

WSSFN 15th Quadrennial Meeting

Sunday, May 24, 2009

9:00 AM – 5:00 PM

Symposium S3: Microelectrode Recording and Intraoperative Electrophysiology

Chairs: Jonathan Dostrovsky / William Hutchison / Jay Shils

9:00 AM - 3:00 PM – Microelectrode Recording

3:00 – 5:00 PM – Intraoperative Monitoring

Lunch will be provided

Additional registration fee of \$100 (not included as part of the WSSFN Meeting registration).

1:00 PM – 5:00 PM

Workshop SI: Stereotactic Approaches: Technical Advances

Session Chair: Michael Schulder

Moderators: Michael Schulder / John Adler Jr.

DBS: Medtronic - Kathryn Holloway

DBS: Rapid Prototyped Stereotactic Frames - Peter Konrad

Frame-Based DBS Advances – Paolo Mazzone

Stereotactic Atlases- Philippe Cornu

SRS: Cyberknife - Pantaleo Romanelli

SRS: Novalis - Antonio F. DeSalles

Gamma Knife Perfexion – Jean Régis

Workshop S2: Building a Functional Neurosurgery Program

Chair: Marwan Hariz

Moderators: Marwan Hariz / Gordon Baltuch

Clinical Practice: Movement Disorders – TBA

Clinical Practice: Pain - Alon Mogilner

Emerging Applications of DBS and Functional Neurosurgery - Angelo Franzini

Research: Basic Science - Tipu Aziz

Research: Clinical - Jaimie Henderson

Marketing - Zvi Israel

3:00 – 3:30 pm Refreshment Break

6:30 PM – 9:00 PM

Opening Reception (Business Attire)

Monday, May 25, 2009

7:15 AM – 8:15 AM

Continental Breakfast Seminar MB I: Neuromodulation for Pain

Moderators: Ronald Tasker / Thomas Gasser

Peripheral Nerve Stimulation for Pain Control - Konstantin Slavin

Spinal – Bengt Linderöth

Intrathecal – Krishna Kumar

Craneofacial Pain – Fabian Piedimonte

Continental Breakfast Seminar MB II: Intraoperative Imaging

Moderators: Walter Hall / Moshe Hadani

iMRI - Antonio DeSalles

iMRI - David Roberts

iCT - Philip Cornu

Intraoperative 3D Ultrasound - Geirmund Unsgaard

Continental Breakfast Seminar MB III: Global Standards for Functional NS

Moderators: Mojgan Hodaie / Kostas Fountas

South America – Manoel Teixeira

Middle East – Ahmed Alkhani

Africa – Roger Melvill

South Asia – Paresh Doshi

East Asia - Bomin Sun

8:30 AM – 12:00 Noon

Plenary Session I: The Cutting Edge

Moderators: Joachim Krauss / Philip Gildenberg

8:30 AM – 8:45 AM

Welcome and Opening Remarks- Andres Lozano

8:45 – 9:10 AM

Functional Neurosurgery: A Journey From Past to Present - Alim Benabid

9:10 AM – 10:15 AM

Open Papers

9:10 – 9:23 AM

Refractory Chronic Cluster Headache treated by Deep Brain Stimulation: a Multicentric Randomized Placebo-controlled Double-blind Trial

Denys Fontaine

9:23 – 9:36 AM

Augmenting Hippocampal Neurogenesis Using Targeted Brain Stimulation: Implications For Memory Networks

Scellig Stone

9:36 – 9:49 AM

Encapsulated Cell Biodelivery of Nerve Growth Factor to the Cholinergic Basal Forebrain of Alzheimer's Disease Patients

Per Almqvist

9:49 – 10:02 AM

Motor Cortex Stimulation Inhibits Thalamic Activity and Enhances Firing of PAG Neurons: Possible Pathways for Antinociception

Erich Fonoff

10:02 – 10:15 AM

Neural Grafts in Patients with Parkinson's and Huntington's Diseases Undergo Long-term Disease Specific Neuronal Degeneration via Different Mechanisms

Thomas Freeman

10:15 AM – 10:45 AM

Refreshment Break – View Posters & Exhibits

10:45 AM – 11:37 AM

Moderators: Alim Benabid / Max Mehdorn

Open Papers

10:45 – 10:58 AM

Deep Brain Stimulation in the Nucleus Accumbens for Refractory Anorexia Nervosa
Dianyou Li

