

Hot Topics 1

HT-01 May 20 (Wed) 9:50~11:50 Room5(Toki Messe302, 3F)

Recent development of therapeutic agents for the
mitochondrial disease MELAS

Chairs: Yoshihide Sunada

(Department of Neurology, Kawasaki Medical School)

Yukiko Hayashi

(Department of Pathophysiology, Tokyo Medical University
Hospital)

HT-01-1 MELAS and L-arginine therapy

Speaker: Yasutoshi Koga

(Department of Pediatrics and Child Health, Kurume
University School of Medicine)

**HT-01-2 Molecular Pathophysiology of Stroke-like Episodes
in MELAS**

Speaker: Takahiro Iizuka

(Department of Neurology, Kitasato University School of
Medicine)

**HT-01-3 Taurine supplemental therapy for prevention of
stroke-like episodes in MELAS**

Speaker: Yoshihide Sunada

(Department of Neurology, Kawasaki Medical School)

**HT-01-4 Proof of concept in sodium pyruvate therapy for
mitochondrial diseases**

Speaker: Masashi Tanaka

(Department of Clinical Laboratory, Tokyo Metropolitan
Geriatric Hospital)

Hot Topics 2

HT-02 May 20 (Wed) 9:50~11:50 Room12(Hotel Nikko Niigata Toki-A, 4F)

The clinical features, pathomechanism and treatment of the neurological conditions associated with human papillomavirus vaccination. -A new autoimmune encephalopathy-

Chairs: Shu-ichi Ikeda

(Department of Medicine (Neurology & Rheumatology),
Shinshu University School of Medicine)

Hiroshi Takashima

(Department of Neurology and Geriatrics, Kagoshima
University Graduate School)

**HT-02-1 The need for the prophylactic human
papillomavirus vaccine in young Japanese**

Speaker: Toshiyuki Sasagawa

(Department of Obstetrics and Gynecology, Kanazawa
Medical University)

**HT-02-2 Peripheral neuropathy after immunization with the
human papillomavirus vaccine**

Speaker: Shu-ichi Ikeda

(Department of Medicine (Neurology and Rheumatology),
Shinshu University School of Medicine)

**HT-02-3 Diversity of CNS-symptom in adolescent patients
after HPV vaccination**

Speaker: Yukitoshi Takahashi

(National epilepsy center, Shizuoka institute of epilepsy and
neurological disorders, NHO.)

**HT-02-4 Studies of encephalopathy associated with ASIA
after HPV vaccination.**

Speaker: Hitoshi Arata

(Department of Neurology and Geriatrics, Kagoshima
University Graduate School of Medical and Dental Sciences)

Hot Topics 3 (Proposed Symposium)

HT-03 May 20 (Wed) 13:15~15:15 Room1 (Toki Messe Main Hall A, 2F)

Advances in tau imaging on dementia diagnosis

Chairs: Etsuro Matsubara

(Oita University Faculty of Medicine)

Kenji Wada

(Division of Neurology, Tottori University)

HT-03-1 Tau PET imaging in Alzheimer's disease

Speaker: Hitoshi Shimada

(Molecular Neuroimaging Program, Molecular Imaging
Center, National Institute of Radiological Sciences (NIRS))

HT-03-2 Tau imaging in senile tauopathy

Speaker: Hiroyuki Shimada

(Osaka City University Graduate School of Medicine,
Department of Geriatrics and Neurology)

HT-03-3 Tau imaging in corticobasal syndrome

Speaker: Hitoshi Shinotoh

(Neurology Chiba Clinic/Molecular Imaging Center, National
Institute of Radiological Sciences)

HT-03-4 Tau Imaging in Frontotemporal Lobar
Degeneration

Speaker: Kenji Ishii

(Tokyo Metropolitan Institute of Gerontology)

Hot Topics 4 (Proposed Symposium)



HT-04 May 20 (Wed) 13:15~15:15 Room8(Toki Messe International Conference Hall, 4F)

Molecular pathogenesis and current insights into therapies for spinocerebellar ataxias with microsatellite repeat expansions

Chairs: Yoshio Ikeda

(Department of Neurology, Gunma University Graduate School of Medicine)

Yoshihisa Takiyama

(Department of Neurology, Interdisciplinary Graduate School of Medicine and Engineering, University of Yamanashi)

HT-04-1 Toward understanding and treating polyglutamine neurodegeneration

Speaker: Henry L. Paulson

(University of Michigan Health System, Department of Neurology, USA/University of Michigan Alzheimer Disease Center, USA/University of Michigan Protein Folding Diseases Initiative, USA)

