WSSFN Quadrennial Meeting

May 27-30, 2013
Hotel Nikko Tokyo
Tokyo, Japan

Jointly sponsored by the:
American Association of Neurological Surgeons (AANS)

in collaboration with the:
Japan Brain Foundation and the
Tokyo Convention & Visitors Bureau

Supported by the Japanese Neurological Society

www.wssfn.org
Dear Colleagues and Guests of the WSSFN,

Welcome to the 16th Quadrennial Meeting of the World Society for Stereotactic and Functional Neurosurgery! Our society president, Takaomi Taira, other WSSFN officers, and my scientific program co-chair Moji Hodaie have all worked with me to prepare a program that we are sure will be of great interest and stimulate much discussion.

This is a most exciting time for the WSSFN. As you all know there is an intense focus on stereotactic and functional neurosurgery the world over, and our society is on the leading edge of this wave. Since our last meeting in Toronto in May 2009 the European SSFN joined the WSSFN as partners (joining the American society in this regard). This also has greatly expanded the readership of our official journal, Stereotactic and Functional Neurosurgery, whose selectivity and impact factor continue to rise under the editorial leadership of David Roberts. Our last interim meeting in Cape Town in November 2011 was a great success, and we invite suggestions for our next event in two years.

Planning the WSSFN program does not occur in a vacuum. Your suggestions after the prior meeting were very much taken into account. You wanted more debates after the success of those two sessions in Toronto? This year there are nine Bento Box debates, three on each day of the meeting during lunch. More time devoted to radiosurgery and psychiatric neurosurgery was added, again based on WSSFN member feedback. A new feature of this year’s program is a final plenary session at the end of the first two meeting days in which key features of the scientific program will be summarized. Vigorous discussion by all attendees is encouraged at these sessions.

Due to the record-breaking number of abstract submissions this year, we had no choice but to have separate poster sessions. Please adhere to the scheduled day for your poster display. Some of the most interesting work at our meetings often is in the posters, so please use the available time to view these and to interact with the authors. The meeting will conclude with a distinguished plenary session and, lastly, the awards ceremony for best oral and poster presentations by residents and fellows.

You will enjoy the opening reception and gala dinner at the meeting. First-time visitors should consider adding some time, before or after the meeting, to see the city and its environs. Take it from a gaijin, Tokyo is one of the most interesting and safe cities in the world, and quite easy to navigate.

Thanks for coming and for your support of the WSSFN. Please let us know your thoughts on the meeting and the society as we continue to grow. Your involvement is welcome and all it takes is enthusiasm and commitment!

Sincerely yours,

Michael Schulder, MD
Scientific Program Chair and Secretary-Treasurer, WSSFN
MEETING DIRECTORS

Takaoami Taira - Meeting Chairman
Michael Schuler - Scientific Program Chairman
Moijgan Hodaei - Scientific Program Co-chair
Joseph Neimat - Meeting Industry Relations Chairman
Joachim Krauss - Meeting Co-chairman
Jin Woo Chang - Meeting Co-chairman
Hiroki Toda - Meeting Co-chairman/Pre-meeting Symposium Chairman
Osvaldo Vilela Filho - Meeting Co-chairman

SPEAKERS AND MODERATORS

Aviva Abosch
University of Minnesota
Department of Neurosurgery
Minneapolis, USA

Feridun Acar
Pamukkale University
Denizli, Turkey

Ahmed Alkrcani
King Faisal Specialist Hospital and Research Centre
Riyadh, Saudi Arabia

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Jeffrey Arle
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Clinatec CEA Grenoble
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Umea University
Umea, Sweden

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University of Toronto
Toronto, Canada

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University Hospital of Lausanne
Lausanne, Switzerland

Patric Blomstedt
University Hospital of Umea
Umea, Sweden

Giovanni Brogi
Istituto Nazionale Neurologico
Milano, Italy

Brian Brophy
Royal Adelaide Hospital
Adelaide, Australia

Stephan Chabardes
University Hospital of Grenoble
Grenoble, France

Jin Woo Chang
Yonsei University College of Medicine
Seoul, South Korea

Mikhail Chernov
Tokyo Women’s Medical University
Tokyo, Japan

Larry Chin
SUNY Upstate Medical Center
Syracuse, USA

Volker Coenen
Freiburg University Medical Center
Freiburg (i.Br.), Germany

Youssef Comair
Gilbert and Rose-Marie Chagoury School of Medicine
Beirut, Lebanon

Philippe Cornu
Hôpital Pitité-Salpêtrière
Paris, France

Rees Cosgrove
Rhode Island Hospital OR
Lifespan
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St Andrews and Wesley Hospitals
Auchentflower, Australia

