The 1st NIPS / Tübingen University Joint Neuroscience Symposium

Date: Feb 25, 9am-6pm
Venue: Okazaki Conference Center
Symposium website: http://www.nips.ac.jp/%7Emyoshi/nips-tubingen/index.html
Registration fee: Free
Lunch fee: 1,000 yen (optional)
Welcome dinner at 'Ishiki-ya'
Contact person: Ayumi Shibata (ayumi@nips.ac.jp)

(This program book is the final version
updated on Feb 23.)

[Program]

9:00-9:10	Welcome note; Yasunobu Okada (NIPS, director)
9:10-9:20	Introduction of NIPS; Tadashi Isa (NIPS)
9:20-9:30	Introduction of Tübingen Neuroscience Group; Peter Their (Tübingen Univ)

Session I: chair; Norihiro Sadato (NIPS)

9:30-9:55	Christoph Braun (Tübingen Univ) "Studying the human somatosensory and motor system using magnetoencephalography."
9:55-10:20	Ryusuke Kakigi (NIPS) "The painful and itchy brain"
10:20-10:35	Coffee break

Session II: chair; Tadashi Isa (NIPS)

10:35-11:00	Steffen Hage (Tübingen Univ) "Neuronal mechanisms underlying vocal communication in monkeys"
11:00-11:25	Norihiro Sadato (NIPS) ""Stay tuned": Inter-individual neural synchronization during mutual gaze and joint attention"
11:25-11:50	Markus Siegel (Tübingen Univ) "Oscillatory cortical networks during perceptual decision-making"
11:50-12:15	Hidehiko Komatsu (NIPS) "Neural selectivity and representation of gloss in the macaque inferior temporal cortex"
12:15-14:15	Lunch & poster session (at Room B)

Session III: chair; Hidehiko Komatsu (NIPS)

14:15-14:40	Fahad Sultan (Tübingen Univ) "Using microstimulation evoked fMRI to study pathways in the monkey brain."
14:40-15:05	Peter Thier (Tübingen Univ)

"Visual attention, mirror neurons or inferential principles in vision"

15:05-15:30 Tadashi Isa (NIPS)
"Neuronal mechanism of blindsight"

15:30-15:55 Ziad Hafed (Tübingen Univ)
"Mechanisms for generating and compensating for the smallest possible saccades: Lessons learned"

15:55-16:10 Coffee break

Session IV: chair; Tadashi Isa (NIPS)

16:10-16:35 Atsushi Nambu (NIPS)
"Cortico-basal ganglia loop and movement disorders"

16:35-17:00 Cornelius Schwarz (Tübingen Univ)
"Perception in the rat's vibrissal system"

17:00-17:25 Takashi Sato (Tübingen Univ)
"Characterization and adaptive optical correction of aberrations during in vivo imaging in the mouse cortex."

17:30-17:55 Junnichi Nabekura (NIPS)
"Remodeling of Cortical Synapses in vivo"

17:55-18:00 Concluding remark (Keiji Imoto, vice director of NIPS)

18:30- Welcome dinner (at 'Ishiki-ya')

[Speakers]

Christoph Braun, Ph.D.

1984-1985	Research fellow in a project entitled “Chronobiology of Non-Human Primates ” at the Institute of Animal Physiology of the University of Tübingen
1985-1995	Research fellow in the Institute of Medical Psychology and Behavioral Neurobiology
1996-2005	Tenured assistant professor at the Institute of Medical Psychology and Behavioral Neurobiology involved in teaching and research. Co-Director of the MEG-Center at the University Tübingen
2005-2006	Deputy chair of the Institute of Medical Psychology
2008-present	Associate Professor for Clinical Psychology at the Department of Cognitive and Education Sciences at the University of Trento, Italy. Head of the laboratory for Magnetoencephalography at the Center for Mind/Brain Sciences at the University of Trento, Italy

Ryusuke Kakigi, M.D., Ph.D.

1978	Resident in Dept of Neurology, Kyushu University
1981	Assistant Professor in Lab. of Neurology, Dept of Internal Medicine, Saga Medical School (Prof. Shibasaki)
1983	Dr. A.M. Halliday’s Lab. In National Hospital for Neurological Diseases, Queen Square, London, England
1985	Associate Professor in Lab. of Neurology, Dept of Internal Medicine, Saga Medical School (Prof. Shibasaki)
1993-	Professor and a Chairperson in Dept of Integrative Physiology, National Institute for Physiological Sciences, Okazaki, Japan

Steffen Hage, Ph.D.

