

**Porter Neuroscience Symposium and Building Dedication  
March 31 – April 1, 2014**

**March 31, 2014**

**9:00 – 9:30 AM      Opening Remarks**

**9:30 AM – 12:00 PM    Constructing Neuronal Circuits  
Session Chair: Story Landis, PhD, National Institute of Neurological  
Disorders and Stroke**

- Joshua Sanes, PhD, Harvard University  
Selective synapse formation in the retina
- Chris McBain, PhD, *Eunice Kennedy Shriver* National Institute of  
Child Health and Human Development  
Development and maturation of a cortical feedforward inhibitory  
pathway
- Matthew Kelley, PhD, National Institute on Deafness and Other  
Communication Disorders  
Wiring the brain's microphone: Regulation of hair cell innervation  
in the mammalian cochlea
- Leonardo Belluscio, PhD, National Institute of Neurological  
Disorders and Stroke  
Formation and maintenance of olfactory bulb circuitry
- Nick Ryba, PhD, National Institute of Dental and Craniofacial  
Research  
The receptors, cells, and coding logic for taste
- Heather Cameron, PhD, National Institute of Mental Health  
Maturation and function of new neurons in the adult  
hippocampus

**12:00 – 1:00 PM      Lunch**

**1:00 – 2:40 PM      Cell Biology of Neurons  
Session Chair: Susan Amara, PhD, National Institute of Mental Health**

- Lily Jan, PhD, University of California, San Francisco  
Ion channels in health and disease
- Antonina Roll-Mecak, PhD, National Institute of Neurological  
Disorders and Stroke  
Traffic signs of the cellular microtubule highway

- Kenton Swartz, PhD, National Institute of Neurological Disorders and Stroke  
Venom toxins and molecular mechanism of the nerve impulse
- Richard Youle, PhD, National Institute of Neurological Disorders and Stroke  
Damage control: The function of genes mutated in familial Parkinson's disease

**2:40 - 3:00 PM**      **Break**

**3:00 – 5:00 PM**      **Dedication Ceremony**  
The Honorable John Porter, Members of Congress, NIH Leadership, and Invited Guests

**April 1 2014**

**9:00 – 11:00 AM**      **Genetics of Nervous System Disorders**  
**Session Chair: Kenneth Fischbeck, MD, National Institute of Neurological Disorders and Stroke**

- Huda Zoghbi, MD, Baylor College of Medicine  
Disease Neurobiology: Charting the path from genes to therapies
- Andrew Singleton, PhD, National Institute on Aging  
Next steps in neurogenetics: Integrating high content data to understand the biology of disease
- Ellen Sidransky, MD, National Human Genome Research Institute  
Gaucher disease and Parkinsonism: An evolving story
- Maximilian Muenke, MD, National Human Genome Research Institute  
Attention Deficit Hyperactivity Disorder (ADHD): From causes to treatment
- Thomas Friedman, PhD, National Institute on Deafness and Other Communication Disorders  
Genetic studies of childhood deafness reveal molecules and mechanisms required for hearing, balance, and vision

**11:00 AM – 12:30 PM**      **Lunch**

**12:30 – 2:30 PM**      **Dissecting Neural Circuits**  
**Session Chair: Tom Insel, MD, National Institute of Mental Health**

- Robert Desimone, PhD, Massachusetts Institute of Technology  
Prefrontal and thalamic control of attention

- Kevin Briggman, PhD, National Institute of Neurological Disorders and Stroke  
Large-scale optical and electron microscopy for studying the neural basis of behavior
- Mark Stopfer, PhD, *Eunice Kennedy Shriver* National Institute of Child Health and Human Development  
Neural codes for odors
- Dietmar Plenz, PhD, National Institute of Mental Health  
The cellular origin of neuronal avalanches
- Benjamin White, PhD, National Institute of Mental Health  
Studying decision-making on the fly

**2:30 – 3:00 PM**

**Break**

**3:00 – 4:45 PM**

**How Synapses Shape Circuit Function**

**Session Chair: Bob Wurtz, PhD, National Eye Institute**

- Roger Nicoll, MD, University of California, San Francisco  
Expanding social network of ionotropic glutamate receptors
- Katherine Roche, PhD, National Institute of Neurological Disorders and Stroke  
Molecular mechanisms regulating plasticity of excitatory synapses
- Ling-Gang Wu, MD, PhD, National Institute of Neurological Disorders and Stroke  
Imaging structural changes of vesicle fusion and endocytosis in live cells
- Jeffrey Diamond, PhD, National Institute of Neurological Disorders and Stroke  
Synapses and circuits in the retina are optimized for sensitivity near visual threshold

**4:45 PM**

**Closing Remarks**