Hot Topics 01

HT-01  May 18 (Wed)  9:50～11:50  Room2
(Kobe International Exhibition Hall [Exhibition Hall A] Hall No.1 Building, 2nd Floor)

Genetics in Clinical Strokes

Chairs: Hidekazu Tomimoto
(Department of Neurology, Mie University Graduate School of Medicine)
Osamu Onodera
(Department of Neurology, Brain Research Institute, Niigata University)

HT-01-1  Progress of the research in CADASIL
Speaker: Toshiki Mizuno
(Department of Neurology, Kyoto Prefectural University of Medicine)

HT-01-2  Molecular mechanism of cerebral small vessel disease. Lesson from CARASIL
Speaker: Osamu Onodera
(Department of Neurology, Brain Research Institute, Niigata University)

HT-01-3  Cerebrovascular diseases associated with RNF213
Speaker: Satoru Miyawaki
(Department of Neurosurgery, The University of Tokyo)

HT-01-4  What is molecular mechanism of Marfan syndrome?
Speaker: Jun Goto
(International University of Health and Welfare, Mita Hospital, Department of Neurology)
Hot Topics 02

HT-02 May 18 (Wed) 9:50~11:50 Room4
(Kobe International Exhibition Hall [Room 3A] Hall No.2 Building, 3rd Floor)

Myasthenia gravis: New insights and overview

Chairs: Naoko Matsui
(Department of Neurology, Tokushima University Hospital)
Tomihiro Imai
(Sapporo Medical University School of Health Sciences)

HT-02-1 Perspective in the study of Japanese Clinical Guideline and overview
Speaker: Tomihiro Imai
(Sapporo Medical University School of Health Sciences)

HT-02-2 Thymectomy in Non-thymomatous Myasthenia Gravis: MGTX study a Randomized, Controlled Trial
Speaker: Hiroaki Yoshikawa
(Kanazawa University, Health Service Center)

HT-02-3 Inflammatory Markers of Myasthenia Gravis
Speaker: Akiyuki Uzawa
(Department of Neurology, Graduate School of Medicine, Chiba University)

HT-02-4 Intrathyomic pathogenesis in various Myasthenia Gravis (MG) subgroups
Speaker: Alexander Marx
(University of Heidelberg, Germany)

HT-02-5 Approach from T cell development in MG thymus
Speaker: Naoko Matsui
(Department of Neurology, Tokushima University Hospital)
Hot Topics 03

HT-03  May 18 (Wed)  9:50〜11:50  Room5
(Kobe International Exhibition Hall [Room 2A] Hall No.2 Building, 2nd Floor)

Cutting edge of metabolic/hereditary neuropathies

Chairs: Satoshi Kuwabara
(Department of Neurology, Chiba University)
Haruki Koike
(Department of Neurology, Nagoya University Graduate School of Medicine)

HT-03-1  Cutting-edge therapies for amyloid neuropathy
Speaker: Yoshiki Sekijima
(Department of Medicine (Neurology & Rheumatology), Shinshu University School of Medicine)

HT-03-2  Therapeutic strategy for Charcot-Marie-Tooth disease
Speaker: Masanori Nakagawa
(North Medical Center, Kyoto Prefectural University of Medicine)

HT-03-3  Current therapeutic strategies for POEMS syndrome
Speaker: Sonoko Misawa
(Department of Neurology, Graduate School of Medicine, Chiba University)

HT-03-4  Chemotherapy-induced Peripheral Neuropathy: From Pathophysiology to Neuroprotection
Speaker: Susanna B. Park
(Brain and Mind Centre, University of Sydney, Australia)
Hot Topics 04

HT-04 May 18 (Wed) 13:15〜15:15 Room5
(Kobe International Exhibition Hall [Room 2A] Hall No.2 Building, 2nd Floor)
Animal models for studying neurological diseases: from worms to primates
   Chairs: Yoshitaka Nagai
   (Department of Neurotherapeutics, Osaka University
    Graduate School of Medicine/Department of Degenerative
    Neurological Diseases, National Center of Neurology and
    Psychiatry)
   Koji Yamanaka
   (Research Institute of Environmental Medicine, Nagoya
    University)

HT-04-1 Caenorhabditis elegans as a model animal for
research on neurodegenerative diseases
   Speaker: Yoshiaki Furukawa
   (Department of Chemistry, Keio University)

