### 7:30-8:30 Educational Seminar Breakfast 1

Chair: Shinichi Kan (Department of Diagnostic Radiology, Kitasato University Hospital)

### Symptoms lead to imaging diagnosis

Harushi Mori (Department of Radiology, Graduate School and Faculty of Medicine, The University of Tokyo)

### CNS anatomy to make you happy

Toshiaki Taoka (Department of Radiology, Nara Medical University)

Co-Sponsored by Siemens Japan Co.Ltd.

### 8:30-8:40 Opening Remarks

Yukunori Korogi (President of the 42nd Annual Meeting of the Japanese Society of Neuroradiology)

# 8:40-9:20 Session 1 "Anatomy · Physiology"

Chairs: Akira Uchino (Department of Diagnostic Radiology, Saitama Medical University International Medical Center)

Toru Machida (NTT Medical Center Tokyo)

#### O-01 Fenestrations of the basilar artery demonstrated in 16416 MRAs

Keiji Sogawa (Department of Radiology, Kameda Medical Hospital)

O-02 The Medial and Lateral Geniculate Body: Evaluation with Phase Difference Enhanced Image

Mika Kitajima (Department of Diagnostic Radiology, Faculty of Life Sciences, Kumamoto University)

O-03 Aging effect of neuromelanin-related MR signal and dopamine transporter binding in substantia nigra

Hiroshi Kawaguchi (Molecular Imaging Center, National Institute of Radiological Sciences)

O-04 Qualitative measurement of the lateral ventricular size

Katsumi Hayakawa (Department of Diagnostic Radiology, Kyoto City Hospital)

O-05 Hyperintense dentate nucleus and globus pallidus on unenhanced T1-weighted MR Images are associated with gadolinium based contrast media.

Tomonori Kanda (Hyogo Cancer Center)

# 9:20-10:00 Session 2 "Brain Tumors 1"

Chairs: Noriaki Tomura (Department of Neuroradiology Southern Tohoku Research Institute for Neuroscience Southern Tohoku General Hospital)

Kaoru Kurisu (Hiroshima University)

O-06 The comparison of response assessment in gliomas; Macdonald, RECIST and RANO in WT1 immunotherapy clinical trial

Naoya Hashimoto (Department of Neurosurgery, Osaka University Graduate School of Medicine)

O-07 Validation of MRI T1/T2 mismatch method for differentiation between radiation injury and tumor recurrence. -Comparison with methionine PET-

Motoki Inaji (Department of Neurosurgery, Tokyo Medical and Dental University)

O-08 The usefulness of the "penetrating vessel sign" for the diagnosis of the brain tumor

Takashi Abe (Department of Radiology, Institute of Health Biosciences, The University of Tokushima Graduate School)

O-09 Comparison of cerebral blood flow on perfusion MRI by using arterial spin labeling and dynamic susceptibility contrast in brain tumors

Arisa Ohara (Department of Radiology, Kyorin University Faculty of Medicine)

O-10 Amide proton transfer (APT) imaging: A practical approach for brain tumors

Masahiro Ida (Department of Radiology, Tokyo Metropolitan Ebara Hospital)

### 10:00-10:20 Morning Break & Poster Viewing

## 10:20-10:52 Session 3 "3D Imaging"

Chairs: Katsumi Hayakawa (Department of Radiology, Kyoto City Hospital)

Masayuki Maeda (Department of Radiology, Mie University School of Medicine)

O-11 4-D CTA finding of a pseudoaneurysm developed after rupture

Takeya Watabe (Department of Neurosurgery, Fujita Health University)

O-12 Experience in whole brain 4D CT angiography/perfusion in two patients of cerebral dural sinus thrombosis

Kazufumi Suzuki (Department of Diagnostic Imaging and Nuclear Medicine, Tokyo Women's Medical University)

O-13 Optic Nerve configuration mapping attained in 3DCT in Paraclinoid Aneurysm

Satoshi Tamura (Department of Radiology, Synthesis Shinkawabashi Hospital)

O-14 Utility of surgical planning by 3D computed tomography venography for lateral suboccipital craniotomies.

