophthalmology; Department of Ophthalmology and Visual Sciences, Washington University School of Medicine; DoD/VA Vision Center of Excellence; Boston University School of Medicine, Department of Ophthalmology

674 - B0240

Impact of Diabetes Mellitus on cataract surgery outcomes: results of the Ophthalmic Surgical Outcomes Data ProjectJ. Lindsey*; N. Shekawat; M. G. Lawrence; D. Vollman; M. K. Daly; E. F. Baze; A. Chomsky
Vanderbilt University Medical; VA Tennessee Valley Healthcare System Center; DoD/Vision Center of Excellence; St. Louis VA Medical Center; Washington University School of Medicine; VA Boston Healthcare System; Boston University School of Medicine; Michael E. DeBakey VA Medical Center; Baylor College of Medicine

704 - C0252

Generation of an In Vitro Wound Healing Model Based on Stratified Human Corneal Epithelial CellsM. Gonzalez Andrades*; A. Cruzat; J. Mauris; L. Alonso Pastor; C. H. Dohlman; P. Argueso
Harvard University; Massachusetts Eye and Ear; Massachusetts Institute of Technology

719 - C0267

PDGFR α is required for the anti-fibrotic action of TGF β 3S. Sriram*; J. A. Tran; X. Q. Guo; A. Kazlauskas; J. D. Zieske
Schepens Eye Research Institute/MEE

799 - D0261

Mitochondrial DNA acts as pro-inflammatory in AMDB. Dib*; H. Lin; D. E. Maidana; J. B. Miller; P. Bouzika; B. Tian; J. W. Miller; D. Vavvas
Massachusetts Eye and Ear Infirmary; Harvard Medical School

811 - D0273

Effect of MiR-17* on oxidative damage in human retinal epithelial cellsB. Tian*; H. Lin; D. E. Maidana; B. Dib; J. B. Miller; P. Bouzika; J. W. Miller; D. Vavvas
Harvard Medical school

Sunday, May 3, 2015

POSTER SESSION

1:30 PM - 3:15 PM

Exhibit Hall

830 - D0292

Control of human RPE differentiation and metabolism by PGC-1 α : implications for AMD

M. Saint-Geniez*; J. Iacovelli; G. Rowe; Z. Arany
 Schepens Eye Research Institute, Massachusetts Eye and Ear; Perelman School of Medicine, University of Pennsylvania; University of Alabama

857 - D0319

Infliximab for the treatment of ocular cicatricial pemphigoid, a Preliminary Report

J. J. Lee*; C. S. Foster
 Massachusetts Eye Research and Surgery Institution; Harvard Medical School

868 - D0330

Interface between Mesenchymal Stem Cells and Regulatory T Cell

S. Chauhan*; M. Omoto
 Harvard Medical School; Okayama University Hospital

POSTER SESSION

3:15 PM – 5:00 PM

Exhibit Hall

954 - A0063

Association of Average Day Length during Early Gestation with Treated Retinopathy of Prematurity in Black Premature Infants: A Multicenter Study.

M. B. Yang*; P. Lundgren; P. Cobb; R. Lang; L. E. Smith; C. Lofqvist; A. Hellström
 Cincinnati Children's Hospital Medical Center; University of Cincinnati; Sahlgrenska Academy at Gothenburg University; Children's Hospital Boston; Harvard Medical School

960 - A0069

Prevalence of amblyogenic risk factors in premature patients: do at-risk populations need different vision screening strategies?

E. Koo*; A. G. De Alba Campomanes
 University of California San Francisco

971 - A0080

The relationship between cord blood adipocytokine levels and retinopathy of prematurity

C. Lofqvist*; I. Hansen-Pupp; G. Hellgren; M. Gram; L. E. Smith; A. Hård; D. Ley; A. Hellström
 Lund University and Skane University Hospital; Sahlgrenska Academy at University of Gothenburg; Boston Children's Hospital, Harvard Medical School

1023 - B0097

Monoscopic vs. Stereoscopic Optic Nerve Evaluation for Glaucomatous Features: Comparison of Ultrawide-field Scanning Laser Ophthalmoscopy and 35 mm Slide Photographs in a Diabetes Ocular Telemedicine Program

B. J. Song*; L. R. Pasquale; L. Aiello; P. S. Silva
 Massachusetts Eye and Ear Infirmary; Harvard Medical School; Beetham Eye Institute - Joslin Diabetes Center

POSTER SESSION

3:15 PM – 5:00 PM

Exhibit Hall

1086 - C0099

Sequence-specific suppression of alleles causing dominantly inherited retinal degenerations using the RNA-guided nuclease Cas9

C. Men*; K. M. Bujakowska; E. Place; Q. Liu; E. A. Pierce
 Harvard Medical School; Massachusetts Eye and Ear Infirmary

1094 - C0107

FEVR-associated mutations in TSPAN12 affect Norrin/Frizzled4 signaling

M. Lai*; J. McVey; C. Zhang; L. Khandan; H. J. Junge
 University of Colorado at Boulder

1116 - D0018

Anatomical and visual outcomes after Boston Keratoprosthesis type 1 in chemical burns: the Santo Domingo experience.

B. Salvador Culla*; L. Arzeno; P. E. Kolovou; S. Martínez; C. H. Dohlman; M. López
 Massachusetts Eye & Ear Infirmary, Harvard Medical School; Hospital Elías Santana

1121 - D0023

Glare Reduction Strategies for Keratoprosthesis

M. Abdelaziz*; C. H. Dohlman; R. R. Sayegh
 Massachusetts Eye & Ear Infirmary; University Hospitals/Case Western Reserve University

1123 - D0025

Longitudinal Assessment of Boston Type 1 Keratoprosthesis/Cornea Interface by Anterior Segment-OCT Allows Detection and Monitoring of Corneal Tissue Melts

R. Müller*; E. Taniguchi; A. Cruzat; B. M. Cavalcanti; C. H. Dohlman; P. Hamrah
 Massachusetts Eye and Ear Infirmary

1126 - D0028

Role of titanium surface topography in regulation of corneal cell growth, patterning, and matrix deposition

C. Zhou*; J. Chodosh; C. H. Dohlman; E. I. Paschalis
 Schepens Eye Research Institute – Massachusetts Eye and Ear; Harvard Medical School; Massachusetts Eye and Ear

1138 - D0040

3D corneal elasticity mapping in normal and keratoconus patients

S. Besner*; G. Scarcelli; r. pineda; S. H. Yun; P. Kalout
 Massachusetts General Hospital; Harvard Medical School; Massachusetts Eye and Ear Infirmary

1148 - D0050

Overestimation of Corneal Endothelial Cell Density by Selecting Smaller Areas to Count the Cells in Images of In Vivo Confocal Microscopy

A. Kheirikhah*; U. Saboo; R. Dana
 Massachusetts Eye and Ear Infirmary

Sunday, May 3, 2015

POSTER SESSION

3:15 PM – 5:00 PM

Exhibit Hall

1223 - D0200

Ocular Coherence Tomographic Findings in Patients with Vitreomacular Traction Treated with Pneumatic Vitreolysis, Intravitreal Ocriplasmin, or Vitrectomy with Membrane Peeling

G. Yu*; J. G. Arroyo; K. V. Marra

Beth Israel Deaconess Medical Center; UCSD

1258 - D0235

Gene Polymorphisms associated with Ocular involvement in Sarcoidosis

V. S. Chang*; E. Papavasileiou; A. Ren; E. Uchiyama; L. Sullivan; A. Lobo;

G. Papaliodis; L. Sobrin

Massachusetts Eye and Ear Infirmary

WORKSHOP

Going to the dark side or seeing the light? Career progression in vision research from academia to industry and vice versa

1:30 PM - 3:00 PM

605/607

1:30 PM - 1:45 PM

Career progression from research, patient care and teaching in academia to translational medicine in pharmaceutical industry research

C. L. Grosskreutz*

Novartis Institutes for Biomedical Research; Massachusetts Eye and Ear Infirmary

SPECIAL INTEREST GROUP (SIG)

1:30 PM - 3:00 PM

2A/3A Mile High Blrm

Presentation and Analysis of a Comparative Efficacy Study of 3 anti-VEGF drugs.

L. M. Jampol*; F. L. Ferris; A. R. Glassman; J. A. Wells; A. N. Antoszyk; C.

W. Baker; M. J. Elman; J. K. Sun

Northwestern University; National Eye Institute; Jaeb Center for Health

Research; Palmetto Retina Center; Charlotte Eye, Ear, Nose and Throat

Assoc; Paducah Retinal Center; Elman Retina Group, P.A; Joslin

Diabetes Center

SPECIAL INTEREST GROUP (SIG)

1:30 PM - 3:00 PM

4CD Mile High Blrm

Neurovascular-Cardiovascular Glaucoma Nexus

E. S. Buys*; G. Prasanna; L. R. Pasquale; O. Zeitz; A. Harris; A. P.

Khawaja; J. Kiel

Harvard Medical School, Massachusetts General Hospital; Novartis;

Massachusetts Eye and Ear Infirmary, Harvard Medical School; Bayer

HealthCare AG, Univ Hamburg; Indiana University School of Medicine,

Eugene and Marilyn Glick Eye Institute; Moorfields Eye Hospital; U

Texas Health Science Center

WORKSHOP

Chinese Ophthalmological Society Workshop: Optic nerve damage and regeneration

1:30 PM - 3:00 PM

1CD Mile High Blrm

2:50 PM - 2:55 PM

Discussant

D. F. Chen*

Schepens Eye Res Inst, Harvard Med Sch

Monday, May 4, 2015

KEY:

SESSION TYPE

Session Time

Session Location

Presentation Time (if within Session Time)

Abstract ID

Abstract Title

Authors

Affiliations

ARVO AWARD LECTURES

5:45 PM - 7:30 PM

2-4 Four Seasons Blrm

5:55 PM - 6:30 PM

2553

Proctor Award Lecture - Regulation of retinal vascular growth: development, pathology and therapy

P. A. D'Amore*

Schepens Eye Res Inst, MEEI

6:45 PM - 6:55 PM

2554

Weisenfeld Award Introduction: Joan W. Miller

E. S. Gragoudas*

Massachusetts Eye & Ear Infirmary

6:55 PM - 7:30 PM

2555

Weisenfeld Award Lecture - Beyond VEGF

J. W. Miller*

Massachusetts Eye & Ear Infirmary

CROSS-SECTIONAL GROUP

Multidisciplinary Ophthalmic Imaging Group - How high resolution retinal imaging is changing light safety