10:58 – 11:11 AM

Involvement of the Middle Short Gyrus of the Insula in Pain Processing: Study by Electric Stimulation Intracerebral
Afif Afif

11:11 – 11:24 AM

Changes In Regional Cerebral Blood Flow By Deep Brain Stimulation On Bilateral Anterior Thalamic Nuclei In Patients With Intractable Epilepsy
Kyung Jin Lee

11:24 – 11:37 AM

Cerebrospinal Stimulation Therapy for the Treatment of Vegetative State and Minimally Conscious State
Takamitsu Yamamoto

11:37 AM – 12:00 Noon

**Spiegel and Wycis Awards
Presented by Andres Lozano and Joachim Krauss**

Noon – 1:30 PM

Lunch

History of the WSSFN - Philip Gildenberg

1:30 PM – 4:30 PM

Afternoon Session I: Pain

1:30 PM – 2:00 PM

Moderators: Damianos Sakas / Nicholas Boulis

Keynote Address: Imaging and Brain Function
Karen Davis

2:00 PM – 2:52 PM

Open Papers

2:00 – 2:13 PM

The effect of pituitary stalk radiosurgery for bone metastatic cancer pain
Jung Lee

2:13 – 2:26 PM

Patterns of Subcortical Neuronal Activation Induced by Motor Cortex Stimulation in Naive Rats and its Parallels in an Experimental Neuropathic Pain Model

Erich Fonoff

2:26 – 2:39 PM

Cortical Thickness Analysis In Trigeminal Neuralgia Reflects Unique Changes Related To Treatment Effect

Mojgan Hodaie

2:39 – 2:52 PM

Suppression of Nociceptive Pain by Focal Brain Cooling: An Animal Study

Hiroshi Fujioka

2:52 PM – 3:30 PM

Refreshment Break – View Posters & Exhibits

3:30 PM – 4:22 PM

Moderators: Jeffrey Brown / Mario Meglio
Open Papers

3:30 – 3:43 PM

Preoperative Imaging in Type 2 Trigeminal Neuralgia

Andrew Zacest

3:43 – 3:56 PM

Intrathecal Clonidine and Baclofen Produce an Enhancement Of Pain Relieving Effect By Spinal Cord Stimulation

Gaston Schechtmann

3:56 – 4:09 PM

Diffusion Tensor Imaging (DTI) and 3D Fast Imaging (3D FIESTA) in the Evaluation of Microstructural Changes of the Trigeminal Nerves in Patients with Trigeminal Neuralgia (TN)

Jan Mehrkens

4:09 – 4:22 PM

A Novel Surgical Target of Thalamic Reticular Nucleus for the Control of Chronic Pain

Young Soo Kim

Afternoon Session II: Epilepsy

1:30 PM – 2:00 PM

Moderators: George Ojemann / Youssef Comair

Keynote Address: The Present and Future Management of Patients with Epilepsy
George Ojemann

2:00 PM – 2:52 PM

Open Papers

2:00 – 2:13 PM

Deep Brain Stimulation of the Mammillothalamic Tract for the Treatment of Epilepsy

Shazia Javed

2:13 – 2:26 PM

Genetic Characterization of a Syndromic Cortical Dysplasia and the Development of a Small Animal Model
Gregory Heuer

2:26 – 2:39 PM

Coordinated Neocortical Dynamics Underlying Phonological Target Detection
Edward Chang

2:39 – 2:52 PM

Outcome after Cortico-Amygdalo-Hippocampectomy In Patients With Refractory Temporal Lobe Epilepsy And Mesial Temporal Sclerosis Without Pre-Operative Ictal Recording
Arthurt Cukiert

2:52 PM – 3:30 PM

Refreshment Break – View Posters & Exhibits

3:30 PM – 4:22 PM

**Moderators: Joshua Rosenow / G. Rees
Cosgrove
Open Papers**

3:30 – 3:43 PM

Outcome After Cortico-amygdalo-hippocampectomy According To Pre-operative Magnetic Resonance Findings
Arthurt Cukiert

3:43 – 3:56 PM

Focal Brain Cooling for the Treatment of Intractable Epilepsy
Sadahiro Nomura

3:56 – 4:09 PM

Neuropathological findings of Amygdala and Hippocampus after Subtemporal Amygdalohippocampectomy for medically intractable Temporal Lobe Epilepsy
Tomokatsu Hori