HT-04-2 Gene and stem cell therapies against polyglutamine diseases

Speaker: Hirokazu Hirai

(Gunma University Graduate School of Medicine, Department of Neurophysiology & Neural Repair/Gunma University Initiative for Advanced Research (GIAR))

HT-04-3 Repeat associated non-ATG (RAN) translation in neurologic disease

Speaker: Laura PW. Ranum

(Center for NeuroGenetics, Department of Molecular Genetics and Microbiology, University of Florida, USA)

HT-04-4 Molecular pathogenesis of spinocerebellar ataxia type 31 (SCA31)

Speaker: Kinya Ishikawa

(The Center for Personalized and Preventive Medicine, Tokyo Medical and Dental University)

Hot Topics 5

HT-05 May 20 (Wed) 13:15~15:15 Room12(Hotel Nikko Niigata Toki-A, 4F)

Is robotic rehabilitation effective for improvement of voluntary motor function?- clinical study and future perspectives

Chairs: Takashi Nakajima

(Department of Neurology, Niigata National Hospital, NHO)

Masami Akai

(Graduate School, International University of Health and Welfare)

HT-05-1 Rehabilitation Robotics; Overview

Speaker: Masami Akai

(Graduate School, International University of Health and Welfare)

HT-05-2 Gait Exercise Assist Robot (GEAR) for hemiplegic gait reconstruction

Speaker: Eiichi Saitoh

(Department of Rehabilitation Medicine I, School of Medicine, Fujita Health University)

HT-05-3 Clinical application of Robot Suit HAL-implementation of motion support with voluntary drive

Speaker: Hiroaki Kawamoto

(University of Tsukuba)

HT-05-4 Physician initiated HAL clinical trial for neuromuscular diseases and future

Speaker: Takashi Nakajima

(Department of Neurology, Niigata National Hospital, NHO)

HT-06 May 21 (Thu) 8:00~10:00 Room4(Toki Messe 301, 3F)

Pivotal role of oligomers in pathogenesis and therapy of dementia

Chairs: Mikio Shoji

(Department of Neurology, Hirosaki University Hospital)

Masahito Yamada

(Department of Neurology and Neurobiology of Aging,

Kanazawa University Graduate School of Medical Sciences)

HT-06-1 Oligomers and Alzheimer's disease: Many types, many activities, many theories

Speaker: David B. Teplow

(Department of Neurology, David Geffen School of Medicine at UCLA)

HT-06-2 Accumulation and neurotoxicity of A β oligomer

Speaker: Takeshi Kawarabayashi

(Department of Neurology, Hirosaki University Graduate School of Medicine)

HT-06-3 Positioning of early aggregates of A β in its aggregation process

Speaker: Kenjiro Ono

(Department of Neurology and Neurobiology and Aging, Kanazawa University Graduate School of Medical Science)

HT-06-4 Therapy against toxic tau aggregation in AD

Speaker: Akihiko Takashima

(Department of Aging Neurobiology, National Center for Geriatrics and Gerontology)

Hot Topics 7

HT-07 May 21 (Thu) 8:00~10:00 Room12(Hotel Nikko Niigata Toki-A, 4F)

Molecular imaging : from cell to clinical studies

Chairs: Kenji Ishii

(Neuroimaging Research Team, Tokyo Metropolitan Institute of Gerontology)

Makoto Higuchi

(Molecular Imaging Center, National Institute of Radiological Sciences)

HT-07-1 Tau PET imaging and DTI for the early detection of tau-induced neurodegeneration

Speaker: Naruhiko Sahara

(Molecular Imaging Center, National Institute of Radiological Sciences)

HT-07-2 (S)-(C-11)-KTP-Me, a PET probe for activated microglia in neuroinflammation

Speaker: Hirotaka Onoe

(RIKEN Center for Life Science Technologies (CLST), Imaging Function Group)

HT-07-3 Characteristics of PET probes for imaging neural transmission

Speaker: Kiichi Ishiwata

(Tokyo Metropolitan Institute of Gerontology)

HT-07-4 Development of Novel PET Probe for Imaging of Mitochondrial Activity in Brain

Speaker: Hideo Tsukada

(Central Research Laboratory, Hamamatsu Photonics)

HT-07-5 Neurochemistry in Hypomyelination on MR Spectroscopy

Speaker: Jun-ichi Takanashi

(Department of Pediatrics, Tokyo Women's Medical University, Yachiyo Medical Center/Molecular Imaging Center, National Institute of Radiological Sciences)

Hot Topics 8



HT-08 May 21 (Thu) 15:10~16:50 Room8(Toki Messe International Conference Hall, 4F)

