

May 20 (Wed) 9:50 ~ 11:50 Room 12 (PACIFICO Yokohama Conference Center 4F 419)

## Futuristic Rehabilitation through Cell Therapies and Biointegrated Devices: Japan Leading the Way

Chairs : Noriaki Hattori

Department of Rehabilitation, Toyama University Hospital, Japan

Masahito Mihara

Department of Neurology, Kawasaki Medical School, Japan

### HT-01-1 Current Limitations of Neurorehabilitation and Expectations for Cell Therapy and BMI

Naoki Wada

Department of Rehabilitation Medicine Gunma University Graduate School of Medicine, Japan

### HT-01-2 Potential of iPSC-Based Therapy for Spinal Cord Injury

Narihito Nagoshi

Department of Orthopaedic Surgery, Keio University School of Medicine, Japan

### HT-01-3 Strategic functional restoration in neurological diseases using implantable brain-machine interfaces

Masayuki Hirata

Department of Neurological Diagnosis and Restoration, The University of Osaka, Graduate School of Medicine, Japan

### HT-01-4 Redefining Rehabilitation Strategies in the Era of Cell and Device Transplantation

Noriaki Hattori

Department of Rehabilitation, Toyama University Hospital, Japan

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May 20 (Wed) 13:20 ~ 15:20 Room 08 (PACIFICO Yokohama Conference Center 3F 315)

## Upgrade therapies for ischemic stroke

Chairs : Kazunori Toyoda

National Cerebral and Cardiovascular Center, Japan

Hisanao Akiyama

Department of Neurology, St. Marianna University School of Medicine, Japan

### HT-02-1 Drug Loss and the Need for New Intravenous Thrombolytic Therapies

Manabu Inoue

Department of Cerebrovascular Medicine, National Cerebral and Cardiovascular Center, Japan /  
Pharmaceuticals and Medical Devices Agency, Japan

### HT-02-2 Non-Cardioembolic Stroke: From DAPT to Dual Pathway Inhibition with FXIa Inhibitors

Teruyuki Hirano

Department of Stroke and Cerebrovascular Medicine, Kyorin University, Japan

**HT-02-3** Beyond DOACs: The Rise of Catheter-Based Cardiac Treatment for Secondary Stroke Prevention

Masayuki Shiozawa

Department of Cerebrovascular medicine, National Cerebral and Cardiovascular Center, Japan

**HT-02-4** Hypertension Management for Ischemic Stroke Prevention -Sodium Homeostasis and Cerebral Reactivity-

Tetsuro Ago

Department of Medicine and Clinical Science, Graduate School of Medical Sciences, Kyushu University, Japan

**HT-02-5** From Edaravone onwards... Come forth, new brain-protecting drugs

Yuji Ueno

Department of Neurology, University of Yamanashi Hospital, Japan

**HT-03 Hot Topics 03**

**Jp**

May 20 (Wed) 13 : 20 ~ 15 : 20 Room 09 (PACIFICO Yokohama Conference Center 4F 414+415)

**Atypical Parkinsonism: Approaches to Innovative Therapies**

Chairs : Ritsuko Hanajima

Division of Neurology, Department of Brain and Neurosciences, Faculty of Medicine, Tottori University, Japan

Takayoshi Shimohata

Department of Neurology, Gifu University Graduate School of Medicine, Japan

**HT-03-1** Pathophysiological Mechanisms and Disease-Modifying Therapies for Multiple System Atrophy

Takafumi Hasegawa

Department of Neurology, NHO Sendai-Nishitaga Hospital, Japan

**HT-03-2** Pathomechanisms and Current Disease-Modifying Therapies in Progressive Supranuclear Palsy

Takayoshi Shimohata

Department of Neurology, Gifu University Graduate School of Medicine, Japan

**HT-03-3** Immunological and inflammatory contributions to alpha-synucleinopathies and tauopathies

Dai Matsuse

Department of Neurology, Kyushu University Hospital, Japan

**HT-03-4** Clinical Development of Therapeutic Strategies for Atypical Parkinsonism

Atsushi Hashizume

Nagoya University Hospital, Department of Advanced Medicine, Japan / Nagoya University Graduate school of Medicine, Department of Clinical Research Education, Japan

