

ADVANCED BRAIN IMAGING FOR THE FUTURE

21st, Feb (Fri)

12:30- Poster Presentation

13:00-13:05 Opening Remark Akiyoshi Kakita (Deputy Director, BRI, Niigata University)

Session 1 Ultrahigh-field MRI

Chair: Hidenao Fukuyama, Kyoto University Graduate School of Medicine

13:05-13:35 Brain Microstructure and Function using Ultra High Field MRI

Masaki Fukunaga, Division of Cerebral Integration, National Institute for Physiological Sciences,

13:35-14:05 Possibilities of Ultra-high field MRI

Hidenao Fukuyama, Kyoto University Graduate School of Medicine

14:05-14:45 Bringing compact high-field MRI systems to life through novel methods that tolerate extreme field inhomogeneity

Michael Garwood, Center for Magnetic Resonance Research, Department of Radiology, University of Minnesota

• **Coffee Break 14:45-15:00**

Session2 Bridging morphology and function by MRI

Chair: Hitoshi Matsuzawa, Center for Integrated Human Brain Science, Brain Research Institute, Niigata University

15:00-15:30 Hydrodynamic Pathology of the Brain - Focused on Aquaporin4 –

Hironaka Igarashi, Center for Integrated Human Brain Science, Brain Research Institute, Niigata University

15:30-16:00 Bridging white matter tract and cortical function using surface-based structural connectivity analysis

Shigetoshi Takaya, Senri Rehabilitation Hospital

16:00-16:30 Perivascular space and brain lymphatics

Toshiaki Taoka, Department of Innovative Biomedical Visualization (iBMV), Graduate School of Medicine, Nagoya University

• **Poster Session 16:30-17:30**

22nd, Feb (Sat)

Session 3, Imaging of Neuro-Psychiatric function by PET/MRI

Chair: Hironaka Igarashi, Center for Integrated Human Brain Science, Brain Research Institute, Niigata University

09:00-09:30 Imaging neural and glial pathways and their functions in homeostasis and pathogenesis

Makoto Higuchi, Department of Functional Brain Imaging Research, National Institutes for Quantum and Radiological Science and Technology

09:30-10:00 Dynamic controls of the dopamine and serotonin systems in neuro-psychiatric disorders

Yasuomi Ouchi, Department of Brain Biofunctional Imaging, Hamamatsu University, School of Medicine

10:00-10:40 Diffusion Imaging in Neuropsychiatry- from Big Data to Biomarker Development

Marek Kubicki, Departments of Psychiatry, Harvard Medical School

• **Coffee Break 10:40-10:55**

Session 4 New paradigms in neuroimaging

Chair: Kosuke Itoh, Center for Integrated Human Brain Science, Brain Research Institute, Niigata University

10:55-11:25 Primate non-invasive EEG: a window into human brain evolution

Kosuke Itoh, Center for Integrated Human Brain Science, Brain Research Institute, Niigata University

11:25-11:55 The role of the default mode network in value estimation: A combinatorial study of fMRI and deep learning

Junichi Chikazoe, Section of Brain Function Information, Supportive Center for Brain Research, National Institute for Physiological Sciences

11:55-12:35 Non-invasive modulation of deep brain circuits with focused ultrasound

Lennart Verhagen, Donders Institute, Radboud University, the Netherlands

12:35-12:40 Closing Remark Hironaka Igarashi, Center for Integrated Human Brain Science, Brain Research Institute, Niigata University

Poster Presentation

- P01 Scalp distribution of event-related potential following error-feedback sounds in patients with myotonic dystrophy type1.
Shugo Suwazono, Center for Clinical Neuroscience, NHO Okinawa Hospital
- P02 Impaired PtdIns(4,5)P2 synthesis in Drosophila neurons causes Calpain-dependent neurodegeneration
Yohei Nitta, Transdisc Res Prog, Niigata University
- P03 Excitatory/Inhibitory Ratios observed by proton MRS measurements at 7T
Tomohisa Okada, Human Brain Research Center, Kyoto University
- P04 3D pathology of cerebral amyloid angiopathy based on tissue clearing method
Masafumi Inoue, Brain Research Institute, Niigata University
- P05 A novel splicing variant of ANXA11 in Japanese sporadic ALS patients
Yuya Hatano, Department of Molecular Neuroscience, Resource Branch for Brain Disease Research, Center for Bioresource-based Research, Brain Research Institute, Niigata University
- P06 BRAFoma- a radiographically homogeneous, morphologically heterogeneous entity?
Manabu Natsumeda, Department of Neurosurgery, Brain Research Institute, Niigata University
- P07 Exome analysis in 54 autopsied Japanese sporadic ALS patients
Tomohiko Ishihara, Brain Research Institute, Niigata University
- P08 Anatomical and functional features of corticospinal circuit in healthy and injured brain
Tokiharu Sato, Department of System Pathology for Neurological Disorders, Brain Research Institute, Niigata University
- P09 Analysis of the role of basal ganglia circuit using dopamine receptor and NMDA receptor mutant mice
Toshikuni Sasaoka, Department of Comparative and Experimental Medicine, Brain Research Institute, Niigata University
- P10 Glutamate Imaging of Alzheimer's disease model mouse
Ken Ohno, Center for Integrated Human Brain Science, Brain Research Institute, University of Niigata
- P11 Participant-driven simulation protocol with a mock scanner for pediatric magnetic resonance neuroimaging preparation without sedation
Kenichi Yamada, Center for Integrated Human Brain Science, Brain Research Institute, University of Niigata
- P12 Epileptogenic mechanisms in resected foci are different between LEAT and Tuberous sclerosis: An optical imaging study of human brain slices ex vivo.
Kitaura Hiroki, Department of Pathology, Brain Research Institute, University of Niigata