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School of Medicine
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Sao Paulo, Brazil

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Okayama University Medical School
Okayama, Japan

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Hôpital Beaujon
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UCLA Neurosurgery Department
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Massachusetts General Hospital
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University of Cape Town
Cape Town, South Africa

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Terpsithea-Larisa, Greece

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Toronto, Canada

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Tomokatsu Hori
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Tokyo, Japan

Zvi Israel
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Brain and Mind Research Institute
University of Sydney, Australia

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Tokyo, Japan

Takeshi Kawase  
Kiel University School of Medicine  
Tokyo, Japan

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Komaki City, Japan

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Calgary, Canada

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Saitama, Japan

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Icahn School of Medicine  
The Mount Sinai Hospital  
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Medical University of Hannover  
Hannover, Germany

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UCSF Medical Center  
San Francisco, USA

Jung Kyo Lee  
Department of Neurosurgery Asan Medical Center  
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Bengt Linderoth  
Karolinska University Hospital  
Stockholm, Sweden

Christine Lindquist  
Bupa Cromwell Hospital  
London, UK

Nir Lipsman  
University of Toronto  
Toronto, Canada

Andres Lozano  
University of Toronto  
Toronto, Canada

Guoiming Luan  
Sanbo Brain Institute  
Beijing, China

Geoff Lutjens  
Medical School Hanover  
Hanover, Germany

Andre Machado  
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Mayfield Clinic  
Cincinnati, USA

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Kiel, Germany

Bjorn Meyerston  
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Stockholm, Sweden

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Grenoble, France

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Sendai, Japan

Atsushi Nambu  
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Nashville, USA

Wai Hoe Ng  
National Neuroscience Institute  
Singapore

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U.Z. Gastroheub  
Leuven, Belgium

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Seoul, South Korea

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Albany, USA

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Buffalo, USA

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Ann Arbor, USA

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The Catholic University of Korea  
Seoul, South Korea

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Shanghai, China

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Tokyo, Japan

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Wade Huai-che Yang  
Taipei Veterans General Hospital  
Taipei, Taiwan

Ludovic Zrinzo  
UCL Institute of Neurology  
National Hospital for Neurosurgery and Neurology  
London, UK
## Monday, May 27, 2013

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>1:00 - 5:00 PM</td>
<td><strong>Workshop S1</strong> International Satellite Symposium on Neurosurgery for Psychiatric Disorders</td>
<td>Tokyo International Exchange Center - Heisei Plaza</td>
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<td><strong>Workshop S2</strong> Microrecording and Intraoperative Monitoring</td>
<td>Tokyo International Exchange Center- Heisei Plaza</td>
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<td>6:30 - 9:00 PM</td>
<td>Opening Reception: Promenade Deck Hotel Nikko</td>
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## Tuesday, May 28, 2013

