## 8:20~8:30 Opening Remarks

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

## 8:30~9:09 Keynote Lecture, Session 1 "Brain Tumors 1" (English Session)

Chairs: Takashi Watanabe (Division of Neurosurgery, Department of Brain and Neurosciences
Faculty of Medicine, Tottori University)

Masafumi Harada (Department of Radiology, University of Tokushima)

#### **Keynote Lecture**

K-01 Application of the advanced MR imaging for the differentiation of pseudoprogression from true progression in GBM patients treated with CCRT with temozolomide

Seung Hong Choi (Department of Radiology, Seoul National University Hospital)

- O-01 3D-FLAIR findings of the optic pathway in patients with sellar suprasellar tumors

  Mika Kitajima (Department of Diagnostic Radiology, Kumamoto University, Kumamoto, Japan)
- O-02 Usefulness of 3T contrast-enhanced 3D TI-VISTA imaging on the detection of small brain metastases: a prospective multicenter study

Minako Azuma (Radiology, University of Kumamoto, Kumamoto, Japan)

O-03 Diagnosis of unusual suprasellar tumors of adult: papillary craniopharyngiomas and germ cell tumors

Han-Jui Lee (Division of Neuroradiology, Taipei Veterans General Hospital, Taipei Taiwan School of Medicine, National Yang-Ming University, Taipei, Taiwan)

## 9:09~9:41 Session 2 "Brain Tumors 2"

Chairs: Yasushi Shibata (Department of Neurosurgery, University of Tsukuba, Mito Medical Center)

Noriaki Tomura (Department of Neuroradiology Southern Tohoku Research Institute

for Neuroscience Southern Tohoku General Hospital)

O-04 The usefulness of arterial spin labeling method against the differentiation of pseudoprogression and radiation necrosis in malignant glioma patients

Atsushi Kambe (The Division of Neurosurgery, Department of Brain and Neurosciences, Faculty of Medicine, Tottori University)

O-05 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, Tokyo, Japan)

O-06 Postoperative images of gliadel wafers and the adjacent brain parenchyma on conventional MRI, ADC map, perfusion MRI and permeability MRI

Saeka Hori (Department of Radiology, Nara Medical University, Nara, Japan)

O-07 Different DCE-perfusion result caused by different measurement method in diagnosis of brain tumor

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

# 9:50~10:30 Session 3 "Brain Tumors 3 / Radiation Therapy"

Chairs: Tadashi Nariai (Department of Neurosurgery, Tokyo Medical and Dental University)
Reiichi Ishikura (Department of Radiology, Hyogo College of Medicine)

O-08 Efficacy of intraoperative MRI for evaluation of extent of resection in glioma surgery: comparison with early postoperative MRI

Yosuke Masuda (Department of Neurosurgery, University of Tsukuba, Ibaraki, Japan)

O-09 Usefulness of amide proton transfer imaging in grading diffuse gliomas: comparison with contrast-enhanced and diffusion-weighted MR imaging

Osamu Togao (Department of Clinical Radiology, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan)

O-10 Do cochlear dose decreases determined using stereotactic computed tomographic images contribute to long-term hearing preservation after vestibular schwannoma radiosurgery?

Shinya Watanabe (Katsuta Hospital Mito Gammahouse)

O-11 Are post-SRS results better in brain MET patients without than in those with neurological symptoms?

Masaaki Yamamoto (Katsuta Hospital Mito GammaHouse, Hitachi-naka, Japan)

O-12 Roles of methionine PET in gamma knife radiosurgery for malignant gliomas

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

# 10:30~11:02 Session 4 "Surgery System / 3D Imaging / Traumatic Disorders"

Chairs: Toshinori Hirai (Department of Diagnostic Radiology, Kumamoto University)

Masato Matsumoto (Department of Neurosurgery, Matsumoto Clinic)

O-13 Surgical planning for brainstem cavernoma using diffusion tensor imaging

Narushi Sugii (Department of Neurosurgery, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan.)

