

Symposium 1 「Correction of spinal deformity considering global spinal alignment」**【English Session】**

Chairperson	Hiroshi Miyamoto	Department of Orthopaedic Surgery, Kindai University Faculty of Medicine
	Kazuhiro Hasegawa	Niigata Spine Surgery Center
Symposiast	Christopher P. Ames	Department of Neurological Surgery, University of California, San Francisco, USA
	Hiroshi Miyamoto	Department of Orthopaedic Surgery, Kindai University Faculty of Medicine
	Louis Boissière	Orthopedic Surgery Department, Bordeaux University Hospital, Bordeaux, France
	Kazuhiro Hasegawa	Niigata Spine Surgery Center
	Yusuke Nakao	Department of Orthopedic, Sanraku Hospital
	Naohisa Miyakoshi	Department of Orthopedic Surgery, Akita University Graduate School of Medicine
	Michael A. Rauschmann	Department of Spine Surgery, Sana Klinikum Offenbach, Offenbach, Germany

Symposium 2 「New technology in spine and spinal cord surgery and image」**【Japanese Session】**

Chairperson	Koji Sato	Japanese Red Cross Nagoya Daini Hospital
	Toshihiro Takami	Department of Neurosurgery Osaka City University Graduate School of Medicine
Symposiast	Yuichiro Abe	Department of Orthopedic, Eniwa Hospital
	Masahito Hara	Department of Neurosurgery, Inazawa Municipal Hospital
	Satoshi Maki	Department of Orthopedic Surgery, Graduate School of Medicine, Chiba University
	Yoshiharu Nakaya	Department of Orthopedic Surgery, Division of Vital Care and Reconstructive Medicine, Osaka Medical College
	Koji Sato	Japanese Red Cross Nagoya Daini Hospital
	Toshihiro Takami	Department of Neurosurgery Osaka City University Graduate School of Medicine

Symposium 3 「Metastatic vertebral tumor」**【Japanese Session】**

Chairperson	Norio Kawahara	Department of Orthopaedic Surgery, Kanazawa Medical University
	Yasuaki Tokuhashi	Department of Orthopaedic Surgery, Nihon University School of Medicine
Symposiast	Jianru Xiao	Department of Orthopedic Oncology, Changzheng Hospital, Second Military Medical University, Shanghai, China
	Hideki Murakami	Nagoya City University, Graduate School of Medical Sciences, Department of Orthopaedic Surgery
	Takahiro Hozumi	Tokyo Metropolitan Cancer and Infectious Diseases Center Komagome Hospital
	Kenichiro Kakutani	Department of Orthopaedic Surgery, Kobe University Graduate School of Medicine
	Hirohisa Katagiri	Department of Orthopaedic Surgery, Shizuoka Cancer Center
	Reiko Imai	National Institute of Radiological Sciences Hospital

Symposium 4 「Chiari malformation and syringomyelia」**【Japanese Session】**

Chairperson	Izumi Koyanagi	Hokkaido Neurosurgical Memorial Hospital
	Hitoshi Kono	Keiyu Orthopedic Hospital Keiyu Spine Center
Symposiast	Izumi Koyanagi	Hokkaido Neurosurgical Memorial Hospital
	Hiroki Ohashi	Department of Neurosurgery, Jikei University School of Medicine
	Yukoh Ohara	Department of Neurosurgery, Juntendo University
	Motoo Kubota	Department of Spine Surgery, Kameda Medical Center
	Kentaro Naito	Department of Neurosurgery, Osaka City University Graduate School of Medicine
	Toshiki Saito	Department of Orthopaedic and Spine surgery, Meijo Hospital