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<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:00 AM</td>
<td>Registration Breakfast in meeting rooms</td>
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<tr>
<td>7:15 - 8:15 AM</td>
<td><strong>PEGASUS AB1</strong> Breakfast Seminar I: High Intensity Focused Ultrasound Moderators: Byung Chul Son/M. Sam Eljamel • HIFU for Pain: Nir Lipsman • Movement Disorders: Jin Woo Chang • Tumors: Jeffrey Elias</td>
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<td><strong>PEGASUS C</strong> Breakfast Seminar II: Pedunculopontine Neucleus: A Real Target? Moderators: Paolo Mazzone/Ludovic Zrinzo • Where is the PPN: Tipu Aziz • Clinical Results: Terry Coyne • A Skeptical Note: Feridun Acar</td>
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<td><strong>APOLLON</strong> Breakfast Seminar III: Clinical Trials in Functional Neurosurgery Moderators: Alexander Green/Antonio DeSalles • Movement disorders: Angelo Franzini • Psychiatric Neurosurgery: Keith Matthews • Surgery for Memory Enhancement: Andres Lozano</td>
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<td>8:30 - 9:00 AM</td>
<td><strong>PEGASUS AB1</strong> Plenary Session I: Emerging Technologies</td>
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<tr>
<td>9:00 - 9:10 AM</td>
<td>Presidential Address Takaomi Taira</td>
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<td>9:10 - 9:30 AM</td>
<td>In Memoriam: Prof. Fritz Mundinger Joachim Krauss</td>
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<td>9:10 - 9:30 AM</td>
<td>Keynote Address: From Lesioning to DBS and Beyond Andres Lozano</td>
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<td>10:30 - 10:50 AM</td>
<td>Refreshment Break - View Posters &amp; Exhibits - MEETING ROOM FOYER</td>
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<td>10:30 - 11:50 AM</td>
<td>Papers (4 papers - 8 minute presentations - 5 minute discussions)</td>
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<td>Moderators: Jeffrey Arle/Max Mehdorn</td>
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<td>10:50-11:03: Progress in Bionic Vision Devices (19) Jeffrey Rosenfeld</td>
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<td>11:20-11:33: Bone Marrow Stem Cells Intraspineal Infusion Technique as a Part of a Pilot Study in ALS (351) Pedro de la Rosa Jimenez</td>
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<td>11:50 - Noon</td>
<td>Spiegel and Wycis Awards Presented by Takaomi Taira and Joachim Krauss</td>
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<td>Noon - 1:30 PM</td>
<td>PEGASUS A81 Bento Box Debate I: The Future of Ablative Neurosurgery</td>
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<td>Moderators: Erica Petersen/Vladimir Shabalov</td>
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<td>• SRS: Christ Richard Lindquist</td>
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<td>• HIFU: Jin Woo Chang</td>
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<td>• LITT: Michael Schulder</td>
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<td>PEGASUS C Bento Box Debate II: Surgery for Depression: Which Site?</td>
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<td>Moderators: Brian Kopelli/Preash Doshi</td>
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<td>• Area 25: Clement Hamani</td>
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<td></td>
<td>• Nucleus Accumbens: Andre Machado</td>
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<td>• Dorosolateral PFC: Emad Eskandar</td>
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<td>APOLLON Bento Box Debate III: Stimulation for Epilepsy: Which Site?</td>
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<td>Moderators: David Roberts/Stephan Chadarb</td>
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<td>• Hippocampus: Francisco Velasco</td>
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<td>• Thalamic: Gordon Baltuch</td>
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<td>• Vagus: Kensuke Kawai</td>
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<tr>
<td>1:30 - 2:00 PM</td>
<td>Afternoon Session I: Movement Disorders</td>
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<td>Keynote Address: Lesioning, a 21st Century Treatment for Movement Disorders Takaomi Taira</td>
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<td>PEGASUS C Afternoon Session II: Epilepsy</td>
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<td>Keynote Address: Epilepsy Surgery and the Mind Itzhak Fried</td>
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<tr>
<td>2:00 - 3:00 PM</td>
<td>Papers (5 papers - 7 minute presentations - 3 minute discussions)</td>
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<td>Moderators: Michael Kaplitt/Christopher Honey</td>
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<td>2:00-2:10: Magnetic Resonance Guided Focused Ultrasound for Unilateral Thalamotomy in Medication Refractory Essential Tremor (28) Nir Lipsman</td>
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<td>2:12-2:22: High Frequency Stimulation at GPi Modules GMR 1b, CAMK2A and GAD1 Gene Expression (145) Xun Kiat Ho</td>
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<td>2:24-2:34: Health Economics and Surgical Treatment for Parkinson’s Disease in a World Perspective (312) Gaston Schechtman</td>
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<td>2:36-2:46: Double-Blind Comparison of Intraoperative Subthalamic High Frequency, Low Frequency and Sham Stimulation Effects on Verbal Fluency (311) Alexander I. Troster</td>
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<td>2:48-2:58: Involvement of Pedunculo-pontine (PPP) and Cuneiform Nuclei (CIN) in Bipedal Locomotor Behavior: Electrophysiological Study in Normal and Parkinsonian (MPTP) Primate (291) Laurent Goetz</td>
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<td>3:00 - 3:30 PM</td>
<td>Refreshment Break - View Posters &amp; Exhibits - Meeting Room Foyer</td>
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<td>PEGASUS AB1 Afternoon Session I: Movement Disorders</td>
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<td>Keynote Address: Epilepsy Surgery and the Mind Itzhak Fried</td>
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<td>APOLLON Afternoon Session III: Radiosurgery</td>
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<td>Keynote Address: Radiosurgery</td>
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<td>• Recent Trends in Stereotactic Radiosurgery for Multiple Brain Metastases Masaaki Yamamoto</td>
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<td>2:36-2:46: Delayed Contrast Extravasation MRI Differentiates Metastatic Tumor Progression from Radiation Necrosis after Radiosurgery (172) Roberto Spiegelman</td>
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<td>2:48-2:58: Long Term Result of Gamma Knife Treatment for Prolatinomas (73) Peng Li</td>
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<td>2:24-2:34: Time Delayed Contrast Enhanced MRI Improves Detection of Brain Metastases (352) Michael Schuler</td>
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<td>2:00-2:10: Clinician Preferences in Management of Trigeminal Neuralgia - A survey of Australian Neurosurgeons and Neurologists (164) Benjamin P. Jonker</td>
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<td>2:12-2:22: A New Grading System Focusing on Functional Preservation for Brain Metastasis Patients Treated With Stereotactic Radiosurgery (35) Toru Serizawa</td>
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<td>2:48-2:58: Delayed Contrast Extravasation MRI Differentiates Metastatic Tumor Progression from Radiation Necrosis after Radiosurgery (172) Roberto Schuster</td>
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<td>Time</td>
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<td>3:30 PM</td>
<td>PEGASUS AB1</td>
<td>Flash presentations (15 papers, 3 minutes each)</td>
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<td>(15 papers, 3 minutes each)</td>
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<tr>
<td>3:30 PM</td>
<td>PEGASUS AB1</td>
<td>Flash presentations (15 papers, 3 minutes each)</td>
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<td>Flash presentations (15 papers, 3 minutes each)</td>
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<tr>
<td>3:30 PM</td>
<td>APOLLON</td>
<td>Flash presentations (15 papers, 3 minutes each)</td>
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**Tuesday, May 28, 2013**
### Wednesday, May 29, 2013

