

## 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>  |
| 10-03-02 | Gong Chen                        | Associate Professor, Department of Biology, The Pennsylvania State University, USA.   | <i>Cytoskeleton modulation and neurodegeneration.</i>   |
| 10-03-05 | George Augustine                 | G.B. Geller Professor, Department of Neurobiology, Duke University Medical Center, USA.   | <i>Novel optogenetic approaches to mapping functional brain circuitry.</i>  |
| 10-03-17 | Bing-Gui Sun                     | Postdoctoral Fellow, University of California at San Francisco, USA.  | <i>New Insight into Alzheimer's Disease: Reduce Amyloid Beta and Boost Neurogenesis.</i>  |
| 10-03-17 | Fu-De Huang                      | Investigator, Unit of Neurodegenerative Diseases, Institute of Neuroscience, SIBS, CAS.   | <i>Age-dependent presynaptic and axonal changes induced by A<math>\beta</math> expression and potential regulators in Drosophila.</i> |
| 10-03-17 | Chen Zhang                       | Research Associate, Stanford University, USA.   | <i>Synaptic function of Alzheimer's disease genes, Presenilin 1 and 2.</i>  |
| 10-03-19 | Hong-Xuan Lin                    | Investigator, Institute of Plant Physiology and Ecology, SIBS, CAS.   | 水稻重要性状分子遗传机理研究  |
| 10-03-19 | Jia-Huai Han                     | Professor, School of Life Science, Xiamen University.   | <i>The function of RJP3 kinase in necrosis.</i>   |
| 10-03-30 | Greg Bashaw                      | Associate Professor, School of Medicine, University of Pennsylvania, USA.   | <i>Molecular Mechanisms of Axon Guidance at the Midline.</i>  |
| 10-04-07 | Jin Xu                           | Assistant Professor, Neurology, Neuroscience Program, Tufts University School of Medicine, USA.   | <i>Transcriptional Regulation in Parkinson's Disease.</i>   |
| 2010-4-7 | Xiao-Qing Liu                    | Professor and Deputy Director, Stem Cell Research Center and Department of Regenerative Medicine, Tongji University School of Medicine. | <i>Studies of phototransduction by using animal models.</i>   |
| 10-04-07 | Zheng-Zheng Bao                  | Associate Professor, Departments of Medicine, University of Massachusetts Medical School, USA.  | <i>Signaling and membrane trafficking processes in Sonic hedgehog-mediated axon guidance</i>  |
| 10-04-12 | Xiao-Qin Wang                    | Professor, Department of Biomedical Engineering, Johns Hopkins University, USA.   | <i>Marmoset as a model for understanding the neural basis of human vocal communication.</i>   |
| 10-04-21 | Randolf Menzel,<br>Dr. rer. nat. | Professor, Freie Universität Berlin, Germany.   | <i>Multiple neural traces of learning and memory in the honeybee brain: single neuron</i>   |

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|          |                    |  | <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>  |

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| 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>   |

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| 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 <i>Drosophila</i>.</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 <i>Drosophila</i> 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*