#### O-14 Clinical application of glassless 3-D monitors in the removal of the malignant gliomas

Yoshitaka Narita (National Cancer Center Hospital, Department of Neurosurgery and Neuro-Oncology)

#### O-15 The development and clinical use of the new 3D virtual image for neurosurgery

Yasukazu Kajita (The Department of Neurosurgery, Nagoya University, Graduate School of Medicine, Nagoya, Japan)

# O-16 Indication of CT in mild traumatic brain injury: Canadian CT head rule and New Orleans criteria compared in Japan

Daddy Mata-Mbemba (Tohoku University Department of Diagnostic Radiology)

# 11:02~11:34 Session 5 "Neurointervention / Spine"

Chairs: Waro Taki (Stroke center, Takeda Hospital)
Shinichi Kan (Sagamihara Chuo Hospital)

### O-17 Simulation of cerebral aneurysm coiling using ex-vivo model

Makoto Negoro (The Center for Neurointervention, The Department of Neurosurgery, Ichinomiya Nishi Hospital, Ichinomiya, Japan)

O-18 Clinical treatment result of carotid artery stenting in Japan: Comparision of periprocedual ischemic complication by embolic protection device

Katsutoshi Takayama (Depertment of Radiology and Interventional neuroradiology, Ishinkai Yao General Hospital)

O-19 The analysis of vulnerable plaque volume in the patient with carotid artery stenosisevaluation by using non-gaited MR plaque imaging

Morito Hayashi (Departement of Neurousurgery, Toho University Ohashi medical center, Tokyo, Japan)

O-20 Pulsatile spinal cord motion in spinal cord herniation and arachnoid cyst observed by pulse-gated cine MRI

Tomohiko Masumoto (Department of Radiology, University of Tsukuba, Tsukuba, Japan)

### 11:45~12:45 Luncheon Seminar I

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

#### Ischemic white matter changes in the light of medullary artery circulation

Shoki Takahashi (Department of Diagnostic Radiology, Tohoku University Graduate School of Medicine)

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# 12:50~13:50 Special Lecture I

Chair: Kei Yamada (Department of Radiology, Kyoto Prefectural University of Medicine)

#### Treatment relevant acute imaging targets in stroke: "TRAITS"

Michael H Lev (Director Emergency Neuroradiology, Massachusetts General Hospital Professor of Radiology, Harvard Medical School)

# 13:50~14:50 Symposium I

Chairs: Kei Yamada (Department of Radiology, Kyoto Prefectural University of Medicine)
Hiroshi Ito (National Institute of Radiological Sciences)

#### S-01 CT diagnosis of acute ischemic stroke

Toshibumi Kinoshita (Department of Radiology and Nuclear Medicine, Research Institute for Brain and Blood Vessels-Akita)

#### S-02 "How to use MRI for acute ischemic stroke?"

Kohsuke Kudo (Department of Diagnostic and Interventional Radiology, Hokkaido University Hospital)

### S-03 Clinical efficacy of <sup>15</sup>O-gas PET in patients with acute ischemic stroke

Naomi Morita (Department of Radiology, National Cerebral and Cardiovascular Center)

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## 15:00~15:32 Session 6 "Cerebrovascular Diseases 1"

Chairs: Hiroshi Toyama (Department of Radiology, Fujita Health University)

Masayuki Ezura (Department of Neurosurgery, NHO Sendai Medical Center)

#### O-21 The detectability of cavitation on MRI in old lacunar infarction

Naoki Fukuyama (The Department of Radiology, Prefectural Central Hospital, Ehime, Japan)

#### O-22 MR angiography in acute perforator territory infarction

Chihiro Inatsuki (Radiology, Ehime Prefectural Central Hospital, Ehime, Japan)

## O-23 Detection of perforating branches of the anterior communicating artery using highresolution MRA at 7T

Taisuke Harada (Division of Ultrahigh Field MRI, Institute for Biomedical Sciences, Iwate Medical University, Morioka, Japan)

O-24 MR angiographic staging systems of the anterior and posterior circulations in moyamoya disease

Shunji Mugikura (Department of Diagnostic Radiology, Tohoku University Graduate School of Medicine)

## 15:32~16:04 Session 7 "Cerebrovascular Diseases 2"

Chairs: Yoko Kato (Department of Neurosurgery, School of Medicine, Fujita Health University)

Yasushi Matsumoto (Department of Neuroendovascular Therapy, KOHNAN Hospital)

O-25 Computational fluid dynamics analysis for the prediction of coil deformity after coiling in patients with unruptured internal carotid artery aneurysms