2005-2007	Postdoctoral fellow, German Primate Center, Göttingen, Germany, Neurophysiology
2007	Guest researcher, Max-Planck-Institute for Ornithology, Seewiesen, Germany, Molecular Biology
2007-2009	Postdoctoral fellow , University of California, Los Angeles, USA, Neuroethology/Neurophysiology
2009-	Group leader, Animal Physiology, Tübingen University

Norihiro Sadato, MD, Ph.D.

1983 – 1985	Junior Resident, Tenri Hospital, Nara, Japan
1985 – 1988	Senior Resident, Department of Radiology, Tenri Hospital, Nara, Japan
1988 – 1990	Clinical Fellow, Neuroradiology Section, Department of Radiology, University of Maryland Medical System/Hospital, Baltimore, Maryland, USA
1993 – 1995	Research Fellow, Human Motor Control Section, Medical Neurology Branch, National Institute of Neurological Disorders and Stroke, NIH, Bethesda, Maryland, USA
1995 – 1998	Lecturer, Biomedical Imaging Research Center, Fukui Medical School, Fukui, Japan
1998 – 1998	Associate Professor, Biomedical Imaging Research Center, Fukui Medical School, Fukui, Japan
1999 – present	Professor, National Institute for Physiological Sciences, Okazaki, Japan

Markus Siegel, M.D. Ph.D

2003-2006	Postdoctoral Fellow, University Medical Center Hamburg, Germany (Advisor: Andreas K. Engel)
2006	Group leader, MEG, University Medical Center Hamburg, Germany
2007-2011	Postdoctoral Fellow, Picower Institute for Learning and Memory, Massachusetts Institute of Technology, USA (Advisor: Earl K. Miller)
2010-	Principle Investigator, Centre for Integrative Neuroscience, University of Tubingen, Germany

Hidehiko Komatsu, Ph.D.

1982-1988	Research Associate, Department of Physiology, Faculty of Medicine, Hirosaki University, Hirosaki, Japan
1985-1988	Visiting Associate, Laboratory of Sensorimotor Research,, National Eye Institute, Bethesda, Maryland, U.S.A.
1988-1988	Assistant Professor, Department of Physiology, Faculty of Medicine, Hirosaki University, Hirosaki, Japan
1988-1995	Senior Researcher, Neuroscience Section, Electrotechnical Laboratory, Tsukuba, Japan
1995-present	Professor, Division of Sensory and Cognitive Information, National Institute for Physiological Sciences

Tadashi Isa, M.D., Ph.D.

1988-1990	Research Fellow at Department of Physiology, University of Göteborg Sweden (Professor Anders Lundberg)
1989-1993	Assistant professor, Department of Neurophysiology, Institute for Brain Research, Faculty of Medicine, University of Tokyo
1993-1995	Lecturer, Department of Physiology, Gunma University, School of Medicine
1995	Associate Professor, Department of Physiology, Gunma University, School of Medicine
1996-Present	Professor, National Institute for Physiological Sciences

Ziad M. Hafed, Ph.D.

1998-1999	Research Assistant (M.Eng.), McGill University, Canada (Advisor: Dr. James J. Clark)
1999-2003	Research Assistant (Ph.D.), McGill University, Canada (Advisor: Dr. James J. Clark)
2003-2009	NSERC (Canada) & Sloan-Swartz Post-Doctoral Fellow, Salk Institute for Biological Studies, USA (Advisor: Dr. Richard J. Krauzlis)
2010-present	Junior Research Group Leader (Assistant Professor), Werner Reichardt Centre for Integrative Neuroscience, Eberhard Karls Universität Tübingen (Tübingen University), Germany

Atsushi Nambu, M.D., Ph.D.

1985 – 1991	Instructor, Institute for Brain Research, Faculty of Medicine, Kyoto University, Kyoto 606, Japan
1989 – 1991	Postdoctoral Fellow, Department of Physiology and Biophysics (Prof. Rodolfo R. Llinás), New York University Medical Center
1991 – 1995	Associate Professor, National Institute for Physiological Sciences, Okazaki 444, Japan
1995 – 2002	Staff Scientist, Director, Tokyo Metropolitan Institute for Neuroscience Tokyo 183-8526, Japan
2002 – present	Professor, Division of System Neurophysiology, National Institute for Physiological Sciences, Okazaki 444-8585, Japan

Takashi Sato, M.D., Ph.D.