1:00 PM - 2:30 PM

2B/3B Mile High Blrm

2:12 PM - 2:30 PM

Light exposure safety in clinical and experimental imaging devices

F. C. Delori*

Schepens Eye Research Institute

MINISYMPOSIUM

Myeloid cells in ocular health and disease

8:30 AM - 10:15 AM

601/603

9:55 AM - 10:15 AM

1345

Optic Nerve Regeneration and Glaucoma: the Yin and Yang of Intraocular Inflammation

L. Benowitz*

Harvard Medical School; Boston Children's Hospital

MINISYMPOSIUM

Lymphangiogenesis in the eye: The role of lymphatic vessels in inflammation, infection, and pathology

11:00 AM - 12:45 PM

2A/3A Mile High Blrm

12:15 PM - 12:30 PM

1683

Mechanisms of APC-lymphatic interaction, immune induction, and inflammatory resolution

R. Dana*

Schepens Eye Research Institute

MINISYMPOSIUM

Mechanisms of vision loss in early diabetes: Connecting new findings from retinal imaging and functional techniques in patients to basic models

3:45 PM - 5:30 PM

702/704/706

4:05 PM - 4:25 PM

2090

Retinal pathology in diabetes and systemic comorbidities

J. K. Sun*

Joslin Diabetes Center, Harvard Medical School

PAPER SESSION

Tumors - Inside and around the eye, I

8:30 AM - 10:15 AM

1AB Mile High Blrm

10:00 AM - 10:15 AM

1293

Second primary cancers in uveal melanoma survivors and the role of radiotherapy: a long-term population-based study

I. Lains*; C. Bartosch; V. Mondim; D. Husain; J. W. Miller

Massachusetts Eye and Ear Infirmary, Harvard Medical School; Faculty of Medicine, University of Coimbra; Instituto Português de Oncologia do Porto; Centro Hospitalar de Lisboa Central

PAPER SESSION

Development, adaptation, and modulation, I

8:30 AM - 10:15 AM

4EF Mile High Blrm

10:00 AM - 10:15 AM

1340

Retinal circadian clock enhances GABA feedback to cones at night

S. C. Mangel*; M. Ishii; H. Choi; A. Chaffiol; Y. Cao; A. Adelaja
Ohio State Univ. College of Med.

Monday, May 4, 2015

PAPER SESSION

Human uveitis: Posterior

11:00 AM - 12:45 PM

601/603

12:00 PM - 12:15 PM

1721

Risk Factors for Poor Visual Outcome in Birdshot Retinochoroidopathy Patients

S. Silpa-archa*; J. J. Lee; S. Boonsoon; P. Patel; C. S. Foster
 Massachusetts Eye Research & Surgery Institution; Rajavithi Hospital,
 College of Medicine, Rangsit University; Harvard Medical School

PAPER SESSION

Diabetic retinopathy screening

3:45 PM - 5:30 PM

1 Four Seasons Blrm

4:45 PM - 5:00 PM

2018

Predominantly Peripheral Diabetic Retinopathy Lesions and Retinopathy Severity are Associated with Peripheral Nonperfusion on Ultrawide Field Fluorescein Angiography

P. S. Silva*; M. Ledesma; J. Cavallerano; R. Ajlan; J. K. Sun; L. Aiello
 Joslin Diabetes Center; Harvard Medical School; Philippine Eye
 Research Institute

PAPER SESSION

IOP

3:45 PM - 5:30 PM

2-4 Four Seasons Blrm

3:45 PM - 4:00 PM

2021

IOP Measurement Using Corneal Vibrations Parameters Analysis in Humans

P. Bitoun*; Z. Khoeir; S. Hammoud; K. Bouafia; B. Haouchine; P.
 Chapelle; J. Chambard; P. Jourot; Y. Lachkar; L. Benzacken
 Jean Verdier Hosp, CHU Paris-Nord; Hopital Saint Joseph; Hopital
 Robert Ballanger; Laboratoires Holo3; Agilite

PAPER SESSION

Mechanisms in angiogenesis

3:45 PM - 5:30 PM

2B/3B Mile High Blrm

4:15 PM - 4:30 PM

2049

Retinal neuronal SOCS3 governs EGF signaling and neovascular growth

Y. Sun*; M. Ju; A. Stahl; L. Evans; K. Tian; N. Saba; T. Fredrick; P. Morss;
 J. Chen; L. E. Smith
 Harvard Med School/Boston Children's Hospital; University Eye
 Hospital Freiburg Killianstrasse 5

PAPER SESSION

Structure / Function, II

3:45 PM - 5:30 PM

2C/3C Mile High Blrm

4:15 PM - 4:30 PM

2056

Prelaminar and Lamina Cribrosa Defects Detected by Swept Source OCT in Glaucoma Stratified by Visual Field Loss Pattern

E. Taniguchi*; E. I. Paschalis; D. Li; H. Wang; S. C. Brauner; S. H.
 Greenstein; A. V. Turalba; L. R. Pasquale; L. Q. Shen
 Massachusetts Eye and Ear Infirmary; Massachusetts Eye and Ear
 Infirmary

POSTER SESSION

8:30 AM - 10:15 AM

Exhibit Hall

1424 - A0119

Identification of Diabetic Retinopathy (DR) and Reduction in Ungradable Image Rate with Ultrawide Field Imaging (UWFI) within the Indian Health Service (IHS) Teleophthalmology Program

M. B. Horton*; P. S. Silva; D. Lewis; J. Cavallerano; L. Aiello
 Indian Health Service – Joslin Vision Network National Reading Center;
 Joslin Diabetes Center; Harvard Medical School; Estenda Solutions

1425 - A0120

Ultrawide Field Imaging (UWFI) for Diabetic Retinopathy in a Community-Based Teleophthalmology Program

N. N. Haddad*; R. Cancino; P. S. Silva; E. Okeke; A. Tolson; L. Aiello; J.
 Cavallerano
 Joslin Diabetes Ctr/Beetham Eye Inst; Harvard Medical School;
 Mattapan Community Health Center (MCHC); Mattapan Community
 Health Center (MCHC); Boston University School of Medicine/Boston
 Medical Center

1486 - B0123

Abcb5-positive retinal pigment epithelial cells are required for normal retinal development and ageing

B. R. Ksander*; R. Lewis; B. J. Wilson; G. Berg; M. H. Frank; N. Frank
 Harvard Medical School; Boston Children's Hospital, Harvard Medical
 School; Brigham & Women's Hospital, Harvard Medical School

1601 - D0056

An acute damage score to guide surgical intervention in ocular Stevens-Johnson Syndrome

K. Ma*; A. Thanos; A. Shah; I. Mantagos
 Boston Medical Center; Boston Children's Hospital; Massachusetts Eye
 and Ear Infirmary, Harvard Medical School

1603 - D0058

Efficacy Studies of Thermo-responsive Reversible Adhesive for Temporary Intervention in Ocular Trauma Utilizing a Rabbit Model

Y. Zhang*; J. J. Whalen; P. Falabella; N. Bayat; M. E. Thompson; M. S.
 Humayun
 University of Southern California; University of Southern California;
 Chemical Engineering and Material Science, University of Southern
 California; Chemistry, University of Southern California

Monday, May 4, 2015

POSTER SESSION

8:30 AM - 10:15 AM

Exhibit Hall

1645 - D0153

Mouse Genomic Loci Modulating Corneal Thickness

R. King*; M. A. Hauser; L. R. Pasquale; J. L. Wiggs; A. E. Ashley-Koch; R. Allingham; E. E. Geisert
Emory School of Medicine; Duke University; Massachusetts Eye and Ear Infirmary; Harvard Medical School; Duke University; Duke University

POSTER SESSION

11:00 AM - 12:45 PM

Exhibit Hall

1821 - B0133

Transplantation of human retinal progenitor cells into the P23H rat improves the scotopic ERG.

M. Semo*; A. Lynch; N. Haamedi; D. Carter; J. Sinden; M. Young; L. Stevanato; S. Patel; A. Vugler
UCL Institute of Ophthalmology; ReNeuron; Schepens Eye Research Institute

1856 - C0164

Plasmacytoid Dendritic Cells Mediate Adaptive Immunity in Acute Herpes Simplex Virus Keratitis

V. Sendra*; A. Jamali; D. L. Harris; P. Hamrah
Schepens Eye Research Institute-Mass eye and ear; Cornea & Refractive Surgery Service-Massachusetts Eye & Ear Infirmary

1863 - C0171

Incidence of Herpes zoster ophthalmicus (HZO) at Massachusetts Eye and Ear Infirmary (MEEI) from 2007-2013

E. Davies*; D. Langston; J. Chodosh
Massachusetts Eye and Ear Infirmary

1869 - C0177

Epidemic Keratoconjunctivitis-causing Adenoviruses Induce MUC16 Ectodomain Release in Corneal Epithelial Cells

B. B. Menon*; X. Zhou; S. Spurr-Michaud; J. Chodosh; I. K. Gipson
Schepens Eye Rsch Inst, MEEI; Harvard Medical School - MEEI

1870 - C0178

Dynamin-2 negatively regulates adenovirus trafficking in corneal cells

J. Rajaiya*; J. Lee; J. Lee; J. Chodosh
Massachusetts Eye and Ear Infirmary, Harvard Medical School

1892 - C0200

Cell death of gamma interferon (IFN γ)-stimulated human macrophages upon Toxoplasma gondii infection limits parasite replication

E. Konstantinou*; J. Saeij; L. Young
Massachusetts Eye and Ear Infirmary, Harvard Medical School; Massachusetts Institute of Technology

1933 - D0068

Effect of TGF- β 1 and - β 3 on CD63 expression in human corneal fibroblasts

J. A. Tran*; X. Q. Guo; A. E. Hutcheon; J. D. Zieske
Schepens Eye Research Institute/MEEI

POSTER SESSION

11:00 AM - 12:45 PM

Exhibit Hall

1934 - D0069

Long-term, Live-Imaging of the Mechanodynamics of Primary Human Corneal Fibroblasts: From Initial Seeding to Matrix Production

J. Ruberti*; R. Zareian; D. Karamichos; D. Tambe; M. Susilo; J. Paten; N. Saeidi; J. D. Zieske
Northeastern University; Schepens Eye Research Institute; University of Oklahoma Health Sciences Center; University of South Alabama; University of California Berkeley; Draper Laboratory; Massachusetts General Hospital