Preclinical/Prodromal Alzheimer's Disease: Clues to Prediction, Diagnosis, and Prevention

Chairs: Takeshi Ikeuchi

(Brain Research Institute, Niigata University)

Atsushi Iwata

(Department of Neurology, The University of Tokyo)

HT-08-1 Delay of Onset of MCI Trial: Predictors of Risk and Low-Dose Pioglitazone

Speaker: Allen D. Roses

(Zinfandel Pharmaceuticals, Inc., North Carolina, USA)

HT-08-2 CSF Biomarkers: Prediction of Cognitive Decline in the North American ADNI Study

Speaker: Leslie M. Shaw

(Perelman School of Medicine, University of Pennsylvania, USA)

HT-08-3 Challenge of identifying patients with MCI among initially healthy individuals

Speaker: Andreas U. Monsch

(Memory Clinic, University Center for Medicine of Aging, Basel, Switzerland)

HT-08-4 Lifestyle and related factors as preventive strategies against dementia

Speaker: Masahito Yamada

(Department of Neurology and Neurobiology of Aging, Kanazawa University Graduate School of Medical Sciences)

HT-09 May 22 (Fri) 8:00~10:00 Room8(Toki Messe International Conference Hall, 4F)

Unsolved clinical and genetic questions in multiple system atrophy

Chairs: Hirohisa Watanabe

(Department of Neurology, Nagoya University Graduate School of Medicine / Nagoya University, Brain and Mind Research Center)

Hidenao Sasaki

(Department of Neurology, Graduate School of Medicine, Hokkaido University)

HT-09-1 Clinical diversities in MSA based on the nationwide registration system of MHLW

Speaker: Ken Sakushima

(Department of Neurology, Hokkaido University Graduate School of Medicine)

HT-09-2 Premotor and preautonomic MSA

Speaker: Hirohisa Watanabe

(Department of Neurology, Nagoya University Graduate School of Medicine / Nagoya University, Brain and Mind Research Center)

HT-09-3 Difference in MSA phenotype distribution across populations

Speaker: Tetsutaro Ozawa

(Department of Neurology, Institute of Community Medicine, Niigata University)

HT-09-4 Population genetics for determining susceptibility factors in MSA

Speaker: Nicholas W. Wood

(University College London, UK)

Hot Topics 10

HT-10 May 22 (Fri) 8:00~10:00 Room1 (Toki Messe Main Hall A, 2F)

Research update in molecular pathogenesis and therapies for motor neuron disease

Chairs: Masahisa Katsuno

(Department of Neurology, Nagoya University Graduate School of Medicine)

Hirofumi Maruyama

(Department of Clinical Neuroscience and Therapeutics, Hiroshima University)

HT-10-1 Pathomechanisms and therapeutic directions common to motor neuron diseases

Speaker: Koji Yamanaka

(Department of Neuroscience and Pathobiology, Research Institute of Environmental Medicine, Nagoya University)

HT-10-2 The molecular profiling of pathogenic TDP-43 for the antibody therapy

Speaker: Makoto Urushitani

(Department of Neurology, Kyoto University Graduate School of Medicine)

HT-10-3 Optineurin in amyotrophic lateral sclerosis

Speaker: Hideshi Kawakami

(Department of Epidemiology RIRBM Hiroshima University)

HT-10-4 Quality loss of FUS is involved in the pathogenesis of ALS/FTLD

Speaker: Shinsuke Ishigaki

(Department of Neurology, Nagoya University Graduate School of Medicine)

HT-10-5 Evidence of a link between TDP-43 and dipeptide repeat protein in c9FTD/ALS **adopted**

Speaker: Mai Yamakawa

(Department of Neurology, Keio University School of Medicine
/Department of Anatomy, Keio University School of Medicine)

HT-11 May 22 (Fri) 8:00~10:00 Room5 (Toki Messe302, 3F)

The cutting edge of Clinical Application of TMS

Chairs: Yoshikazu Ugawa

(Department of Neurology, School of Medicine, Fukushima Medical University)

Ryusuke Kakigi

(Department of Integrative Physiology, National Institute for Physiological Sciences)

HT-11-1 rTMS treatment for neuropathic pain

Speaker: Youichi Saitoh

(Department of Neuromodulation and Neurosurgery, Osaka University Graduate School of Medicine / Department of Neurosurgery, Osaka University Graduate School of Medicine)

HT-11-2 A new protocol for plasticity induction in human brain

Speaker: Yoshikazu Ugawa

(Department of Neurology, School of Medicine, Fukushima Medical University)

