13th Annual Symposium
Visual Sciences Research Center
Schedule

Friday, June 17, 2011

7:30  Continental Breakfast, Poster Setup

8:00  Jonathan H. Lass, M.D.
      Charles I Thomas Professor and Chairman, Ophthalmology & Visual Sciences
      Opening Remarks

8:10  Eric Pearlman, Ph.D.
      Professor and Director of Research, Ophthalmology & Visual Sciences
      Update on Visual Sciences Research Center

Retinal Biology Moderator: Shawn Wilker, M.D.

8:20  Saida Omarova, M.D.
      Postdoctoral Researcher, Ophthalmology and Visual Sciences
      Irina Pikuleva, Ph.D. Lab
      The Unexpected Link Between Cholesterol and Retinal Neovascularization

8:30  Alejandro Colozo, Ph.D.
      Research Associate, Ophthalmology and Visual Sciences
      Paul Park, Ph.D. Lab
      Comparison of the Molecular Interaction that Stabilize Bovine and Mouse Rhodopsin

8:45  Akiko Maeda, M.D., Ph.D.
      Assistant Professor, Ophthalmology & Visual Sciences
      Primary amines protect the retina from degeneration in mouse models: implications for Stargardt’s
disease and age-related macular degeneration

9:00  Elisa Bala, M.D.
      Resident, Ophthalmology & Visual Sciences
      Multifocal Electroretinography and Genetic Correlations in Early Age-Related Macular Degeneration

9:15  Johannes von Lintig, Ph.D.
      Assistant Professor, Pharmacology
      Molecular Components Affecting Ocular Vitamin A Homeostasis
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<tr>
<td>9:30</td>
<td>Sanae Sakami, Ph.D.</td>
<td>Postdoctoral Researcher, Pharmacology</td>
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<td></td>
<td>Krzysztof Palczewski, Ph.D. Lab</td>
<td>Probing Mechanisms of Photoreceptor Degeneration in a New Mouse Model of the Common Form of Autosomal Dominant Retinitis Pigmentosa due to P23H Opsin Mutations</td>
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<td>9:45</td>
<td>Feng Lin, Ph.D.</td>
<td>Assistant Professor, Pathology</td>
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<td>Myeloid suppressor cells induced by retinal pigmentation epithelial cells inhibit autoreactive T cell responses that lead to experimental autoimmune uveitis</td>
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**Aging and Diabetes Moderator: Vincent Monnier, M.D.**

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<tr>
<td>10:00</td>
<td>Ram Nagaraj, Ph.D.</td>
<td>Carl F. Asseff, M.D. Professor of Ophthalmology &amp; Visual Sciences, Pharmacology</td>
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<td>Inflammatory cytokines induce the expression of indoleamine 2,3-dioxygenase in human retinal capillary endothelial cells: Implications for diabetic retinopathy</td>
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<td>10:15</td>
<td>Xingjun Fan, Ph.D.</td>
<td>Instructor, Pathology</td>
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<td>Mouse Models of Accelerated Aging by Carbonyl and Oxidant Stress</td>
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<td>10:30</td>
<td>Virginia Utz, M.D.</td>
<td>Resident, Ophthalmology &amp; Visual Sciences</td>
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<td>Spectral Domain-OCT Imaging of Melanocytic Lesions</td>
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<td>10:45</td>
<td>Carlos Subauste, M.D.</td>
<td>Associate Professor, Medicine</td>
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<td>CD40 is Central for Development of Diabetic Retinopathy</td>
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**20th Anniversary Presentation, Department of Ophthalmology & Visual Sciences**

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<td>Jonathan H. Lass, M.D.</td>
<td>Charles I Thomas Professor and Chairman, Ophthalmology &amp; Visual Sciences</td>
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<td>11:20</td>
<td>Jerry Shuck, M.D., D.SC</td>
<td>Associate Dean and Director of Graduate Medical Education</td>
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<td>11:30</td>
<td>Pamela B. Davis, M.D., Ph.D.</td>
<td>Dean, School of Medicine</td>
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**Lunch & Poster Session**
**Epidemiology & Biostatistics Moderator:** Sudha Iyengar, Ph.D.

1:00  **Keynote Speaker**  
Rohit Varma, M.D.  
Professor of Ophthalmology & Preventive Medicine  
Director of Glaucoma Service, Ocular Epidemiology Center and the Clinical Trials Unit  
Doheny Eye Institute, University of Southern California  
LALES (Los Angeles Latino Eye Study) and MEPEDS (Multi-Ethnic Pediatric Eye Disease Study) – Lessons to Improve Prevention of Visual Impairment and Blindness in the United States

2:00  **Keynote Speaker**  
Natalie Afshari, M.D.  
Associate Professor of Ophthalmology  
Director of Cornea and Refractive Surgery  
Duke University  
Genetics of Corneal Dystrophies and Gene Therapy in Cornea