P13 Elucidation of motor control and aversive memory formation mechanism by dopamine using dopamine D1 receptor gene modified mice

Nae Saito, Brain Research Institute, Niigata University

P14 Aif1-iCre knock-in mouse line: a tool for conditional gene manipulation in microglia

Manabu Abe, Brain Research Institute, Niigata University

P15 Interactions of three monoamine neurons in social defeat stress responses

Maki Kikawa, Hidekazu Sotoyama, Hisaaki Namba, Hiroyuki Nawa

Department of Molecular Neurobiology, Brain Research Institute, Niigata University

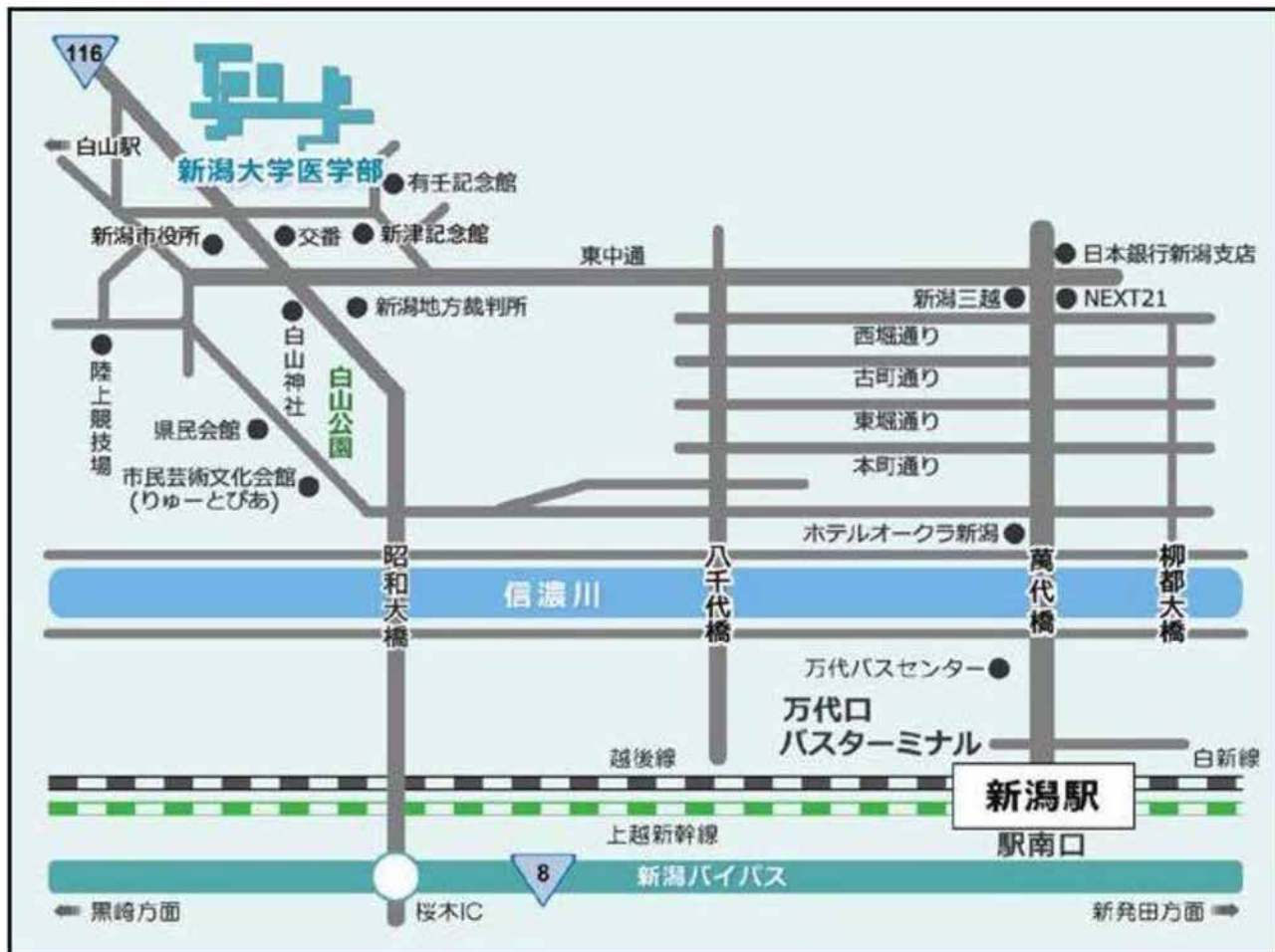
P16 Blood Biomarkers for Differentiating Cognitive disorders from Psychiatric disorders

Yo Higuchi, Department of Molecular Genetics, Center for Bioresources, Brain Research Institute, Niigata University

アクセスマップ

➤ 新潟大学旭町キャンパスへのアクセス

<http://www.bri.niigata-u.ac.jp/about/access/index.html>



➤ 会場（脳研究所・統合脳機能研究センター 6F 中田記念ホール）へのアクセス

- 1) タクシーで大学病院入退院玄関まで
- 2) 統合脳機能研究センターまで徒歩2～3分