#### Continental Breakfast in Meeting Rooms

**7:00 AM**

#### 7:15 - 8:15 AM

**PEGASUS AB1**

**Breakfast Seminar IV:** Restorative Neurosurgery  
**Moderators:** Wade Yang/Jeff Cozzens  
- Gene Therapy: Michael Kaplitt  
- Stem cells: Roy Bakay  
- Transplantation: Jocelyn Bloch

**PEGASUS C**

**Breakfast Seminar V:** Functional Stereotactic Radiosurgery  
**Moderators:** Yoshihisa Kida/Joseph Neimat  
- Movement Disorders: Larry Chin  
- Psychiatric Disorders: Rees Cosgrove  
- Pain: Motohiro Hayashi

**APOLLON**

**Breakfast Seminar VI:** Surgical Treatment of Head and Facial Pain  
**Moderators:** Tomokatsu Hori/Manoel Teixeira  
- Cluster Headaches: Denys Fontaine  
- Occipital Nerve Stimulation: Oren Sagher  
- Advanced Imaging in Trigeminal Neuralgia: Mojgan Hodaie

#### 8:30 - 8:35 AM

**Welcome**  
Michael Schulder

#### 8:35 - 9:00 AM

**Keynote Address:** The Neurophysiology of Functional Neurosurgery  
Yoichi Katayama

#### 9:00 - 10:35 AM

**Papers**  
(6 papers - 8 minute presentations - 5 minute discussions)  
**Moderators:** Jin Woo Chang/Mojgan Hodaie

**9:00-9:13:** Deep Brain Stimulation for Parkinson Disease - Results of the EARLYSTIM Study (190) Maximilian H. Mehdorn

**9:15-9:28:** Treatment of Memory Decline in Alzheimer’s Disease by Deep Brain Stimulation: A Feasibility Study (71) Denys Fontaine

**9:30-9:43:** Pedunculopontine nucleus-stimulation in patients with Advanced Parkinson’s disease (227) Mohammad J. Nausahi

**9:45-9:58:** Long Term Effects of Deep Brain Stimulation of the Medial Forebrain Bundle (slMFB DBS) for treatment resistant depression (173) Volker A. Coenen

**10:00-10:13:** Deep Brain Stimulation of the Subcallosal Cingulate Area for Treatment-Refractory Anorexia Nervosa: Phase I Pilot Trial (27) Nir Lipsman

**10:15-10:28:** A Randomized Blinded Trial of Nucleus Accumbens Ablation to Treat Opiate Dependence in Humans: Location Correlates with Outcome (270) Guodong Gao

**Refreshment Break - View Posters - Meeting Room Foyer**

**10:35 - 10:50 AM**

#### 10:50 AM - Noon

**Papers**  
(5 papers - 8 minute presentations - 5 minute discussions)  
**Moderators:** Hiroki Toda/Robert Gross

**10:50-11:03:** What Happened in the Lobotomized Brain?: Tractographic Analysis of Prefrontal lobotomy for Mental Illness (165) Katsushige Watanabe

**11:05-11:18:** Where the Parallels Meet: Evidence of Functional Convergence of Basal Ganglia Circuits in Subthalamic Nucleus From Intra-operative Multichannel-microelectrode Recording (332) Erich T. Fonoff


**11:35-11:48:** Nerve Fiber Composition of Posterior Subthalamic Area and its Relevance for the Treatment of Parkinson’s Disease Symptoms (77) Francisco Velasco