HT-04-2 Drosophila models to study human
neurodegenerative diseases
   Speaker: Yoshitaka Nagai
   (Department of Neurotherapeutics, Osaka University
    Graduate School of Medicine / Department of Degenerative
    Neurological Diseases, National Center of Neurology and
    Psychiatry)

HT-04-3 From Fish to Human Neurological Disorders
   Speaker: Hideaki Matsui
   (Department of Neuroscience of Disease, Center for
    Transdisciplinary Research, Niigata University / Brain
    Research Institute, Niigata University)

HT-04-4 CRISPR/Cas9 mediated genome editing in mice
   Speaker: Masahito Ikawa
   (Research Institute for Microbial Diseases, Osaka University)

HT-04-5 Disease Modeling using transgenic marmosets
   Speaker: Hideyuki Okano
   (Keio University School of Medicine, Department of
    Physiology)

Co-hosted by : The Japan Neuroscience Society
Hot Topics 05

HT-05  May 18 (Wed)  13:15～15:15  Room7
(Kobe Portopia Hotel [Kairaku 1] Main Building B1F)

MRI on the edge

Chairs: Aya M. Tokumaru
(Department of Diagnostic Radiology, Tokyo Metropolitan Medical Center of Gerontology)
Masafumi Harada
(Department of Radiology, Tokushima University)

HT-05-1  Different visualization of transparent brain by MR imaging
Speaker: Shigeki Aoki
(Department of Radiology, Juntendo University)

HT-05-2  Visualization of Brain Structures and Oxygen Metabolism using Quantitative Susceptibility Mapping
Speaker: Kohsuke Kudo
(Department of Diagnostic and Interventional Radiology, Hokkaido University Hospital)

HT-05-3  Looking into microstructures in the brain using diffusion images
Speaker: Toshiaki Taoka
(Department of Radiology, Nagoya University)

HT-05-4  Inspection of brain activity: Brain function evaluation by noninvasive CBF measurement using ASL-MRI
Speaker: Tomoyuki Noguchi
(Department of Radiology, National Center for Global Health and Medicine (NCGM))

HT-05-5  Seeing a dreaming brain -Human brain activity accompanying rapid eye movements during REM sleep-
Speaker: Satoru Miyauchi
(National Institute of Information and Communications Technology)
Hot Topics 06  
(Proposed Symposium)

HT-06  May 19 (Thu)  8:00～10:00  Room4
(Kobe International Conference Center [Meeting Room 501] 5F)

Neuroregeneration and nucleic acid medicine

Chairs: Hideyuki Okano  
(Keio University School of Medicine, Department of Physiology)
Masayuki Nakamori  
(Department of Neurology, Osaka University Graduate School of Medicine)

HT-06-1  Antisense Oligonucleotide Therapies for the Treatment of Neurodegenerative Diseases  
Speaker: Frank Bennett  
(IONIS Pharmaceuticals, USA)

HT-06-2  Novel oligonucleotide based on DNA/RNA heteroduplex structures  
Speaker: Kazutaka Nishina  
(Department of Neurology and Neurological Science, Graduate School, Tokyo Medical and Dental University)

HT-06-3  Therapeutic development using cell penetrating, asymmetric RNAi triggers  
Speaker: Dong-ki Lee  
(Department of Chemistry, Sungkyunkwan University, Korea)

HT-06-4  Migration and maturation of new neurons in the normal and injured adult brain  
Speaker: Kazunobu Sawamoto  
(Department of Developmental and Regenerative Biology, Nagoya City University Graduate School of Medical Sciences)

HT-06-5  The role of adult neural stem cell-neurogenesis in the pathogenesis of psychiatric disorders  
Speaker: Seiji Hitoshi  
(Department of Integrative Physiology, Shiga University of Medical Science)
HT-06-6  Unique embryonic neurogenesis in the hippocampus, an adult neurogenic region
Speaker: Tatsunori Seki
(Department of Histology and Neuroanatomy, Tokyo Medical University)

Hot Topics 07
(Proposed Symposium)

