α-Synuclein and beyond: Find out the true culprit causing neurodegeneration in Parkinson's disease!

Chairs: Takahiko Tokuda
Department of Molecular Pathobiology of Brain Diseases, Kyoto Prefectural University of Medicine, Japan
Kazushi Takahashi
Department of Neurology, Saitama Medical University, Japan

HT-01-1 Introduction: what is the true culprit of neurodegeneration in PD; alpha-synuclein and beyond?
Takahiko Tokuda
Department of Molecular Pathobiology of Brain Diseases, Kyoto Prefectural University of Medicine, Japan

HT-01-2 Molecular and cellular basis of neurotoxicity caused by alpha-synuclein
Naoto Sugeno
Department of Neurology, Tohoku University, Japan

HT-01-3 Hyperbranching axon as a structural template to explain focal and multifocal Lewy body disorders
Toshiki Uchihara
Neurology with Neuromorphomics Laboratory, Nitobe Memorial Nakano General Hospital, Japan
Department of Neurology and Neurological Science, Tokyo Medical and Dental University, Japan

HT-01-4 Molecular mechanisms of selective neuronal vulnerability in PD and α-synuclein
James D. Surmeier
Feinberg School of Medicine Northwestern University, USA

HT-01-5 Distinct aggregation patterns of alpha-synuclein in PD and MSA: Is it all about strains?
Wassilios Meissner
Université de Bordeaux, Institut des Maladies Neurodégénératives, France / Service de Neurologie, CHU Bordeaux, France / Dept. Medicine, University of Otago, and New Zealand Brain Research Institute, New Zealand
**HT-02 Hot Topics 02**

**May 22 (Wed) 9:50 ~ 11:50 Room 7 (Osaka International Convention Center 10F Conference Room 1008)**

**Stroke and Microbiota**

**Chairs:**
- Toshiki Mizuno  
  Department of Neurology, Kyoto Prefectural University of Medicine, Japan
- Toru Yamashita  
  Department of Neurology, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University, Japan

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**HT-02-1**

**Intestinal immune cells in stroke immunity**

Josef Anrather  
Weill Cornell Medicine, USA

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**HT-02-2**

**Gut microbiome and atherosclerosis**

Tomoya Yamashita  
Kobe University Graduate School of Medicine, Division of Cardiovascular Medicine, Japan

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**HT-02-3**

**Gut microbiota and stroke**

Kazuo Yamashiro  
Department of Neurology, Juntendo University School of Medicine, Japan

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**HT-02-4**

**Intestinal microbiota in CADASIL patient**

Toshiki Mizuno  
Dept. of Neurology, Kyoto Prefectural Univ. of Medicine, Japan

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**HT-02-5**

**Collagen-binding Streptococcus mutans tied to intracerebral hemorrhage**

Masafumi Ihara  
Department of Neurology, National Cerebral and Cardiovascular Center, Japan

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**HT-02-6**

**Associations between serum titer to periodontal pathogens and cerebral small vessel diseases**

Yuji Shiga  
Department of clinical Neuroscience and Therapeutics, Hiroshima University Graduate School of Biomedical and Health Sciences, Japan

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**HT-02-7**

**Influence of periodontitis on stroke**

Naohisa Hosomi  
Department of Clinical Neuroscience and Therapeutics, Hiroshima University Graduate School of Biomedical & Health Sciences, Japan
### HT-03 Hot Topics 03

**Newly Emerging Concepts on PSP and CBD**

**Chairs:** Hidefumi Ito  
Department of Neurology, Wakayama Medical University, Japan  
Takeshi Ikeuchi  
Niigata University, Brain Research Institute, Japan

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<td>HT-03-1</td>
<td>Overview of clinical aspects of tauopathies including PSP and CBD</td>
<td>Zbigniew Wszolek</td>
<td>Mayo Clinic Florida, USA</td>
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<tr>
<td>HT-03-2</td>
<td>Early pathological changes of CBD</td>
<td>Helen Ling</td>
<td>Queen Square Brain Bank, Institute of Neurology, University College London, UK</td>
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<td>HT-03-3</td>
<td>Identification of a gene associated with PSP</td>
<td>Ichiro Yabe</td>
<td>Department of Neurology Faculty of Medicine and Graduate School of Medicine Hokkaido University, Japan</td>
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<td>HT-03-4</td>
<td>JALPAC: Longitudinal cohort study for PSP and CBD in Japan</td>
<td>Takeshi Ikeuchi</td>
<td>Brain Research Institute, Niigata University, Japan</td>
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<tr>
<td>HT-03-5</td>
<td>Molecular imaging for PSP and CBD</td>
<td>Kazunari Ishii</td>
<td>Kindai University Faculty of Medicine, Department of Radiology, Japan</td>
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### HT-04 Hot Topics 04

