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**5th Biennial International
Symposium on AMD**



**October 12-13, 2018
Boston, MA**

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HARVARD
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Ophthalmology



**AGE-RELATED MACULAR
DEGENERATION**
CENTER OF EXCELLENCE

Notes



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DEGENERATION
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5th Biennial International
Symposium
on **AMD**

October 12-13, 2018

The Starr Center
185 Cambridge Street, 2nd Floor
Boston, MA 02114



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AFFILIATES: Massachusetts Eye and Ear • Massachusetts General Hospital • Boston Children's Hospital
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Cambridge Health Alliance • VA Boston Healthcare System • VA Maine Healthcare System

PARTNERS: Aravind Eye Hospital (India) • Shanghai Eye and ENT Hospital, an affiliate of Fudan University (China)

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Organizing Committee

CO-CHAIRS

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Co-director, Harvard Ophthalmology AMD Center of Excellence
Director, Howe Laboratory, Mass. Eye and Ear
Associate Chief of Basic and Translational Research, Mass. Eye and Ear
Director of Research, Schepens Eye Research Institute of Mass. Eye and Ear

Deeba Husain, MD

Associate Professor of Ophthalmology, Harvard Medical School
Co-director, Harvard Ophthalmology AMD Center of Excellence
Site Director, Mass. Eye and Ear Retina Consultants, Stoneham
Investigator, Angiogenesis Laboratory, Mass. Eye and Ear

Ivana K. Kim, MD

Associate Professor of Ophthalmology, Harvard Medical School
Co-director, Harvard Ophthalmology AMD Center of Excellence
Director, Macular Degeneration Unit, Mass. Eye and Ear

EX-OFFICIO

Joan W. Miller, MD

David Glendenning Cogan Professor of Ophthalmology, Harvard Medical School
Chair, Department of Ophthalmology, Harvard Medical School
Chief of Ophthalmology, Mass. Eye and Ear
and Massachusetts General Hospital

Welcome

Dear Colleagues,

Welcome to the 5th Biennial International Symposium on AMD. We are very pleased that you have joined us, and we are confident that you will find your time well spent.

As has been our format from the first symposium, a significant proportion of the meeting time will be dedicated to discussion, including a 40-minute panel discussion at the end of each session. We also know that the discussions continue on through the breaks, meals, and the gala dinner.

Another hallmark of this meeting is the inclusion of experts from outside vision research, who are working in areas that we believe are relevant to AMD. This year, you will hear from leaders in metabolomics, epigenetics, and microRNAs.

Please enjoy the meeting and know that your presence is an important contribution to its success.



Patricia A. D'Amore, PhD, MBA



Deeba Husain, MD



Ivana K. Kim, MD

Thursday, October 11

6:00 - 8:00 pm

Welcome Reception

Mass. Eye and Ear
Lank Family Dining Room, 7th Floor
243 Charles Street, Boston, MA

Friday, October 12

7:00 - 8:00 am

Breakfast and Registration

Starr Center
185 Cambridge Street, 2nd Floor, Boston, MA

8:00 - 8:05 am

Welcome and Introduction: Joan W. Miller, MD

Harvard Ophthalmology, Mass. Eye and Ear, and Mass General Hospital

8:05 - 8:30 am

Opening Address: Anthony P. Adamis, MD

Genentech
A Short history of AMD drug development

8:30 - 10:25 am

BIOMARKERS

Moderator: Deeba Husain, MD

Harvard Ophthalmology, Mass. Eye and Ear

8:30 - 8:50 am

Emily Y. Chew, MD

National Eye Institute, National Institutes of Health
Biomarkers of AMD: dark adaptation, function, and imaging

8:55 - 9:15 am

Jessica A. Lasky-Su, ScD

Harvard Medical School, Brigham and Women's Hospital
The utility of metabolomics in an integrative omic era

9:20 - 9:40 am

Anders M. Naar, PhD

University of California, Berkeley
Targeting of miR-33 in age-related macular degeneration

9:45 - 10:25 am

Panel Discussion

10:25 - 10:45 am

Break

Starr Center Breakout Space

10:45 am - 12:40 pm

VASCULAR

Moderator: Demetrios Vavvas, MD, PhD

Harvard Ophthalmology, Mass. Eye and Ear

10:45 - 11:05 am

Barbara Braunger, MD, PhD

University of Regensburg, Germany
Deletion of endothelial TGF- β signaling promotes choroidal neovascularization

11:10 - 11:30 am	<p>Robert J. D'Amato, MD, PhD Harvard Ophthalmology, Boston Children's Hospital <i>Identification of novel angiogenesis regulating genes by genome association studies in mice</i></p>
11:35 - 11:55 am	<p>Richard F. Spaide, MD Vitreous Retina Macula Consultants of New York, New York University <i>New insights into mactel2 and type 3 neovascularization from optical coherence tomography angiography imaging</i></p>
12:00 - 12:40 pm	<p>Panel Discussion</p>
12:40 - 1:40 pm	<p>Lunch Starr Center Breakout Space</p>
1:40 - 3:35 pm	<p>INFLAMMATION</p> <p>Moderator: Kip M. Connor, PhD Harvard Ophthalmology, Mass. Eye and Ear</p>
1:40 - 2:00 pm	<p>Andrew D. Dick, MD Bristol Eye Hospital, University of Bristol <i>Immunotherapy regulating immune responses through metabolic sensing</i></p>
2:05 - 2:25 pm	<p>Goldis Malek, PhD Duke Eye Center, Duke University School of Medicine <i>Rethinking nuclear receptors as therapeutic targets for AMD</i></p>
2:30 - 2:50 pm	<p>Aparna Lakkaraju, PhD University of California, San Francisco <i>Intracellular complement activation in the retinal pigment epithelium</i></p>
2:55 - 3:35 pm	<p>Panel Discussion</p>
3:35 - 3:55 pm	<p>Break Starr Center Breakout Space</p>
4:00 - 5:15 pm	<p>EPHRAIM FRIEDMAN LECTURE</p>
4:00 - 4:10 pm	<p>Introduction to Lecture: Evangelos S. Gragoudas, MD Harvard Ophthalmology, Mass. Eye and Ear</p>
4:10 - 4:15 pm	<p>Speaker Introduction: Joan W. Miller, MD Harvard Ophthalmology, Mass. Eye and Ear, and Mass General Hospital</p>
4:15- 5:15 pm	<p>François C. Delori, PhD Harvard Ophthalmology, Schepens Eye Research Institute of Mass. Eye and Ear <i>Fundus autofluorescence</i></p>
6:00 - 10:00 pm	<p>Gala Dinner at the Boston Museum of Science <i>By registration only</i></p>