HT-07  May 19 (Thu)  15:15~16:55       Room 2
(Kobe International Exhibition Hall [Exhibition Hall A] Hall No.1 Building, 2nd Floor)
Embolic strokes of undetermined source (ESUS): a new therapeutic target
Chairs: Shinichiro Uchiyama
(Clinical Research Center for Medicine, International University of Health and Welfare)
Kazunori Toyoda
(Department of Cerebrovascular Medicine, National Cerebral and Cardiovascular Center)

HT-07-1  Management of stroke patients with definite embolic sources
Speaker: Masahiro Yasaka
(Department of Cerebrovascular Medicine and Neurology, Cerebrovascular Center, Clinical Research Institute, Kyushu Medical Center)

HT-07-2  Embolic strokes of undetermined source (ESUS): a new clinical construct
Speaker: Satoru Ishibashi
(Department of Neurology and Neurological Science, Tokyo Medical and Dental University)

HT-07-3  Embolic source detection from ESUS to Embolic Stroke of Ascertained Source (ESAS)
Speaker: Yasuyuki Iguchi
(Department of Neurology, Jikei University School of Medicine)
HT-07-4 How to prevent recurrence of embolic stroke of undetermined source
Speaker: Shinichiro Uchiyama
(Clinical Research Center for Medicine, International University of Health and Welfare)
Co-hosted by: Japanese Heart Rhythm Society

Hot Topics 08

HT-08 May 19 (Thu) 15:15~17:15 Room6
(Kobe International Exhibition Hall [Room 3B] Hall No.2 Building, 3rd Floor)
Molecular dissection of spastic paraplegia
Chairs: Toshitaka Kawarai
(Department of Clinical Neuroscience, Institute of Biomedical Sciences, Tokushima University Graduate School)
Hiroyuki Ishiura
(Department of Neurology, The University of Tokyo)

HT-08-1 Emerging genetic and cellular insights into HSP pathogenesis
Speaker: Craig Blackstone
(NINDS, US National Institutes of Health, USA)

HT-08-2 Molecular epidemiology of HSPs in Japan
Speaker: Kishin Koh
(Department of Neurology, University of Yamanashi)

HT-08-3 Genetic Analysis in a Cohort of Taiwanese Patients with Hereditary Spastic Paraplegia
Speaker: Chin-Song Lu
(Chang Gung Medical Center at Linkou and Chang Gung University, Taiwan)

HT-08-4 Strategies for identifying causative genes of HSP
Speaker: Hiroyuki Ishiura
(Department of Neurology, The University of Tokyo)

HT-08-5 A Homozygous loss-of-function mutation in DNAJA3 causes HMSN type V
Speaker: Toshitaka Kawarai
(Department of Clinical Neuroscience, Institute of Biomedical Sciences, Tokushima University Graduate School)
Hot Topics 09

HT-09  May 19 (Thu)  15:15～16:55  Room15
(Kobe International Conference Center [Meeting Room502] 5F)
Combining imaging and therapy: Neuroimaging-based companion diagnostics and theranostics

Chairs: Makoto Higuchi
(Molecular Imaging Center, National Institute Radiological Sciences)
Makoto Yoneda
(Faculty of Nursing and Social Welfare Sciences, Fukui Prefectural University)

HT-09-1  In vivo monitoring of AADC gene delivery by PET
Speaker: Shin-ichi Muramatsu
(Division of Neurology, Jichi Medical University／Center for Gene & Cell Therapy, The Institute of Medical Science, The University of Tokyo)

HT-09-2  The Role of Amyloid and Tau Imaging in Clinical Trials in Alzheimer’s Disease
Speaker: Michael D. Devous
(Vice President, Avid Radiopharmaceuticals, Inc., USA)

HT-09-3  Imaging and treatment targeting adenosine receptors in Parkinson’s disease
Speaker: Masahiro Mishina
(Department of Neuro-pathophysiological Imaging, Graduate School of Medicine, Nippon Medical School／Research Team for Neuroimaging, Tokyo Metropolitan Institute of Gerontology)

HT-09-4  In vivo Imaging for Monitoring Differentiation and Manipulating Function of iPS Cells
Speaker: Bin Ji
(National Institute of Radiological Sciences)
Hot Topics 10

HT-10  May 20 (Fri)  8:00～10:00  Room3
(Kobe International Exhibition Hall [Exhibition Hall B] Hall No.1 Building, 2nd Floor)
Autoantibodies in Neuroimmununological Disorders: Treatable pathophysiology that we should know
Chairs: Takahiro Iizuka
( Department of Neurology, Kitasato University School of Medicine)
Shunya Nakane
( Department of Neurology (Molecular Neurology and Therapeutics), Kumamoto University Hospital)

