### NFS-01 Neuroscience Frontier Symposium 01

配信En

5月19日(水) 14:15~16:15

第04会場 (国立京都国際会館 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

配信En

5月20日(木) 16:15~18:15

第04会場(国立京都国際会館 2F Room A)

## Frontiers of neuroscience and medicine accelerated by big data and AI

Chairs: Hidevuki 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

### Applications of AI to Elucidate Mechanisms of Neurodegenerative Disease in Models and Patients

Steve Finkbeiner

Gladstone Institutes, UCSF, USA

#### NFS-02-3 AI-based live-cell-image analysis for spinal and bulbar muscular atrophy pathology

一般演題から採用

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

### Neuroscience Frontier Symposium 03

5月20日(木) 16:15~18:15

第05会場 (国立京都国際会館 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 $\varepsilon 4$ 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

公募 配信 En

5月21日(金) 14:40~16:40

第05会場 (国立京都国際会館 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

Katsuva 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

配信En

5月22日(土) 8:00~10:00

第05会場 (国立京都国際会館 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