

“INTERNATIONAL SYMPOSIUM ON ORGANIZATION AND FUNCTION OF THE NERVOUS SYSTEM”

Dates : November 27 (Tue) - 28 (Wed), 2012

Venue : Koshiba Hall, The University of Tokyo

Program

November 27, 2012

- 12:00-13:00 Registration
13:00-13:10 Opening Remarks: Yuichi Iino (The University of Tokyo)

Session 1 “Molecular Ethology and Operating Principles of the Nervous System”

Chair: Minoru Saitoe (Tokyo Metropolitan Institute of Medical Science)

- 13:10-13:35 **Odor-evoked innate and learned fear responses are mediated by distinct neuronal mechanism**
Ko Kobayakawa (Osaka Bioscience Institute)
- 13:35-14:00 **Unravelling the neuronal mechanism of the spinal locomotor network -what we learn from hopping mice-**
Hiroshi Nishimaru (University of Tsukuba)
- 14:00-14:25 **Temporal-spatial regulation of singing-induced genes and epigenetic dynamics in the critical period for vocal learning in songbirds**
Kazuhiro Wada (Hokkaido University)
- 14:25-14:45 *Coffee Break*
Chair: Yuichi Iino (The University of Tokyo)
- 14:45-15:10 **Acceleration of forgetting by neuronal communication in *C. elegans***
Takeshi Ishihara (Kyushu University)
- 15:10-15:55 **Sensory transduction in *C. elegans*: What can't a worm sense?**
Shawn Xu (University of Michigan)
- 15:55-16:15 *Coffee Break*
Chair: Tetsuya Tabata (The University of Tokyo)
- 16:15-16:40 **Anatomical and functional organization of the *Drosophila* auditory system**
Azusa Kamikouchi (Nagoya University)
- 16:40-17:05 **Long-term enhancement in the mushroom body in cultured *Drosophila* brain-cellular substrate for olfactory learning**
Minoru Saitoe (Tokyo Metropolitan Institute of Medical Science)
- 17:05-17:50 **Bending the not so simple mind of the fruit fly**
Scott Waddell (University of Oxford)
- 18:00-20:00 *Reception at “Goten” Sanjo Conference Hall, The University of Tokyo*

November 28, 2012

Session 2 “Optogenetics and Neural Imaging”

Chair: Ikue Mori (Nagoya University)

10:00-10:35 **Functional analysis of locomotor circuits in the spinal cord and brainstem in zebrafish**

Shin-ichi Higashijima (Okazaki Institute for Integrative Bioscience)

10:35-11:10 **Neural circuits characterizing the posterior parietal cortex in mice**

Katsuei Shibuki (Niigata University)

11:10-11:45 **Structure and structure-based variant design of channelrhodopsin**

Osamu Nureki (The University of Tokyo)

11:45-13:00 *Lunch Break*

Session 3 “Neural Progenitor and Stem Cells, and Synapse Formation”

Chair: Takuya Shimazaki (Keio University)

13:00-13:35 **Regulation of neural stem cell fate in the developing mouse neocortex**

Yukiko Gotoh (The University of Tokyo)

13:35-14:20 **Human stem cell models of cerebral cortex development and disease**

Frederick J Livesey (Gurdon Institute and Department of Biochemistry, University of Cambridge)

14:20-15:05 **Migrating transient neurons: organizing activity in patterning of the cerebral cortex**

Alessandra Pierani (Institut Jacques-Monod)

15:05-15:25 *Coffee Break*

15:25-16:10 **Spatial and temporal roles of the homeobox gene Gsx2 in the specification of telencephalic cell fates**

Kenneth J. Campbell (University of Cincinnati College of Medicine)

16:10-16:45 **Synapse formation in the brain**

Masayoshi Mishina (Ritsumeikan University)

16:45-17:00 Closing Remarks: Tetsuo Yamamori (National Institute for Basic Biology)