Yosuke Masuda (Department of Neurosurgery, University of Tsukuba)

### 10:52-11:52 Session 4 "Functional MRI, MRS" (English Session)

Chairs: Akira Matsumura (Department of Neurosurgery, Faculty of Medicine University of Tsukuba)
Shinji Naganawa (Department of Radiology, Nagoya University)
Masafumi Harada (Department of Radiology, University of Tokushima)

#### Keynote Lecture

K-01 Functional brain mapping: Clinical application

Gyung-Ho Chung (Chonbuk National University Medical School, Korea)

O-15 Influence of environmental stimulation for default mode network detected by resting state fMRI

Masafumi Harada (Department of Radiology, The University of Tokushima)

O-16 A new method of fixation for function MRI during foot extension and flexion.

Kousaku Saotome (Center for Cybernics Research, University of Tsukuba)

O-17 Development of an MR-Compatible Sensory Stimulation Device

Koichi Murata (Systems and Information Engineering, University of Tsukuba)

O-18 Differences between Spinocerebellar Ataxias and Multiple System Atrophy-Cerebellar Type on Proton Magnetic Resonance Spectroscopy

Hung-Chieh Chen (Department of Radiology, Taichung Veterans General Hospital, Taichung, Taiwan)

O-19 The significance of Lipid peak in the diagnosis of meningioma

Hisao Nakamura (Department of Radiology, St, Marianna University of Medicine)

# 12:00-12:50 Luncheon Seminar 1

Chair: Takaaki Hosoya (Department of Diagnostic Radiology, Yamagata University Faculty of Medicine)

#### Trace the History of MR Perfusion Analysis

Kohsuke Kudo (Division of Ultrahigh Field MRI, Institute for Biomedical Sciences, Iwate Medical University)

Co-Sponsored by Bayer Yakuhin,

# 13:00-14:30 Collaboration Session "Progress in Neuroradiology" (English Session)

Chairs: Waro Taki (Mie University)

Toshihide Ogawa (Division of Radiology, Department of Pathophysiological Therapeutic Science, Tottori University)

#### 7 Tesla MRI

Makoto Sasaki (Division of Ultrahigh Field MRI, Institute for Biomedical Sciences, Iwate Medical University)

#### dMRI: from Gaussian to non-Gaussian

Masaaki Hori (Department of Radiology, School of Medicine, Juntendo University)

### Current status of clinical PET imaging for malignant brain tumor

Tadashi Nariai (Department of Neurosurgery, Tokyo Medical and Dental University)

### Neuro endovascular treatment with the latest device in Japan

Masaru Hirohata (Department of Neurosurgery, Kurume University Hospital)

#### The Evidence for Percutaneous Vertebroplasty

Noboru Tanigawa (Department of Radiology, Kansai Medical University)

Co-Sponsored by Shimadzu Corporation

### 14:30-15:00 Special Lecture

Chair: Yukunori Korogi (Department of Radiology, University of Occupational and Environmental Health)

#### Advanced imaging of gliomas and biological correlates: understanding tumor behavior.

Mauricio Castillo (Department of Radiology, University of North Carolina School of Medicine, USA)

### 15:00-15:20 Afternoon Break & Poster Viewing

### 15:20-16:00 Session 5 "Brain Tumors 2" (English Session)

Chairs: Masaaki Yamamoto (Katsuta Hospital Mito GammaHouse)

Sang Joon Kim (Asan Medical Center, University of Ulsan College of Medicine, Korea)

#### O-20 C-11 methionine PET/CT for tumors of the skull base: Comparison with F-18 FDG PET/CT

Noriaki Tomura (Department of Neuroradiology, Southern Tohoku Research Institute for Neuroscience, Southern Tohoku General Hospital)

O-21 Asymptomatic telangiectasia after radiotherapy in the long-term survivors of intracranial germ cell tumors: whole-ventricle vs. whole-brain radiation

Li Li (Department of Diagnostic Radiology, Tohoku University Hospital)

O-22 The advantage of advanced MR imaging for the diagnosis of germinoma

Fumiyuki Yamasaki (Department of Neurosurgery, Graduate School of Biomedical and Health Sciences, Hiroshima University)