1995 - D0238

Real-time in vivo detection of retinal reactive oxygen species

N. Fan*; Y. Liu; B. Kim; L. Tang; A. F. Clark; I. Pang
Shenzhen Eye Hospital, Jinan University; UNT Health Science Center; University of Texas at Arlington; UNT Health Science Center

POSTER SESSION

3:45 PM - 5:30 PM

Exhibit Hall

2110 - A0017

The impact of glaucoma on functional visual improvement after cataract surgery: Results of the Veterans Affairs (VA) Ophthalmic Surgical Outcomes Data (OSOD) Project

D. Sola-Del Valle*; A. R. Payal; L. A. Gonzalez; T. Cakiner-Egilmez; X. Chen; A. Chomsky; E. F. Baze; D. Vollman; M. G. Lawrence; M. K. Daly
VA Boston Healthcare System, Ophthalmology Department; Harvard Medical School, Massachusetts Eye and Ear Infirmary; VA Tennessee Valley Healthcare System; Vanderbilt Eye Institute, Vanderbilt University Medical School; Michael E. DeBakey VA Medical Center; Cullen Eye Institute, Baylor College of Medicine; St Louis VA Medical Center; Department of Ophthalmology and Visual Sciences, Washington University School of Medicine; DoD/VA Vision Center of Excellence; Boston University School of Medicine, Department of Ophthalmology

2149 - B0002

Effects of 430nm monochromatic light on defocus-induced myopia in guinea pigs

Y. Qian*; r. liu; j. dai
First Affiliated Hospital of Soochow University; Eye & ENT Hospital of Fudan University

2290 - B0195

Novel CCR3 antagonists are effective mono- and combination inhibitors of CNV growth and vascular permeability

Y. Ng*; N. Nagai; M. Ju; K. Izumi-Nagai; S. Robbie; J. W. Bainbridge; A. H. Krauss; D. C. Gale; P. S. Adamson; D. Shima
The Schepens Eye Research Institute; UCL Institute of Ophthalmology; UCL Institute of Ophthalmology; GlaxoSmithKline; GlaxoSmithKline

2359 - C0009

Systemic Administration of Anti-Angiopoietin-2 (Ang-2) Antibody Inhibits Matrigel Induced Choroidal Neovascularization (CNV) in Rats

Y. Liu*; z. li; D. reef; J. Cao; C. Romano; S. J. Wiegand
Regeneron Pharmaceuticals Inc

Monday, May 4, 2015

POSTER SESSION

3:45 PM - 5:30 PM

Exhibit Hall

2364 - C0014

A Highly Potent Inhibitor of PI3K and the Mammalian Target of Rapamycin, GSK2126458, Inhibits Laser-Induced Choroidal Neovascularization

Y. Sun*; J. Ma; G. C. Teague; F. J. Lopez; P. S. Adamson; E. Kurali; K. Lashkari

Schepens Eye Research Institute, Harvard Medical School; Ophthalmology IPE US, RD Alternative Discovery & Development, GSK; Quantitative Sciences, RD Alternative Discovery & Development, GSK

2367 - C0017

Oxidized lipoproteins induce RPE cell death through NLRP3-inflammasome activation

G. Gnanaguru*; A. Choi; D. Amarnani; W. Tseng; L. A. Kim; P. A. D'Amore

Schepens Eye Research Institute, MEEI, HMS; Brown University; Massachusetts Institute of Technology

2503 - D0107

Effects of insulin and high glucose on human meibomian gland epithelial cells

J. Ding*; Y. Liu; D. A. Sullivan

Schepens Eye Research Institute/Massachusetts Eye and Ear

2504 - D0108

Do cyclosporine A, anakinra, uridine triphosphate, rebamipide or bimatoprost influence the proliferation, differentiation or signaling of human meibomian gland epithelial cells?

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

Schepens Eye Res Inst/Harvard Med School

2538 - D0202

FOXF2 mutations in patients with early-onset glaucoma

X. Chen*; K. Allen; K. Linkroum; D. Wang; M. Consugar; E. DelBono; J. L. Wiggs

Massachusetts Eye & Ear Infirmary

2544 - D0208

Panel-based genetic testing of Juvenile-Open Angle Glaucoma probands in the United States

K. Allen*; D. Wang; M. Janessian; D. Navarro-Gomez; J. White; E. Choi;

L. R. Pasquale; M. Consugar; X. Gai; J. L. Wiggs

Massachusetts Eye and Ear Infirmary

2549 - D0213

Association of Clusterin Variants and Exfoliation Syndrome: An Analysis in Two Caucasian Datasets and A Summary Meta-analysis

B. Fan*; L. R. Pasquale; J. H. Kang; H. Levkovitch-Verbin; J. L. Haines; J. L. Wiggs

Massachusetts Eye & Ear Infirmary; Harvard Medical School, Brigham and Women's Hospital; Chaim Sheba Medical Center, Tel Aviv University; Case Western Reserve University

SPECIAL INTEREST GROUP (SIG)

1:00 PM - 2:30 PM

1CD Mile High Blrm

Lipid Metabolites in ischemic retinopathies: What we learned so farM. A. Al-Shabraway*; J. V. Busik; J. S. Penn; L. E. Smith; T. Lyons
Georgia Regents University; Medical College of Georgia; Michigan State University; Vanderbilt; Harvard Medical School; Queen's University

SPECIAL INTEREST GROUP (SIG)

1:00 PM - 2:30 PM

1EF Mile High Blrm

Regenerative Medicine vs Pharmaceutical Agents: New Treatments for Corneal Endothelial Dysfunction

S. Kinoshita*; F. E. Kruse; K. H. Baratz; U. V. Jurkunas; A. S. Jun; N. Okumura; J. S. Mehta; T. A. Fuchsluger

Kyoto Prefectural Univ of Med; Erlangen University; Mayo clinic; Massachusetts Eye and Ear Infirmary; Johns Hopkins University; Doshisha University; Singapore Eye Research Institute; Erlangen University

SPECIAL INTEREST GROUP (SIG)

1:00 PM - 2:30 PM

2A/3A Mile High Blrm

The Lasker/IRRF Initiative on Restoring Vision to the BlindJ. E. Dowling*; E. Zrenner; B. Roska; J. Sahel; J. Sowden; D. Goldman
Harvard University; University of Tübingen; Friedrich Miescher Institute for Biomedical Research; Institut de la Vision; UCL Institute of Child Health; University of Michigan

Tuesday, May 5, 2015

KEY:**SESSION TYPE**

Session Time

Session Location

Presentation Time (if within Session Time)

Abstract ID

Abstract Title

Authors

Affiliations

ARVO/CHAMPALIMAUD AWARD LECTURE

5:45 PM - 7:00 PM

2-4 Four Seasons Blrm

5:45 PM - 5:55 PM

Opening remarks and introduction

A. Sommer; L. Beleza

5:55 PM - 6:20 PM

3953

Discovery of VEGF-A, a Key Regulator of Intraocular Neovascularization

N. Ferrara*

UC San Diego Moores Cancer Center

6:20 PM - 6:45 PM

3954

VEGF: from discovery to therapy

J. W. Miller*

Massachusetts Eye & Ear Infirmary

6:45 PM - 6:59 PM

Questions from attendees**CROSS-SECTIONAL GROUP SESSION****Genetics Group - DNA: The road from sequence to phenotype and beyond**

1:00 PM - 2:30 PM

2B/3B Mile High Blrm

1:54 PM - 2:12 PM

Translating molecular pathways in POAG

J. L. Wiggs*

MEEI; Harvard Medical School

PAPER SESSION

Corneal endothelium, dystrophies, genetics

8:30 AM - 10:15 AM

2A/3A Mile High Blrm

9:00 AM - 9:15 AM

2577

Increased mitochondrial fission in Fuchs Endothelial Corneal Dystrophy

T. Miyai*; A. Benischke; U. V. Jurkunas

Massachusetts Eye and Ear/ Schepens Eye Research Institute; Harvard Medical School

PAPER SESSION

Neuroprotection

8:30 AM - 10:15 AM

2C/3C Mile High Blrm

9:45 AM - 10:00 AM

2594

Gene therapy treatment with AAV-soluble Fas ligand protects retinal ganglion cells during development of Glaucoma

A. Krishnan*; F. Fei; A. Jones; B. R. Ksander; A. Rothstein; M. S.

Gregory-Ksander

Schepens Eye Rsrch Inst, Mass Eye & Ear Infirmary; University of Massachusetts Medical School

PAPER SESSION

Gene mutations- Functional effects

8:30 AM - 10:15 AM

4AB Mile High Blrm

8:30 AM - 8:45 AM

2596

AMD-Associated Silent Substitutions in HTRA1 Hijack the Unfolded Protein Response in RPE

S. P. Jacobo*; A. Kazlauskas

Harvard Medical School / SERI

2599

The importance of Sanger sequencing of exon ORF15 of RPGR at the time of next-generation sequencing

C. Zeitz*; K. M. Bujakowska; J. Neidhardt; S. El Shamieh; J. A. Sahel; I. S.

Audo

INSERM, U968, CNRS, UMR_7210, Sorbonne Universités, UPMC Univ Paris 06, UMR_S 968, Institut de la Vision; Ocular Genomics Institute, Massachusetts Eye and Ear Infirmary, Harvard Medical School; Human Genetics, Faculty of Medicine and Health Sciences, University of Oldenburg; Centre Hospitalier National d'Ophtalmologie des Quinze-Vingts, INSERM-DHOS CIC 1423

PAPER SESSION

Diabetic macular edema management

11:00 AM - 12:45 PM

1 Four Seasons Blrm

11:00 AM - 11:15 AM

3143

Durability of diabetic retinopathy improvement and impact of delayed therapy with ranibizumab (RBZ) during the RIDE/RISE open-label extension (OLE)

J. K. Sun*; P. Wang; A. E. Fung

Joslin Diabetes Center; Harvard Medical School; Genentech

Tuesday, May 5, 2015

PAPER SESSION

Visual fields and visual function, II

11:00 AM - 12:45 PM

2C/3C Mile High Blrm

11:30 AM - 11:45 AM

3178

Patterns of early glaucomatous visual field loss and their evolution over time

T. Elze*; L. Q. Shen; J. L. Wiggs; M. V. Boland; S. Wellik; P. J. Bex; L. R. Pasquale

Schepens Eye Research Institute; Max Planck Institute for Mathematics in the Sciences; Harvard Medical School; Johns Hopkins University; Bascom Palmer Eye Institute; Northeastern University