Saturday, October 13

7:00 - 8:00 am

Breakfast

Starr Center Breakout Space

8:00 - 8:10 am

Welcome Back

Ivana K. Kim, MD
Harvard Ophthalmology, Mass. Eye and Ear

8:10 - 9:20 am

TRAINEE RAPID FIRE SESSION

8:10 - 8:20 am

Introduction: Ivana K. Kim, MD

Harvard Ophthalmology, Mass. Eye and Ear

8:25 - 8:30 am

Christin Hanke-Gogokhia, PhD

Weill Cornell Medical College
Indian hedgehog (Ihh) secreted by adult choroid endothelial cells regulates choroidal homeostasis and immune response

8:35 - 8:40 am

Shuntaro Ogura, MD, PhD

Johns Hopkins University School of Medicine
A novel rat model for mast cell involvement in geographic atrophy and an ex vivo assay for evaluating drug efficacy to quiesce mast cells

8:45 - 8:50 am

Jonathan B. Lin, PhD/MD Candidate

Washington University School of Medicine
Macrophage microRNA-150 promotes pathological angiogenesis as seen in age-related macular degeneration

8:55 - 9:00 am

Stuart McKeown, PhD

Queen's University Belfast
Endothelial colony forming cell modulation of the choroidal vasculature

9:05 - 9:10 am

Katy B. Ebrahimi, MD

University of Pennsylvania Health System
Outer plexiform layer remodeling in aging and age-related macular degeneration

9:15 - 9:20 am

Laura Lores-Motta, PhD

Radboud University Medical Center
Genome-wide association study reveals variants in CFH and CFHR4 associated with systemic complement activation: implications in age-related macular degeneration"

9:20 - 9:45 am

Break

Starr Center Breakout Space

9:45 am - 11:40 pm

EPIGENETICS

Moderator: Margaret M. DeAngelis, PhD
University of Utah

9:45 - 10:05 am

Trygve O. Tollefsbol, PhD, DO
University of Alabama at Birmingham
Epigenetics of aging and cancer: a nutritional perspective

10:10 - 10:30 am

Myles Brown, MD
Harvard Medical School, Dana-Farber Cancer Institute
Defining the functional epigenome

10:35 am - 10:55 am

Li-Huei Tsai, PhD
Massachusetts Institute of Technology
Transcriptomic analysis of at single-cell resolution in neurodegeneration

11:00 - 11:40 pm

Panel Discussion

11:40 - 12:40 pm

Lunch
Starr Center Breakout Space

12:40 - 2:35 pm

MITOCHONDRIA

Moderator: Scott W. Cousins, MD
Duke University

12:40 - 1:00 pm

Deborah A. Ferrington, PhD
University of Minnesota
Mitochondrial dysfunction in the retinal pigment epithelium promotes AMD pathology

1:05 - 1:25 pm

Zoltan Ungvari, MD, PhD
University of Oklahoma Health Science Center
Role of mitochondrial oxidative stress in cerebrovascular aging

1:30 - 1:50 pm

Magali Saint-Geniez, PhD
Harvard Ophthalmology, Schepens Eye Research Institute of Mass. Eye and Ear
Metabolic control of RPE phenotype

1:55 - 2:35 pm

Panel Discussion

CLOSING REMARKS

2:40 - 3:20 pm

Patricia A. D'Amore, PhD, MBA
Harvard Ophthalmology, Schepens Eye Research Institute of Mass. Eye and Ear

NIH-Sponsored Travel Award Recipients

Fiona Cunningham

PhD Student
Queen's University Belfast
Ireland

Katy B. Ebrahimi, MD

Instructor
University of Pennsylvania Health System
Pennsylvania

Ankur Gupta, MD

Spect, Inc.
California

Christin Hanke-Gogokhia, PhD

Ophthalmology Fellow
Weill Cornell Medical College
New York

Jonathan B. Lin

MD/PhD Candidate
Washington University School of Medicine
Missouri

Stuart McKeown

MD/PhD Candidate
Queen's University Belfast
Ireland

Laura Lorés de Motta, PhD

Postdoctoral fellow
Radboud University Medical Center
Netherlands

Shuntaro Ogura, MD, PhD

Postdoctoral Research Fellow
Johns Hopkins University School of Medicine
Maryland

Ravi Parikh, MD

Retina Fellow
Mass. Eye and Ear
Boston

Irum Perveen, PhD

Assistant Professor
Shaheed Zulfiqar Ali Bhutto Medical University
Islamabad

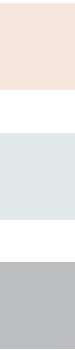
Magali Ridano, PhD

Postdoctoral Fellow
National University of Córdoba
Argentina

Roy Schwartz, MD

Specialty Doctor (Department of Medical Retina)
Moorfields Eye Hospital
London

Notes



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