HT-10-1 Neuroimmununological diseases and autoantibodies: Progress in these 10 years
Speaker: Takashi Inuzuka
( Department of Neurology & Geriatrics, Gifu University Graduate School of Medicine)

HT-10-2 Clinical spectrum and pathophysiology of NMDA receptor antibody-associated syndrome
Speaker: Takahiro Iizuka
( Department of Neurology, Kitasato University School of Medicine)

HT-10-3 Anti-GAD antibody associated syndrome
Speaker: Kazunori Nanri
( Tokyo Medical University Hachioji Medical Center)

HT-10-4 Anti-VGKC complex antibodies associated disorders
Speaker: Osamu Watanabe
( Department of Neurology, Kagoshima University Hospital)

HT-10-5 Clinical and pathological significances of autoantibodies to LRP4
Speaker: Osamu Higuchi
( Department of Clinical Research, Nagasaki Kawatana Medical Center)
HT-10-6  Anti-nicotinic acetylcholine receptor antibody mediated neuroimmunological syndrome
Speaker: Shunya Nakane
(Department of Neurology (Molecular Neurology and Therapeutics), Kumamoto University Hospital)
Co-hosted by: The Japanese Society for Neuroimmunology

Hot Topics 11

HT-11  May 20 (Fri)  8:00～10:00  Room7
(Kobe Portopia Hotel [Kairaku 1] Main Building B1F)
SCA Research-How Far We’ve Come and What Lies Ahead?
Chairs: Kinya Ishikawa
(The Center of Personalized Medicine for Healthy Aging,
Tokyo Medical and Dental University)
Kei Watase
(Center for Brain Integration Research, Tokyo Medical and Dental University)

HT-11-1  A heterozygous mutation in ELOVL4 leading to SCA34
Speaker: Kokoro Ozaki
(Department of Neurology and Neurological Science, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University)

HT-11-2  Role of microglial response in the pathogenesis of SCA6
Speaker: Kei Watase
(Center for Brain Integration Research, Tokyo Medical and Dental University)

HT-11-3  Investigation of spinocerebellar ataxia utilizing patient-derived iPS cells
Speaker: Keiko Muguruma
(RIKEN CDB)
HT-11-4  Generation of a transgenic common marmoset model for Spinocerebellar Ataxia Type 3  
Speaker: Ikuo Tomioka  
(Shinsu University, Institute for Biomedical Science/  
National Center of Neurology and Psychiatry)  

HT-11-5  Development of a novel gene therapy against SCA  
Speaker: Hitoshi Okazawa  
(Tokyo Medical and Dental University, Medical Research  
Institute, Neuropathology)  
Co-hosted by : The Japan Neuroscience Society  
Japanese Association of Cerebellum Research  

Hot Topics 12  

HT-12  May 20 (Fri)  8:00～10:00  Room8  
(Kobe Portopia Hotel [Kairaku 2] Main Building B1F)  
Expanding prion concept to cerebral beta-amyloidosis  
Chairs: Masahito Yamada  
(Department of Neurology and Neurobiology of Aging,  
Kanazawa University Graduate School of Medical Sciences)  
Takeshi Iwatsubo  
(Department of Neuropathology, Graduate School of Medicine,  
The University of Tokyo)  

HT-12-1  Mechanisms of transmission of prion diseases  
Speaker: Atsushi Kobayashi  
(Graduate School of Veterinary Medicine, Hokkaido University)  

HT-12-2  Propagation and spreading of Alzheimer lesions  
Speaker: Mathias Jucker  
(Hertie Institute for Clinical Brain Research, University of  
Tübingen, Germany/German Center for Neurodegenerative  
Diseases, Tübingen, Germany)  

HT-12-3  Possible iatrogenic transmission of cerebral beta-amyloidosis  
Speaker: Tsuyoshi Hamaguchi  
(Department of Neurology and Neurobiology of Aging,  
Kanazawa University Graduate School of Medical Science)
HT-12-4  Progression mechanism of synucleinopathies  
Speaker: Seung-Jae Lee  
(Department of Biomedical Sciences, Seoul National University College of Medicine, Korea)  
Co-hosted by : Asian Pacific Society of Prion Research