PAPER SESSION

Gene editing and modification

11:00 AM - 12:45 PM

4AB Mile High Blrm

12:15 PM - 12:30 PM

3188

Nrf2 promotes neuron survival in mouse models of neurodegeneration and acute nerve damageW. Xiong*; A. MacColl Garfinkel; Y. Li; L. Benowitz; C. L. Cepko
Harvard Medical School; Howard Hughes Medical Institute; Boston Children's Hospital; Harvard Medical School

PAPER SESSION

Meibomian gland, lacrimal gland and tear film, II

11:00 AM - 12:45 PM

4EF Mile High Blrm

11:00 AM - 11:15 AM

3197

Progenitor cell transplantation rescues lacrimal gland acinar structure in the thrombospondin-1 null (TSP-1-/-) miceH. P. Makarenkova*; T. Umazume; D. A. Dartt
The Scripps Research Institute; Schepens Eye Research Institute

3200

Regulation of mouse meibomian gland by the growth hormone/insulin-like growth factor-1 axis.Y. Liu*; E. Knop; N. Knop; D. A. Sullivan; E. List; J. J. Kopchick; J. Ding
Schepens Eye Research Institute, Massachusetts Eye and Ear, and Harvard Medical School; Ocular Surface Center Berlin, Charité-Universitätsmedizin Berlin, Germany, Berlin, Germany; Ocular Surface Center Berlin, Charité-Universitätsmedizin Berlin, Germany, Berlin, Germany; Edison Biotechnology Institute, Ohio University

PAPER SESSION

Pathophysiology of macular degenerations: Animal models and donor eyes

3:45 PM - 5:30 PM

2B/3B Mile High Blrm

3:45 PM - 4:00 PM

3532

The Role of Complement and the Extracellular Matrix in Early Stage Macular DegenerationR. Fernandez-Godino*; E. A. Pierce; D. Garland
Mass Eye and Ear Infirmary

PAPER SESSION

Pathophysiology of macular degenerations: Animal models and donor eyes

3:45 PM - 5:30 PM

2B/3B Mile High Blrm

3537

Dysfunctional autophagosome and phagosome in age-related macular degeneration (AMD).S. Notomi*; T. Hisatomi; T. Tachibana; Y. Murakami; Y. Ikeda; H. Terasaki; T. Sakamoto; J. W. Miller; T. Ishibashi; D. Vavvas
Massachusetts Eye and Ear Infirmary, Harvard Medical School; Kyushu University; National Hospital Organization Kyushu Medical Center; Kagoshima University

POSTER SESSION

8:30 AM - 10:15 AM

Exhibit Hall

2710 - A0278

Vision Loss and Recovery after Baerveldt Glaucoma Implant SurgeryE. L. Kim*; M. Toeteborg-Harms; J. S. Tran; J. S. Chahal; D. J. Rhee; V. Chopra; R. Varma; B. A. Francis
University of Southern California Eye Institute; Doheny Eye Institute; Massachusetts Eye and Ear Infirmary; Case Western Reserve University

2740 - B0062

Thrombi to hemorrhages: The ins and outs of microvascular disease in glaucoma.W. M. Norkett*; K. Green; A. Ren; L. Walker; A. P. Tanna; L. R. Pasquale; P. A. Knepper
University of Illinois at Chicago; Massachusetts Eye and Ear; Northwestern University

2741 - B0063

Examining systemic microvascular abnormalities in primary open-angle glaucoma using nailfold videomicroscopyC. Wanderling*; A. Ren; W. M. Norkett; K. Green; M. Giovingo; L. R. Pasquale; P. A. Knepper
University of Illinois at Chicago; Massachusetts Eye and Ear; Northwestern University

2765 - B0087

Mathematical modeling of shear stress and shear rate: implications for NTG and POAGK. Green*; W. Norkett; A. Grybauskas; C. Velagapudi; J. R. Samples; L. R. Pasquale; P. A. Knepper
University of Illinois at Chicago; Northwestern University; Vista University; Massachusetts Eye and Ear

2778 - B0160

Magnetic Resonance Imaging (MRI) Models of the Posterior SegmentJ. D. Akula*; R. Munro; E. A. Swanson; T. L. Favazza; T. Y. Chui; A. Moskowitz; R. Ramamirtham; S. Prabhu; R. M. Hansen; A. B. Fulton
Boston Children's Hospital; Harvard Medical School; New York Eye & Ear Infirmary; Boston Children's Hospital; Harvard Medical School

Tuesday, May 5, 2015

POSTER SESSION

8:30 AM - 10:15 AM

Exhibit Hall

2796 - B0178

Z-score maps of quantitative autofluorescence images

F. C. Delori*; R. L. Woods; T. Duncker; R. Allikmets; S. H. Tsang; J. R. Sparrow

Schepens Eye Institute; Charite University Medicine Berlin; Columbia University

2904 - D0003

Compensatory strategies for independent binocular scotomas in simulated CFL

C. F. Alberti*; P. J. Bex

Schepens Eye Research Institute; Northeastern University

2999 - D0164

Observation of focal weakening in keratoconic corneas in vivo and ex vivo with Brillouin microscopy

G. Scarcelli*; S. Besner; r. pineda; S. H. Yun

Harvard Medical School; Massachusetts Eye and Ear Infirmary

3019 - D0184

In Vivo Cornea Crosslinking with Rose Bengal and Green Light: 1-month results

I. E. Kochevar*; H. Zhu; C. Alt; S. Melki

Massachusetts General Hospital; Boston Eye Group

3042 - D0238

Polymeric Shield to Reduce Conjunctival Scarring and Facilitate Re-Access for Multistage Surgical Procedures.

J. J. Whalen*; Y. Zhang; P. Falabella; N. Bayat; M. E. Thompson; M. S. Humayun

University Of Southern California; University Of Southern California; University Of Southern California; University Of Southern California

3074 - D0270

CO₂-Induced Corneal Nociceptor Stimulation Reveals Neuropeptide Changes in a Novel Murine Pain Model

Y. Seyed-Razavi*; P. Hamrah

Schepens Eye Research Institute/Massachusetts Eye and Ear; Cornea and Refractive Surgery Service-Massachusetts Eye and Ear Infirmary

3104 - D0300

Shedding of Endomucin by Endothelial Cells under Inflammatory Conditions: Involvement of Matrix Metalloproteases

J. Yang*; M. Saint-Geniez; Y. Ng; M. A. Moses; P. A. D'Amore

The Schepens Eye Research Institute, Massachusetts Eye and Ear Infirmary, Harvard Medical School; Harvard Medical School; Vascular Biology Program, Boston Children's Hospital, Boston, MA; Harvard Medical School

3128 - D0324

Birdshot Retinochoroidopathy Lesions on Indocyanine Green Angiography as an Indicator of Disease Activity

J. Cao*; S. Silpa-Archa; C. Freitas; C. Foster

Massachusetts Eye Research and Surgery Institute; Harvard Medical School; Ocular Immunology and Uveitis Foundation

POSTER SESSION

8:30 AM - 10:15 AM

Exhibit Hall

3133 - D0329

Toxoplasmosis Antibody Titers as a Supportive Tool in the Diagnosis of Ocular Toxoplasmosis

M. Roh*; H. Cho; C. Yasa; L. Nicholson; E. Uchiyama; L. H. Young; M.

Durand; A. Lobo; G. Papaliodis; L. Sobrin
Massachusetts Eye and Ear Infirmary

POSTER SESSION

11:00 AM - 12:45 PM

Exhibit Hall

3376 - B0202

Automated Assessment of Conjunctival Redness in Patients Undergoing Pterygium Surgery

F. Amparo*; T. Abud; U. V. Jurkunas; P. Hamrah; R. Dana

Massachusetts Eye & Ear Infirmary

3384 - C0090

Adult Notch3 Deficient Mice Exhibit Extensive Mural Cell Loss in the Retinal Vasculature

A. A. Bigger-Allen*; m. Graham; J. F. Arboleda-Velasquez; V. Primo; P.

A. D'Amore

Schepens Eye Research Institute/Mass Eye and Ear

3396 - C0102

Dietary ω 3polyunsaturated-fatty-acid decreases retinal neovascularization by adipose-ER-stress reduction to increase adiponectin

Z. Fu*; C. Lofqvist; K. Tian; L. Evans; N. Saba; P. Morss; T. Fredrick; J.

Chen; A. Hellström; L. E. Smith

Children's Hosp Boston/Harvard Med Sch; Sahlgrenska Academy at University of Gothenburg

3399 - C0105

Small molecule activator of Wnt signaling protects retinal vasculature in a mouse model of FEVR disease

Z. Wang*; Y. Gong; T. L. Favazza; L. Evans; K. Tian; P. Morss; T. Fredrick;

N. Saba; J. D. Akula; J. Chen

Boston Children's Hospital

3404 - C0110

Endomucin Plays a Role in Developmental Retinal Vasculization and in VEGF-Induced Endothelial Cell Migration, Growth, and Morphogenesis In Vitro

C. Park-Windhol*; J. Yang; V. Primo; Y. Ng; M. Saint-Geniez; P. A.

D'Amore

Schepens Eye Research Institute/Massachusetts Eye and Ear/Harvard Medical School; Harvard Medical School

3405 - C0111

Hyperglycemia prolongs severe retinopathy in the OIR mouse model

R. Liegl*; Z. Fu; L. Evans; K. Tian; T. Fredrick; N. Saba; P. Morss; J. Chen;

L. E. Smith

Boston Children's Hospital, Harvard Medical School; Ludwig-Maximilians-University Munich

Tuesday, May 5, 2015

POSTER SESSION

11:00 AM - 12:45 PM

Exhibit Hall

3406 - C0112

The role of the alternative complement pathway in vascular regression

K. Smith*; A. Castillejos; D. Diaz-Aguilar; C. Kim; H. Sweigard; K. M. Connor
Massachusetts Eye and Ear Infirmary

3426 - C0237

A Novel Murine Model of Orbital Inflammation

N. Lee*; L. L. Wong; D. Amarnani; S. K. Freitag; D. Bielenberg; P. A. D'Amore; L. A. Kim
Harvard Medical School - MEEI; Schepens Eye Research Institute; Boston Children's Hospital

3430 - C0241

Multispecialty approach to management of sebaceous carcinoma of the eyelids

S. R. Grob*; N. Lee; F. Creighton; F. Jakobiec; K. Emerick; S. K. Freitag
Massachusetts Eye and Ear Infirmary; Harvard Medical School; Massachusetts Eye and Ear Infirmary; Massachusetts Eye and Ear Infirmary; Massachusetts Eye and Ear Infirmary

