

## Colloquia and Symposia Sponsored by ION (2010.01-2010.12)

Date	Name	Affiliations	Title
10-01-05	Tao Wang	Postdoctoral Fellow, Division of Basic Science, Fred Hutchinson Cancer Research Center, USA.	<i>Neuronal degeneration, lessons from Drosophila.</i>

			<i>and network properties.</i>
10-04-27	Barry Richmond	Senior Scientist, Laboratory of Neuropsychology, National Institute of Mental Health, NIH, USA.	<i>Studies into the neurobiological basis of stimulus-outcome learning in monkeys.</i>
10-05-10	Linda Van Aelst	Professor, Cold Spring Harbor Laboratory, USA.	<i>Regulators of Rho proteins in neuronal development and disease.</i>
10-05-13	Craig Montell	Professor, Department of Biological Chemistry, The Johns Hopkins School of Medicine, USA.	<i>TRP channels: from sensory signaling to neurodegenerative disease.</i>
10-05-14	Li Zhang	Assistant Professor, University of Southern California, USA.	<i>Synaptic circuitry mechanisms underlying the function and development of the auditory cortex.</i>
10-05-17	Yu-Guo Yu	Associate Research Scientist, Department of Neurobiology, School of Medicine, Yale University, USA.	<i>Cortical Neural Coding Strategies for Input Signal Representation and Synaptic Communication.</i>
10-05-17	David Featherstone	Associate Professor, Department of Biological Sciences, University of Illinois at Chicago, USA.	<i>Molecular mechanisms controlling glutamatergic synapse strength and behavior.</i>
10-05-17	Janet Richmond	Professor, Department of Biological Sciences, University of Illinois at Chicago, USA.	<i>Mechanisms regulating the localization of nicotinic receptors at the C. elegans neuron muscular junction.</i>
10-05-18	John Wemmie	Associate Professor, Department of Psychiatry, University of Iowa College of Medicine, USA.	<i>Acid sensing ion channels: a novel therapeutic target for anxiety and depression?</i>
10-06-11	Lu Chen	Associate Professor, University of California, Berkeley.	<i>Translational regulation of synaptic strength: from retinoic acid to Fragile-X.</i>
10-06-11	Thomas Südhof	Professor and HHMI, Stanford University School of Medicine, USA.	<i>Mechanism and Function of Fast Neurotransmitter Release.</i>
10-07-14	Zhou-Feng Chen	Professor, Washington University, USA.	<i>Unraveling the mystery of itch.</i>
10-07-15	Xin Yu	Research Fellow, National Institute of Neurological Disorders and Stroke, National Institutes of Health, USA.	<i>Functional mapping the rodent brain using high field MRI.</i>
10-07-15	Tianzi Jiang	Professor of Brain Imaging and Cognitive Disorders, Chinese Director of LIAMA, National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences.	<i>Studies of Brain Networks with Multimodal Magnetic Resonance Imaging.</i>
10-07-16	Michael Shadlen	Professor, Department of Physiology & Biophysics, University of Washington School of Medicine, USA.	<i>Believing and Time: A Neural Mechanism for Decision Making.</i>
10-07-19	Michael Hausser	Professor, Department of Physiology, University College London, UK.	<i>Dendritic computation.</i>