4:09 – 4:22 PM

Surgical Treatment of 18 Patients with Rasmussen's Encephalitis
Guoming Luan

4:30 PM – 5:00 PM

Afternoon Plenary Session I-II

Debate: MCS is an Effective Treatment for Pain

Debate Chair: Robert Coffey

Pro: - Yves Keravel

Con: - Joshua Rosenow

5:00 PM – 5:30 PM

Afternoon Session I-II

Debate: SRS Can Cure Epilepsy

Debate Chair: Itzhak Fried

Pro: - Jean Régis
Con: - Robert Gross

Tuesday, May 26, 2009

7:15 AM – 8:15 AM

Continental Breakfast Seminar TM I: DBS of the PPN: Impact of Location

Moderators: Jorge Guridi / Massimo Scerrati

Europe – Paolo Mazzone

Australia / Oceania - Terry Coyne

North America - Andres Lozano

Continental Breakfast Seminar TM II: Functional Radiosurgery

Moderators: Chihiro Ohye / Alain deLotbiniere

Movement Disorders - Douglas Kondziolka

Epilepsy - Nicholas Barbaro

Pain - Joseph Chen

Continental Breakfast Seminar TM III: Psychiatric Neurosurgery and Society: Worldwide Experience

Moderators: Zelma Kiss / Aviva Abosch

Japan - Takaomi Taira

Europe - Bart Nuttin

North America - Rees Cosgrove

South America – Luis Fernando Martins

8:30 AM – 12:00 Noon

Plenary Session II: Psychiatric Disorders

8:30 AM – 8:35 AM

Welcome: Michael Schulder

8:35 AM – 9:15 AM

Moderators: Francois Alesch / Ali Rezai

Keynote Address: The Science of Modern Psychiatric Neurosurgery

Helen Mayberg

9:15 AM – 10:20 AM

Open Papers

9:15 – 9:28 AM

Volumes of Tissue Activated by Deep Brain Stimulation for Neuropsychiatric Disorders and Their Correlation to Therapeutic Outcomes

Luis Lujan

9:28 – 9:41 AM

Deep Brain Stimulation of the Medial Prefrontal Cortex induces a Serotonin dependent Antidepressant-like response in Rats

Clement Hamani

9:41 – 9:54 AM

Multiple Targets for Deep Brain Stimulation (dbs) for The Treatment Of Refractory Tourette's Syndrome (rts): Our Experience With A Long-term Follow-up Evaluation
Domenico Servello

9:54 – 10:07 AM

Deep Brain Stimulation of Different Anatomical Structures in Therapeutically Refractory Tourette-Syndrome
Doris Lenartz

10:07 – 10:20 AM

Systematic Review of Cingulotomy and Implications for Trial Design
Imran Puneekar

10:20 AM – 10:50 AM

Refreshment Break – View Posters & Exhibits

10:50 AM – 11:16 AM

Moderators: Osvaldo Vilela, Jr. / Giovanni Broggi

Open Papers

10:50 – 11:03 AM

Long-Term Follow-Up of Capsulotomy in Shanghai: Results beyond Numbers
Hemmings Wu

11:03 – 11:16 AM

MRI Guided Bilateral Capsulotomy For Refractory Schizophrenia: 2 Years Follow-up Results
Bomin Sun

11:16 – 11:42 AM

The Ethics of Clinical Trials - Mark Bernstein

11:45 AM – 1:30 PM

Box Lunch

Poster Viewing and Judging

1:30 PM – 4:30 PM

Afternoon Session III: Psychiatric Disorders

1:30 PM – 2:00 PM

Moderators: Bomin Sun / Bjorn Meyerson

Keynote Address: A Psychiatric Primer for Neurosurgeons – Peter Giacobbe

2:00 PM – 2:52 PM

Open Papers

2:00 – 2:13 PM

Lesions Of The Rat Entopeduncular Nucleus Prevent Apomorphine-Induced Deficient Sensorimotor Gating And Motor Hyperactivity
Kerstin Schwabe

2:13 – 2:26 PM

Nucleus Accumbens Deep Brain Stimulation in refractory Tourette Syndrome: Our experience with de-novo and rescue surgery in 4 patients
Domenico Servello

2:26 – 2:39 PM

Bilateral Globus Pallidus Internus Stimulation for Intractable Gilles de la Tourette Syndrome
Jan Mehrkens

2:39 – 2:52 PM

Bilateral GPe-DBS for the Treatment of Refractory Tourette Syndrome
Osvaldo Vilela, Jr.