3431 - C0242

Visual Outcomes in Non-Neurofibromatosis-Related Optic Pathway Gliomas

M. J. Wan*; G. h. Heidary
Boston Children's Hospital and Harvard University

3453 - D0189

Effect of Storage Temperature on Gene Expression of Cultured Oral Keratinocytes

T. P. Utheim*; R. Islam; I. Fostad; D. A. Dartt; E. Messelt; O. Olstad; C. Jackson; A. Sehic; J. Eidet
Oslo University Hospital; Faculty of Dentistry, University of Oslo; Schepens Eye Research Institute, Massachusetts Eye and Ear

3466 - D0202

Transplantation of 3D construct onto wounded mouse cornea

A. E. Hutcheon*; X. Q. Guo; D. Karamichos; R. Mathew; J. Stein-Streilein; J. D. Zieske
Schepens Eye Research Institute/MEEI; University of Oklahoma Health Sciences Center; Duke Eye Center

3485 - D0343

Preventing glaucoma by blocking activation of the NLRP3 inflammasome in the optic nerve head

F. Fei*; A. Krishnan; A. Rothstein; B. R. Ksander; M. S. Gregory-Ksander
Medicine, University of Massachusetts Medical School; Schepens Eye Research Institute / Massachusetts Eye & Ear Infirmary/ Harvard Medical School

3504 - D0362

Cytokine profile in active scleritis

M. Sainz De La Maza*; B. Molins; M. Mesquida; V. Llorens; J. Zarranz-Ventura; A. Sala-Puigdollers; J. Matas; A. Adan Civera; C. S. Foster
Hospital Clinico Oftalmologia; Mass. Eye Research and Surgery Institute

POSTER SESSION

3:45 PM - 5:30 PM

Exhibit Hall

3608 - A0102

Neuroprotective Effect of the MicroNeurotrophin BNN27 on experimental Retinal Detachment and NMDA-Induced Retinal Excitotoxicity.

P. Tsoka*; H. Matsumoto; K. Kataoka; A. Gravanis; D. Vavvas; M. K. Tsilimbaris
University of Crete; Harvard Medical School; University of Crete; Gunma University School of Medicine

3621 - A0115

The expression of neurotrophic factors in the rhodopsin knockout mouse model of retinal degeneration: a time course study.

C. Garcia Caballero*; B. Lieppman; P. Y. Baranov; R. Herrero-Vanrell; M. Young
Schepens Eye Research Institute; Universidad Complutense de Madrid

3663 - A0157

Sex-Specific Primary Open-Angle Glaucoma Loci identified in a Meta-analyzed Genome-Wide Imputed Dataset

J. Cooke Bailey*; P. Gharahkhani; L. R. Pasquale; J. H. Kang; J. E. Craig; S. MacGregor; K. P. Burdon; J. L. Haines; J. L. Wiggs
Case Western Reserve University; QIMR Berghofer Medical Research Institute; Harvard Medical School and Massachusetts Eye and Ear Infirmary; Channing Division of Network Medicine, Brigham and Women's Hospital; Flinders University

3665 - A0159

GENOMIC LOCI MODULATING GANGLION CELL DEATH FOLLOWING ELEVATED IOP IN THE MOUSE

E. E. Geisert*; F. L. Struebing; R. King; L. R. Pasquale; A. E. Ashley-Koch; M. A. Hauser; R. Allingham; J. L. Wiggs
Emory University; Massachusetts Eye and Ear Infirmary; Duke University; Duke University; Harvard Medical School

3666 - A0160

Age at menopause genetic risk score in relation to primary open-angle glaucoma in the Augmented GLAUGEN study

J. H. Kang*; H. Aschard; M. A. Hauser; J. L. Haines; W. G. Christen; P. Kraft; D. I. Chasman; J. Cooke Bailey; J. L. Wiggs; L. R. Pasquale
Brigham and Women's Hospital; Harvard School of Public Health; Duke University Medical Center; Case Western Reserve University; Massachusetts Eye and Ear Infirmary

3683 - B0026

Genetic variants associated with different risks for high tension glaucoma and normal tension glaucoma in a Chinese population

Y. Chen*; X. Chen; L. Wang; X. Sun
Eye and Ear Hospital

3768 - C0010

Physical Activity and Age-Related Macular Degeneration: Results from the 2005-2006 National Health and Nutrition Examination Surveys

K. V. Marra*; M. Kwiatkowski; G. Yu; J. G. Arroyo
Beth Israel Deaconess Medical Center; University of California, San Diego

Tuesday, May 5, 2015

POSTER SESSION

11:00 AM - 12:45 PM

Exhibit Hall

3770 - C0012

Nutritional and lifestyle risk factors in AMD. The Coimbra Eye Study

C. L. Farinha*; F. Mira; L. Santos; S. Nunes; A. Pedroso; I. Laíns; M. Cachulo; R. Silva

Centro Hospitalar e Universitário de Coimbra; Faculty of Medicine (FMUC). University of Coimbra.; Centro Hospitalar e Universitário de Coimbra; Association for Innovation and Biomedical Research on Light and Image; Centro Hospitalar e Universitário de Coimbra; Massachusetts Eye and Ear Infirmary, Harvard Medical School

3790 - C0032

Early Progression of Geographic Atrophy in the Complications of Age-related macular degeneration Prevention Trial (CAPT).

H. S. Brader*; M. Pistilli; G. Ying; M. G. Maguire

Massachusetts Eye and Ear Infirmary; Scheie Eye Institute, University of Pennsylvania

3853 - C0215

Hemorrhagic Occlusive Retinal Vasculitis after Cataract Extraction: A Vancomycin-Associated Reaction?

M. M. Kron-Gray*; A. J. Witkin; D. Witkin; C. R. Bauman; R. E. Engstrom; T. A. Albin; I. R. Battle; D. Elliott; M. W. Johnson; A. Shah

University of Michigan; Tufts University; Jules Stein Eye Institute; Retina Associates PA; Massachusetts Eye and Ear Infirmary; Bascom Palmer Eye Institute

3861 - C0266

Mitochondria haplogroups in patients with dominant optic atrophy

I. Nakata*; E. D. Gaier; D. Navarro-Gomez; J. S. Borchert; X. Gai; L. R. Pasquale; S. Lessell; D. M. Cestari; J. F. Rizzo; J. L. Wiggs

Massachusetts Eye and Ear Infirmary

3896 - D0038

Average Precision as a test-retest reliability measure: a quick CSF study on myopia

M. Dorr*; L. A. Lesmes; T. Elze; H. Wang; Z. Lu; P. J. Bex

Technische Universität München; Adaptive Sensory Technology; Mass Eye and Ear; Jilin University of Finance and Economics; Ohio State University; Northeastern University

Special Interest Group (SIG)

1:00 PM - 2:30 PM

1AB Mile High Blrm

Retinopathy of Prematurity – recent developments in diagnosis and treatment with a focus on long-term morbidity

B. Lorenz*; C. A. Toth; A. B. Fulton; A. Vinekar; H. A. Mintz-Hittner

Justus-Liebig University; Duke University; Harvard Medical School; Narayana Nethralaya Postgraduate Institute of Ophthalmology; University of Texas Medical School

Special Interest Group (SIG)

1:00 PM - 2:30 PM

4EF Mile High Blrm

Neuroinflammation, systemic inflammation, and RGC damage in POAG

M. H. Kuehn*; J. Danias; D. F. Chen; F. H. Grus; A. Bosco

University of Iowa; SUNY Downstate; Schepens Eye Research Institute; Johannes Gutenberg University Mainz; The Jackson Laboratory; University of Utah

Wednesday, May 6, 2015

KEY:

SESSION TYPE

Session Time

Session Location

Presentation Time (if within Session Time)

Abstract ID

Abstract Title

Authors

Affiliations

ARVO AWARD LECTURE

6:45 PM - 7:30 PM

2-4 Four Seasons Blrm

6:45 PM - 6:55 PM

5233

Friedenwald Award Introduction: David Berson

R. H. Masland*

Massachusetts Eye & Ear Infirmary

MINISYMPOSIUM

Mechanisms of wound repair: Lessons learned from the eye

11:00 AM - 12:45 PM

605/607

11:25 AM - 11:45 AM

4387

Neutrophils Express Oncomodulin and Promote Optic Nerve Regeneration

L. Benowitz*

Harvard Medical School; Boston Children's Hospital

12:00 PM - 12:15 PM

4389

Regulation of cell motility by galectin-3 and MMP9

P. Argueso*

Harvard University

PAPER SESSION

Imaging, II

8:30 AM - 10:15 AM

2-4 Four Seasons Blrm

9:30 AM - 9:45 AM

3966

Point-of-Care Evaluation of Diabetic Retinopathy Using Ultrawide Field Imaging in a Teleophthalmology Program

R. Ajan*; P. S. Silva; J. Cavallerano; A. Tolson; J. Rodriguez; S.

Rodriguez; D. Tolls; J. K. Sun; L. Aiello

Beetham Eye Institute, Joslin Diabetes Center; Harvard Medical School

PAPER SESSION

Retinopathy of prematurity

11:00 AM - 12:45 PM

1 Four Seasons Blrm

12:30 PM - 12:45 PM

4324

Serum levels of vascular endothelial growth factor - temporal changes in relation to retinopathy of prematurity.

