Program Schedule

All talks will be held in the Class of '62 Auditorium
All Breakfasts, Breaks, and Lunches will be held in the Medical Center Atrium

Friday, October 22, 2010

8:00 am - 9:00 am Breakfast, Registration, and Put up Posters

9:00 am - 9:15 am Welcome, David Williams, University of Rochester

Comparative color vision across the animal kingdom
Moderator: Gerald Jacobs, University of California, Santa Barbara

9:15 am - 9:45 am Nathaniel Dominy, University of California, Santa Cruz
Selective advantages of mono- and dichromatic vision among nocturnal primates

9:45 am – 10:15 am Claude Desplan, New York University
Detection and processing of color information in Drosophila

10:15 am - 10:45 am Almut Kelber, Lund University
Colour vision in dim light

10:45 am - 11:15 am Joseph Corbo, Washington University
The cone photoreceptor mosaics of the avian retina

11:15 am - 12:45 pm Poster Session (with coffee)

12:45 pm - 1:45 pm Lunch

Contributed color session
Moderator: David Brainard, University of Pennsylvania

1:45 pm - 2:00 pm Joanna Crook, University of Washington
Circuitry and receptive field structure underlying 'double duty' performance by midget ganglion cells

2:00 pm - 2:15 pm Patrick Monnier, Colorado State University
Estimating the properties of the chromatic mechanisms mediating the processing of large color differences

2:15 pm - 2:30 pm Hannah Smithson, Durham University
Using Stroop interference to reveal cognitive colour spaces

2:30 pm - 2:45 pm Keiji Uchikawa, Tokyo Institute of Technology
Degree of color constancy obtained by luminance balance of color samples

2:45 pm - 3:00 pm Daniela Petrova, University College London
The temporal characteristics of the early and late stages of the visual pathways signaling brightness and colour

3:00 pm - 3:15 pm Luis Garcia-Suarez, McGill Vision Research
Form detection for second order isoluminant red-green stimuli

3:15 pm - 3:45 pm Break

3:45 pm – 5:15 pm Poster Session

5:15 pm – 6:15 pm Presentation of Tillyer Medal & Tillyer Lecture

7:00 pm Tillyer Banquet, Colgate Divinity School

Saturday, October 23, 2010
8:00 am - 8:30 am Breakfast

Advances in Retinal Imaging
Moderator: Adrian Podoleanu, University of Kent

8:30 am – 9:00 am Xincheng Yao, University of Alabama at Birmingham
Intrinsic optical signal monitoring of visual signal propagation from the photoreceptor to inner retina

9:00 am - 9:30 am James Fujimoto, Massachusetts Institute of Technology
Ultrahigh speed imaging with swept source Fourier domain OCT

9:30 am – 10:00 am Don Miller, Indiana University
Research-grade OCT: what new can it reveal about photoreceptors?

10:00 am – 10:30 am William Seiple, Lighthouse International
A comparison of structural and functional relationships using an OCT/SLO/Microperimeter

10:30 am - 11:00 am Break

Contributed Vision Session
Moderator: Alyssa Brewer, University of California, Irvine

11:00 am - 11:15 am Jennifer Hunter, University of Rochester
Towards functional measurements of vision in the living macaque retina using two-photon fluorescence imaging

11:15 am - 11:30 am Suzanne McKee, Smith-Kettlewell Eye Research Institute
Surface segmentation is more powerful in the fixation plane: evidence from EEG source imaging

11:30 am - 11:45 am Damien Mannion, University of Sydney
Anti-correlation between natural scene orientation structure and activity in visual cortex
11:45 am - 12:00 pm Andrew Haun, Schepens Eye Research Institute
Blur sensitivity is best when adapted to normal imagery

12:00 pm - 12:15 pm Kevin Dieter, University of Rochester
Eye-specific plasticity induced by binocular rivalry training

12:15 pm - 12:30 pm Athena Buckthought, The Hospital for Sick Children
The neural correlates of two forms of bistability: a comparison of binocular and monocular rivalry with fMRI

12:30 pm - 1:00 pm Business Meeting

1:00 pm - 2:00 pm Lunch

2:00 pm - 3:30 pm Poster Session

Seeing motion in depth
Moderator: Suzanne McKee, Smith-Kettlewell Eye Research Institute

3:30 pm - 4:00 pm Julie Harris, University of St. Andrews
Comparing two mechanisms for the perception of binocular motion in depth

4:00 pm - 4:30 pm Alex Huk, University of Texas at Austin
Motion processing with 2 eyes in 3 dimensions

4:30 pm - 5:00 pm Mark Nawrot, North Dakota State University
Using the dynamic geometry of the motion/pursuit ratio to study motion parallax

5:00 pm - 5:30 pm Greg DeAngelis, University of Rochester
Neural representation of depth from motion parallax in visual area MT

6:30 pm Dinner, Nixon-Peabody

Sunday, October 24, 2010

8:00 am - 8:30 am Breakfast

The cognition and language of color
Moderator: Jonathan Winawer, Stanford University

8:30 am - 9:00 am Delwin Lindsey, Ohio State University
How categorical is color perception?

9:00 am - 9:30 am Kimberly A. Jameson, University of California, Irvine
Evolutionary models of color categorization based on realistic observer models and population heterogeneity

9:30 am - 10:00 am Anna Franklin, University of Surrey
Color categories in infancy

10:00 am – 10:30 am **Tom Griffiths**, University of California, Berkeley
Simulating the transmission of systems of color terms in the laboratory

10:30 am - 11:00 am Break

**Normalization mechanisms and contrast gain control**
Moderator: **Duje Tadin**, University of Rochester

11:00 am - 11:30 am **David Ferster**, Northwestern University
Diverse mechanisms of contrast normalization in primary visual cortex

11:30 am – 12:00 pm **Tony Norcia**, Smith-Kettlewell Eye Research Institute
Normalization of contrast responses in the visual cortex of humans and mice as seen in the frequency-tagged EEG

12:00 pm - 12:30 pm **Steve Dakin**, University College London
Deficits in processing sensory context in schizophrenia

12:30 pm - 1:00 pm **Eyal Seidemann**, University of Texas at Austin
Complex spatiotemporal dynamics of V1 population responses explained by a simple gain-control model

1:00 pm - 2:00 pm Lunch

2:00 pm - 2:15 pm Young Investigator Award

**Mechanisms of accommodation**
Moderator: **Howie Howland**, Cornell University

2:15 pm - 2:45 pm **Rowan Candy**, Indiana University
Accommodation during visual development

2:45 pm – 3:15 pm **Maggie Woodhouse**, Cardiff University
Accommodation in Down syndrome – more questions than answers

3:15 pm - 3:45 pm **Adrian Glasser**, University of Houston
Surgical restoration of accommodation in presbyopia

3:45 pm – 4:15 pm **Jean-Marie Parel**, Bascom Palmer Eye Institute
Assessing primate accommodation and its restoration by Optical Coherence Tomography and Ultrasound Biomicroscopy in an ex-vivo accommodation simulator

END OF MEETING