**11:50-12:03:** Modulation of Neural Network Excitability with an Implantable Closed-Loop DBS System (321) Paul Stypulkowski
<table>
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<tr>
<th>Time</th>
<th>Session/Debate/Sub-Session</th>
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| Noon - 1:30 PM | PEGASUS AB1 Bento Box Debate IV | Dystonia: DBS vs. Lesioning vs. Peripheral Procedures  
Moderators: Elena Moro/Claudio Pollo  
• DBS is Best: Ron Alterman  
• Lesioning is Best: Takaomi Taira  
• Peripheral is Best: Tommy Bergenheim |
|            | PEGASUS C Bento Box Debate V | Tourette’s Syndrome  
Moderators: Ashwin Viswanathan/Zelma Kiss  
• GPi: Philippe Cornu  
• Thalamus: Joachim Krauss  
• GPe: Osvaldo Vilela |
|            | APOLLON Bento Box Debate VI | Controversies in Psychiatric Neurosurgery  
Moderators: Marwan Hariz/Sally Rothemeyer  
• Surgery for Schizophrenia: Bomin Sun  
• Surgery for Aggression: Fabian Piedimonte  
• Not So Fast: Volker Coenen |
| 1:30 - 2:00 PM | PEGASUS AB1 Afternoon Session IV | From the Laboratory to the Clinic  
Keynote Address: The Hyperdirect Pathway and Motor Control  
Atsushi Nambu |
|            | PEGASUS C Afternoon Session V | Surgery for Pain: Only When Nothing Else Works?  
Keynote Address: Peripheral Nerve Stimulation for Pain  
Konstantin Slavin |
|            | APOLLON Afternoon Session VI | Stereotactic Technology  
Keynote Address: Stereotactic Principles: The Evolution of Image Guidance  
David Roberts |
| 2:00 - 3:00 PM | Afternoon Sessions | Papers  
(5 papers - 7 minute presentations - 3 minute discussions)  
Moderators: Zvi Israel/Moon Chan Kim  
2:00-2:10: in Vivo Brain Repair? Electrical Fields Attract Newborn Brain Cells  
(Ali Jahanshahi)  
2:12-2:22: Deep Brain Stimulation of the Cm-pf in Rats Alleviate Breeding-induced Deficient Prepulse Inhibition  
(Mesbah Alam)  
2:24-2:34: Theta Burst Stimulation of the Hippocampus Via an Electrode Implanted in the Fornix Is Associated With Improved Cognitive Performance After Moderate Traumatic Brain Injury  
(Jonathan Miller)  
2:36-2:46: Recordings of Local Field Potentials in the Bed Nucleus of the Stria Terminalis in a Rat Model of Obsessive-Compulsive Disorder  
(Hemmings Wu)  
(Stephan Chabardes) |
|            | Papers | (5 papers - 7 minute presentations - 3 minute discussions)  
Moderators: Juan Barcia/Bengt Linderoth  
2:00-2:10: Motor Cortex Stimulation Efficacy in Refractory Neuropathic Pain Might Be Predicted by Brain 11C-diprenorphine Pet-scans  
(Patrick Mertens)  
2:12-2:22: Simultaneous Trial of Deep Brain Stimulation (DBS) and Motor Cortex Stimulation (MCS) for Chronic, Intractable Neuropathic Pain  
(Byung-chul Son)  
2:24-2:34: Differential Efficacy of Motor Cortex Stimulation and Lesioning of the Dorsal Root Entry Zone for Continuous Vs Paroxysmal Pain Afterroot Avulsion  
(Youichi Saitoh)  
(Fahid T. Rasul)  
2:48-2:58: Rechargeable Occipital Nerve Stimulator Systems a Patient Satisfaction Study  
(Sara Sciacc) |
|            | Papers | (5 papers - 7 minute presentations - 3 minute discussions)  
Moderators: Rick Schuurman/Masahito Kobayashi  
2:00-2:10: Steering Deep Brain stimulation: an exploratory study with a new 32-contact lead  
(Rick Schuurman)  
2:12-2:22: Convection Enhanced Delivery: Infusion characteristics in ex vivo and in vivo non-human primate brain tissue  
(Gurwattan S. Miranpuri)  
2:24-2:34: Accuracy of Electrode Placement, Clinical Response and Complication rate in Frameless Stereotaxis (NexFrame) for Movement disorders  
(Matthew G. Stovell)  
2:36-2:46: Validating Diffusion Tensor Imaging of the Thalamus with Intraprocedural Microelectrode Recording  
(Hiroki Toda)  
(Sarah L. Olson) |
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<th>Time</th>
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<tr>
<td>3:30 - 3:33 PM</td>
<td>PEGASUS C</td>
<td>Flash presentations (15 papers, 3 minutes each)</td>
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<td>Moderators: Brian Brophy/Miroslav Galanda</td>
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<td>3:30-3:33: Stereotactic Thalamic Vicpexc Stimulation for the Treatment of Cases with Central Post-stroke Pain (70) Masafumi Hirato</td>
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<td>3:38 - 3:41 PM</td>
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<td>Deep brain stimulation in Short Lasting Unilateral Headache with Conjunctival Inflammation and Tearing (SUNCT) (181) Sarah Miller</td>
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<td>3:42-3:45: Implanted Occipital Nerve Stimulation Results for Intractable Headache Predicted by Transcutaneous Electrical Nerve Stimulation (303) Vincent Roualides</td>
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<td>3:46-3:49: Pulsed Radiofrequency of Sympathetic Lumbar Plexus Versus Sympathetic Block in the Management of Lower Limb Complex Regional Pain Syndrome Type 1 (324) Tiago S. Freitas</td>
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<td>3:50-3:53: Potential Role of L-PGDS as a Surrogate Marker of Frontal Lobe Dysfunction (47) Namiko Nishida</td>
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<td>3:54-3:57: Subthalamic Nucleus Stimulation Reverses Spinal Motoneurone Activity in Parkinsonian Patients (59) Sylvie Raoul</td>
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<td>3:58 - 4:01 PM</td>
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<td>Different Performance Between Food Reaching Motors and Finger Precise Motors Ameliorated by STN-DBS in MPTP-treated Monkeys (118) Tetsuya Asakawa</td>
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<td>4:02-4:05: Isolation and Transplantation Protocol of Human Fetal Neural Progenitor Cells in the Treatment of Huntington’s and Parkinson’s Disease (203) William O. Contreras Lopez</td>
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<td>4:06-4:09: A Novel Intraoperative Method for Monitoring Hyperacutae Changes in Cerebral Ischemia (361) Hiroshi Fujikawa</td>
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<td>4:10-4:13: Neurophysiological Characteristics of Subthalamic Neurons Receiving Inputs From the Limbic Cortex (376) Sumito Sato</td>
