

## Colloquia and Symposia Sponsored by ION (2008.01-2008.12)

Date	Name	Affiliations	Title
08-01-21	Robert Baker	Professor, Dept. of Physiology & Neuroscience, New York University Medical School, USA.	<i>Gene regulation and evolution of motor behavior.</i>
08-03-10	Shao-Qun Zeng	Professor, Key Laboratory of Biomedical Photonics of Ministry of Education, College of Life Science and Technology, Huazhong University of Science and Technology.	<i>Random access two-photon microscopy for Neuron circuits.</i>
08-03-21	Zuoshi Josh Huang	Professor, Cold Spring Harbor Laboratory, USA.	<i>GABA signaling and activity-dependent development of inhibitory synapses and circuits.</i>
08-04-22	Bing Wu	Post-Doctoral researcher, Robotics Institute/Dept. of Psychology, Carnegie Mellon University, USA.	<i>Multimodal information integration in space perception.</i>
08-04-22	Hai-Dong Lu	Research Assistant Professor, Department of Psychology, Vanderbilt University, USA.	<i>How the brain sees the motion: an optical imaging study.</i>
08-04-22	Qi Zhang	Postdoctoral fellow, Department of Molecular and Cellular Physiology, Stanford University, USA.	<i>The life of synaptic vesicles revealed by quantum dot.</i>
08-05-19	Jie Shen	Associate Professor, Harvard Medical School, USA.	<i>A presynaptic mechanism for Alzheimer's and Parkinson's diseases.</i>
08-05-20	Raymond J. Kelleher III	Assistant Professor, Harvard Medical School, USA.	<i>Translational control and microRNAs in brain development and function.</i>
08-05-29	Xing-Yu Jiang	Investigator, National Center for NanoScience and Technology, china	<i>Surface nanotechnology, gradients and cell biology.</i>
08-06-17	Christopher A. Walsh	Investigator, Howard Hughes Medical Institute, BIDMC, Chief, Division of Genetics, Children's Hospital Boston, Bullard Professor of Neurology and Pediatrics, Harvard Medical School, USA.	<i>Genes that regulate development of the human cerebral cortex.</i>

08-06-26	Perry Bartlett	Professor and Chair of Molecular Neuroscience, Director of Queensland Brain Institute, The University of Queensland, Australia.	<i>Activation and regulation of neuronal precursors in the hippocampus.</i>
08-06-26	Arnold Kriegstein	Professor and Director, Institute for Regeneration Medicine, University of California, San Francisco, USA.	<i>The Dynamics of Neural Stem and Progenitor Cells in Cortical Development.</i>
08-06-30	Daniel Tracey	Assistant Professor, Duke University Medical Center, USA.	<i>Genetic analysis of somatosensation in Drosophila.</i>
08-07-07	Lorne Mendell	Professor, SUNY Stony Brook, USA.	<i>Enhancing Circuit Performance in the Injured Spinal Cord.</i>
08-07-08	Jian-Wei Jiao	Instructor, Harvard Medical School, USA.	<i>Neural stem cell and neurogenesis in the brain.</i>
08-07-21	Jian Yang	Associate Professor, Department of Biological Sciences, Columbia University, USA.	<i>Structural and molecular mechanisms of complex feedback regulation of a TRPC channel.</i>
08-07-25	Xiao-Bing Gao	Assistant Professor, Division of Reproductive Neuroscience, Department of Obstetrics and Gynecology, Yale University School of Medicine, USA.	<i>Long-term potentiation underlies adaptive changes in hypocretin/orexin neurons.</i>
08-07-31	Qin Feng	Associate Professor, Dept of Physiology and Biophysics, SUNY Buffalo, USA.	<i>Pain Receptors/TRP Channels: Activation, Desensitization and Adaptation.</i>
08-08-06	Sheng He	Professor, Psychology and Neuroscience, University of Minnesota, USA.	<i>Conscious and unconscious visual processing of faces, tools, and biological motion.</i>
08-08-07	David Fitzpatrick	Professor, Department of Neurobiology, Duke University School of Medicine, USA.	<i>Imaging experience-dependent emergence of functional circuits in visual cortex.</i>
08-08-13	Ralph Greenspan	Senior Fellow in Experimental Neurobiology, The Neurosciences Institute, USA.	<i>Sleep in Drosophila.</i>
08-09-02	Samuel Schacher	Professor, Department of Neuroscience, Columbia University College of Physicians and Surgeons, USA.	<i>Common mechanisms mediate the formation of specific synapses and long-term activity-dependent synaptic plasticity.</i>
08-09-09	Jian-Hong Zhu	Professor, Hua Shan Hospital, Fudan University.	<i>Exploring stem cell biology for brain regenerative medicine.</i>