G. Hellgren*; C. Lofqvist; A. Hård; I. Hansen-Pupp; M. Gram; D. Ley; L. E. Smith; A. Hellström

University of Gothenburg; Universtiy of Gothenburg; Lund University; Children's Hospital Boston, Harvard Medical School

PAPER SESSION

Vitreomacular interface

11:00 AM - 12:45 PM

2-4 Four Seasons Blrm

11:00 AM - 11:15 AM

4325

The Combined Tractional-Hydration Theory of Idiopathic Macular Holes

R. C. Gentile*; D. Elliott; R. B. Rosen; J. Benevento; V. S. Reppucci; R. lezzi

The New York Eye and Ear Infirmary of Mount Sinai; Winthrop University Hospital; Massachusetts Eye and Ear Infirmary, Harvard Medical School; Mayo Clinic School of Medicine

PAPER SESSION

Gene association and function in eye diseases

11:00 AM - 12:45 PM

1EF Mile High Blrm

11:00 AM - 11:15 AM

4345

Identification of novel angiogenesis-regulating genes by genome association studies in mice

M. Khajavi*; Y. Zhou; A. Birsner; L. Bazinet; B. Hu; L. Zon; R. J. D'Amato
Boston Children's Hospital; Boston Children's Hospital; Howard Hughes Medical Institute

Wednesday, May 6, 2015

PAPER SESSION

Immunology and angiogenesis

11:00 AM - 12:45 PM

2A/3A Mile High Blrm

11:45 AM - 12:00 PM

4355

Plasmacytoid Dendritic Cells Demonstrate Vital Neuro-protective Properties in the Cornea and Induce Corneal Nerve Regeneration

A. Jamali*; M. J. Lopez; V. Sendra; D. L. Harris; P. Hamrah

Schepens Eye Research Institute/Massachusetts Eye and Ear; Cornea & Refractive Surgery Service, Massachusetts Eye and Ear Infirmary

12:00 PM - 12:15 PM

4356

Mesenchymal stem cells suppress innate immune response to corneal injury

A. Mashaghi-Tabari*; R. Dana; S. Chauhan

Harvard Medical School

PAPER SESSION

Synapses, receptors, and channels

11:00 AM - 12:45 PM

4EF Mile High Blrm

12:15 PM - 12:30 PM

4377

Synaptic properties of vGlut3 amacrine cells in the mouse retina

S. Lee*; m. chen; y. Zhang; L. Chen; Z. Zhou

Yale University

PAPER SESSION

Trauma and endophthalmitis

3:45 PM - 5:30 PM

1 Four Seasons Blrm

4:15 PM - 4:30 PM

4797

Validation of the RD-OGI score as an effective tool for predicting retinal detachment after open globe injury.

T. Strykowski*; K. Brodowska; E. Papavasileiou; Y. Chee; D. Elliott

MEEI

PAPER SESSION

AMD Novel Therapies

3:45 PM - 5:30 PM

2-4 Four Seasons Blrm

3:45 PM - 4:00 PM

4800

Vascular normalization: A novel method for inhibiting vascular leakage in age-related macular degeneration

A. Koirala*; A. Rothstein; B. R. Ksander; M. S. Gregory-Ksander

Schepens Eye Research Institute; University of Massachusetts Medical School

4:15 PM - 4:30 PM

4802

VGX-300, a 'Trap' for VEGF-C and VEGF-D, Inhibits Choroidal Neovascularization and Vascular Leakage in a Mouse Model of Wet AMD

K. Lashkari*; J. Ma; Y. Sun; G. C. Teague; M. E. Baldwin

Harvard Med School; Circadian Technologies Ltd, Opthea Pty Ltd

Paper Session

Bacterial and viral infection systems

3:45 PM - 5:30 PM

702/704/706

3:45 PM - 4:00 PM

4841

MyD88 Adaptor Protein is Required for Adenovirus KeratitisM. Ramke*; X. Zhou; A. Chintakuntlawar; J. Rajaiya; J. Chodosh
Massachusetts Eye and Ear Infirmary, Harvard Medical School

4:15 PM - 4:30 PM

4843

Proteotyping as a tool to study the evolution of human adenoviruses associated with epidemic keratoconjunctivitis

J. Chodosh*; G. Singh; C. Robinson; J. Lee; J. Rajaiya; M. Jones; D. Dyer; D. Seto

Mass Eye & Ear Infirmary/HMS; George Mason University; University of Oklahoma Health Sciences Center

4:45 PM - 5:00 PM

4845

Impact of microbiome on ocular immunity

M. G. Gadjeva*; A. Kugadas; L. Ruiz; S. Masli

Brigham and Womens Hospital; Boston University

5:00 PM - 5:15 PM

4846

Toxigenic Staphylococcus Aureus bacteria activate conjunctival goblet cell NLRP3 inflammasomes using TLR 2, TLR1, and α toxin

D. A. Dartt*; D. Li; R. R. Hodges; M. Gilmore; M. S. Gregory-Ksander

Schepens Eye Research Institute/MEEI; Harvard Medical School; Massachusetts Eye and Ear Infirmary

POSTER SESSION

8:30 AM - 10:15 AM

Exhibit Hall

4023 - A0150

Corneal inflammation after penetrating keratoplasty and miniature keratoprosthesis implantation

A. Crnej*; S. Eiglmeier; M. Omoto; T. H. Dohlman; C. H. Dohlman; R.

Dana

Massachusetts Eye and Ear Infirmary; Schepens Eye Research Institute

4025 - A0152

Pretreatment of Donor Corneas with Anti-Inflammatory Cytokines Promotes Allograft Survival in High-Risk Corneal Transplantation

M. Tahvildari*; P. Emami-naeini; M. Omoto; D. Saban; S. Chauhan; R.

Dana

Schepens Eye Research Institute/Massachusetts Eye and Ear Infirmary; Kresge Eye Institute; Duke Eye Center

4027 - A0154

Corneal Grafts Prone to Rejection Exhibit Impaired Function of Peripherally Induced Regulatory T Cells

T. Inomata*; J. Hua; A. Di Zazzo; S. Lee; T. Shiang; H. Chiang; Q. Zhang;

R. Dana

Massachusetts Eye & Ear Infirmary, Schepens Eye Research Institute

Wednesday, May 6, 2015

POSTER SESSION

8:30 AM - 10:15 AM

Exhibit Hall

4029 - A0156

Comparison of galectin expression signature in rejected and accepted murine corneal allografts

S. Sugaya*; W. Chen; Z. Cao; K. Kenyon; T. Yamaguchi; M. Omoto; P. Hamrah; N. A. Panjwani

New England Eye center / Tufts university school of medicine; Tufts University; Schepens Eye Research Institute / Massachusetts Eye and Ear

4030 - A0157

Desiccating Stress-induced Dry Eye Disease is a High-Risk Factor for Corneal Allograft Rejection

J. Hua*; T. Inomata; T. Shiang; W. Stevenson; T. H. Dohlman; L. Vandenberghe; M. Omoto; S. Eiglmeier; Q. Zhang; R. Dana

Schepens Eye Research Institute

4033 - A0160

Mucosal Addressin Cell Adhesion Molecule (MAdCAM)-1 Mediate Dendritic Cell Trafficking In Vivo and is Up-Regulated after Corneal Graft Rejection

H. Moein*; M. J. Lopez; D. L. Harris; P. Hamrah

Schepens Eye Research Institute; Massachusetts Eye and Ear Infirmary

4034 - A0161

Neurogenic Immune Homeostasis: Peripheral Innervation Maintains Avascularity and Immune Privilege of the Cornea

T. Yamaguchi*; D. L. Harris; K. Higa; J. Shimazaki; U. von Andrian; P. Hamrah

Schepens Eye Research Institute and Cornea Service, Massachusetts Eye & Ear Infirmary, Department of Ophthalmology, Harvard Medical School; Immune Disease Institute, Program in Cellular and Molecular Medicine at Children's Hospital, Harvard Medical School; Tokyo Dental College

4038 - A0165

Expression of the Neuropeptide Adrenomedullin and its Receptors in Normal and Inflamed Murine Corneas

D. L. Harris*; M. J. Lopez; A. Jamali; P. Hamrah

Schepens Eye Research Institute; Massachusetts Eye and Ear Infirmary

4039 - A0166

The Chemokine Receptor CXCR4 Mediates Recruitment of CD11c+ Dendritic Cells into the Inflamed Murine Corneas.

M. J. Lopez*; A. Jamali; D. L. Harris; P. Hamrah

Schepens Eye Research Institute/Massachusetts Eye and Ear Infirmary; Massachusetts Eye and Ear Infirmary Cornea and Refractive Surgery Service

4040 - A0167

Lack of Galectin-3 Protects From Lipopolysaccharide Challenge at the Ocular Surface

J. Mauris*; P. Argueso

Schepens/Mass Eye and Ear/HMS

POSTER SESSION

8:30 AM - 10:15 AM

Exhibit Hall

4070 - A0247

Microbiologic spectrum of post-injection endophthalmitis by indication for intravitreal anti-VEGF therapy

C. Calvo*; N. Rayess; E. Rahimy; C. Shah; J. D. Wolfe; E. Chen; F. DeCroos; S. J. Garg; J. Hsu

Wills Eye Hospital; Ophthalmic Consultants of Boston; Associated Retinal Consultants at William Beaumont Hospital; Retina Consultants of Houston; Southeastern Retina Associates

4104 - B0026

Smartphone fundus photography, in vivo retinal fluorescent photography and fluorescein angiography in mouse eyes

C. X. Qian*; E. Hasegawa; L. Haddock; D. M. Wu; S. Mukai

Massachusetts Eye and Ear Infirmary; Bascom Palmer Eye Institute; Harvard Medical School

4163 - C0046

Antimicrobial Activity Detected in Ocular and Salivary Secretions from Marine Mammals

R. Kelleher Davis*; P. Argueso

Schepens Eye Research Inst/MEEI

4169 - C0052

Endogenous Endophthalmitis in the American and Korean Population : An Eight-year Retrospective Study

H. Cho*; N. H. Siegel; H. Yu; L. Sobrin; A. Patel; H. Lim; M. Durand; J. W. Miller; D. Husain

Massachusetts Eye and Ear Infirmary, Harvard Medical School; Hanyang University Medical College; Boston University School of Medicine; Seoul National University College of Medicine; Massachusetts General Hospital, Harvard Medical School

4180 - C0063

Nurse-administered intravitreal injections: a systematic review

E. Li*; P. B. Greenberg; M. G. Krzystolik

The Warren Alpert Medical School of Brown University; Providence Veterans Affairs Medical Center; Massachusetts Eye and Ear Infirmary, Harvard Medical School

4231 - C0240

microRNA-192 Expression Induced by TGF- β 1 Contributes to Epithelial-Mesenchymal Transition of RPE by activating AKT Kinases

D. E. Maidana*; H. Lin; B. Dib; J. B. Miller; P. Bouzika; B. Tian; J. W. Miller; D. Vavvas

Massachusetts Eye and Ear Infirmary

POSTER SESSION

11:00 AM - 12:45 PM

Exhibit Hall

4425 - A0051

Differential Effects of Pro-resolution Mediators Resolvins RvD1 and RvE1 on Conjunctival Goblet Cell Function

M. Lippestad*; R. R. Hodges; T. P. Utheim; D. Li; C. Serhan; D. A. Dartt

The University of Oslo; Schepens Eye Research Institute/Massachusetts Eye and Ear Infirmary, Harvard Medical School; Brigham and Women's Hospital

Wednesday, May 6, 2015

POSTER SESSION

11:00 AM - 12:45 PM

Exhibit Hall

4483 - A0109

Assessment of quality of life and symptom reduction in dry eye subjects using Retaine™ Ophthalmic Emulsion

M. Watson*; G. W. Ousler; D. Devries; P. Karpecki; J. B. Ciolino
Ora, Inc; Eye Care Associates of Nevada; Koffler Vision Group;
Massachusetts Eye and Ear

4499 - A0199

Effects of Sensory and Sympathetic Innervation on the Corneolimbic Neurovascular Complex

x. huang*; M. J. Lopez; P. Hamrah
Harvard Medical School; Harvard medical school

4504 - A0204

Nerve Growth Factor Mediates Corneal Lymphangiogenesis

T. Ecoiffier*; P. Hamrah; S. Grimaldo; G. Kang; R. Sessa; T. N. Truong; D. L. Harris; U. von Andrian; L. Chen; L. Zheng
Center for Eye Disease and Development, Program in Vision Science and School of Optometry, University of California; Schepens Eye Research Institute, Massachusetts Eye & Ear, Department of Ophthalmology, Harvard Medical School; Immune Disease Institute, Program in Cellular and Molecular Medicine at Children's Hospital Boston, Harvard Medical School

4561 - B0114

Comparison of peripapillary retinal thickness (RT) with retinal nerve fiber layer (RNFL) thickness measurements for diagnostic capability and artifact rates.