10-08-03	Dong-Lin Bai	Associate Professor, Department of Physiology and Pharmacology, The University of Western Ontario, Canada.	<i>Human disease linked mutants in gap junction channels.</i>
10-08-04	C. Ron Yu	Assistant Investigator, Stowers Institute for Medical Research, USA.	<i>Odors Recognition and Discrimination: Insights from Transgenic Mice.</i>
10-08-12	Bin-Hai Zheng	Associate Professor, Department of Neurosciences, University of California San Diego, USA.	<i>Axon regeneration in the CNS: myelin inhibitors and beyond.</i>
10-08-13	Michael Stryker	Professor, University of California, San Francisco, USA.	<i>How neural activity and molecular cues guide the formation of maps in the brain and connections between brain areas.</i>
10-08-14	Xiaoping Hu	Professor and Georgia Research Alliance, Endowed Eminent Scholar in Imaging, Coulter Department of Biomedical Engineering, Georgia Tech and Emory University	<i>In Vivo Magnetic Resonance in Neuroscience Research.</i>
10-08-25	Shao-Wu Zhang	Professor, The Australian National University.	<i>Small Brains, Smart Minds: New evidence of higher cognitive function emerging from the small brain.</i>
10-08-25	Martin Giurfa	Professor, University Paul Sabatier, France.	<i>Accessing the neural bases of cognitive processing: lessons from an insect brain.</i>
10-08-27	Songhai Shi	Assistant Member, Memorial Sloan-Kettering Cancer Center	<i>Mammalian Neocortex Development: from Neurogenesis to Circuit Formation.</i>
10-09-21	Jack Feldman	Distinguished Professor, Department of Neurobiology, David Geffen School of Medicine, University of California, Los Angeles, USA.	<i>Looking for inspiration, the search for the oscillator(s).</i>
10-09-26	Günther Schütz	Helmholtz Professor, Molecular Biology of the Cell I, German Cancer Research Center.	<i>Crucial role of the nuclear receptor tailless (Tlx) in neural stem cells and brain tumor formation.</i>
10-09-28	Gerald W. Zamponi	Professor, Department of Physiology and Pharmacology, University of Calgary, Canada.	<i>Regulation of NMDA receptors - implications for pathophysiology</i>
10-10-15	Guang-Ping Gao	Professor, University of Massachusetts Medical School, USA.	<i>AAV evolution: from the smallest virus to a highly efficient and stable vector for CNS gene transfer.</i>
10-10-27	Ian Macara	Professor, University of Virginia School of Medicine, USA.	<i>Cell Polarity Proteins and Synapse Formation in Hippocampal Neurons.</i>
10-10-29	Azad Bonni	Professor, Department of Pathology, Harvard Medical School, USA.	<i>Regulation of Neuronal Circuitry in the Brain by Ubiquitin Pathways.</i>
10-11-01	James McNamara	Professor and Chairman, Department of Neurobiology, Duke University Medical Center, USA.	<i>Transactivation of the BDNF receptor, TrkB, by the divalent cation, zinc</i>

10-11-02	Curtis Baker	Professor, Department of Ophthalmology, McGill University, Canada.	<i>Neural mechanisms for cue-invariant boundary segmentation in early visual cortex.</i>
10-11-03	Erich Buchner	Professor, Department of Neurobiology and Genetics, University of Wuerzburg, Germany.	<i>Presynaptic proteins and their roles in olfactory conditioning of Drosophila.</i>
10-11-15	Qing-Ming Luo	Professor, Hua Zhong University of Science and Technology.	<i>Micro-Optical Sectioning Tomography to Obtain a High-Resolution Atlas of the Mouse Brain.</i>
10-11-30	Jing Wang	Associate Professor, University of California, San Diego, USA.	<i>Modulation of olfactory circuits in the hungry fly.</i>
10-12-13	Hong-Sheng Li	Associate Professor, University of Massachusetts Medical School, USA.	<i>How Drosophila achieves rapid vision.</i>
10-12-24	Zi-Jiang He	University Scholar and Professor, Department of Psychological and Brain Sciences, University of Louisville, USA.	<i>Push-Pull Perceptual Learning Modifies Ocular Dominance.</i>
10-12-29	Wei Lu	Postdoctoral Fellow, University of California, San Francisco, USA.	<i>Single-cell genetic analysis of synaptic glutamate receptors.</i>

# *Institute of Neuroscience Lectures*

Speaker: Michail Tsodyks, Ph.D.  
Professor,  
Department of Neurobiology,  
Weizmann Institute of Science, ISRAEL.

