26th ANNUAL BAVRD
Bay Area Vision Research Day

Free-day symposium hosted by the 2nd year Vision Science Graduate Students at Berkeley

FEBRUARY
6th
2015

Sutardja Dai Hall, Banatao Auditorium
University of California, Berkeley

We thank all of the sponsors for their generous support of the 26th Annual Bay Area Vision Research Day
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<tr>
<th>Time</th>
<th>Session</th>
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<tr>
<td>8:00 a.m.</td>
<td>Doors open</td>
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<tr>
<td>8:15 a.m.</td>
<td>Welcome/introduction</td>
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<tr>
<td>8:30 a.m.</td>
<td>Marla Feller, Professor and Head, Division of Neurobiology, MCB; member of VS &amp; HWNI departments, UC Berkeley— The development and function of direction selective circuits in the retina.</td>
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<td>9:00 a.m.</td>
<td>Adam Coates, Director of the Silicon Valley Artificial Intelligence Laboratory, Baidu— Scalability in AI.</td>
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<td>9:30 a.m.</td>
<td>Steven D. Schwartz, Ahmanson Professor of Ophthalmology &amp; Chief of the Retina Division, Jules Stein eye Institute, UCLA— Stem Cell Derived RPE Transplantation for Macular Disease.</td>
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<tr>
<td>10:00 a.m.</td>
<td>Break (refreshment offered) and Poster Session I</td>
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<tr>
<td>10:30 a.m.</td>
<td>Alan L. Yuille, Professor of Statistics &amp; Director of the Center of Cognition, Vision and Learning, UCLA— Bottom-Up and Top-Down visual processing</td>
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<td>11:00 a.m.</td>
<td>Michael A. Webster, Professor of Psychology, University of Nevada Reno— A neural basis for perception norms.</td>
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<td>11:30 a.m.</td>
<td>Saidas Nair, Assistant Professor of Ophthalmology, UCSF— The complex genetics of glaucoma: what animal models can teach us.</td>
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<td>12:00 p.m.</td>
<td>Lunch (provided onsite for registered attendants)</td>
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<td>1:00 p.m.</td>
<td>E.J. Chichilnisky, Professor of Neurosurgery &amp; Ophthalmology, Stanford— Responses of complete neural populations in primate retina to naturalistic stimuli.</td>
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<td>1:30 p.m.</td>
<td>Ashutosh Saxena, Visiting Assistant Professor of Computer Science, Stanford— RoboBrain: Large-Scale Knowledge Engine for Robot.</td>
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<td>2:00 p.m.</td>
<td>Robert Chang, Assistant Professor of Ophthalmology, Stanford— Smartphone-Based Tele-Ophthalmology Screening For Diabetic Eye Disease.</td>
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<td>2:30 p.m.</td>
<td>Break (refreshments offered) and Poster Session II</td>
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<tr>
<td>3:00 p.m.</td>
<td>Nicolas Davidenko, Assistant Professor of Psychology, UC Santa Cruz— Motion pareidolia: perception of coherent apparent motion in random flicker.</td>
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<td>3:30 p.m.</td>
<td>Karen De Valois, Professor Emerita of Vision Science, Psychology &amp; HWNI, UC Berkeley— The appearance of images.</td>
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<td>4:00 p.m.</td>
<td>KEYNOTE: Austin Roorda, Professor of Vision Science &amp; Optometry, UC Berkeley— From Sensation to Perception: Adaptive Optics for Probing Human Vision on a Cellular Scale.</td>
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<td>4:45 p.m.</td>
<td>Closing Remarks</td>
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<td>5:00 p.m.</td>
<td>Reception</td>
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Mina Azimi  
**Investigating the Role of Presenilins in Mammalian Lens Development**

Angelica Kowalchuk  
**Requirements for Neurogenin2 in the developing mammalian retina**

Kavitha Ratnam  
**Fixational eye movements improve visual performance at the sampling limit**

James Dooley  
**Effects of early, pervasive exposure to stripes on visual acuity and visual response properties in the short-tailed opossum**

Elise Piazza  
**Rapid Crossmodal Learning Influences Perceptual Selection During Binocular Rivalry**

Langlois & Peterson  
**Crossmodal associations between textures and multiple levels of musical structure**

Christopher Purington  
**Quantifying the relationship between the fMRI BOLD signal and neural activity with an achiasmic subject**

Doby Rahnev  
**Distinguishing three prefrontal processes in perceptual decision-making: A TMS-fMRI study**

Tsvi Achler  
**Avoiding Globalist Difficulties Using Equivalent Localist Networks**

Sheng Lundquist  
**Sparse Encoding of Stereo Frames to Extract Disparity Selective Features**

Brian A. Barsky  
**Vision Correcting Displays Based on Inverse Blurring and Aberration Compensation**

Christopher Warner  
**Retinal Circuits for Image Segmentation & Coding**

Zach Farrow  
**Dynamics of Vitamin A during Gestation**

Megan Tillman  
**Adaptation recovery of the photopic full-field and multifocal ERGs in normal young old adults**

Moqian Tian  
**Learning invariant object representations: asymmetric transfer of learning across line drawing and 3D cues**

David Kane  
**Is there a preference for linearity when viewing natural images?**

Mark Lescroart  
**Object silhouettes and semantic tuning in human lateral occipital cortex**

Steeve Laquittaine  
**Humans incorporate priors with a switching heuristic during motion direction estimation**

Lyndia Wu  
**Investigating the relationship between head impact kinematics and oculomotor response – a pilot study**

Andrew Coia  
**Chromatic luminance asymmetries in the watercolor illusion**

Christy Sheehy  
**Usages of the Tracking Scanning Laser Ophthalmoscope**

Marius Iordan  
**Basic Level Category Structure Emerges Gradually Across Human Ventral Visual Cortex**

Karl Zipser  
**P-imaging: a technique for comparing visually evoked population responses across visual areas and subjects**

Dylan Paiton  
**Causal Neural Networks for Learning Sparse Representations of Video**