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<td>4:14-4:17: Anatomic Study of Fiber Tracts Linking the Basal Ganglia and Cerebellum in Patients with Parkinson’s Disease (49) Jennifer A. Sweet</td>
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<td>4:18-4:21: Selective Dorsal Rhizotomy for Neoplastic lumbosacral plexopathy in terminal pelvic cancer (40) Byung-chul Son</td>
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<td>4:39 - 4:42 PM</td>
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<td>4:40 - 5:30 PM</td>
<td>Plenary Session: Scientific Highlights and Discussion, Day 2</td>
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<td>Moderators: Alon Mogilner/Ahmed Al-Khani</td>
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<td>Discussants: Travis Tierney/Alexandre Francisco</td>
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<td>7:00 - 10:00 PM</td>
<td>Gala Reception and Dinner</td>
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<td>7:00 AM</td>
<td>Breakfast in meeting rooms</td>
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<td>Neurosurgery: Training, Education and Expansion</td>
<td>Moderators: Isao Date/Rick Schuurman</td>
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<td>- Spectrum of Fellowships in SFN: Gaston Schechtman</td>
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<td>- Setting Up a Program in Functional Neurosurgery: Erich Richter</td>
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<td>- Do We Need International Fellowship Standards? Mojgan Hodaie</td>
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<td>Moderators: Julie Piltis/Guoming Luan</td>
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<td>- Epilepsy: Eiju Watanabe</td>
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<td>- Cognition: Emad Eskandar</td>
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<td>- Ethical Considerations: Mark Bernstein</td>
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<td>Neurosurgery: Training, Education and Expansion</td>
<td>Moderators: Masaaki Yamamoto/Dheerendra Prasad</td>
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<td>- Fractionation: Roberto Spiegelmann</td>
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<td>- Microbeam Radiosurgery: Pantaleo Romanelli</td>
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<td>- Heavy Particles: Takeshi Kondo</td>
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<td>8:00 AM</td>
<td>Plenary Session III</td>
<td>PEGASUS A81: Plenary Session III: New Indications for Functional Neurosurgery</td>
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<tr>
<td>8:00 AM</td>
<td>Welcome</td>
<td>Welcome: Joachim Krauss</td>
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<tr>
<td>8:00 AM</td>
<td>Keynote Address: Surgery for Neurobehavioral Disorders</td>
<td>Keynote Address: Surgery for Neurobehavioral Disorders: Ali Rezai</td>
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<tr>
<td>8:30 AM</td>
<td>Papers</td>
<td>Papers: Aviva Abosch/Patric Blomsted</td>
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<tr>
<td>9:00 AM</td>
<td>Papers</td>
<td>9:05-9:18: Deep Brain Stimulation of the Fornix and Entorhinal Cortex in an Experimental Model of Memory Impairment (379) Ali Jahanshahi</td>
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<td>9:00 AM</td>
<td>Papers</td>
<td>9:20-9:33: Results of Neuromodulation of the Posterolateral Hypothalamic Region in Cluster Headache. Are We on the Right Place? (90) Fernando Seijo</td>
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<td>10:20 AM</td>
<td>Refreshment Break and View Posters</td>
<td>Refreshment Break and View Posters: Meeting Room Foyer</td>
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<tr>
<td>11:00 AM</td>
<td>WSSFN Business Meeting</td>
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<td>Noon - 1:30 PM</td>
<td><strong>Bento Box Debates</strong>&lt;br&gt;PEAGSUS AB1&lt;br&gt;Bento Box Debate VII: New Indications: When to Push the Limits&lt;br&gt;<strong>Moderators:</strong> Damianos Sakas/Ben Jonker&lt;br&gt;• DBS for Obesity: Donald Whiting&lt;br&gt;• DBS for Tinnitus: Paul Larson&lt;br&gt;• Not So Fast: Roy Bakay</td>
<td>PEGASUS AB1</td>
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<td>1:30 - 2:00 PM</td>
<td><strong>Keynote Address:</strong> Guidelines for Psychiatric Neurosurgery&lt;br&gt;Bart Nuttin</td>
<td>PEGASUS AB1</td>
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<td>3:00 - 3:30 PM</td>
<td><strong>Refreshment Break - View Posters &amp; Exhibits - Meeting Room Foyer</strong></td>
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<tr>
<td>3:30 - 4:00 PM</td>
<td><strong>Keynote Address:</strong> Looking Back and Ahead in Functional Neurosurgery - Where We Came From, and Where Are We Heading&lt;br&gt;Alim Benabid</td>
<td>PEGASUS AB1</td>
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<td>4:00 - 5:00 PM</td>
<td><strong>Papers</strong>&lt;br&gt;(4 papers - 8 minute presentations - 5 minute discussions)&lt;br&gt;<strong>Moderators:</strong> Volker Sturm/Takeshi Kawase&lt;br&gt;4:00-4:13: Anatomo-radiologic Correlation To Achieve Maximum Accuracy in Leads Implantation for Chronic Stimulation of Sphenopalatine Ganglion (215) Fabian C. Piedmonte&lt;br&gt;4:15-4:28: Deep Brain Stimulation Induces Changes in Cerebral Perfusion in Patients With Tourett e Syndrome (210) Goetz Lutjens&lt;br&gt;4:30-4:43: Localisation of the Subthalamic Nucleus in Parkinson’s Disease with Neural Beta and Gamma Activity of Local Field Potentials (345) Rick Schaumann&lt;br&gt;4:45-4:58: Deep Brain Stimulation for the Early Treatment of the Minimal Coscious Sate and Vegetative State (201) Darko Chudy</td>
<td>PEGASUS AB1</td>
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<td>5:00 - 5:30 PM</td>
<td><strong>Closing Ceremony</strong>&lt;br&gt;Resident Awards</td>
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At Medtronic, we’re committed to innovating for life by pushing the boundaries of medical technology and changing the way the world treats chronic disease. Last fiscal year, more than eight million patients benefited from our products and therapies. Medtronic DBS Therapy has been used in more than 100,000 patients worldwide for the treatment of Parkinson’s disease, essential tremor and dystonia.