Y. Liu*; H. Simavli; C. Que; M. Akduman; J. Rizzo; E. Tsikata; R. Maurer; J. F. De Boer; T. C. Chen
Harvard Medical School; Massachusetts Eye and Ear Infirmary; Center for Clinical Investigation, Brigham and Women's Hospital; VU University

4623 - B0264

Intravitreal Afibercept for Macular Edema Secondary to Central Retinal Vein Occlusion in Patients with Prior Treatment with Bevacizumab or Ranibizumab

T. van Zyl*; T. D. Papakostas; L. S. Lim; J. B. Miller; D. Husain; D. Elliott; L. A. Kim
Massachusetts Eye and Ear Infirmary; Singapore National Eye Center

4631 - D0006

Development and functional characterization of PRPF31 knockout ARPE-19 cells using genome editing technique

M. H. Farkas*; M. Sousa; E. A. Pierce
Massachusetts Eye and Ear Infirmary

4639 - D0014

The nuclear hormone receptor gene Nr2c1 (Tr2) is a Critical Regulator of Cone Photoreceptor Cell Patterning

A. Olivares*; Y. Han; D. Soto; K. Flattery; J. Marini; P. Escher; M. M. DeAngelis; N. B. Haider
Schepens Eye Research Institute/Massachusetts Eye and Ear; University of Utah; Institute for Research in Ophthalmology; Harvard Medical School; Moran Eye Center Center for Translational Medicine

POSTER SESSION

11:00 AM - 12:45 PM

Exhibit Hall

4676 - D0121

Development and Characterization of a new Mouse Model of Proliferative Diabetic Retinopathy

A. M. Mackey*; J. Aranda; C. Gerhardinger; A. Kazlauskas
Schepens Eye Research Institute/Mass Eye and Ear Infirmary/Harvard Medical School

4683 - D0128

Analysis and culture of cells from patient-derived membranes in proliferative diabetic retinopathy

L. A. Kim*; L. L. Wong; D. Amarnani; A. A. Bigger-Allen; Y. Hu; C. Marko; V. Shah; D. Elliott; J. F. Arboleda-Velasquez; P. A. D'Amore
Massachusetts Eye and Ear Infirmary; Schepens Eye Research Institute / Mass Eye and Ear; Dean McGee Eye Institute

4735 - D0180

Aesthetic benefits of CO2 laser photorejuvenation treatment for malar mounds (festoons).

J. C. Jimenez*; J. R. Montes; J. Maldonado
UPR Medical Sciences Campus; UPR Medical Sciences Campus

4738 - D0183

Google Glass in Oculoplastic Surgery: measurement of the margin reflex distance

R. Rao*; C. Choi; M. K. Yoon
Massachusetts Eye & Ear Infirmary

4761 - D0206

Dynamic Intraductal Meibomian Probing (DIMP): A Novel Approach to the Treatment of Meibomian Gland Dysfunction

Z. A. Syed*; F. Sutula
Massachusetts Eye and Ear Infirmary

4776 - D0263

Residual Peripheral Fields in RP and the Risk for Pedestrian Collisions

E. Peli*; H. Apfelbaum; E. L. Berson; R. B. Goldstein
Schepens Eye Research Institute, Mass Eye And Ear, Harvard Medical School; Ophthalmology, Harvard Medical School

4778 - D0265

Gaze scanning and intersection detection failures by drivers with hemianopia

A. R. Bowers*; C. F. Alberti; K. Houston; R. B. Goldstein; E. Peli
Dept Ophthalmol, Harvard Med School

4786 - D0273

Predicting face recognition ability using macular focal cone electroretinography in patients with macular degeneration

J. A. Menendez*; B. Falsini; L. Ambrosio; G. Corbo
Johns Hopkins University; Catholic University, Policlinico Gemelli

Wednesday, May 6, 2015

POSTER SESSION

3:45 PM - 5:30 PM

Exhibit Hall

4875 - A0124

The contribution of T cells to corneal angiogenic privilege in transplantation

A. Di Zazzo*; B. Subbarayal; T. H. Dohlman; T. Inomata; S. Chauhan; R. Dana
Schepens Eye Research Institute

4876 - A0125

Interleukin-12 and Interleukin-23-mediated IFN- γ Secretion by T Helper 17 Cells Exacerbates Dry Eye Disease

Y. Chen*; S. Chauhan; J. Hua; M. Omoto; R. Dana
Schepens Eye Research Ins /MEEI

4897 - A0171

UVA Irradiation Activates Nrf2-Regulated Antioxidant Defense and Induces p53/Caspase3 Dependent Apoptosis in Corneal Endothelial Cells

C. Liu*; D. Vojnovic; I. E. Kochevar; U. V. Jurkunas
Harvard Medical School; Wellman Center for Photomedicine, Massachusetts General Hospital, Harvard Medical School

4901 - A0175

Galectin-3 and CD147 Colocalization in Sterile Corneal Ulcers

A. Cruzat*; J. Mauris; M. Gonzalez; M. Robert; K. Kenyon; J. Chodosh; C. H. Dohlman; P. Argueso
Harvard Medical Sch/MEEI; Schepens Eye Research Institute, Harvard Medical School; New England Eye Center, Tufts University School of Medicine

4906 - A0180

Blockage of Smad-Signaling Pathway in Human Corneal Fibroblasts

X. Q. Guo*; J. A. Tran; A. E. Hutcheon; J. D. Zieske
Schepens Eye Research Institute/MEEI

4933 - B0061

Extrafoveal Cone Packing Density and Geometry in Retinopathy of Prematurity (ROP)

R. Ramamirtham*; G. Soni; J. D. Akula; E. A. Swanson; T. L. Favazza; M. Mujat; R. D. Ferguson; T. Y. Chui; A. Moskowitz; A. B. Fulton
Boston Children's Hospital; Northeastern University; Harvard Medical School; PSI Corp; New York Eye & Ear Infirmary

4949 - B0148

Glial cell specific deletion of p38 MAPK did not affect retinal ganglion cell degeneration following optic nerve crush

Y. Liu*; J. Manheim; S. Yang; R. J. Wordinger; A. F. Clark; I. Pang
UNT Health Science Center; UNT Health Science Center; North Texas Eye Research Institute; UNT Health Science Center

4968 - B0167

Zinc is a critical regulator of optic nerve regeneration

Y. Li*; L. Andereggen; K. Yuki; K. Omura; U. Apfel; W. Lin; S. Lippard; P. Rosenberg; L. Benowitz
Children's Hosp. Boston and Harvard Med. Sch; State Key Laboratory of Ophthalmology, Zhongshan Ophthalmic Center, Sun Yat-sen University; MIT; Children's Hosp. Boston and Harvard Medical School

POSTER SESSION

3:45 PM - 5:30 PM

Exhibit Hall

5126 - C0162

Qualities of the Ideal Surgical Retina Fellow and Attending: Perspective of the Attending and Fellow

J. Lee*; C. Shah; S. Agemy; D. Elliott; R. C. Gentile; S. Annual Mass Eye and Ear Vitrectomy Course
New York Eye and Ear Infirmary of Mount Sinai; Massachusetts Eye and Ear Infirmary; Stony Brook School of Medicine; Winthrop-University Hospital

5195 - D0077

Novel Biomarkers Equations Based on Assigning Cytokines from Healthy and Disease States as Vectors in Multi-dimensional Phase Space

N. Nandakumar*; W. Johnson ; G. C. Teague; J. Ma; M. E. Baldwin; K. Lashkari
Mass Eye and Ear; Schepens Eye Research Institute; suffolk university; Opthea

5212 - D0217

Preliminary Evaluation of a Mobile App for Strabismus Screening

S. Pundlik*; M. Tomasi; K. Houston; G. Luo
Schepens Eye Research Institute, Mass Eye and Ear; EyePhone LLC

5217 - D0222

Botulinum Toxin-Augmented Strabismus Surgery versus Conventional Surgery in the Treatment of Large-Angle Infantile Esotropia

A. Gilbert*; M. J. Wan; M. Kazlas; C. Wu; D. G. Hunter; I. Mantagos; A. Shah
Massachusetts Eye and Ear Infirmary; Boston Children's Hospital and Harvard Medical School

5225 - D0230

Surgical strabismus in Down syndrome patients

J. Hollander*; L. Eldweik; D. Ledoux
Boston Children's Hospital

SPECIAL INTEREST GROUP (SIG)

1:00 PM - 2:30 PM

4CD Mile High Blrm

Newer modalities to restore corneal function

R. R. Mohan*; D. Karamichos; G. S. Schultz; J. D. Zieske; M. Griffith
University of Missouri-Columbia; University of Oklahoma Health Sciences Center; University of Florida; MEEI; Linkoping University

Wednesday, May 6, 2015

WORKSHOP

Clinician-scientist forum: How to become a successful clinician-scientist

1:00 PM - 2:30 PM

605/607

1:12 PM - 1:24 PM

Lessons learned going from K to R

L. Sobrin*

Harvard Medical School

1:36 PM - 1:48 PM

The many ways and the only way to succeed in academia

D. Vavvas*

Harvard Medical School; Mass Eye and Ear Infirmary

Thursday, May 7, 2015

KEY:**SESSION TYPE**

Session Time

Session Location

Presentation Time (if within Session Time)