Masanori Tsuji (Department of Neurosurgery, Mie University School of Medicine, Tsu, Mie, Japan)

O-26 Relationship of hemodynamic parameters by CFD analysis and brain aneurysm shape indexes

Yasuyuki Umeda (Department of Neurosurgery, Mie University School of Medicine, Tsu, Japan)

O-27 Accuracy of 3D cine PC MR data as boundary conditions for computational fluid dynamics: acrylic and polyimide tube phantom study

Haruo Isoda (Department of Radiological and Medical Laboratory Sciences, Nagoya University Graduate School of Medicine, Nagoya, Japan)

O-28 Vascular biomarkers obtained by MR-based computational fluid dynamics for intracranial aneurysms with temporal geometry changes

Haruo Isoda (Department of Radiological and Medical Laboratory Sciences, Nagoya University Graduate School of Medicine, Nagoya, Japan)

# 16:04~16:36 Session 8 "Cerebrovascular Diseases 3/Hydrocephalus, CSF Flow/Advanced Technology"

Chairs: Satoshi Iwabuchi (Department of Neurosurgery, Toho University Ohashi Medical Center)

Kazuhiro Tsuchiya (Department of Radiology, Tokyo Teishin Hospital)

O-29 Can MRI differentiate the cardiogenic embolic occlusion from the atherothrombosis in patients with acute proximal artery occlusion?

Morio Nagahata (Department of Diagnostic and Interventional Neuroradiology, Yamagata City Hospital SAISEIKAN Stroke Center, Yamagata, Japan)

# O-30 Usefulness of R2\* mapping by IDEAL IQ for acute cerebral infarction: comparison with susceptibility vessel sign on T2\*-weighted imaging

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

# O-31 Utility of time-SLIP technique to identify communication between the intracranial arachnoid cyst and the subarachnoid space

Kayoko Abe (Department of Diagnostic Imaging and Nuclear Medicine, Tokyo Women's Medical University, Tokyo, Japan)

#### O-32 The effect of blood-suppression pulse for the brachial plexus at 3T MRI

Masayuki Odashima (Department of Radiology, Toho University Sakura Medical Centre, Chiba, Japan)

# 17:30~18:30 Evening Seminar

Chair: Toshio Okudera (Department of Radiology, Hara-Doi Hospital)

#### Vascular structure of skull base-hemodynamic balance and anastomosis-

Toshi Abe (Department of Radiology, Kurume University School of Medicine)

#### Imaging anatomy of the cavernous sinus and relevant venous structures

Hiro Kiyosue (Department of Radiology, Oita University Hospital)

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# 16:45~17:05 Poster 1 "Diffusion · Tensor · Perfusion Imaging 1"

Chair: Osamu Abe (Nihon University School of Medicine)

- P-01 Transient hypothyroidism: arterial spin labeling magnetic resonance study
  - Yoko Kaichi (Diagnostic Radiology, Graduate School of Biomedical and Health Sciences, Hiroshima University, Hiroshima, Japan)
- P-02 The utility of ASL-CBF measurement in atherosclerotic occlusive cerebrovascular disease Yasuhiro Ueda (Department of Neurosurgery, JA Toride Medical Center, Toride, Japan)
- P-03 Evaluation of spinocerebellar ataxia type 6 (SCA6) by VBM and TBSS analyses

  Atsushi Yoshida (Department of Diagnostic and Interventional Radiology, Hokkaido University Hospital,

  Sapporo, Japan)
- P-04 Diffusion kurtosis imaging in the differential diagnosis of early-stage parkinsonisms

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

  Japan)

## 17:05~17:25 Poster 2 "Diffusion • Tensor • Perfusion Imaging 2 / MRS"

Chair: Ichiro Yamada (Department of Diagnostic Radiology and Oncology, Tokyo Medical and Dental University)

P-05 Correlation between arterial blood volume obtained by ASL and DSC in gliomas under treatment

Yoko Shigemoto (Department of Radiology, Yamaguchi University Graduate School of Medicine, Japan)

- P-06 Can diffusion tensor imaging (DTI) be a useful tool in evaluating hemimegalencephaly?