O-23 The usefulness of double dose gadolinium contrast enhanced 3D FLAIR for evaluating small brain metastases

Sung Jun Ahn (Department of Radiology, Research Institute of Radiological Science, Yonsei University Health System, Seoul, Korea)

O-24 The rim enhancement of meningiomas on contrast-enhanced 3D FLAIR imaging

Mikako Enokizono (Department of Radiology, Nagasaki University Hospital)

## 16:00-17:00 Session 6 "Neurointervention 1 (Imaging)" (English Session)

Chairs: Makoto Negoro (Center for Neurointervention Department of Neurosurgery, Ichinomiya Nishi Hospital)

Akira Takahashi (Department of Neuroendovascular Therapy, Tohoku University)

Hiro Kiyosue (Department of Radiology Oita University Hospital)

#### Keynote Lecture

K-02 Toward the quantitative ear of one-stop imaging service for neuro-vascular disorders by using flat-detector DSA

Wan-Yuo, Guo (Department of Radiology, Taipei Veterans General Hospital, School of Medicine, National Yang-MingUniversity, Taiwan)

O-25 Normalization of metallic artifacts in flat-detector CT after neurointervention: a clinical study

Sheng-Che Hung (Department of Radiology, Taipei Veterans General Hospital, Taiwan)

O-26 3DRA for dural arteriovenous fistula endovasucular treatment.

Koichi Satoh (Tokushima Red Cross Hospital Department of Neuro-Endovascular Surgery)

O-27 Fusion image from data of subtracted/nonsubtracted rotational angiography for evaluation of angioarchitectures of dural arteriovenous fistulas

Hiro Kiyosue (Department of Radiology, Oita University Hospital)

O-28 3D-rotation Angiography planning and endovascular treatment of unruptured paraclinoid aneurysms

Masanori Gomi (Department of Neurosurgery, Stroke Center, Kokura Memorial Hospital)

O-29 Subtraction technique of catorid CT angiography after carotid stenting

Yoshihiro Minamida (Department of Neurosurgery, Sunagawa City Hospital)

# 17:00-18:00 Evening Seminar

Chair: Kazuhiro Katada (Fujita Health University)

Imaging of the Central Nervous System Infection

E. Turgut Tali (Department of Radiology, Gazi University School of Medicine, Turkey)

#### Advanced MRI of Brain Tumors

Takashi Yoshiura (Department of Clinical Radiology, Graduate School of Medical Sciences, Kyushu University)

Co-Sponsored by Eisai Co., Ltd.

### 18:05-18:35 Poster 1 "Anatomy, Physiology"

Chair: Harushi Mori (Department of Radiology, Graduate School and Faculty of Medicine, the University of Tokyo)

S-01 Convexity non-sinusal epidural collection-the so called accessory epidural sinus; Anangiographic study

Srivatanakul Kittipong (Department of Neurosurgery, Tokai University School of Medicine)

S-02 Variations of the ophthalmic artery diagnosed by MRA at 3T

Akira Uchino (Department of Diagnostic Radiology, Saitama Medical University International Medical Center)

S-03 The frequency of persistent hypoglossal artery on cranial MRI

Masayuki Yamura (Department of Radiology, Kumamoto Regional Medical Center)

S-04 Variation of the origin of the left common carotid artery diagnosed by CT angiography

Akira Uchino (Department of Diagnostic Radiology, Saitama Medical University International Medical Center)

S-05 Internal structures of globus pallidus in patients with Parkinson's disease:

Evaluation with phase difference enhanced imaging

Satoru Ide (Department of Radiology, University of Occupational and Environmental Health School of Medicine)

# 18:35-19:05 Poster 2 "Hydrocephalus, CSF Flow, Advanced Technology"

Chair: Suketaka Momoshima (Diagnostic Radiology, Keio University)

- S-06 MR imaging study of alteration in brain parenchymal compliance Simulated experiment Kazuya Aoki (Department of Neurosurgery, Toho University, Ohashi Medical Center)
- S-07 Motion detection at the cervico-medullary brainstem in patients with Chiari malformation type I using cine-MRI