**Dual nature of REM sleep behavior disorder: parasomnia vs harbinger of synucleinopathies**

**Chairs:** Naoko Tachibana  
Center for Sleep-related Disorders, Kansai Electric Power Hospital, Japan  
Masayuki Miyamoto  
Department of Neurology Dokkyo Medical University Hospital, Dokkyo  
Medical University School of Nursing, Japan

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<td>HT-04-1</td>
<td>Natural history of idiopathic REM behavior disorder: parasomnia vs. harbinger of synucleinopathies</td>
<td>Carlos Schenck</td>
<td>Minnesota Regional Sleep Disorders Center, Departments of Psychiatry, Hennepin County Medical Center, and University of Minnesota Medical School, USA</td>
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<tr>
<td>HT-04-2</td>
<td>The relationship between REM sleep behavior disorder and hallucinations in patients with DLB</td>
<td>Manabu Ikeda</td>
<td>Department of Psychiatry, Osaka University Graduate school of Medicine, Japan</td>
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<tr>
<td>HT-04-3</td>
<td>REM sleep behavior disorder in patients with Parkinson's disease</td>
<td>Takashi Nomura</td>
<td>Nomura Neuro Sleep Clinic, Japan</td>
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<td>HT-04-4</td>
<td>Aggressive behavior and dream contents in RBD: why and how?</td>
<td>Ki-Young Jung</td>
<td>Seoul National University College of Medicine, Korea</td>
</tr>
<tr>
<td>HT-04-5</td>
<td>Preparation and future direction of clinical trials for idiopathic REM sleep behavior disorder</td>
<td>Masayuki Miyamoto</td>
<td>Department of Clinical Medicine for Nursing, Dokkyo Medical University School of Nursing, Japan / Department of Neurology, Dokkyo Medical University Hospital, Japan / Center of Sleep Medicine, Dokkyo Medical University Hospital, Japan</td>
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<td>Nominal support: Integrated Sleep Medicine Society Japan (ISMSJ)</td>
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**HT-05 Hot Topics 05**

**May 22 (Wed) 13:20 ~ 15:20 Room 9 (Osaka International Convention Center 12F Conference Hall)**

**More than just taking out the garbage: Expanding landscape of autophagy and lysosome function in neurological diseases**

**Chairs:** Seiji Hitoshi  
Department of Integrative Physiology, Japan  
Takafumi Hasegawa  
Division of Neurology, Department of Neuroscience & Sensory Organs, Tohoku University Graduate School of Medicine, Japan

**HT-05-1** Tunneling nanotubes allow the spreading of alpha-synuclein fibrils through lysosomal trafficking  
Chiara Zurzolo  
Unité Trafic Membranaire et Pathogenèse, Institut Pasteur, France

**HT-05-2** Lysosomal dysfunction in Parkinson’s disease and what postmortem brains tell us  
Glenda M. Halliday  
Brain and Mind Centre and Faculty of Medicine and Health Central Clinical School, University of Sydney, Australia

**HT-05-3** Muscle diseases with autophagic abnormalities  
Ichizo Nishino  
Department of Neuromuscular Research, National Institute of Neuroscience, National Center of Neurology and Psychiatry, Japan

**HT-05-4** Endo-lysosomal trafficking defect as a unifying concept of neurodegenerative diseases  
Takafumi Hasegawa  
Division of Neurology, Department of Neuroscience & Sensory Organs, Tohoku University Graduate School of Medicine, Japan
How can the registry contribute to drug development for neurological diseases?