  Tomomi Oikawa (The Department of Radiology, Tohoku university hospital, Sendai Japan)
- P-07 Grading of gliomas on diffusion kurtosis imaging: the efficacy of plotting of diffusion kurtosis on line segment in tumors

Toshiteru Miyasaka (The department of Radiology, Nara prefectural Nara hospital, Nara, Japan)

P-08 Usefulness of MRS with an elevated peak at 3.56 ppm in differentiation between menigioma and hemangiopericytoma

Reiko Ideguchi (Department of Radiology, Nagasaki University Hospital)

# 16:45~17:05 Poster 3 "Degenerative 1"

Chair: Makoto Ochi (Department of Radiology, Nagasaki Kita Hospital)

P-09 DWI high signal lesions in patients with severe hypoglycemia

Kazuaki Fukasaku (Image Processing Team, Extreme Photonics, RIKEN, Japan)

P-10 Comparison of some parameters between VSRAD plus and VSRAD advance

Ikuko Hori (Department of Radiology of Matsue City Hospital, Matsue, Japan)

P-11 The utility of white matter volume reduction analysis using SPM8 plus DARTEL in the differentiation between CBD and PSP

Keita Sakurai (Department of Diagnostic Radiology, Tokyo Metropolitan Medical Center of Gerontology, Tokyo, Japan)

P-12 Preliminary diffusional kurtosis imaging of the substantia nigra in de novo Parkinson disease: diagnostic utility of histogram analysis

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

# 17:05~17:25 Poster 4 "Degenerative 2 / Cerebral Blood Circulation"

Chair: Hitoshi Miki (Department of Radiology, Ehime Prefectural Central Hospital)

P-13 Brain MRI apparent diffusion coefficient in Parkinson disease with dementia

Atsushi Umemura (Clinical Research Center, and Department of Neurology, National Hospital of Utano, Kyoto, Japan)

P-14 Significance of combined use of MRI and perfusion SPECT for the evaluatuion of the cerebellar type multiple system atrophy

Fuminori Miyoshi (Division Of Radiology, Department Of Pathological Therapeutic Science, Tottori University, Tottori, Japan)

P-15 A case of adult phenylketonuria, whose brain perfusion SPECT resembled to that of Alzheimer's disease

Hidenori Takahashi (Department of Diagnostic Radiology, Keio University, Tokyo, Japan)

P-16 CT perfusion and FDG-PET findings of developmental venous anomaly of the brain

Kazuhiro Oguchi (Radiology and diagnostic imaging center, Aizawa hospital, Matsumoto, Japan)

# 16:45~17:05 Poster 5 "Pediatrics 1"

Chair: Kumiko Ando (Department of Radiology, Hyogo College of Medicine)

P-17 Venous outflow restriction of the posterior fossa dural sinuses in vein of Galen malformations

Naoki Toma (Department of Neurosurgery, Mie University Graduate School of Medicine)

P-18 Accelerated myelination along fiber tracts in patients with hemimegalencephaly

Kouhei Kamiya (Department of Radiology, Juntendo University School of Medicine, Tokyo, Japan)

P-19 Ear anomaly in Antley-Bixler syndrome

Kazutoshi Fujita (Department of Radiology, Tokyo Metropolitan Children's Medical Center, Tokyo, Japan)

P-20 MR imaging findings in a case of Oral-Facial-Digital syndrome type VI

Yoko Uchikawa (The Department of Diagnostic Radilogy, Tsukuba University Hospital, Ibaraki, Japan)

## 17:05~17:25 Poster 6 "Pediatrics 2"

Chair: Eiji Matsusue (Department of Radiology, Tottori Prefectural Central Hospital)

P-21 A case of rapidly progressive infantile onset vanishing white matter disease with diagnostic initial MRI findings

Tetsuhiko Okabe (Department of Radiology, Shonankamakura General Hospital, Kamakura, Japan)

P-22 A case of guanidinoacetate methyltransferase deficiency

Kentaro Ida (Okayama University Hospital, Department of Radiology)

P-23 Pituitary stalk interruption syndrome (PSIS): Case report with transient hyperammonemia and review of the literature

Sayo Otani (Department of Radiology, Osaka Red Cross Hospital, Osaka, Japan)

P-24 Diagnostic application of magnetoencephalography for detection of epileptogenic cortical lesion in MRI study

Kosuke Otsuka (Department of Pediatrics, Hokkaido University Graduate School of Medicine, Sapporo, Japan)