2003-2004	Postdoctoral Fellow, Department of Neurobiology, Harvard Medical School, (Research advisor: Wade G. Regehr)

2004 summer	Visiting Researcher, Laboratory of Sensorimotor Research, National Institute of Health (Kirk Thompson's lab)
2004-2006	Postdoctoral Fellow, Cold Spring Harbor Laboratory (Research advisor: Karel Svoboda)
2006-2010	Postdoctoral Fellow, Janelia Farm Research Campus (Research advisor: Karel Svoboda)
2010- current	Junior Group Leader, Center for Integrative Neuroscience, University of Tuebingen

Junichi Nabekura, M.D., Ph.D

1980-1982	Resident at Kyushu University Hospital (Obstetrics and Gynecology), Fukuoka, Japan
1986-1989	Research Associate, School of Medicine, Washington University, St. Louis USA (Adviser: Dr. Jeff Lichtman)
1990-1992	Assistant Professor, Tohoku University School of Medicine, Sendai, Japan
1992-1994	Associate Professor, Akita University School of Medicine, Akita, Japan
1994-2003	Associate Professor, Kyushu University School of Medicine, Fukuoka, Japan
2003-	Professor, National Institute for Physiological Sciences, Okazaki, Japan

[Posters]

1. “Do cerebellar climbing fibers encode saccadic errors?”

   M. Junker [1], D. Endres [1,2], M.A. Giese [1,2], P.W. Dicke [1], P. Thier [1]

   [1] Department of Cognitive Neurology, Hertie Institute for Clinical Brain Research, Germany, [2] Werner Reichardt Centre for Integrative Neuroscience, Tübingen, Germany, [3] Eberhard-Karls Universität, Tübingen, Germany

2. “Synaptic interactions in the outer retina using optical recordings from photoreceptors”

   Robin Kemmler, Thomas Euler and Timm Schubert

   Centre for Integrative Neuroscience (CIN) / Institute for Ophthalmic Research, University of Tübingen

3. “Regions responding to surface gloss in the macaque visual cortex localized using fMRI”

   Gouki Okazawa [1,2], Naokazu Goda [1,2], Hidehiko Komatsu [1,2]

   [1] National Institute for Physiological Sciences, Okazaki, Japan, [2] The Graduate University for Advanced Studies (SOKENDAI) , Okazaki, Japan

4. “Reconstruction of movement-related intracortical potentials from micro-electrocorticogram signals in monkey primary motor cortex”

   Hidenori Watanabe [1,2], Masa-aki Sato [2], Takafumi Suzuki [3], Mitsuo Kawato [4], Yukio Nishimura [1,5,6], Atsushi Nambu [6,7], Tadashi Isa [1,6]

   [1] Div of Behav Dev, Natl Inst for Physiol Sci, Okazaki, Japan, [2] ATR Neural Information Analysis Lab, Kyoto, Japan, [3] Grad Sch of Information Sci and Technol, Univ of Tokyo, Tokyo, Japan, [4] ATR Computational Neuroscience Lab, Kyoto, Japan, [5] PRESTO, JST, Tokyo, Japan, [6] Grad Univ for Advanced Studies, Hayama, Japan, [7] Div of System Neurophyiol, Natl Inst Physiol Sci, Okazaki, Japan

5. “Cerebral mechanism of itch perception”

   Hideki Mochizuki

   Department of Integrative Physiology, NIPS

6. “GABA regulates the multidirectional tangential migration of GABAergic

interneurons in living neonatal mice”

Hiroyuki Inada, Miho Watanabe, Taku Uchida, Hitoshi Ishibashi, Hiroaki Wake, Tomomi Nemoto, Yuchio Yanagawa, Atsuo Fukuda, Junichi Nabekura

Division of Homeostatic Development, National Institute for Physiological Sciences (NIPS)

7. “Representation of continuous contours in early stages of the primate visual cortex”

Minami Ito [1] and Kunihiro Asakawa [2]

[1] Division of Sensory and Cognitive Information, National Institute for Physiological Sciences, Okazaki, Aichi 444-8585, Japan, [2] Department of Physiological Sciences, The Graduate University for Advanced Studies, Okazaki, 444-8585, Japan, [3] The Jikei University School of Medicine, Tokyo 105-8461, Japan

8. “Sound processing hierarchy within human auditory cortex”