Chairs: Masahiro Nagai  
Clinical therapeutic trial center, Ehime university hospital  
Keisuke Suzuki  
Innovation Center for Clinical Research, National Center for Geriatrics and Gerontology

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S-01-1 Current status of Clinical Innovation Network and Remudy  
(Registry of muscular dystrophy)  
Harumasa Nakamura  
Translational Medical Center, National center of neurology and psychiatry

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S-01-2 The current status and issues in all-Japan registry of dementia  
(ORANGE registry)  
Keisuke Suzuki  
Innovation Center for Clinical Research, National Center for Geriatrics and Gerontology

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S-01-3 SBMA registry: current status and challenges for the future  
Atsushi Hashizume  
Nagoya University Graduate School of Medicine, Department of Neurology

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S-01-4 Efforts to utilize patient registration systems (patient registries)  
Kinue Nishioka  
Pharmaceuticals and Medical Devices Agency

---

S-01-5 Expectations for disease registries from the standpoint of pharmaceutical industries  
Hiroshi Matsuzawa  
Japan Pharmaceutical Manufacturers Association, Drug Evaluation Committee, Clinical Evaluation Expert Committee

Nominal support: The Japanese Society of Clinical Pharmacology and Therapeutics
S-02 Symposium 02

May 22 (Wed) 9:50 ~ 11:50 Room 9 (Osaka International Convention Center 12F Conference Hall)

Genetic and neuropathological approach decipher the molecular mechanism of idiopathic central nervous system demyelinating diseases

**Chairs:** Noriko Isobe  
Department of Neurological Therapeutics, Neurological Institute, Graduate School of Medical Sciences, Kyushu University, Japan  
Katsuhisa Masaki  
Department of Neurology, Graduate School of Medical Science, Kyushu University, Japan

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**S-02-1**  
Susceptibility to multiple sclerosis: from genetic risk to immune dysfunction in at-risk individuals  
**Philip L. De Jager**  
Center for Translational & Computational Neuroimmunology and Multiple Sclerosis Center, Department of Neurology, Columbia University Medical Center, USA

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**S-02-2**  
Genetic studies on Japanese multiple sclerosis and neuromyelitis optica spectrum disorders  
**Takuya Matsushita**  
Department of Neurology, Kyushu University Hospital, Japan

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**S-02-3**  
Genetic study on Chinese patients with demyelinating disorders  
**Qiu Wei**  
The Third Affiliated Hospital of Sun Yat-Sen University, Guangzhou, Guangdong Province, China

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**S-02-4**  
Disease-specific TCRs recognize CMV in Japanese MS with HLA-DRB1*04:05; a novel approach with GLIPH  
**Fumie Hayashi**  
Department of Neurology, Graduate School of Medical Sciences, Kyushu University, Japan

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**S-02-5**  
Glial pathology of multiple sclerosis, neuromyelitis optica spectrum disorders, and Baló’s disease  
**Katsuhisa Masaki**  
Department of Neurology, Graduate School of Medical Science, Kyushu University, Japan

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adopted from free papers
Cutting edge applications of non-invasive brain stimulation

**Chairs:** Takashi Nagamine  
Department of Systems Neuroscience, School of Medicine, Sapporo Medical University  
Yasuo Terao  
Department of Pathophysiology, Kyorin University

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<td>S-03-1</td>
<td>Noninvasive brain stimulation for cognitive dysfunction in patients with Alzheimer's disease</td>
<td>Tomoo Mano</td>
<td>Department of Neuromodulation and Neurosurgery, Osaka University Graduate School of Medicine / Department of Neurology, Osaka University Graduate School of Medicine / Center for Information and Neural Networks</td>
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<td>S-03-2</td>
<td>Non-invasive brain stimulation treatment for Parkinson's disease</td>
<td>Masashi Hamada</td>
<td>Department of Neurology, the University of Tokyo</td>
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<td>S-03-3</td>
<td>Task-specific brain reorganization induced by Hybrid-rehabilitation</td>
<td>Satoko Koganemaru</td>
<td>Department of Physiology and Biological Information, Dokkyo Medical University</td>
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<td>S-03-4</td>
<td>Transcranial magnetic stimulation and transcranial direct current stimulation for rehabilitation</td>
<td>Toshiyuki Fujiwara</td>
<td>Department of Rehabilitation Medicine, Juntendo University Graduate School of Medicine</td>
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<td>S-03-5</td>
<td>Neuromodulation treatments for pain</td>
<td>Youichi Saitoh</td>
<td>Department of Neuromodulation and Neurosurgery, Osaka University Graduate School of Medicine / Department of Neurosurgery, Osaka University Graduate School of Medicine</td>
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<td>S-03-6</td>
<td>Induction of plastic changes in spinal circuits and its clinical application</td>
<td>Yukari Ohki</td>
<td>Dept Physiology, Kyorin University School of Medicine</td>
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S-04 Symposium 04
May 22 (Wed) 13:20 ~ 15:20  Room 1 (Osaka International Convention Center 5F Large Hall)