**HT-03-5** Exclusion of autoimmune Parkinsonism mimicking Parkinson-like disorders

Yoya Ono

Department of Neurology, Gifu University Graduate School of Medicine, Japan

**Frontiers in the Treatment of Spinocerebellar Degeneration  
— From Rehabilitation to Clinical Trials**

Chairs : Yuji Takahashi

National Center of Neurology and Psychiatry, Japan

Tomohiko Ishihara

Department of Neurology, Brain research Institute, Niigata University, Japan

**HT-04-1 Frontiers in Therapeutic Development for Hereditary Spinocerebellar Degeneration**

Tomohiko Ishihara

Brain Research Institute, Niigata University, Japan

**HT-04-2 Treatment development for multiple system atrophy based on pathophysiological mechanisms**

Jun Mitsui

Department of Precision Medicine Neurology, Graduate School of Medicine, The University of Tokyo, Japan

**HT-04-3 Towards the development of treatment for hereditary spastic paraplegia**

Yoshihisa Takiyama

Fuefuki Central Hospital, Japan

**HT-04-4 Rehabilitation for Spinocerebellar Degeneration: Improving Function and Sustaining Home Living**

Ichiro Miyai

Neurorehabilitation Research Institute, Morinomiya Hospital, Japan

**Cell Transplantation Therapy for Parkinson's Disease:  
Clinical Trajectory and Future Outlook**

Chairs : Atsushi Takeda

NHO Sendai Nishitaga Hospital, Japan

Tetsuya Maeda

Division of Neurology and Gerontology, Department of Internal Medicine, School of Medicine, Iwate Medical University, Japan

**HT-05-1 Phase I/II trial of iPS-cell-derived dopaminergic progenitors for Parkinson's disease**

Nobukatsu Sawamoto

Department of Human Health Sciences, Kyoto University Graduate School of Medicine, Japan

**HT-05-2 Phase I clinical trial of hESC derived dopaminergic neuron progenitors for Parkinson disease**

Claire Henchcliffe

University of California, Irvine, USA

- HT-05-3** Next steps in neuronal regenerative medicine  
 Jun Takahashi  
 Center for iPS Cell Research and Application, Kyoto University, Japan

**HT-06 Hot Topics 06**

**Jp**

May 21 (Thu) 15 : 10 ~ 17 : 10 Room 08 (PACIFICO Yokohama Conference Center 3F 315)

**Clinical Neurorehabilitation: A quarter century of progress and future outlook**

Chairs : Michinari Fukuda  
 Kitasato University, School of Allied Health Sciences, Department of  
 Rehabilitation, Japan  
 Takayo Chuma  
 Department of Rehabilitation Medicine, Shiga General Hospital, Japan

- HT-06-1** Rehabilitation for patients with Parkinson's disease  
 Takayo Chuma  
 Department of Rehabilitation Medicine, Shiga General Hospital, Japan

- HT-06-2** Assistive communication devices that support the daily lives of  
 patients with neurological disorders  
 Naomi Tominaga  
 International University of Health and Welfare, Japan

- HT-06-3** eSports for Social Participation and Rehabilitation in Neuromuscular  
 Diseases  
 Eiichi Tanaka  
 Center for Neuromuscular Disease, Child Health and Development National Hospital Organization  
 Hokkaido Medical Center, Sapporo, Japan

- HT-06-4** Effect and Mechanism of Extracorporeal Shock Wave Therapy for  
 Spasticity  
 Tomonori Kenmoku  
 Department of Orthopaedic Surgery, Kitasato University School of Medicine, Japan

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**HT-07 Hot Topics 07**

**Jp**

May 21 (Thu) 15 : 10 ~ 17 : 10 Room 09 (PACIFICO Yokohama Conference Center 4F 414+415)

**The Future of Gene Editing in Neurological Disease Therapy: From  
 CRISPR to Japan-Originated Technologies at the Forefront of Research**

Chairs : Tetsuya Nagata  
 Institute of Science Tokyo, Japan  
 Keiko Imamura  
 Center for iPS Cell Research and Application (CIRA), Kyoto University, Japan

- HT-07-1** Development of Genetic Modification Technology Using Domestic  
 Genome Editing Tools  
 Takashi Yamamoto  
 Genome Editing Innovation Center, Hiroshima University, Japan