Title 1: Mathematical modeling of short-term synaptic plasticity in neocortex.

Time: 2010.03.11 (Thursday)  
13:30 PM

Place: Room 430, ION Building.

Host PI: Dr. Si Wu

Title 2: Information processing in recurrent neural networks with population spikes.

Time: 2010.03.12 (Friday)  
13:30 PM

Place: Room 430, ION Building.

Host PI: Dr. Mu-Ming Poo

Title 3: Synaptic theory of working memory.

Time: 2010.03.16 (Tuesday)  
13:30 PM

Place: Room 430, ION Building.

Host PI: Dr. You-Sheng Shu

# *Shanghai Symposium on Frontiers of Neuroscience*

*Date and time:* 09:00-16:30, April 18, 2010

*Place:* Lecture Hall of SIBS Building, 320 Yue Yang Road, Shanghai 200031

1. Yuh-Nung Jan, Professor, University of California, San Francisco.  
*Mechanisms of dendrite morphogenesis and its role in neuronal function and neurological disorders.*
2. Lily Jan, Professor, University of California, San Francisco.  
*Potassium channel regulation and mental disorders.*
3. Richard Tsien, Professor, Stanford University.  
*Synaptic Adaptation in Recurrent Networks: Reallocation of Presynaptic Resources?*
4. Gyorgy Buzsaki, Professor, Rutgers University.  
*Oscillations, cell assembly sequences and cognition.*
5. Linda Buck, Professor, University of Washington.  
*Unraveling smell.*
6. Hitoshi Sakano, Professor, University of Tokyo.  
*Sequential arrival and graded secretion of *Sema3F* by olfactory axons specify the glomerular map topography.*
7. Andreas Luthi, Senior Group Leader, Friedrich Miescher Institute.  
*Defining the neuronal circuitry of fear.*
8. Michael Fee, Professor, Massachusetts Institute of Technology  
*The role of basal ganglia-forebrain circuits for vocal learning in the songbird.*
9. May-Britt Moser, Professor, Norwegian University of Science and Technology.  
*How does the brain navigate in space?*
10. Nikos Logothetis, Professor, Max Planck Institute for Biological Cybernetics.  
*Neurovascular Coupling: Insights from Physiology, Neuropharmacology & Electrical Microstimulation.*

# *Shanghai Symposium on Frontiers of Neuroscience*

*Date and time:* 08:00-12:15, May 21, 2010

*Place:* Lecture Hall of SIBS Building, 320 Yue Yang Road, Shanghai 200031

Chair: Mu-Ming Poo

1. Susumu Tonegawa, Professor of MIT, Director of RIKEN BSI  
*Can the Hippocampus Predict the Future?*
2. Fred Gage, Professor, The Salk Institute for Biological Studies  
*Regulation and function of adult neurogenesis in the dentate gyrus*
3. Joshua Sanes, Professor, Harvard University  
*Development and function of retinal circuitry*
4. Takao Hensch, Professor, Harvard University  
*Shaping circuits by experience*
5. Richard Morris, Professor, University of Edinburgh  
*Memory Consolidation: Synaptic tagging and schemas*
6. Carla Shatz, Professor, Stanford University  
*Releasing the Brakes on Synaptic Plasticity*

# *Frontier in Computational and Systems Neuroscience*

*Date and time:* 13:30 - 16:30, July 9, 2010

*Place:* Lecture Hall of SIBS Building, 320 Yue Yang Road

Chair: Dr. Si Wu

13:30 - 14:20 Dr. Eve Marder, Professor of Brandeis University  
*Variability, Compensation and Homeostasis in Neuronal Circuits*

14:30 - 15:20 Dr. Robert Desimone, Professor of MIT  
*Neural synchrony and selective attention*

15:40 - 16:30 Dr. Xiao-Jing Wang, Professor of Yale University  
*Mechanisms and theory of 'cognitive-type' cortical microcircuits*