HT-11-3 Diagnostic utility of threshold-tracking TMS in ALS

Speaker: Steve Vucic

(Westmead Hospital, University of Sydney, Australia)

HT-11-4 Neuroimaging study of quadripulse stimulation (QPS)

Speaker: Seiki Konishi

(Department of Physiology, Juntendo University School of Medicine)

HT-11-5 Age dependency of the LTP like effect by quadripulse stimulation (QPS) over M1 **adopted**

Speaker: Ritsuko Hanajima

(Department of Neurology, Kitasato University school of Medicine)

Hot Topics 12 (Proposed Symposium)

HT-12 May 22 (Fri) 8:00~10:00 Room12(Hotel Nikko Niigata Toki-A, 4F)

The Japanese Society for Neurochemistry Symposium: Can neurological diseases be understood without glial research?

Chairs: Hiroko Baba

(Department of Molecular Neurobiology, School of Pharmacy,
Tokyo University of Pharmacy and Life Sciences)

Schuichi Koizumi

(Interdisciplinary Graduate School of Medicine, University of
Yamanashi/CREST, JST)

HT-12-1 Glia-mediated ischemic tolerance

Speaker: Schuichi Koizumi

(Interdisciplinary Graduate School of Medicine, University of
Yamanashi/CREST, JST)

HT-12-2 Microglia in Neurological Disorders

Speaker: Akio Suzumura

(Department of Neuroimmunology, Nagoya University)

HT-12-3 Role of astrocyte in myelin formation and maintenance

Speaker: Kazuhiro Ikenaka

(Division of Neurobiology and Bioinformatics, National
Institute for Physiological Sciences (NIPS))

HT-12-4 Regulation of myelination in brain

Speaker: Hiroko Baba

(Department of Molecular Neurobiology, School of Pharmacy,
Tokyo University of Pharmacy and Life Sciences)

HT-13 May 22 (Fri) 13:30~15:30 Room4(Toki Messe301, 3F)

Current concept of neuromyelitis optica spectrum disorders (NMOSD)

Chairs: Jun-ichi Kira

(Department of Neurology, Neurological Institute Graduate School of Medical Sciences, Kyushu University)

Masaaki Niino

(Department of Clinical Research, Hokkaido Medical Center)

HT-13-1 International Consensus Diagnostic Criteria of NMO Spectrum Disorder

Speaker: Brian G. Weinshenker

(Mayo Clinic, Rochester MN, USA)

HT-13-2 Immunopathology of NMO

Speaker: Izumi Kawachi

(Department of Neurology, Brain Research Institute, Niigata University)

HT-13-3 Seronegative NMOSD and MOG-IgG

Speaker: Douglas Kazutoshi Sato

(Tohoku University Graduate School of Medicine)

HT-13-4 Therapeutic update in NMOSD

Speaker: Yuji Nakatsuji

(Department of Neurology, Osaka University Graduate School of Medicine)

Hot Topics 14

HT-14 May 22 (Fri) 13:30~15:30 Room12(Hotel Nikko Niigata Toki-A, 4F)

Analysis of CNS pathophysiology with novel visualizing techniques

Chairs: Akio Suzumura

(Department of Neuroimmunology, Nagoya University Hospital)

Yoshitaka Nagai

(Department of Degenerative Neurological Diseases, National Center of Neurology and Psychiatry)

HT-14-1 Manipulation of specific neurons using optogenetics or pharmacogenetics

Speaker: Akihiro Yamanaka

(Research Institute of Environmental Medicine, Nagoya University)

HT-14-2 Cortical Synapse Remodeling in Neural Disorder: Synapse-Glia Interaction

Speaker: Junichi Nabekura

(National Institute for Physiological Sciences)

HT-14-3 Imaging mass spectrometry for neuropathology

Speaker: Mitsutoshi Setou

(Hamamatsu University School of Medicine)

HT-14-4 Cruising inside the brain

Speaker: Atsushi Miyawaki

(RIKEN Brain Science Institute, Laboratory for Cell Function Dynamics / RIKEN Center for Advanced Photonics, Biotechnological Optics Research Team)

Sponsored by : The Japan Neuroscience Society

Hot Topics 15

HT-15 May 23 (Sat) 8:00~10:00 Room10(Toki Messe Exhibition Hall B-2, 1F)

Impact of neuro-modulation on neurorehabilitation

Chairs: Takashi Hanakawa

(Department of Advanced Neuroimaging, Integrative Brain Imaging Center, National Center of Neurology and Psychiatry)

Ichiro Miyai

(Neurorehabilitation Research Institute, Morinomiya Hospital)