3:00  Sudha Iyengar, Ph.D.  
Professor, Epidemiology & Biostatistics  
Identification of Novel Loci for Diabetic Retinopathy in European Americans: The Family Investigation of Nephropathy and Diabetes (FIND)

**Cornea Moderator:** Jonathan Lass, M.D.

3:15  Gary Wnek, Ph.D.  
The Joseph F. Toot, Jr., Professor of Engineering  
Professor of Macromolecular Science and Engineering  
Faculty Director, The Institute for Management and Engineering (TiME)  
A Versatile Type I Collagen Processing Platform

3:30  Brian McDermott, Ph.D.  
Assistant Professor, Otolaryngology  
Fascin 2b Is a Component of Stereocilia that Lengthens Actin-Based Protrusions

3:45  M. Edward Medof, M.D., Ph.D.  
Professor, Pathology, Medicine, Ophthalmology, and Cancer Center  
Mechanisms of Ocular Tolerance

**Visual Sciences Training Program Moderator:** Susann Brady-Kalnay, Ph.D.

4:00  Patricia R. Taylor, Ph.D.  
Postdoctoral Researcher, Ophthalmology & Visual Sciences  
Eric Pearlman, Ph.D. Lab  
An essential role for T cell and neutrophil derived IL-17 in fungal keratitis
4:15  Debarshi Mustafi  
MSTP Student, Pharmacology  
Krzysztof Palczewski, Ph.D. Lab  
*Defective photoreceptor phagocytosis in a mouse model of Enhanced S-cone Syndrome causes progressive retinal degeneration*

4:30  Casey Charvet  
Ph.D. Student, Ophthalmology & Visual Sciences  
Irina Pikuleva, Ph.D. Lab  
*Post-translational Modification of CYP27A1 by Oxidative Derivatives of Arachidonic Acid, Isolevuglandins, Occurs in Human Retina.*

4:45  Steven de Jesus Carrion  
Ph.D. Student, Ophthalmology & Visual Sciences Dr. Eric Pearlman Lab  
*Surface hydrophobins in fungal spores promote pathogenicity during Fungal Keratitis*

#### Poster Session & Reception

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**Saturday, June 18**

8:30  Continental Breakfast

9:10  **Shawn Wilker, M.D.**  
Opening Remarks

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**Retina Moderator: Shawn Wilker, M.D.**

9:15  **Mehul Nagarsheth, M.D.**  
Resident, Ophthalmology & Visual Sciences  
*Incidence and severity of Retinopathy of Prematurity in premature Infants with birth weight > 1250 grams and/or gestational age > 28 weeks*

9:30  **Johnny Tang, M.D.**  
Assistant Professor, Ophthalmology & Visual Sciences  
*Increased Corneal Thickness in Patients with Ocular Coloboma*
**Cornea Moderator: Kristina Thomas, M.D.**

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<td><strong>Keynote Speaker</strong>&lt;br&gt;Natalie Afshari, M.D.</td>
<td>Associate Professor of Ophthalmology&lt;br&gt;Director of Cornea and Refractive Surgery&lt;br&gt;Duke University&lt;br&gt;Advances in Corneal Surgery</td>
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<td>10:45</td>
<td>Break</td>
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<td>11:00</td>
<td>Donghai Ho, M.D.</td>
<td>Resident, Ophthalmology &amp; Visual Sciences&lt;br&gt;<strong>Susceptibility of Fungal Biofilms on Worn Soft Contact Lenses to Lens Care Solutions</strong></td>
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<td>11:10</td>
<td>Loretta Szczotka-Flynn, O.D., Ph.D.</td>
<td>Professor, Ophthalmology &amp; Visual Sciences and Epidemiology &amp; Biostatistics&lt;br&gt;<strong>Application of Activated Protein C in Reducing Soft Contact Lens Associated Fungal Biofilms</strong></td>
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<td>11:20</td>
<td>Scott Yeates, M.D.</td>
<td>Resident, Ophthalmology &amp; Visual Sciences&lt;br&gt;<strong>Corneal Topographic Changes During Continuous Silicone Hydrogel Contact Lens Wear</strong></td>
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<td>Jonathan H. Lass, M.D.</td>
<td>Charles I Thomas Professor and Chairman, Ophthalmology &amp; Visual Sciences&lt;br&gt;<strong>Update on Corneal Transplant Studies: Cornea Donor Study, DSEK, &amp; Future Plans</strong></td>
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<td>11:45</td>
<td>Holly Simpson, M.D.</td>
<td>Resident, Ophthalmology &amp; Visual Sciences&lt;br&gt;<strong>Comparison of Nidek Automated, Automated Adjusted, and Manual Center Methods of Corneal Endothelial Cell Analysis</strong></td>
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12 – 3 p.m. **Resident Graduation Festivities: Dr. Jonathan Lass, Dr. Johnny Tang, Marianne Reeves**

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**Thank You for Attending**

**The 13th Annual**

**Visual Sciences Research Center Symposium**