Hidehiko Okamoto, Henning Teismann, Christo Pantev, Ryusuke Kakigi

Department of Integrative Physiology, National Institute for Physiological Sciences

9. “Inter-regional remodeling between the primary somatosensory cortex and anterior cingulate cortex accelerates chronic pain behavior”

Kei Eto [1], Hiroaki Wake [1], Miho Watanabe [1], Hitoshi Ishibashi [1], Junichi Nabekura [1]

[1] Division of Homeostatic Development, National Institute for Physiological Sciences, 38 Nishigonaka, Okazaki 444-8585, Japan

10. “Subthalamo-pallidal interactions underlying parkinsonian neuronal oscillations in the primate basal ganglia”

Yoshihisa Tachibana [1], Hirokazu Iwamuro [1], Hitoshi Kita [2], Masahiko Takada [3], Atsushi Nambu [1]

[1] Division of System Neurophysiology, National Institute for Physiological Sciences, [2] Department of Anatomy and Neurobiology College of Medicine, University of Tennessee Health Science Center, [3] Systems Neuroscience Section

Primate Research Institute, Kyoto University

11. “The role of the right cerebellum and the left fusirofm gyrus during foreign language vocabulary learning enhanced by the phonological loop: an fMRI study”

Kai Makita, Mika Murase, Hirokazu Yokokawa, Hiroki C. Tanabe, Haruyo Yoshida, Norihiro Sadato

Division of Cerebral Integration, National Institute for Physiological Sciences (NIPS)

12. “Genetic dissection of the spinal circuit for hand dexterity in monkeys”

Masaharu Kinoshita [1], Ryosuke Matsui [2], Shigeki Kato [3], Taku Hasegawa [2], Hironori Kasahara [2], Kaoru Isa [1], Akiya Watakabe [4,7], Tetsuo Yamamori [4,7], Yukio Nishimura [1,5], Bror Alstermark [6], Dai Watanabe [2], Kazuto Kobayashi [3], Tadashi Isa [1,7]

[1] Department of Developmental Physiology, National Institute for Physiological Sciences, Myodaiji, Okazaki 444-8585, JAPAN, [2] Department of Molecular and System Biology, Graduate School of Biostudies, Kyoto University, Sakyo-ku, Kyoto 606-8501, Japan, [3] Department of Molecular Genetics, Institute of Biomedical Sciences, Fukushima Medical University School of Medicine , Fukushima 960-1295, Japan, [4] Division of Brain Biology, National Institute for Basic Biology, Okazaki 444-8585, Japan, [5] Precursory Research for Embryonic Science and Technology (PRESTO), Japan Science and Technology Agency (JST), 3-5, Chiyoda, Tokyo, 102-0075, Japan, [6] Department of Integrative Medical Biology, section of Physiology, Umeå University, S-901 87 Umeå, Sweden, [7] The Graduate University for Advanced Studies (SOKENDAI), Hayama, Kanagawa 240-0193, Japan

13. “Retino-tectal pathway is essential for visually guided saccades after V1 lesion: an implication for neural network of ‘blindsight’”

Rikako Kato [1,2], Kana Takaura [1,3], Takuro Ikeda [1,2], Masatoshi Yoshida [1,3], Tadashi Isa [1,2,3]

[1] Department of Developmental Physiology, National Institute for Physiological Sciences, Myodaiji, Okazaki, 444-8585, JAPAN, [2] The Core Research for Evolutionary Science and Technology (CREST), Japan Science and Technology Agency (JST), Kawaguchi, Japan, [3] The Graduate University for Advanced Studies (SOKENDAI), Hayama, Japan

14. “Neuronal Recordings of Motor-related Cortices and the Basal Ganglia in awake Common Marmosets”

Daisuke Koketsu, Nobuhiko Hatanaka & Atsushi Nambu

National Institute for Physiological Sciences, Okazaki, Aichi, Japan

15. “Express saccade without V1”

Masatoshi Yoshida [1,2], Tadashi Isa [1,2]

[1] Department of Developmental Physiology, National Institute for Physiological Sciences, Myodaiji, Okazaki, JAPAN, [2] The Graduate University for Advanced Studies (SOKENDAI), Hayama, Japan

16. “High-frequency pallidal stimulation disrupts information flow through the pallidum by GABAergic inhibition”

Satomi Chiken, Atsushi Nambu
Division of System Neurophysiology, National Institute for Physiological Sciences, Okazaki, Japan

