Program Schedule

Thursday 9/24

6 pm – 9 pm **Welcome Reception**
Vista Café
William H. Foege building

Thanks to:
UNIVERSITY OF WASHINGTON
DEPARTMENT OF OPHTHALMOLOGY

Directions from University Inn & Watertown (0.5 mi)
Head south on Roosevelt Way NE toward NE 41st St: go 446
Left onto NE Campus Pkwy: go 0.2 mi
Right at Brooklyn Ave NE: go 0.2 mi
left at NE Pacific St: go 0.1 mi
(Vista café far side of the building, overlooking water)

Friday 9/25

8 am – 9 am **Registration**
220 Kane Hall

Directions from University Inn & Watertown (0.5 mi)
Head south on Roosevelt Way NE toward NE 41st St: go 187 ft
Left onto NE 41st: go 171 ft
Left at Eastlake Ave E: go 223 ft
Sharp right at 11th Ave NE: go 200 ft
Left at NE 41st St: go 0.2 mi
Continue on Skagit Lane: go 0.1 mi
Turn right to stay on Skagit Lane: go 305 ft.

9 am – 11 am **Glaucoma**

Moderator: **Phil Horner** , University of Washington

9-9.20: **Stuart McKinnon**, Duke University
Glaucoma - Current Trends in Diagnosis and Treatment [T1]

9.20-9.40: **Ron Harwerth**, University of Houston
Structure/Function Relationships in Glaucoma [T2]

9.40-10: **David Calkins** , Vanderbilt University
Intrinsic Mechanisms of Retinal Ganglion Cell Degeneration in Glaucoma [T3]

10.00-10.20: **Monica Vetter**, University of Utah
Microglia Cell Activation and Neuronal Decline in a Mouse Model of Glaucoma [T4]

10.20-11: Discussion

Friday 9/25 continued …

11.30 am – 1 pm Contributed Vision Talks

Moderator: **Greg Appelbaum**, Smith Kettlewell

11.30-11.45: **Toshifumi Mihashi***, Yoko Hirohara, Yoshiyuki Kitaguchi, Takeshi Morimoto, Tomomitsu Miyoshi, Takashi Fujikado
* Topcon Corp/Research Institute
Differences in the Independent Components in Two-Spectral-Band for Retinal Functional Imaging [T5]

11.45-12: **Michael E. Rudd***, Gregory W. Schwartz, Fred Rieke
* University of Washington
Square-Root Law Light Adaptation in Rod-Mediated Vision is Due to Retinal Gain Control [T6]

12-12.15: **Brian Barton***, Derrik E. Asher, Alyssa A. Brewer
* University of California, Irvine
Rod Pathway Projections in Human Visual Cortex [T7]

12.15-12.30: **Shun-nan Yang***, Jennifer Lynn Ziegler, Helen Hwang
* Vision Performance Institute
Supplementary Eye Field Involvement in Exerting the Effect of Prior Saccade History on Saccade Latency [T8]

12.30-12.45: **Kaccie Y. Li***, Austin Roorda, Jaclyn M. Wray, Björn N.S. Vlaskamp, Martin S. Banks
* University of California, Berkeley
Anisometropes Adapt to Different Retinal Image Sizes Via Post-Receptoral Mechanisms, Not by Differences in Photoreceptor Density [T9]

12.45-1: **Alan Gilchrist***, Ana Radonjic
* Rutgers University
Grouping by Illumination and the Role of Proximity in Lightness [T10]

1 pm – 2.30 pm LUNCH BREAK
(Please see back of program for suggestions on where to lunch)

Friday 9/25 continued …

2.30 pm – 4.30 pm The Melanopsin Pathway - Sensing Light Without Sight

Moderator: **Dennis Dacey,** University of Washington

2.30-2.50: **Satchidananda Panda**, The Salk Institute of Biological Studies
Melanopsin-Cre Mice are New Tools to Comprehensively Mark and Ablate Melanopsin Expressing Retinal Ganglion Cells [T11]

2.50-3.10: **Dave Berson**, Brown University
Ganglion-Cell Photoreceptors: Curiouser and Curiouser [T12]

3.10-3.30: **Samer Hattar**, John Hopkins University
Rods Provide the Principal Input to Melanopsin Cells for Circadian Photoentrainment [T13]