HT-15-1 Neuromodulation with the stimulation of brain and spinal cord

Speaker: Youichi Saitoh

(Department of Neuromodulation and Neurosurgery, Osaka University Graduate School of Medicine / Department of Neurosurgery, Osaka University Graduate School of Medicine)

HT-15-2 Restoration of poststroke severe upper limb paralysis with BMI

Speaker: Meigen Liu

(Department of Rehabilitation Medicine, Keio University School of Medicine)

HT-15-3 Neurofeedback: Novel approach for neurorehabilitation

Speaker: Masahito Mihara

(Department of Neurology, Osaka University Graduate School of Medicine)

HT-15-4 Network connectivity imaging in neurological disorders and stroke

Speaker: Takashi Hanakawa

(Department of Advanced Neuroimaging, Integrative Brain Imaging Center, National Center of Neurology and Psychiatry)

Sponsored by : The Japanese Association of Rehabilitation Medicine

Hot Topics 16

HT-16 May 23 (Sat) 8:00~10:00 Room8(Toki Messe International Conference Hall, 4F)

Frontline in the research of stem cell based medicine

Chairs: Koji Abe

(Department of Neurology, Okayama U.)

Haruhisa Inoue

(Dept. of Cell Growth and Differentiation, Center for iPS Cell
Research and Application, Kyoto University)

HT-16-1 Challenges towards stem cell therapy for
Parkinson's disease

Speaker: Jun Takahashi

(Center for iPS Cell Research and Application, Kyoto
University)

HT-16-2 Retinal cell therapy using iPS cells

Speaker: Masayo Takahashi

(RIKEN Center for Developmental Biology)

HT-16-3 Development of new therapy for neural diseases by
activation of microvasculature

Speaker: Akihiko Taguchi

(Department of Regenerative Medicine Research, Institute of
Biomedical Research and Innovation)

HT-16-4 Induced pluripotent stem cells and neurological
disorders

Speaker: Yohei Okada

(Department of Neurology, Aichi Medical University)

HT-16-5 The need to share the knowledge of iPS cell
research with general citizen

Speaker: Yoshimi Yashiro

(Uehiro Research Division for iPS cell Ethics, Center for iPS
Cell Research and Application, Kyoto University)

Hot Topics 17 (Proposed Symposium)

HT-17 May 23 (Sat) 8:00~10:00 Room5(Toki Messe302, 3F)

Pathophysiology and target of treatment in acute ischemic stroke. -How to protect neurovascular unit-

Chairs: Kortaro Tanaka

(Department of Neurology, Toyama University)

Takao Urabe

(Department of Neurology, Juntendo University Urayasu Hospital)

HT-17-1 Protection of Endothelial Cells as a Treatment Target of Cerebral Ischemia

Speaker: Yoshiaki Itoh

(Department of Neurology, Osaka City University Graduate School of Medicine)

HT-17-2 Innate immunity as a target for neurovascular protection

Speaker: Hiroaki Ooboshi

(Department of Internal Medicine, Fukuoka Dental College Medical and Dental Hospital)

HT-17-3 Therapeutic Strategy for Neurovascular Unit Protection:The Role of Free Radicals

Speaker: Toru Yamashita

(Department of Neurology, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama)

HT-17-4 Therapeutic strategies against hemorrhagic transformation after t-PA treatment

Speaker: Masato Kanazawa

(Department of Neurology, Brain Research Institute, Niigata University)

HT-18 May 23 (Sat) 8:00~10:00 Room13(Hotel Nikko Niigata Toki-B, 4F)

Gene therapy for neurological disorders

Chairs: Shin-ichi Muramatsu

(Jichi Medical University, Department of Neurology)

Takanori Yokota

(Department of Neurology and Neurological Science, Tokyo Medical and Dental University)

HT-18-1 Gene therapy for aromatic L-amino acid decarboxylase (AADC) deficiency

Speaker: Wuh-Liang Hwu

(National Taiwan University Hospital, Taiwan)

HT-18-2 Mechanism-base gene therapy for sporadic ALS

Speaker: Shin Kwak

(Division of Clinical Biotechnology, Center for Disease Biology and Integrative Medicine, Graduate School of Medicine, The University of Tokyo/Clinical Research Center for Medicine, International University of Health and Welfare)

HT-18-3 Towards a therapy for Angelman syndrome by targeting a long non-coding RNA

Speaker: Frank Rigo

(Isis Pharmaceuticals, Carlsbad, CA, USA)

HT-18-4 Antisense oligonucleotides therapy of muscular dystrophy

Speaker: Shin'ichi Takeda

(Translational Medical Center, National Center of Neurology and Psychiatry)