Hot Topics 13

HT-13  May 20 (Fri)  8:00~10:00  Room13
(Kobe International Conference Center [Meeting Rooms 401+402] 4F)
Understanding ALS pathogenesis by Updated progress in C9ORF72-TDP43 lineage  
Chairs: Takanori Yokota  
(Department of Neurology and Neurological Science, Tokyo Medical and Dental University)  
Makoto Urushitani  
(Department of Neurology, Kyoto University Graduate School of Medicine)  

HT-13-1  Amyotrophic lateral sclerosis and C9ORF72/TDP-43 pathology  
Speaker: Hitoshi Takahashi  
(Department of Pathology, Brain Research Institute, Niigata University)  

HT-13-2  Deciphering the expression and function of C9ORF72 using mouse model  
Speaker: Naoki Suzuki  
(Department of Neurology, Tohoku University / Department of Stem Cell and Regenerative Biology, Harvard University, USA)  

HT-13-3  C9ORF72 repeat expansion in mice causes TDP-43-linked ALS  
Speaker: Hiroki Sasaguri  
(Department of Neuroscience, Meiyo Clinic, USA)
HT-13-4  C9orf72-Rab mediates defective vesicle trafficking in C9ALS/FTD and rescue by antisense intervention  adopted

Speaker: Yoshitsugu Aoki
(Department of Molecular Therapy, National Institute of Neuroscience, National Center of Neurology and Psychiatry)

HT-13-5  Impaired VHL/CUL2-mediated clearance of misfolded TDP-43 underlies oligodendrocyte inclusions in ALS

Speaker: Makoto Urushitani
(Department of Neurology, Kyoto Graduate School of Medicine)

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**Hot Topics 14**

**HT-14  May 20 (Fri)  13:15～14:55  Room7**
(Kobe Portopia Hotel [Kairaku 1] Main Building B1F)

Inflammatory myopathy: a changing concept

Chairs: Shigeaki Suzuki
(Department of Neurology, Keio University School of Medicine)
Mitsuru Kawai
(Higashisaitama National Hospital)

HT-14-1  Polymyositis: Neurology vs. Rheumatologoy

Speaker: Ichizo Nishino
(Department of Neuromuscular Research, National Institute of Neuroscience, National Center of Neurology and Psychiatry (NCNP))

HT-14-2  Clinical and pathological features of anti-HMGCR antibody-associated autoimmune myopathies  adopted

Speaker: Masato Kadoya
(Department of Neurology and Anti-aging Medicine, National Defense Medical College/Department of Neurology, The University of Tokyo)
HT-14-3 Dermatomyositis in dermatology -Clinical features of dermatomyositis-specific autoantibodies-
Speaker: Yukie Yamaguchi
(Department of Environmental Immuno-Dermatology, Yokohama City University Graduate School of Medicine)

HT-14-4 Therapeutic strategy of polymyositis/dermatomyositis
Speaker: Shinji Sato
(Division of Rheumatology, Department of Internal Medicine, Tokai University School of Medicine)

HT-14-5 Physical therapy and rehabilitation for inflammatory muscle disease
Speaker: Kaori Muraoka
(Keio University, School of Medicine, Department of Rehabilitation)

Hot Topics 15

HT-15 May 20 (Fri) 13:15～14:55 Room8
(Kobe Portopia Hotel [Kairaku 2] Main Building B1F)
Gene therapy & regenerative medicine
Chairs: Hideki Mochizuki
(Department of Neurology, Osaka University Graduate School of Medicine)
Haruhisa Inoue
(Center for iPS Cell Research and Application, Department of Cell Growth and Differentiation, Kyoto University)

HT-15-1 MRI-based Platform for AAV2-GDNF and AAV-2AADC Gene Delivery in Parkinson’s disease
Speaker: Krystof Bankiewicz
(Neurosurgery and Neurology, University of California San Francisco, CA, USA)

HT-15-2 Cell-Based Therapeutics for Parkinson’s disease
Speaker: Jun Takahashi
(Kyoto University, Center for iPS Cell Research and Application)
HT-15-3 Gene therapy with antisense oligonucleotides for neurological and neuromuscular disorders