Founded in 1999, InSightec Ltd. is a privately held innovative medical device company that has developed the breakthrough MR guided Focused Ultrasound (MRgFUS) technology and transformed it into a next generation operating room. Headquartered in Israel, the company has invested in research, development, and clinical investigations of its ExAblate system to thermally ablate tumors inside the body – incision-less, with real-time anatomic and thermal feedback. ExAblate is currently used to treat uterine fibroids as well as for pain palliation of bone metastases. ExAblate Neuro has been developed for transcranial, functional stereotactic applications and has received CE mark for treating essential tremor, tremor dominant Parkinson’s disease and neuropathic pain. Other applications of focused ultrasound neurosurgery are under clinical investigation. More information at www.Insightec.com

St. Jude Medical develops medical technology and services that focus on putting more control into the hands of those who treat cardiac, neurological and chronic pain patients worldwide. SJM has provided leading neurostimulation therapy innovations for 30 years. The company is dedicated to advancing the practice of medicine by reducing risk wherever possible and contributing to successful outcomes for every patient.

Innsbruck-based MED-EL Medical Electronics is a leading provider of hearing implant systems worldwide. The family-owned business is one of the pioneers in the industry. The two Austrian scientists Ingeborg and Erwin Hochmair developed the world’s first microelectronic-multichannel Cochlear-Implant in 1977. The cochlear implant was and remains the first replacement of a human sense, the sense of hearing. In 1990 they laid the foundation for the successful growth of the company when they hired their first employees. To date, the company has grown to more than 1400 employees around the world.