17. “Social praise enhances offline improvement in motor skill”

Sho K. Sugawara, Satoshi Tanaka, Shuntaro Okazaki, Katsumi Watanabe, and Norihiro Sadato
Division of Cerebral Integration, National Institute for Physiological Sciences (NIPS)

18. “Auditory sustained field responses to periodic noise”

Sumru Keceli, Koji Inui, Hidehiko Okamoto, Naofumi Otsuru and Ryusuke Kakigi
Department of Integrative Physiology, NIPS

19. “Encoding of forelimb joint kinematics by cutaneous and muscle afferents in monkeys”

Tatsuya Umeda [1], Kazuhiko Seki [1,2,3], Masa-aki Sato [4], Yukio Nishimura [1,3,6], Mitsuo Kawato [5] and Tadashi Isa [1,6]
[1] Department of Developmental Physiology, National Institute for Physiological Sciences (NIPS), National Institutes of Natural Sciences (NINS), Okazaki, Japan, [2] Department of Neurophysiology, National Institute of Neuroscience, National Center of Neurology and Psychiatry, Kodaira, Japan, [3] PRESTO, Japan Science and Technology Agency (JST), Kawaguchi, Japan, [4] Neural Information Analysis Laboratories, Advanced Telecommunications Research Institute International, Kyoto, Japan, [5] Computational Neuroscience Laboratories, Advanced Telecommunications Research Institute International, Kyoto, Japan

20. “Inhibitory synaptic transmission from the substantia nigra pars reticulata in the murine ventral medial thalamus”

Daisuke Kase [1], Keiji Imoto [1,2]
[1] Division of Neural Signaling, National Institute for Physiological Sciences, [2] Department of Physiological Sciences, The Graduate University for Advanced Studies

21. “Toward the restoration of volitional walking via an artificial neural connection between arm muscle and lumbar spinal cord after spinal cord injury”

Syusaku Sasada [1], Kenji Kato [1,2], Stefan J Groiss [3], Suguru Kadowaki [3], Yoshikazu

Ugawa [3], Tomoyoshi Komiyama [4], Yukio Nishimura [1,2,5]

[1] Department of Developmental Physiology, NIPS, [2] The Graduate University for Advanced Studies, SOKENDAI, [3] Department of Neurology, Fukushima Medical Univ., [4] Faculty of Education, Chiba Univ., [5] PRESTO, Japan Science and Technology Agency.

22. “Adaptation to an Artificial Neural Connection between Muscle and Peripheral Nerve in Man”

Kenji Kato [1,2], Syusaku Sasada [1], Yukio Nishimura [1,2,3]

[1] Department of Developmental Physiology, NIPS, [2] The Graduate University for Advanced Studies, SOKENDAI, [3] PRESTO, Japan Science and Technology Agency

23. Primate corticospinal connections strengthened by cortically triggered spinal stimulation during free behavior

Yukio Nishimura [1,2], Steve I. Perlmutter [1], Ryan W. Eaton [1], Eberhard E. Fetz [1]

[1] Developmental Physiology, National Institute for Physiological Sciences, Okazaki, Japan, [2] Physiology & Biophysics and Washington National Primate Research Center, University of Washington, Seattle, Washington, USA, [3] PRESTO, Japan Science and Technology Agency, Chiyoda, Tokyo, Japan

24. The lateral interaction in the superficial and intermediate layers of the mouse superior colliculus slice

Penphimon Phongphanphanee [1], Robert Marino [2], Katsuyuki Kaneda [3], Yuchio Yanakawa [4], Douglas P. Munoz [2], Tadashi Isa [1,5,6]

[1] Department of Developmental Physiology, National Institute for Physiological Sciences, Myodaiji, Okazaki, Japan, [2] Department of Physiology, Centre for Neuroscience Studies, Canadian Institute of Health Research Group in Sensory-Motor Systems, Queen's University, Kingston, Ontario, Canada, [3] Department of Pharmacology, Graduate school of Pharmaceutical Sciences, Hokkaido University, Hokkaido, Japan, [4] Department of Genetic and Behavioral Neuroscience, Gunma University Graduate School of Medicine, Maebashi, Japan, [5] Department of Physiological Sciences, School of Life Science, The Graduate University for Advanced Studies (SOKENDAI), Hayama, Japan, [6] The Core Research for Evolutionary Science and Technology (CREST), Japan Science and Technology Agency (JST), Kawaguchi, Japan