

The 4th Neuroscience Workshop in Kyushu

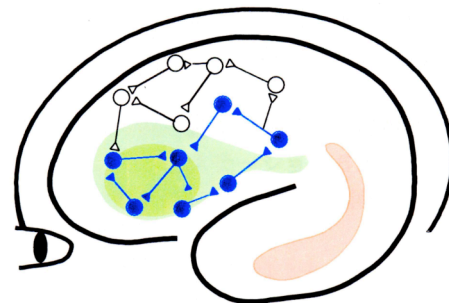
PROGRAM

December 9-10, 2005
Lake-side Hotel Hisayama (Fukuoka)

Organized by



Integrated Brain Research
Grant-in-Aid for Scientific Research
on Priority Areas from MEXT



December 9 (Fri)

12:30-13:00 **Registration**

13:00-13:10 **Opening remark:** Akinori Nishi (Kurume Univ)

Oral Session

I. Neuronal signal transduction

Chairperson: Kohji Fukunaga (Tohoku Univ),

13:10-13:40 **“Physiological significance of neural junctophilins in the memory formation”**

Shigeki Moriguchi

Dept of Pharmacology, Graduate Sch of Pharmaceutical Sci, Tohoku Univ

13:40-14:10 **“Phospholipase C-related inactive protein/protein phosphatase signaling complex regulates BDNF-modulated GABA_A receptor phosphorylation and membrane trafficking.”**

Takashi Kanematsu

Lab of Molecular and Cellular Biochemistry, Faculty of Dental Sci, Kyushu Univ

Invited lecture 1

Chairperson: Akinori Nishi (Kurume Univ)

14:10-15:10 **“Molecular adaptations in serotonin signaling in response to anti-depressant compounds”**

Per Svenningsson

Dep of Physiology and Pharmacology, Karolinska Institute, Sweden

II. Glial cells and neuronal signaling

Chairperson: Hiroshi Nakanishi (Kyushu Univ)

15:30-16:00 **“Interactions between perineuronal glial cells and neurons in the rat hippocampal CA1 region”**

Yoshihiko Yamazaki

Dept of Neurophysiology, Yamagata Univ Sch of Med

16:00-16:30 **“Spinal microglia and neuropathic pain”**

Makoto Tsuda

Dept of Molecular and System Pharmacology, Graduate Sch of Pharmaceutical Sci, Kyushu Univ

16:40-18:00 **Poster Session**

19:00-21:00 **Getting Together Party**

December 9 (Fri)

Poster Session

(presentation 6 min, discussion 4 min)

16:40-18:00

Chairperson: Kiyohisa Natsume (Kyushu Institute of Technology)

- 1 **“The one-dimensional map model of sleep-wake patterns in autistic children”**
Hirotsune Matsuura, Katsumi Tateno and Shuji Aou
Dept of Brain Science and Engineering, Kyushu Institute of Technology
 - 2 **“Visual categorization of food and sex in the primate orbitofrontal cortex”**
Takao Inoue, Balázs Lukáts, Ayumi Sasaki, Kenji Sakai, Masaharu Mizuno, Shuji Aou
Dept of Brain Science and Engineering, Kyushu Institute of Technology
 - 3 **“Selective orexin-1 receptor antagonist (SB 334867) antagonizes the effects of orexin-A on food and water intake in the bed nucleus of stria terminalis”**
Olga Hangodi, Barbara Urbán, Éva E. Bagi, Éva Fekete, Krisztián Tóth and László Lénárd
Neurophysiology Research Group of the Hungarian Academy of Sciences and Institute of Physiology, Pécs University, Medical School, Pécs, Hungary
 - 4 **“Prenatal and postnatal exposure to bisphenol A accelerates depressive responses to stress conditions in rats.”**
T. Fujimoto¹, K. Kubo² and S. Aou¹
Dept of Brain Science and Engineering, Kyushu Institute of Technology; ²Dept of Otorhinolaryngology, Chidoribashi Hospital, Fukuoka
- Chairperson: Masaharu Mizuno (Kyushu Institute of Technology)
- 5 **“Epileptic neuronal synchronization process depends on SK channel and NMDA receptor in hippocampal slices.”**
Genki Ogata and Kiyohisa Natsume
Dept of Brain Science and Engineering, Kyushu Institute of Technology
 - 6 **“Potentiation of the NMDA receptor-mediated responses through the activation of the glycine site by microglia secreting soluble factor”**
Yoshinori Hayashi ^{1,2}, Hitoshi Ishibashi ³, Kenji Hashimoto ⁴ and Hiroshi Nakanishi ¹
¹Lab of Oral Aging Science, Faculty of Dental Sciences, Kyushu Univ; ²Graduate School of Pharmacology, Faculty of Pharmaceutical Sciences, Kyushu Univ; ³Dept of Bio-signaling Physiology, Graduate School of Medical Sciences, Kyushu Univ; ⁴Division of Clinical Neuroscience, Center for Forensic Mental Health, Chiba Univ
 - 7 **“Enhancement of amygdala LTP in neurotensin receptor type-1 knockout mice; participation of the dopamine system”**
^{1,2}Taiju Amano, ¹Etsuko Wada, ²Mami Noda, ¹Keiji Wada, ¹Masayuki Sekiguchi
¹Dept of Degenerative Neurological Diseases, National Institute of Neuroscience, NCNP, Tokyo; ²Laboratory of Pathophysiology, Graduate School of Pharmaceutical Sciences, Kyushu Univ
 - 8 **“SKF83959 regulates DARPP-32 phosphorylation by activating PLC-dependent and independent cascades”**
Mahomi Kuroiwa and Akinori Nishi
Dept of Pharmacology, Kurume Univ Sch of Med

December 10 (Sat)

Oral Session

Invited lecture 2

Chairperson: Kiyohisa Natsume (Kyushu Institute of Technology)

9:00-10:00

“Dynamics of GABAergic inhibition in the subthalamic nucleus of intact and dopamine-depleted animals”

Nicholas E. Hallworth

Dep of Physiology, Feinberg Sch of Med, Northwestern Univ, Chicago, USA

III. Neural circuit

Chairperson: Shuji Aou (Kyushu Institute of Technology)

Takaichi Fukuda (Kyushu Univ)

10:20-10:50

“Difference in organization of corticostriatal and thalamostriatal synapses between patch and matrix compartments of rat striatum”

Fumino Fujiyama

Dept of Morphological Brain Science, Graduate Sch of Med, Kyoto Univ

10:50-11:20

“Orbitofrontal cortical IL-1 β mechanisms in the homeostatic regulation”

Balázs Lukáts

Institute of Physiology and Neurophysiology Research Group of the Hungarian Academy of Sciences, Pécs University, Medical School, Pécs, Hungary

11:20-11:50

“Gap junctions linking a dense and wide-ranging network in the cerebral cortex”

Takaichi Fukuda

Dep of Anatomy and Neurobiology, Graduate Sch of Med Sci, Kyushu Univ

11:50-12:50

Open discussion

12:50-13:00

Closing Remarks

Kiyoshi Aoki (Integrated Brain Research)

Junichi Nabekura (National Institute of Physiology)