Today, Elekta solutions in oncology and neurosurgery are used in over 6,000 hospitals worldwide. Elekta employs around 3,400 employees globally and the corporate headquarters is located in Stockholm, Sweden. Website: www.elekta.com

Alpha Omega has been known in the industry for more than two decades, as a global leader in the fields of Functional Neurosurgery and Neuroscience Research, offering its clients breakthrough technology, unrivalled dependability, and dedicated service. For Functional Neurosurgery, Alpha Omega offers Microelectrode recording (MER) equipment for Deep Brain Stimulation (DBS) procedures along with powerful research capabilities.

For Neuroscience Research, Alpha Omega offers variety of powerful electrical and mechanical solutions in the field of In-Vivo extracellular recording, allowing neuroscientists to discover brain signals even in the resolution of a single cell activity.

Renishaw is applying cutting-edge precision engineering technology to the challenges of functional neurosurgery. We are helping leading clinicians to enhance the safety and cost-effectiveness of their procedures, improving patient outcomes through consistently accurate delivery of implantable devices.

The neuronmate® stereotactic robot provides a platform solution for a broad range of functional neurosurgical procedures.

neuronmate® has been used in thousands of electrode implantation procedures for Deep Brain Stimulation (DBS), Stereotactic Electroencephalography (SEEG), neuroendoscopy, biopsy, as well as R&D applications in radiosurgery, drug delivery and Transcranial Magnetic Stimulation.

Elekta is a human care company pioneering significant innovations and clinical solutions for treating cancer and brain disorders. The company develops sophisticated, state-of-the-art tools and treatment planning systems for radiation therapy, radiosurgery and brachytherapy, as well as workflow enhancing software systems across the spectrum of cancer care. Stretching the boundaries of science and technology, providing intelligent and resource-efficient solutions that offer confidence to both healthcare providers and patients, Elekta aims to improve, prolong and even save patient lives.

Today, Elekta solutions in oncology and neurosurgery are used in over 6,000 hospitals worldwide. Elekta employs around 3,400 employees globally and the corporate headquarters is located in Stockholm, Sweden. Website: www.elekta.com.
Brainlab develops, manufactures and markets software-driven medical technology, enabling access to improved, more efficient, less-invasive patient treatments.

Core products revolve around less-invasive image guided surgery technology, more accurate and effective radiation therapy, and integration through planning and collaboration systems that bring patient data and physicians together.

Brainlab technology currently powers treatments in the fields of neurosurgery, radiation oncology, orthopedics, ENT, CMF, spine, trauma and radiology.

Privately held since its formation in Munich, Germany in 1989, Brainlab has more than 5,000 systems installed in about 80 countries. Brainlab employs 1,120 people in 17 offices worldwide, including 290 Research & Development engineers, who form a crucial part of the product development team.
WSSFN Travel Awards

This year, the World Society is pleased to offer a large number of travel grants to residents and fellows participating in the quadrennial meeting in Tokyo. These grants, based on scientific merit and geographical location, have been made available to facilitate attendance to the meeting and are a direct reflection of the society’s mandate of nurturing the field stereotactic and functional neurosurgery across the globe.

The society wishes to recognize and encourage strong scientific contributions to the field internationally, while promoting the field of stereotactic and functional neurosurgery in areas where it is not easily available. We are encouraged by the strong participation and interest during the WSSFN interim meeting of the society in South Africa, 2011. As a result, a number of travel awards have been made available to participants from Africa. We are confident of the fruitful outcome that accompanies increasing international participation and collaboration.

I would like to acknowledge the invaluable contributions of Dr. Joseph Neimat, Vanderbilt University, and Dr. Graham Fieggen, University of Cape Town, in the selection process of the awardees.

The travel grant awardees of the 16th quadrennial meeting of the WSSFN are as follows:

Jason Agran - United States
Mawuli Ametefe - Ghana
Pedro de la Rosa - Spain
Anna Gamalya - Russia
David Kis - Hungary
Nan Li - China
C.C. Liao - Taiwan
Querchefani Naoufel - Tunisia
Naomi Ochieng’ - Kenya
Taopheeq Rabiu - Nigeria
Fahid Rasui - United Kingdom
Jie Ren - China
Anand Rughani - Canada
Samuila Sanoussi - Niger
Demitre Serletis - United States
Krzysiek Szalecki - Poland
Hemmings Wu - Belgium

It has been a pleasure to participate in the selection of the travel awards and we welcome you all to Tokyo!

Mojgan Hodaie
Scientific Program co-Chair and Travel Awards Coordinator