3.30-3.50: **Russ N Van Gelder** , University of Washington
Mechanisms of Murine Melanopsin-Mediated Photoreception [T14]

3.50-4.30: Discussion

DEPARTMENT OF PSYCHOLOGY
UNIVERSITY of WASHINGTON

5 pm – 6 pm ROBERT M. BOYNTON LECTURE

Introduction: Sheri Mizumori
Donald MacLeod

David R. Williams
William G. Allyn Professor of Medical Optics
University of Rochester, Rochester, NY

Thanks to:

FRIENDS OF PSYCHOLOGY
&
THE ALLEN EDWARDS ENDOWED LECTURESHIP IN PSYCHOLOGY

6.30 pm – 9 pm BANQUET
University of Washington Club

Directions from Kane Hall(~0.3 mi)
Southeast on Spokane Lane: go 138 ft
Left onto Skagit Lane: go 138 ft
Turn Right onto path just before Thomson Hall,
Grieg garden should be on right, Thompson Hall on left
Continue past the HUB (student union building) on right
Cross Stevens Rd and the University of Washington club should be in front of you.

Saturday 9/26

Talks in Kane Hall 220. Posters in Walker-Ames room, Kane 225. Please set posters up by 8.30 am, remove by 10 am Sunday.

8.30 pm – 10.30 pm Where and Whether to Move the Eyes

Moderator: **Michael Shadlen,** University of Washington

8.30-8.50: **Rich Krauzlis**, The Salk Institute of Biological Studies
A Priority Map for Movement and Perception in the Primate Superior Colliculus [T15]

8.50-9.10: **Marc A. Sommer**, University of Pittsburgh
How the Visual System Monitors Where the Eyes Will Move [T16]

9.10-9.30: **Laura Renninger**, Smith Kettlewell Eye Research Institute
Uncertainty Reduction as a Theory for Fixation Selection [T17]

9.30-9.50: **Al Fuchs**, University of Washington
Activation of a Cerebellar Complex Spike Pathway Drives Saccade Motor Learning [T18]

9.50-10.30: Discussion

10.30 am – 12 pm POSTER SESSION: Walker Ames Room, Kane 225

12 pm – 1.30 pm LUNCH BREAK
(Please see back of program for suggestions on where to lunch)

1.30 pm – 3.30 pm Computational Approaches to Color Constancy

Moderator: **Bevil Conway**, Wellesley College

1.30-1.50: **Beau Lotto**, University College London
What are Illusions and Why Do We See Them? [T19]

1.50-2.10: **Laurence T. Maloney**, New York University
Estimating and Discounting the Light Field: Perception of Surface Color in Three-Dimensional Virtual Scenes [T20]

2.10-2.30: **David H. Brainard**, University of Pennsylvania
Bayesian Models of Object Color Perception [T21]

2.30-2.50: **Hannah E. Smithson**, Durham University
Sensory, Computational and Cognitive Components of Human Colour Constancy [T22]

2.50-3.30: Discussion

Saturday 9/26 continued …

Thanks to:

4 pm – 6 pm **Classics of Vision Science**

Moderator: **Donald MacLeod**, UC San Diego

4-4.20: **Horace Barlow**, University of Cambridge
Measuring the Brain's Statistical Work: From Absolute Thresholds to Autocorrelation in Cortex [T23]

4.20-4.40: **Howard Howland**, Cornell University
A subjective method for the measurement of monochromatic aberrations of the eye [T24]

4.40-5: **Gerald H. Jacobs**, UC Santa Barbara
Reflections on "Analysis of Response Patterns of LGN Cells" [T25]

5-5.20: **Margaret S. Livingstone**, Harvard Medical School
Blobs, Patches, Puffs, and Color [T26]

5.20-6: Discussion

6 pm – 8 pm **POSTER RECEPTION**

Thanks to:

Department of Physiology and Biophysics
&
Department of Biological Structure

Sunday 9/27

8.30 am – 10.30 am Visual Cortical Maps on Multiple Scales

Moderator: **Geoffrey M. Boynton**, University of Washington

8.30-8.50: **Nicholas V. Swindale**, University of British Columbia
Cortical Maps as Content-Addressable Memories [T27]

8.50-9.10: **Soumya Chatterjee**, Harvard University
Functional Microarchitecture of Color Selectivity in Macaque Primary Visual Cortex [T28]