2:52 PM – 3:30 PM

Refreshment Break – View Posters & Exhibits

3:30 PM – 4:22 PM

Moderators: Robert Goodman / Christopher Honey

3:30 – 3:56 PM

Surgical Modulation in Patients with Eating Disorders - Michael Oh

Open Papers

3:56 – 4:09 PM

Impact of Lateral Hypothalamic DBS on Intake and Body Composition in Rats
Ellen Air

4:09 – 4:22 PM

Reduction in Fat Mass, but not in Food Intake, During Hypothalamic DBS In Monkeys
Napoleon Torres-Martinez

**Afternoon Session IV:
Neuronavigation**

1:30 PM – 2:00 PM

Moderators: Mitsunori Matsumae / Michael Oh

Keynote Address: Stem Cells and Brain Tumors - Peter Dirks

2:00 PM – 2:52 PM

Open Papers

2:00 – 2:13 PM

Wireless Instantaneous Neurotransmitter Concentration System (WINCS) Compatibility in the High Field MR environment
Stephan Goerss

2:13 – 2:26 PM

Deep Brain Stimulation: Simulation And Assessment Of Vascular Damage Using 7T Scans
Wieslaw Nowinski

2:26 – 2:39 PM

Semi-Automated Detection Algorithm for Routine Localization of Deep Brain Stimulation Electrodes using Extended Hounsfield Unit CT-MRI co-registration
Adam Hebb

2:39 – 2:52 PM

Stereotactic Biopsy With Intraoperative MRI Guidance
Michael Schulder

2:52 PM – 3:30 PM

Refreshment Break – View Posters & Exhibits

3:30 PM – 4:22 PM

Moderators: Patrick Kelly / Andrew Zacest

Open Papers

3:30 – 3:43 PM

Tractography DTI, Functional MRI and Intraoperative Mapping. New Technique of Image-Guided Navigation of Brain Tumors
Pedro Roldan

3:43 – 3:56 PM

The Relationship between Hearing Preservation and Cochlear Dose in Acoustic Neuroma Patients Treated with Gamma Knife Radiosurgery
Rupesh Kotecha

3:56 – 4:09 PM

Violating The Ventricular Wall Increases Length Of Stay Following Subthalamic DBS Surgery For Parkinson's Disease
Yakov Gologorsky

4:09 – 4:22 PM

Gamma Knife Radiosurgery for Epilepsy: Clinical Outcome of 11 Cases
Jung-Il Lee

4:30 PM – 5:00 PM

Afternoon Session III-IV

Debate: Frames are Obsolete

Debate Chair: Joseph Neimat

Pro: - Jaimie Henderson

Con: - Ron Alterman

5:00 PM – 5:30 PM

Afternoon Session III-IV

Debate: Lesioning for Psychiatric Disorders is Obsolete

Debate Chair: Rees Cosgrove

Pro: - Bart Nuttin

Con: - M. Sam Eljamel

6:30 PM – 10:00 PM

Gala Reception and Dinner (Business Attire)

Wednesday, May 27, 2009

7:15 AM – 8:15 AM

Breakfast Seminar WB I: DBS for Epilepsy

Moderators: Francisco Velasco-Campos / Andrew Parrent

Hippocampus – Dirk van Roost

Thalamus - Michael Kaplitt

Neuropace - Robert Wharen

Breakfast Seminar WB II: Surgical Treatment of NPH

Moderators: Peter Black / Ethan Taub

Pathophysiology - Richard Penn

Diagnosis of NPH - Joachim Krauss

Surgery – Daniele Rigamonti

Breakfast Seminar WB III: Surgical Treatment of Spasticity

Moderators: Jairo Espinoza / Ahmed Alkhani

Dorsal Rhizotomy – Leland Albright

Intrathecal Infusion -Takaomi Taira

Neurotomy – Marc Sindou

8:30 AM – 11:40 AM

Plenary Session III: Movement

Disorders

8:30 AM – 8:35 AM

Welcome: Joachim Krauss

8:35 AM – 9:10 AM

Moderators: Takaomi Taira / Jurgen Voges

Keynote Address: Quo Vadis? - Michael Apuzzo

9:10 AM – 10:15 AM

Open Papers

9:10 – 9:23 AM

Benefit And Anatomic-clinical Correlation Of Deep Brain Stimulation Of The Pedunculopontine Nucleus In Parkinson's Disease: Preliminary Results