Akira Matsushita (Center for Cybernics Research, University of Tsukuba)

S-08 Diffusional kurtosis imaging in evaluation of cortico-spinal tract in patients with normal pressure hydrocephalus

Masaaki Hori (Department of Radiology, School of Medicine, Juntendo University)

S-09 Evaluation for the contrast of brain CT images using the iterative reconstruction method Yoshiyasu Hiratsuka (Department of Radiology, Ehime University School of Medicine)

S-10 A practical application of 3D multi-fusion imaging for "Tailored bypass" with general -purpose workstation

Yujiro Tanaka (Department of Neurosurgery, Stroke Center, Kokura Memorial Hospital)

# 18:05-18:29 Poster 3 "Diffusion/Tensor/Perfusion Imaging 1"

Chair: Takao Kodama (Department of Radiology, Faculty of Medicine, University of Miyazaki)

S-11 Regional cerebral blood flow analysis of healthy elderly with 3D ASL: effect of aging and post labeling delay

Akihiko Wada (Department of Radiology, Teikyo University Chiba Medical Center)

S-12 Comparison of 3D ASL and IMP-SPECT in occlusive cerebrovascular disease

Koichi Takano (Department of Radiology, Fukuoka University Faculty of Medicine)

S-13 Evaluation of Hemodynamics in Patients with Ischemic Brain Disease Using 3DFFE -ASTAR Technique

Naruhide Kimura (Department of Radiology, Faculty of Medicine, Kagawa University)

S-14 Postoperative transient reduced diffusion in the ipsilateral striatum and/or thalamus as secondary neuronal degeneration

Kouhei Kamiya (Department of Radiology, National Center Hospital of Neurology and Psychiatry)

## 18:29-19:05 Poster 4 "Diffusion/Tensor/Perfusion Imaging 2"

Chair: Osamu Abe (Nihon University School of Medicine, Radiology)

S-15 Quantitive analysis of gray matter alteration in Parkinson's disease using Diffusional Kurtosis Imaging; Relation with Lewy body pathology

Koji Kamagata (Department of Radiology, Juntendo University School of Medicine)

S-16 Diffusion tensor imaging characteristics of the normal human corticospinal tract

Tha Khin (Department of Radiobiology and Medical Engineering, Hokkaido University Graduate School of Medicine)

S-17 Assessment of the cerebro-ponto-cerebellar pathways with diffusion tensor tractography: Relation with crossed cerebellar diaschisis

Masamichi Koyama (Biophysics Program, Molecular Imaging Center, National Institute of Radiological Sciences)

S-18 Diffusional Kurtosis Imaging of Multiple Sclerosis, Combination with Double Inversion Recovery to Segment Gray Matter

Mariko Yoshida (Department of Radiology, Juntendo University School of Medicine)

S-19 White-matter changes in diffusion anisotropy associated with alterations in cognitive function after carotid endarterectomy: tract-based spatial statistics analysis

Kenji Ito (Division of Ultrahigh Field MRI, Institute for Biomedical Sciences, Iwate Medical University)

S-20 Fractional anisotropy and symptom dimensions in obsessive-compulsive disorder: a diffusion tensor MR imaging study

Takatsune Kawaguchi (Department of Radiology, Nagoya City University Graduate School of Medical Sciences)

### 18:05-18:35 Poster 5 "Cerebrovascular Diseases"

Chair: Toshibumi Kinoshita (Department of Radiology and Nuclear Medicine,

Research Institute for Brain and Blood Vessels-Akita)

S-21 The effectiveness of Cone-beam CT for the assessment of VA dissection

Kenji Fukuda (Department of Neurosurgery, Faculty of Medicine, Fukuoka University)

S-22 Evaluation of CTA after intracranial aneurysm coil embolization using dual energy imaging with metal artifact reduction software (MARS)

Yuki Shinohara (Division of Radiology, Department of Pathophysiological and Therapeutic Science, Tottori University, Faculty of Medicine)

S-23 CTA after carotid artery stenting: assessment of the utility of model-based iterative reconstruction (MBIR) technique