08-09-26	Wen Wang	Investigator, Kunming Institute of Zoology, Chinese Academy of Sciences.	<i>Origin and evolution of genetic novelties and their roles in physiological function, development and evolution of host organisms.</i>
08-10-14	Christian LUSCHER	Associate Professor, Centre Medical Universitaire, Switzerland.	<i>Cocaine-evoked synaptic plasticity: a key to addiction?</i>
08-10-14	Marc Caron	Professor of Neurobiology, Duke University Medical Center, USA.	<i>Animal Models of Neuropsychiatric Disorders: Implications for Therapies.</i>
08-10-16	Ke-Chen Zhang	Assistant Professor, Department of Biomedical Engineering and Department of neuroscience, Johns Hopkins University School of Medicine, USA.	<i>Optimal stimulus in hierarchical sensory networks.</i>
08-10-16	Shun-ichi Amari	Director, RIKEN Brain Science Institute, Japan.	<i>Mathematical Analysis of Spiking Neurons.</i>
08-10-23	Dora Angelaki	Alumni Endowed Professor of Neurobiology, Washington University Medical School St. Louis, USA.	<i>Extrastriate Visual Cortex and Multisensory Perception.</i>
08-10-26	Dick Swaab	Professor of Neurobiology, University of Amsterdam.	<i>The neurobiology of major depression and depression in Alzheimer's disease.</i>
08-10-27	John Hildebrand	Professor, University of Arizona, USA.	<i>Explorations of a 'Simple' Olfactory System.</i>
08-10-30	Stephen Smith	Professor of Molecular and Cellular Physiology, Stanford University School of Medicine, USA.	<i>Array Tomography: A New Tool for the Study of Neural Circuit Connectivity and Molecular Architecture</i>
08-10-30	Winfried Denk	Director, Department for Biomedical Optics, Max-Planck Institute for Medical Research, Germany	<i>Reverse engineering the brain: tools to image activity and structure.</i>
08-11-11	Michael Gershon	Professor and Chairman, Department of Anatomy and Cell Biology, College of Physicians and Surgeons, Columbia University, USA.	<i>The second brain: enteric neuronal control of intestinal behavior in health and disease.</i>
08-11-14	Xiao-Jiang Li	Distinguished Professor of Human Genetics, Department of Human Genetics, Emory University School of Medicine, USA.	<i>Protein misfolding and neurodegeneration in Huntington disease.</i>

08-11-20	Gordon Fishell	Professor and Coordinator, Smilow Neuroscience Program, NYU School of Medicine, USA.	<i>Making up your mind: the developmental origins of cortical interneurons.</i>
08-12-24	Jun Zhang	Professor, Department of Psychology, University of Michigan, USA.	<i>Understanding Neural Basis of Decision Making by Determining Locus in Stimulus-Response Arc of Neural Recordings.</i>

# Mini Symposium

## Mechanisms of Plasticity, from Molecules to MRI

**March 11<sup>th</sup>, 2008**

**Time: 13:30 - 17:30**

**Place: Rm 430, ION Building**

Talk 1: Multisensory processing and the sensory deprivation approach.

Speaker: Brigitte Roeder, Ph.D.

Professor,

Department of Biological Psychology and Neuropsychology,  
University of Hamburg, Germany.

Talk 2: The role of Munc13-2 in hippocampal synaptic transmission and plasticity.

Speaker: Joerg-Michael Breustedt, Ph.D.

Neurowissenschaftliches Forschungszentrum der Charite,  
Universitätsmedizin Berlin, Germany.

Talk 3: How neurons choose partners: Imaging structure and function of developing synapses.

Speaker: Christian Lohmann, Ph.D.

Department of Systems and Cellular Neurobiology,  
Max-Planck Institute of Neurobiology, Germany.

Talk 4: The Ying and Yang of Neurotrophin receptor signalling in the process of synaptic plasticity: results and fairytales.