Stephan Chabardes

9:23 – 9:36 AM

Thalamic and Subthalamic DBS in the Treatment of Essential Tremor

Patric Blomstedt

9:36 – 9:49 AM

Comparison of Surgical Outcomes with Unilateral, Staged Bilateral, and Bilateral Subthalamic Stimulation for Advanced Parkinson's Disease

Hiroki Toda

9:49 – 10:02 AM

The Effect Of Bilateral Subthalamic Deep Brain Stimulation On Decision Making In Parkinson's Disease

Genko Oyama

10:02 – 10:15 AM

Neuronal-specificity, Transduction Efficiency and Caspase-3 Activation Following Convection-infusion of AAV2 Serotypes to the Rhesus Striatum

Travis Tierney

10:15 AM – 10:40 AM

Break

10:40 AM – 11:32 AM

Moderators: Jin Woo Chang / Roy Bakay

Open Papers

10:40 – 10:53 AM

STN DBS Halts Dopamine Neuron Degeneration and Upregulates Striatal BDNF in a Parkinsonian Rodent Model

Anne Spieles-Engemann

10:53 – 11:06 AM

Transplantation of Ectopic Dopaminergic Neurons located in the Rostral Hindbrain of En1+/Otx2lacZ Transgenic Mice

Guido Nikkhah

11:06 – 11:19 AM

Primate Adult Brain Cell Autotransplantation In A Monkey MPTP Model Of Parkinson's Disease

Jocelyne Bloch

11:19 – 11:32 AM

Fetal Neural Transplantation in Huntington's Disease: Detailed Histological Evaluation in an Early Postgrafting Period

Guido Nikkhah

11:40 AM – 12:00 Noon

WSSFN Business Meeting

Noon – 1:30 PM

Sit Down Lunch

History Talk

Personal Reflections on Functional Neurosurgery- Marwan Hariz

Afternoon Session IV: Movement Disorders

Moderators: Emad Eskandar / Yoichi Katayama

1:30 PM – 2:00 PM

Keynote Address: The New and Old Motor Cortex – Peter Strick

2:00 PM – 2:52 PM

Open Papers

2:00 – 2:13 PM

Control of Post-stroke Movement Disorders by Chronic Motor Cortex Stimulation
Yoichi Katayama

2:13 – 2:26 PM

Spontaneous GPi Activity in Generalized Primary Dystonia Differs From Activity in Cervical Dystonia
Donald Weisz

2:26 – 2:39 PM

Subthalamic Nucleus and Motor Cortex Local Field Potentials in Patients with Dystonia and Parkinson's Disease
Andrea Crowell

2:39 – 2:52 PM

Comparison Of Selective Peripheral Denervation And Deep Brain Stimulation For Spasmodic Torticollis
Ryoong Huh

2:52 PM – 3:30 PM

Refreshment Break

3:30 PM – 4:00 PM

Presidential Address: Andres Lozano

Afternoon Session IV: Emerging

Indications

Moderators: Andres Lozano / Steven Gill

4:00 PM – 4:52 PM

Open Papers

4:00 – 4:13 PM

The Regulation Of Bdnf And Amyloid-related Protein Expression By Hypothalamic/fornix High Frequency Stimulation In Adult Rodents
Wai Ng

4:13 – 4:26 PM

How Stem Cells Make The Corticospinal Tract Regenerated In Stroke Patients
Shinn-Zong Lin

4:26 – 4:39 PM

Control of Essential Hypertension with Deep Brain Stimulation (DBS) of Periventricular/Periaqueductal (PVG/PAG) Grey Matter
Shazia Javed

4:39 – 4:52 PM

Sphenoplatine Ganglion (SPG) stimulation for Treatment of Cluster Headaches

Ali Rezai

5:00 PM – 5:30 PM

Closing Ceremony

Resident Awards