Update on Diagnostic Biomarkers for the early diagnosis of Alzheimer's Disease

Chairs: Takeshi Iwatsubo
Department of Neuropathology, School of Medicine, The University of Tokyo, Japan
Hisatomo Kowa
Kobe University Graduate School of Health Sciences, Japan

S-04-1 Updates on PET imaging of tau pathologies
Makoto Higuchi
National Institutes for Quantum and Radiological Science and Technology, Japan

S-04-2 Plasma Abeta as a biomarker for Alzheimer's disease
Koichi Tanaka
Koichi Tanaka Mass Spectrometry Research Laboratory Shimadzu Corporation, Japan

S-04-3 TRC-PAD: Accelerating Recruitment in AD Clinical Trials via Innovation in Information Technology
Gustavo A. Jimenez-Maggiora
Alzheimer's Therapeutics Research Institute, University of Southern California, USA

S-04-4 Japanese ADNI: from biomarkers to disease-modifying therapy
Takeshi Iwatsubo
Department of Neuropathology, Graduate School of Medicine, The University of Tokyo, Japan

S-05 Symposium 05
May 22 (Wed) 13:20 ~ 15:20  Room 4 (Osaka International Convention Center 10F Conference Room 1001-1002)

Neuroimage and neuropathology of white matter lesions

Chairs: Shigeo Murayama
Department of Neurology and Neuropathology (the Brain Bank for Aging Research)
Koichi Wakabayashi
Department of Neuropathology, Hirosaki University Graduate School of Medicine

S-05-1 Significance of clinico-radio-pathological correlationship for diagnosing white matter disease
Aya M. Tokumaru
Dept of Diagnostic Radiology, Tokyo Metropolitan Medical Center of Gerontology

S-05-2 Neuropathology of demyelinating diseases
Satoshi Suzuki
Department of Neuropathology, Graduate School of Medical Sciences, Kyushu University

S-05-3 Hereditary leukoencephalopathy: histology and pathomechanisms
Mari Tada
Department of Pathology, Brain Research Institute, Niigata University
S-05-4  Neuroathological findings of metabolic disorder and intoxication
Yasuko Toyoshima
Department of Pathology, Brain Research Institute, Niigata University

S-06  Symposium 06
May 22 (Wed) 13:20 ~ 15:20  Room 5 (Osaka International Convention Center 10F Conference Room 1005-1007)

Pleiotropic approach to the pathogenesis of neuroimmune disorders
Chairs: Makoto Yoneda
Fukui Prefectural University
Ryo Yamasaki
Department of Neurology, Neurological Institute, Graduate School of Medical Sciences, Kyushu University

S-06-1  Gut microbiota and neuroinflammation
Sachiko Miyake
Department of Immunology, Juntendo University Graduate School of Medicine

S-06-2  Pathogenesis of neuroimmunological disorders: approach from barrier system
Takashi Kanda
Department of Neurology and Clinical Neuroscience, Yamaguchi University Graduate School of Medicine

S-06-3  Proteomic approaches for the study of Neuroimmunological Diseases
Masaya Ikegawa
Department of Life and Medical Systems, Doshisha University

S-06-4  A comprehensive approach to autoimmune neurological disorders based on the effects of autoantibodies
Makoto Hara
Division of Neurology, Department of Medicine, Nihon University School of Medicine

S-06-5  Glia-targeting therapy for neurological disorders
Hideyuki Takeuchi
Department of Neurology and Stroke Medicine, Yokohama City University Graduate School of Medicine

S-07  Symposium 07
Proposed symposium
May 22 (Wed) 13:20 ~ 14:50  Room 10 (Osaka International Convention Center 12F Grande Toque)

Extending the clinical spectrum of cerebral amyloid angiopathy (CAA)
Chairs: Steven M. Greenberg
Massachusetts General Hospital, USA/ Harvard Medical School, USA
Masahito Yamada
Department of Neurology and Neurobiology of Aging, Kanazawa University
Graduate School of Medical Sciences, Japan

S-07-1  Clinical spectrum of CAA-related cerebrovascular disorders
Yusuke Yakushiji
Division of Neurology, Department of Internal Medicine, Saga University Faculty of Medicine, Japan
Cerebral amyloid angiopathy-related cognitive impairment and inflammation
Kenji Sakai
Department of Neurology and Neurobiology of Aging, Kanazawa University Graduate School of Medical Sciences, Japan

Extending the clinical spectrum of cerebral amyloid angiopathy (CAA)
Steven M. Greenberg
Massachusetts General Hospital, USA / Harvard Medical School, USA