NFS-01 Neuroscience Frontier Symposium 01 Web En

May 19 (Wed) 14 : 15 ～ 16 : 15 Room 04 (ICC Kyoto 2F Room A)

Coevolution of multimodal neuroimaging and biomarkers

Chairs : Makoto Higuchi
National Institutes for Quantum and Radiological Science and Technology
Takashi Hanakawa
Department of Integrated Neuroanatomy and Neuroimaging, Kyoto Univesity Graduate School of Medicine

NFS-01-1 Precision measurement of fluid biomarkers for the multicenter imaging cohort study (MABB)
Takahiko Tokuda
Department of Functional Brain Imaging Research, National Institute of Radiological Sciences, National Institutes for Quantum and Radiological Science and Technology, Japan

NFS-01-2 Dissecting pathophysiology of Parkinson's disease with multimodal neuroimaging
Nobukatsu Sawamoto
Department of Human Health Sciences, Kyoto University Graduate School of Medicine, Japan

NFS-01-3 Coevolution of neurophysiology, neuroimaging and CSF biomarkers in early staged Alzheimer's disease
Takenobu Murakami
Division of Neurology, Department of Brain and Neurosciences, Faculty of Medicine, Tottori University, Japan ／Department of Neurology, Faculty of Medicine, Fukushima Medical University, Japan

NFS-01-4 Tau imaging in typical and atypical Alzheimers disease
Pedro Rosa-Neto
McGill University, Canada ／McGill Centre for Studies in Aging, Canada

NFS-01-5 Multimodal Database for Parkinson Disease in China
Tao Wu
Capital Medical University, China

NFS-02 Neuroscience Frontier Symposium 02 Web En

May 20 (Thu) 16 : 15 ～ 18 : 15 Room 04 (ICC Kyoto 2F Room A)

Frontiers of neuroscience and medicine accelerated by big data and AI

Chairs : Hideyuki Okano
Department of Physiology, Keio University School of Medicine
Hitoshi Okazawa
Neuropathology, Tokyo Medical and Dental University

NFS-02-1 iPSCs-based stratification, drug development and clinical trial for ALS
Hideyuki Okano
Keio University School of Medicine, Japan

NFS-02-2 Applications of AI to Elucidate Mechanisms of Neurodegenerative Disease in Models and Patients
Steve Finkbeiner
Gladstone Institutes, UCSF, USA

NFS-02-3 adopted from free papers
AI-based live-cell-image analysis for spinal and bulbar muscular atrophy pathology
Kenji Sakakibara
Department of Neurology, Nagoya University Graduate School of Medicine, Japan

NFS-02-4
Big data-driven research of neurodegenerative diseases
Hitoshi Okazawa
Department of Neuropathology, Tokyo Medical and Dental University, Japan

NFS-02-5
Deep learning of medical imaging data for early prediction of Alzheimer's disease dementia
Yong Fan
Perelman School of Medicine, University of Pennsylvania, USA

NFS-02-6
Challenges to Personalized Medicine by AI and Big Data - Genomes to Networks
Satoru Miyano
M&D Data Science Center, Tokyo Medical and Dental University, Japan

NFS-03 Neuroscience Frontier Symposium 03 Web En

May 20 (Thu) 16 : 15 ～ 18 : 15 Room 05 (ICC Kyoto 2F Room B-1)

Reassessment APOE4 in Alzheimer's disease

Chairs : Noriyuki Matsukawa
Department of Neurology, Nagoya City University
Kenji Sakai
Department of Neurology, Kanazawa University Hospital

NFS-03-1
The gender differences in the centenarians with extreme aging are affected by APOE ε4 alleles
Yoshinori Nishimoto
Department of Neurology, Keio University, School of Medicine, Japan

NFS-03-2
ApoE4 disrupts microcirculation in the white matter
Yorito Hattori
Department of Neurology, National Cerebral and Cardiovascular Center, Japan

NFS-03-3
ApoE4 in Vascular Mural Cells and Brain Homeostasis
Yu Yamazaki
Department of Clinical Neuroscience and Therapeutics, Hiroshima University Graduate School of Biomedical and Health Sciences, Japan

NFS-03-4
Differential effect of APOE genotype on blood-brain barrier integrity
Yuto Uchida
Department of Neurology, Nagoya City University Graduate School of Medical Sciences, Japan ／Department of Neurology, Toyokawa City Hospital, Japan

NFS-04 Neuroscience Frontier Symposium 04

Proposed symposium | Web | En

May 21 (Fri) 14 : 40 ～ 16 : 40 Room 05 (ICC Kyoto 2F Room B-1)

Structure and propagation of aggregated proteins

Chairs : Nobuyuki Nukina
Doshisha University Graduate School of Brain Science
Atsushi Iwata
Tokyo Metropolitan Geriatric Institute Neurology

NFS-04-1 Structure of alpha-synculein fibrils in the brain
Katsuya Araki
Toyonaka Municipal Hospital, Japan ／Department of Neurology, Osaka University Graduate School of Medicine, Japan

NFS-04-2 Prion-like propagation of pathological alpha-synuclein and tau proteins
Masato Hasegawa
Department of Brain and Neurosciences, Tokyo Metropolitan Institute of Medical Science, Japan

NFS-04-3 Identification of disease-specific alpha-synuclein seeds in serum by IP-RT-QuIC
Ayami Okuzumi
Department of Neurology, Juntendo University School of Medicine, Japan

NFS-04-4 Quantum-dot-labeled synuclein seeds assay identifies drugs modulating prion-like transmission
Nobuyuki Nukina
Doshisha University Graduate School of Brain Science, Japan

NFS-04-5 Deconstructing and Reconstructing Lewy Bodies: New insights into the role of alpha-synuclein in PD
Hilal A. Lashuel
École Polytechnique Fédérale de Lausanne (EPFL), Switzerland

NFS-05 Neuroscience Frontier Symposium 05

Web | En

May 22 (Sat) 8 : 00 ～ 10 : 00 Room 05 (ICC Kyoto 2F Room B-1)

Motor neuron disease: revisiting the roles of RNA binding proteins and RNA metabolism in neurodegeneration

Chairs : Makoto Urushitani
Department of Neurology, Shiga University of Medical Science
Shinsuke Ishigaki
Nagoya University Graduate School of Medicine

NFS-05-1 Expanding mechanisms and therapeutic targets for ALS
Aaron D. Gitler
Department of Genetics, Stanford University, USA

NFS-05-2 Defect in monomer/multimer balance induces TDP-43 pathology in ALS
Koji Yamanaka
Resaerch Institute of Environmental Medicine, Nagoya University, Japan

NFS-05-3 TDP-43 transports ribosomal protein mRNA to regulate local translation in neuronal axons

Seiichi Nagano
Department of Neurotherapeutics, Osaka University Graduate School of Medicine, Japan

NFS-05-4 Optogenetic modulation of TDP-43 oligomerization accelerates ALS-related pathologies in a fish model

Kazuhide Asakawa
Tokyo Medical University, Department of Chemical Biology, Japan

NFS-05-5 Alteration of Tau metabolism through FUS in FTLD

Shinsuke Ishigaki
Department of Neurology, Nagoya University Graduate School of Medicine, Japan／Brain and Mind Research Center, Nagoya University, Japan