Keita Kuya (Division of Radiology, Department of Pathophysiological and Therapeutic Science, Tottori University, Faculty of Medicine)

S-24 Analysis of optimal reference area for quantitative carotid plaque using magnetic resonance imaging

Kenichiro Sato (Department of Neurosurgery, Toho University Ohashi Medical Center)

S-25 2D dark blood carotid plaque imaging optimized by local phase contrast analysis; 2nd report

Nobuyuki Mori (Department of Radiology, Tenri Hospital)

### 18:35-19:05 Poster 6 "Neurointervention"

Chair: Koichi Satoh (Department of Neuro-Endovascular Surgery, Tokushima Red Cross Hospital)

S-26 Initial use experience of Hydrogel coil

Junichi Harashina (Department of Neurosurgery, Faculty of Medicine, Fukuoka University)

S-27 The changes of treatment strategies: Stent assisted coil embolization of paraclinoid aneurysm

Yoshikiyo Urabe (Department of Neurosurgery, Stroke Center, Kokura Memorial Hospital)

S-28 Evaluation of cerebral blood flow after carotid artery stenting for high-risk cases of postoperative hyperperfusion

Tetsuya Hashimoto (Department of Neurosurgery, Stroke Center, Kokura Memorial Hospital)

S-29 Identification of Adamkiewicz artery in the patients with spinal duralarteriovenous fistula by MDCT

Sodai Hoshiai (Department of Diagnostic and Interventional Radiology, Tsukuba University Hospital)

S-30 Contrast-enhanced three-dimensional MR venography of the thrombosed inferior petrosal sinus

Satoshi Takahashi (Department of Radiology, Akita University School of Medicine)

### 18:05-18:29 Poster 7 "Brain Tumors, Venous Anomaly, Other"

Chair: Futoshi Mihara (Department of Radiology, Fukuoka Higashi Medical Center)

S-31 PRESTO(Principles of Echo Shifting with a Train of Observation) Imaging of CNS malignant lymphoma: pre and post therapy

Yuki Wakata (Department of Radiology, Hyogo College of Medicine)

S-32 Parenchymal abnormalities associated with developmental venous anomalies using susceptibility-weighted imaging at 3T

Maki Umino (Department of Radiology, Mie University School of Medicine)

S-33 Analysis of venous draining course of medullary venous malformations in the poterior fosssa from the viewpoint of normal venous architecture

Akio Fukusumi (Department of Radiology, Nara City Hospital)

S-34 Comparison of normal facial nerve signal intensity on Gd-enhanced three-dimensional MRI at 1.5T and 3T

Jun Haneda (Department of Radiology, Nagaoka Chuo General Hospital)

# 18:29-19:05 Poster 8 "Inflammatory / Demyelinating / Degenerative / Diseases"

Chair: Noriko Sato (National Center Hospital of Neurology and Psychiatry)

S-35 Nerve swelling in chronic inflammatory demyelinating polyneuropathy: Evaluation of three-dimensional STIR images

Hajime Yokota (Department of Radiology, Graduate School of Medicine, Chiba University)

S-36 MRI findings in 11 cases with anti-aquaporin4 antibody positive NMO or NMO spectrum disorders

Yusuke Kurobe (Department of Radiology, Mie University School of Medicine)

S-37 The evaluation of the findings on spinal magnetic resonance imaging of idiopathic acute transverse myelitis

Tadahiro Yonezu (Department of Neurology, Chiba University)

S-38 Voxel-based morphometry with SPM8 and DARTEL at 3.0 T MRI in the diagnosis of minimal cognitive impairment and Alzheimer's disease

Makoto Ochi (Department of Radiology, Nagasaki Kita Hospital)

S-39 The evaluation the effects of galantamine on Alzheimer's disease and Mild Cognitive Impairment

Yoko Hirata (Department of Neurosurgery, Toho University Medical Center Ohashi Hospital)

S-40 Olfactory bulb volumes in autopsy-confirmed Demantia with Lewy body

Koji Kamagata (Department of Radiology, Juntendo University School of Medicine)