9.10-9.30: **Alyssa Ann Brewer**, UC Irvine
A Novel Use for Visual Field Maps: Tracking Functional Plasticity in Posterior Parietal Cortex [T29]

9.30-9.50: **Eli Merriam**, New York University
Decoding Eye Position from Responses in Human Visual Cortex [T30]

9.50-10.30: Discussion

Sunday 9/27 continued …

11 am – 12.30 am Contributed Color Talks

Moderator: **Greg Field**, The Salk Institute for Biological Studies

11-11.15: **Mina Gheiratmand***, Timothy S Meese, Kathy T Mullen
***** McGill University
Cross Orientation Masking in Color Vision: Cortical Processing Assessed with Dichoptic Presentation [T31]

11.15-11.30: **Austin Roorda***, Pavan Tiruveedhula, Qiang Yang, David W Arathorn, Joseph Carroll
* UC Berkeley
Measurements of Retinal Sensitivity on a Cellular Scale [T32]

11.30-11.45: **Greg Field***, Jeffrey L. Gauthier, Alexander Sher, Martin Greschner, Jonathon Shlens, Tim A. Machado, Deborah E. Gunning, Keith Mathieson, Alan M. Litke, E.J. Chichilnisky
* The Salk Institute for Biological Studies
Retinal Receptive Fields at Single Cone Resolution and Implications for Color Vision [T33]

11.45-12: **Barry Lee***, Hao Sun, Dingcai Cao
*SUNY College of Optometry at New York City
A New View of Receptive Field Structure of Midget Ganglion Cells [T34]

12-12.15: **Sérgio MC Nascimento***, João MM Linhares, Paulo D Pinto, David H Foster, Kinjiro Amano
* Universidade do Minho
Image Quality of Natural Scenes as a Function of Daylight Color [T35]

12.15-12.30: **Igor Juricevic***, Kyle McDermott, Michael A. Webster
* University of Nevada, Reno
Observer vs. Environmental Variations in Color Appearance [T36]

12.30 pm – 2 pm YOUNG INVESTIGATORS AWARD, LUNCH, & BUSINESS MEETING

Walker-Ames room Kane 225

12.30-12.40: **Young Investigators Award**
12.40-1.20: **Lunch**
12.40-1.20: **Business Meeting**

Thanks to:

Thanks to:

Sunday 9/27 continued …

2 pm – 4 pm

Therapeutic Approaches to Vision Loss

Moderator: **Jim Hurley**, University of Washington

2-2.20: **Thomas Reh**, University of Washington
Stem Cell Approaches for Retinal Repair [T37]

2.20-2.40: **Jessy Dorn,** Second Sight Medical Products
The Argus™ II Retinal Prosthesis Restores Some Sight to the Blind [T38]

2.40-3: **Stelios Smirnakis**, UC Irvine
Neural Repair at the Systems Level: Lessons from the Visual System [T39]

3-3.20: **William W. Hauswirth**, University of Florida
Leber Congenital Amaurosis Gene Therapy Clinical Trial [T40]

3.20-4: Discussion

4 pm – 4.15 pm **Final Remarks**

Many thanks to:

Amanda Pype
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Sheri Mizumori
Ali Clayton

And the generous support of:

Cambridge Research Systems
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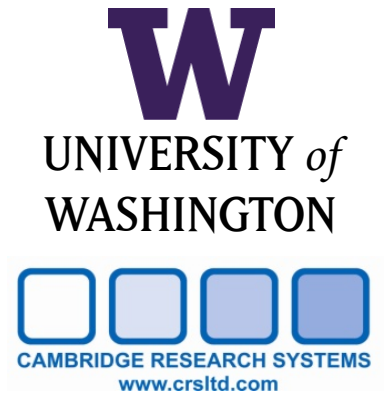
International Colour Vision Society
Smith Kettlewell Eye Research Institute
University of Washington
Psychology Department
Friends of Psychology
Allen Edward Endowed Lectureship in Psychology
Department of Ophthalmology
Physiology and Biophysics Department
Department of Biological Structure



To request disability accommodations, contact the Disability Services Office at least ten days in advance at: 206.543.6450/V, 206.543.6452/TTY, 206.685.7264 (FAX), or e-mail at dso@u.washington.edu