Abstract ID

Abstract Title

Authors

Affiliations

PAPER SESSION

Genetic epidemiology used to identify risk factors for eye disease

12:00 PM - 1:45 PM

1CD Mile High Blrm

12:45 PM - 1:00 PM

5817

Gene by gene interaction analyses identifies evidence of epistasis and new candidate genes that influence intraocular pressure in the general population

P. G. Hysi*; A. I. Iglesias; S. MacGregor; D. A. Mackey; R. Hoehn; C. Cheng; T. Wong; J. L. Wiggs; C. J. Hammond; C. M. van Duijn
King's College London; Erasmus Medical Center; QIMR Berghofer Medical Research Institute Royal Brisbane Hospital; University of Melbourne; University Medical Center Mainz; Singapore Eye Research Institute; Harvard University

PAPER SESSION

Biochemistry of diabetic retinopathy and angiogenesis

12:00 PM - 1:45 PM

4AB Mile High Blrm

12:45 PM - 1:00 PM

5851

Modulation of endothelial cell function and pathologic ocular angiogenesis by microRNA-150

C. Liu*; Y. Sun; J. Li; L. Evans; K. Tian; T. Fredrick; N. Saba; P. Morss; J. Chen
Boston Children's Hospital/Harvard Medical School

POSTER SESSION

8:30 AM - 10:15 AM

Exhibit Hall

5310 - A0159

Phenotypic heterogeneity of uveal melanoma cell lines

M. J. Young*; N. Vila; V. Bravo; P. Y. Baranov; B. Lieppman; A. Palazzolo; M. N. Burnier
Schepens Eye Research Institute, Massachusetts Eye and Ear; McGill University

5320 - A0169

Deferoxamine inhibits the growth of uveal melanoma cells in vitro

T. D. Papakostas*; F. Nicolaou; A. Al-Moujahed; J. B. Miller; H. Lin; E. S. Gragoudas; D. Vavvas
Massachusetts Eye & Ear Infirmary; Massachusetts General Hospital

POSTER SESSION

8:30 AM - 10:15 AM

Exhibit Hall

5337 - A0186

Bromodomain (BRD) inhibition as a novel strategy to inhibit the Microphthalmia-associated transcription factor (MITF) axis in uveal melanoma (UM)

V. Poulaki*; N. Mitsiades; W. Fiskus
Veterans Affairs Boston Healthcare System; Boston University; Baylor College of Medicine

5371 - A0220

Multicenter, Prospective Trial Comparing Treat & Extend to Monthly Dosing in Neovascular AMD Management: TREX-AMD 12-Month Outcomes

C. C. Wykoff*; D. M. Brown; D. Croft; R. Wang; L. Clark; J. F. Payne
Retina Consultants of Houston; Weill Cornell Medical College, Houston Methodist Hospital; Palmetto Retina Center

5401 - A0250

Deficiency of Intraflagellar Transport Protein 139 in Rod Photoreceptors Causes Early-Onset Rod-Cone Degeneration in Mice

S. H. Greenwald*; M. M. Staniszewska; E. A. Pierce; Q. Liu
Massachusetts Eye and Ear Infirmary

5499 - B0058

Transcriptome profiling of single rod photoreceptors in the Rd1 mouse

D. M. Wu*; R. Kirchner; M. Soumillon; T. Mikkelsen; C. L. Cepko
Massachusetts Eye and Ear Infirmary/Harvard Medical School; Harvard School of Public Health; Broad Institute; Harvard Medical School/HHMI

5544 - B0115

Characterization and application of a nonhuman primate model of non-arteritic anterior ischemic optic neuropathy for therapeutic screening

M. S. Lawrence*; J. Attwood; A. Lewis; R. Brookes; V. Woodley; M. Tucker; W. Hu; R. J. Goody; S. Callanan; D. Vavvas
RxGen; Ross University; Massachusetts Eye and Ear Infirmary

5634 - B0274

N-glycans Promote the Retention of Galectin-3 in the Corneal Epithelial Glycocalyx

A. M. Woodward*; P. Argueso
Massachusetts Eye and Ear; Harvard Medical School

Thursday, May 7, 2015

POSTER SESSION

8:30 AM - 10:15 AM

Exhibit Hall

5643 - B0283

Culture Media and Biopsy Location Affect the Proliferative Capacity and Phenotype of Ex Vivo Expanded Oral Mucosal Tissue

R. Islam*; T. P. Utheim; J. Eidet; M. Lippestad; E. Messelt; M. Griffith; D. A. Dartt
University of Oslo; Harvard Medical School; Oslo University Hospital; Linköping University

5650 - B0290

Galectin-3 Mediates IL1 β Responses in Human Corneal Epithelial Cells

Y. Uchino*; P. Argueso
Schepens Eye Research Institute

5652 - B0292

Structure and Biosynthesis of Transmembrane Mucin N-glycans in Human Corneal Epithelial Cells

T. Taniguchi*; A. M. Woodward; P. Magnelli; P. Argueso
Schepens Eye Research Institute and Massachusetts Eye and Ear; Santen Pharmaceutical Co., Ltd.; New England Biolabs

5665 - C0052

Perifoveal Capillary Perfusion Pressure and Wall Shear Stress Estimated by a Computational Model Based on Adaptive Optics Scanning Laser Ophthalmoscopy (AOSLO)

Y. Lu*; M. Bernabeu; J. Lammer; C. C. Cai; L. Aiello; J. K. Sun
Joslin Diabetes Center; University College London; Medical University Vienna; Harvard Medical School; University College London

5724 - C0154

A novel PLGA-CsA drug delivery system based on glaucoma drainage device

Z. Dai*; X. Yu; J. Hong; J. Sun; X. Sun
EENT Hospital, Fudan University

5755 - C0216

Incidence of Herpes Simplex Eye Disease: Results from the Pacific Ocular Inflammation (POI) Study

D. S. Borkar*; V. M. Tham; J. V. Parker; A. Uchida; A. C. Vinoya; N. Acharya
Univ of California, San Francisco; Massachusetts Eye and Ear Infirmary; Pacific Vision Institute of Hawaii; Kaiser Permanente Hawaii

5759 - C0220

Validation of ICD-9 Codes Used in the Pacific Ocular Inflammation (POI) Study

P. Janardhana*; N. Acharya; D. S. Borkar; V. M. Tham; J. V. Parker; A. C. Vinoya; A. Uchida; E. Browne
Proctor Foundation, UCSF; Pacific Vision Institute of Hawaii; Kaiser Permanente Hawaii

5797 - C0258

Treating autoimmune retinopathy (AIR) with immunosuppressive therapy: results of a retrospective single-center study.

A. Maghsoudlou*; N. Khachatryan; N. Kombo; C. Foster
MERSI, Scheie Eye Institute, University of Pennsylvania Perelman School of Medicine; Yale School of Medicine

Poster Session

12:00 PM - 1:45 PM

Exhibit Hall

5959 - A0130

Reproducibility of Disorganization of the Retinal Inner Layers (DRIL) Grading Across Spectral Domain Optical Coherence Tomography (SDOCT) Model and Scan Types in Eyes with Diabetic Macular Edema (DME)

M. Abdulaal*; M. M. Lin; M. Ledesma; C. Pitoc; P. S. Silva; M. Cheney; J. Lammer; T. Doctor; L. Aiello; J. K. Sun
Joslin Diabetes Center; Philippine Eye Research Institute; Harvard Medical School; Medical University Vienna

5984 - A0155

AO-OCT imaging with the Compact Adaptive Optics Retinal Imager

R. D. Ferguson*; M. Mujat; A. Patel; R. Ramamirtham; J. D. Akula; A. B. Fulton
Physical Sciences Inc; Boston Children's Hospital

6037 - B0216

Characteristics and outcomes of open globe injuries with clinical optic neuropathy

S. Barb*; A. Patel; T. Stryjewski; C. Andreoli; M. Gardiner; S. Lessell
Massachusetts Eye and Ear Infirmary

6076 - C0011

PROSE Treatment for Pediatric Patients with Neurotrophic Keratitis

C. D. Remington*; D. S. Jacobs
Boston Foundation for Sight, 501(c)3

6119 - C0077

Incidence of Inflammation following Selective Laser Trabeculoplasty in Uveitic Eyes

R. T. Swan*; C. Foster
Massachusetts Eye Research and Surgery Institution

6195 - C0266

Resident Compliance with the American Academy of Ophthalmology Preferred Practice Pattern[®] Guidelines for Conjunctivitis

J. Yin*; M. Muhlstein; M. McDermott; F. Hwang
Kresge Eye Institute

CONGRATULATIONS

to the following members, alumni, and former faculty
of the
HARVARD MEDICAL SCHOOL DEPARTMENT OF OPHTHALMOLOGY

2014 Champalimaud Vision Award

Joan W. Miller, MD, FARVO
Evangelos S. Gragoudas, MD, FARVO
Patricia A. D'Amore, PhD, MBA, FARVO
Anthony P. Adamis, MD, FARVO
George L. King, MD, FARVO
Lloyd Paul Aiello, MD, PhD, FARVO

ARVO Achievement Awards

Proctor Medal

Patricia A. D'Amore, PhD, MBA, FARVO

Weisenfeld Award

Joan W. Miller, MD, FARVO

ARVO Foundation and Dowling Society Gala Honoree

Martine J. Jager, MD, PhD, FARVO

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Andrew W. Taylor, PhD, FARVO*
Terri Young, MD, MBA, FARVO*

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R. Rand Allingham, MD, FARVO*
Pablo Argueso, PhD, FARVO
Pedram Hamrah, MD, FARVO

Fight for Sight Alumni Achievement Award

Anthony P. Adamis, MD, FARVO

Travel Grants

ARVO Foundation/Knights Templar

Miguel G. Andrades, MD, PhD
Takashi Miyai, MD
Yureeda Qazi, MB, BS
Elise Taniguchi, MD
Chengxin Zhou, PhD

ARVO Foundation/Retina Research Foundation/ Joseph M. and Eula C. Lawrence

Chi-Hsiu Liu, PhD

National Eye Institute

Victoria Chang, MD
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Namrata Nandakumar, MD

*alumni and former faculty



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PARTNERS Aravind Eye Hospital (India) • Eye and ENT Hospital of Fudan University (China)

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