Speaker: Masayuki Nakamori
(Department of Neurology, Osaka University Graduate School of Medicine)

HT-15-4 Oscillatory control of proliferation and differentiation of neural stem cells

Speaker: Ryoichiro Kageyama
(Kyoto University, Institute for Virus Research/Kyoto University, WPI-iCeMS)

Hot Topics 16
(Proposed Symposium)

HT-16 May 20 (Fri) 13:15〜14:55 Room9
(Kobe Portopia Hotel [Kairaku 3] Main Building B1F)
Recent advances of socio-medical support for the patients with intractable diseases

Chairs: Tetsuo Komori
(National Hakone Hospital, Center for Neuromuscular and Intractable Disease)
Kouichi Mizoguchi
(Shizuoka Fuji Hospital)

HT-16-1 Co-working strategy between medical and care service for better QOL of the Nanbyo patient

Speaker: Tetsuo Komori
(National Hakone Hospital, Center for Neuromuscular and Intractable Disease)

HT-16-2 The current state of the incurable disease support and cooperation with future’s medical treatment

Speaker: Hiromi Kawajiri
(Gunma Intractable Disease Support Center)

HT-16-3 Registration in the specified intractable diseases can alter medical system for muscular dystrophy

Speaker: Tsuyoshi Matsumura
(Department of Neurology, National Hospital Organization Toneyama National Hospital)
Importance of study on the use of home mechanical ventilators and its contribution to home care
Speaker: Takaﬁumi Miyachi
(National Hospital Organization, Yanai Medical Center)

Hot Topics 17

HT-17  May 20 (Fri)  13:15〜15:15  Room10
(Kobe International Conference Center [Main Hall] B1F・1F)
Translational approach for prevention and treatment of MS
Chairs: Takashi Yamamura
(Department of Immunology, National Institute of Neuroscience, NCNP)
Takayuki Kondo
(Department of Clinical Network and Collaborative Medicine, Kyoto University)

HT-17-1 Impact of Nutrition on CNS Autoimmunity and Their Therapeutic Potential for Multiple Sclerosis
Speaker: Ralf Gold
(Department of Neurology, St. Josef-Hospital/Ruhr-University Bochum, Germany)

HT-17-2 Alterations in gut ﬂora giving clues to the cure of MS
Speaker: Sachiko Miyake
(Department of Immunology, Juntendo University School of Medicine)

HT-17-3 Investigator-Initiated Clinical Trial (ﬁrst-in-human, Phase I) of invariant NKT cell ligand OCH adopted
Speaker: Daisuke Noto
(Department of Immunology, National Institute of Neuroscience, National Center of Neurology and Psychiatry (NCNP) /Department of Immunology, Juntendo University Graduate School of Medicine)

HT-17-4 Current and future treatment for multiple sclerosis
Speaker: Ho Jin Kim
(Department of Neurology, National Cancer Center, Korea)
HT-17-5  IL-6 signal blockade for CNS autoimmune diseases
Speaker: Masakazu Nakamura
(Department of Immunology, National Institute of Neuroscience, National Center of Neurology and Psychiatry (NCNP) / Department of Neurology, Hokkaido Medical Center)

Hot Topics 18

HT-18  May 21 (Sat)  8:00~10:00  Room14
(Kobe International Conference Center [Meeting Room 501] 5F)
Developments of Pathogenic Research in Demyelinating Diseases

Chairs: Ichiro Nakashima
(Department of Neurology, Tohoku University School of Medicine)
Makoto Matsui
(Department of Neurology, Kanagawa Medical University)

HT-18-1 Visualizing central nervous system myelin using MRI: The Myelin Map and its clinical application
Speaker: Jin Nakahara
(Department of Neurology, Keio University School of Medicine)

HT-18-2 Pathogenesis of secondary progressive multiple sclerosis
Speaker: Takashi Yamamura
(Department of Immunology, National Institute of Neuroscience, NCNP)

HT-18-3 Clinical features of demyelinating diseases with anti-MOG antibody
Speaker: Ichiro Nakashima
(Department of Neurology, Tohoku University School of Medicine)

HT-18-4 Combined central and peripheral demyelination (CCPD) as anti-Neurofascin antibody-related disorders
Speaker: Ryo Yamasaki
(Department of Neurology, Kyushu University Hospital)