



CCNS Opening Workshop
August 17-21, 2015
SCHEDULE

Monday, August 17th

Hamner Conference Center Auditorium

- 8:00-8:30 Registration
- 8:30-8:45 Introduction and Welcome – **Richard Smith**, SAMSI
- 8:45-10:00 **Rob Kass**, Carnegie Mellon University
“A Statistical Perspective on Spike Train Analysis, and Possible Connections with Modeling”
- 10:00-10:10 Break
- 10:10-11:25 **Kenneth Miller**, Columbia University
“Modeling Neural Circuits”
- 11:25-12:40 **Emery Brown**, Harvard/MIT
“Neuroscience. A Broad and Open Frontier for Statistics”
- 12:40-1:40 Lunch (Galleria)
- 1:40-2:00 **Thomas Witelski**, SAMSI
“Working Groups at SAMSI”
- 2:00-3:15 **Martin Lindquist**, Johns Hopkins University
“Principles of Functional Neuroimaging”
- 3:15-3:25 Break
- 3:25-4:40 **Maxime Descoteaux**, Universite de Sherbrooke
“Diffusion MRI Tractography and Connectomics: problems and challenges”
- 4:40-5:00 Discussion

Tuesday, August 18th

Hamner Conference Center Auditorium

- 8:00-8:30 Registration and Announcements

- 8:30-9:30 **Edward Boyden**, MIT
“Tools for Mapping Brain Computations”
- 9:30-10:30 **Markus Diesmann**, Juelich Research Centre
“Brain-Scale Simulations at Cellular and Synaptic Resolution: Necessity and Feasibility”
- 10:30-11:00 Break
- 11:00-12:00 **Uri Eden**, Boston University
“Estimating Neural Dynamics using Point Process Models”
- 12:00-1:00 Lunch (Galleria)
- 1:00-1:20 Introduction to the Theoretical Neuroscience Working Group
- 1:20-2:20 **TBD**
- 2:20-3:20 **Friedrich Sommer**, University of California, Berkeley
“Understanding the Functions of Oscillatory LFP”
- 3:20-3:40 Break
- 3:40-5:00 Panel Discussion:
Sonja Gruen, Juelich Research Centre
Eric Shea-Brown, University of Washington
Matthew Harrison, Brown University
Brent Doiron, University of Pittsburgh
- 5:00-7:00 Poster Session/Reception
(The board dimensions are 4 ft. wide by 3 ft. high. They are tri-fold with each side being 1 ft. wide and the center 2 ft. wide. Please make sure your poster fits the board. The boards can accommodate up to 16 pages of paper measuring 8.5 inches by 11 inches.)

Wednesday, August 19th

Hamner Conference Center Auditorium

- 8:15-8:30 Announcements
- 8:30 -9:30 **Stephanie Jones**, Brown University
“Biophysically Principled Computational Modeling of Human MEG/EEG Signals to Link Mechanism to Function”
- 9:30-10:30 **Wei Ji Ma**, New York University
“The Inevitability of Probability: Near-Optimal Probabilistic Inference in Generic Neural Networks Trained with Non-Probabilistic Feedback”
- 10:30-11:00 Break

- 11:00-11:20 Introduction to the Inverse Problems Working Group
- 11:20-12:20 **Greg Farber**, NIH/NIMH
“The BRAIN Initiative, NIH, and Support for Computational Neuroscience”
- 12:20-1:20 Lunch (Galleria)
- Lunch Panel Discussion - Optional (Dogwood Room)
Wei Ji Ma, New York University
“Growing Up in Science”
- 1:20-2:20 **Daniel Rowe**, Marquette University
- 2:20-3:20 **Ruben Gur**, University of Pennsylvania
“Multimodal Neuroimaging and Behavioral Phenotyping in a Genomic Neurodevelopmental Context”
- 3:20-3:50 Break
- 3:50-4:50 **Raquel Gur**, University of Pennsylvania
“Integration of Neuroimaging and Behavioral Phenotypes in Informative Populations: the clinical neuroscience perspective”

Thursday, August 20th

Hamner Conference Center Auditorium

- 8:15-8:30 Announcements
- 8:30-9:30 **Polina Golland**, MIT
“From Pixels to Brain Networks: Modeling Brain Connectivity and Its Changes in Disease”
- 9:30-10:30 **Michael Miller**, Johns Hopkins University
“Neuroinformatics and the Complexity of the Brain at the Imm Morphome Scale”
- 10:30-11:00 Break
- 11:00-12:00 **Peter Bandettini**, NIMH
“New fMRI Observations at an Individual Level Using Novel Acquisition, Paradigm, and Processing Approaches”
- 12:00-1:00 Lunch (Galleria)
- 1:00-2:00 **James Haxby**, Dartmouth
“A Common Model of Representational Spaces in Human Cortex”.
- 2:00-2:30 Break
- 2:30-3:30 Discussion: *“Working Groups”*

Friday, August 21st

Hamner Conference Center Auditorium

8:45-9:00 Announcements

9:00-10:00 **Thomas Nichols**, (Warwick)
“Two Wildly Different Approaches to Brain Connectivity in fMRI”

10:00-12:00 Initial Working Group Meetings

12:00 Adjourn and Box Lunch (Galleria)