HT-07-2 In vivo genome editing therapy using the domestic CRISPR-Cas3 technology

Tomoji Mashimo

Institute of Medical Science, the University of Tokyo, Japan

HT-07-3 Frontiers in Genome Editing Therapy Research for Dementia

Hiroki Sasaguri

RIKEN Center for Brain Science, Japan

HT-07-4 Genome Editing Therapy Research for Muscular Dystrophy

Akitsu Hotta

CiRA, Kyoto University, Japan

HT-07-5 Development of gene therapy for MELAS with the 3243A>G mutation by editing mitochondrial DNA

accepted from  
free papers

Ryuji Hata

Osaka Psy. Medical Center, Osaka Psy. Research Center, Japan

HT-07-6 Gene Editing Research Toward the Treatment of Neurodegenerative Diseases

Haruhisa Inoue

Center for iPSC Cell Research and Application (CiRA), Kyoto University, Japan / RIKEN BioResource Research Center, Japan

HT-08 Hot Topics 08

Jp

May 22 (Fri) 8 : 00 ~ 9 : 30

Room 12 (PACIFICO Yokohama Conference Center 4F 419)

Viruses and Neurodegenerative Diseases: From Novel Pathogenic Insights to Preventive and Therapeutic Strategies

Chairs : Hideto Nakajima

Nihon University, Japan

Yoshihisa Yamano

Department of Neurology, St. Marianna University School of Medicine, Japan

HT-08-1 The Cutting Edge of Autoimmune Mechanisms Induced by EBV In Multiple Sclerosis

Masahiro Mori

Department of Neurology, Graduate School of Medicine, Chiba University, Japan

HT-08-2 Virus-Driven Perturbations of Self-Antigen Recognition and Neurodegeneration in HAM

Makoto Nakashima

Department of Rare Diseases Research, Institute of Medical Science, St. Marianna University School of Medicine, Japan

HT-08-3 Abeta tau pathology driven by herpes virus reactivation

Tadanori Hamano

Department of Geriatric Medicine, Kanazawa Medical University, Japan

**HT-08-4** Parkinson's Disease: alpha-Synuclein Pathology as a Long-Term Post-Infectious Risk

**Ayami Okuzumi**

Department of Neurology, Juntendo University, Faculty of Medicine, Japan / Department of Neuroetiology and Diagnostic Science, Healthy Longevity Medicine, Osaka Metropolitan University Graduate School of Medicine, Japan

**HT-08-5** ALS : Therapeutic Strategies Focusing on Endogenous Retroviruses and Neuroinflammation

**Osamu Kano**

Departure of Neurology, Toho University Faculty of Medicine, Japan

**HT-08-6** EB Virus-Induced Neoself Antigens Are Involved in Autoimmune Disease Pathogenesis

**Hisashi Arase**

Immunochemistry, Immunology Frontier Research Center, The University of Osaka, Japan / Department of Immunochemistry, Research Institute for Microbial Diseases, The University of Osaka, Japan

**HT-09 Hot Topics 09**

**Web En**

May 23 (Sat) 9 : 45 ~ 11 : 45 Room 03 (PACIFICO Yokohama Conference Center 3F 302)

**Towards the realization of personalized nucleic acid medicine for ultra-rare neurological disorders**

Chairs : Harumasa Nakamura

National Center of Neurology and Psychiatry, Japan

Hiroya Kuwahara

Department of Neurology and Neurological Science, Institute of Science Tokyo, Japan

**HT-09-1** Japan's National Strategy for Addressing Unmet Medical Needs in Rare Diseases

**Hideshi Semba**

National Healthcare Policy Secretariat, Cabinet Office, Government of Japan, Japan

**HT-09-2** Pioneering implementation of personalized nucleic acid medicine

**Sarah Glass**

n-Lorem foundation, USA

**HT-09-3** Efforts to identify the genetic causes of ultra-rare neurological disorders - Experience of IRUD -

**Hidehiro Mizusawa**

National Center of Neurology and Psychiatry, Japan / Institute of Science Tokyo, Japan

**HT-09-4** Patient-derived iPSC motor neuron model identifies an ASO candidate therapy for HMSN-P

**Chris Kato**

Keio University Regenerative Medicine Research Center, Japan / Division of Neurodegenerative Disease Research, Tokyo Metropolitan Institute for Geriatrics and Gerontology, Japan

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Hot Topics

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HT-09-5

Progress towards the clinical trials of personalized nucleic acid  
medicine in Japan

Hiroya Kuwahara

Department of Neurology and Neurological Science, Institute of Science Tokyo, Japan /  
Nucleotide and Peptide Drug Discovery Center (TIDE), Institute of Science Tokyo, Japan

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Hot Topics