Speaker: Martin Korte, Ph.D.

Professor of Cellular Neuroscience,  
Zoological Institute,  
Technical University at Braunschweig, Germany.

***SJAS Symposium on  
"Frontier of Neuroscience"  
(May 25 – 26, 2008)***

Lecture Hall of SIBS building, 320 Yue Yang Road, Shanghai 200031, China

**May 25, 2008 (Sunday) – Lecture Hall of SIBS building**

09:00 – 09:10      Opening Remark -- by Professor QS Lin

**Topic 1: Development of Neural Circuits**

**Chaired by Nancy Ip**

09:10 -- 09:40	<b><i>A molecular mechanism for activity-dependent synaptic suppression and synaptic homeostasis</i></b> Professor Morgan Sheng Picower Center for Learning and Memory and HHMI, MIT
09:40 -- 09:50	Discussion
09:50 -- 10:20	<b><i>Cell-cell communication mediated by lysosome exocytosis in glial cells</i></b> Professor Shumin Duan Institute of Neuroscience Shanghai Institutes for Biological Sciences
10:20 -- 10:30	Discussion
10:30 -- 10:45	Coffee/tea break
10:45 -- 11:15	<b><i>Receptors, Synapses and Memories</i></b> Professor Richard Huganir Howard Hughes Medical Institute Johns Hopkins School of Medicine
11:15 -- 11:25	Discussion
11:25 -- 11:55	<b><i>Entrained rhythmic activities of neuronal ensembles as perceptual memory of time interval</i></b> Professor Muming Poo UC Berkeley and Institute of Neuroscience
11:55 -- 12:05	Discussion

**Topic 2: Function and Plasticity of Neural Circuits**  
**Chaired by Morgan Sheng**

- 13:30 -- 14:00     ***How Activity Changes Synapses in the Mammalian Brain***  
Professor Tobias Bonhoeffer  
Max Planck Institute for Neurobiology
- 14:00 -- 14:10     Discussion
- 14:10 -- 14:40     ***Rapid learning in cortical coding of visual stimuli***  
Professor Yang Dan  
UC Berkeley
- 14:40 -- 14:50     Discussion
- 14:50 -- 15:20     ***The logics of networks in motion – from ion channels to behaviour***  
Professor Sten Grillner  
Department of Neuroscience, Karolinska Institute
- 15:20 -- 15:30     Discussion
- 15:30 -- 15:50     Coffee/tea break
- 15:50 -- 16:20     ***A Cell Type-Based Genetic Approach to Complex Neural Circuits***  
Professor Z Josh Huang  
Cold Spring Harbor Laboratory
- 16:20 -- 16:30     Discussion
- 16:30 -- 17:00     ***Molecular and cellular mechanisms of pain***  
Professor Xu Zhang  
Institute of Neuroscience  
Shanghai Institutes for Biological Sciences
- 17:00 -- 17:10     Discussion
- 17:10 -- 17:40     ***Receptor Tyrosine Kinase-Dependent Signaling in Synaptic Plasticity***  
Professor Nancy Ip  
Department of Biochemistry  
Hong Kong University of Science & Technology
- 17:40 -- 17:50     Discussion

**May 26, 2008 (Monday)** – Lecture Hall of SIBS building

**Topic 3: Perception, Cognition, Brain Computation and Theory**  
**Chaired by Tobias Bonhoeffer**

- 09:00 -- 09:30      ***Life at Low Molecule Number***  
Professor Terrence J. Sejnowski  
Computational Neurobiology Laboratory  
Salk Institute for Biological Studies
- 09:30 -- 09:40      Discussion
- 09:40 -- 10:10      ***Neural Correlation of “Global-first” Object Formation: Anterior Temporal Lobe***  
Professor Lin Chen  
National Key Lab of Brain and Cognition  
Institute of Biophysics, CAS
- 10:10 -- 10:20      Discussion
- 10:20 -- 10:40      Coffee/tea break
- 10:40 -- 11:10      ***Oscillatory EEG based Brain-computer interface***  
Professor Shangkai Gao  
Tsinghua University
- 11:10 -- 11:20      Discussion
- 11:20 -- 11:50      ***A general principle governing the design of neural circuits***  
Professor Charles Stevens  
Salk Institute for Biological Studies
- 11:50 -- 12:00      Discussion

