

Courses Program

8:00AM - 5:00PM

1015: BrainStem Society Meeting

Location: Delaware A

Developed in conjunction with the BrainStem Society

Co-Directors: Josep Valls-Sole, MD (Spain) and Mark Hallett, MD, FACNS (USA)

Objectives:

At the conclusion of this course, participants should be able to:

1. Recognize the role of brainstem circuits in functions such as oculomotor control, respiration and inhibitory mechanisms of pain;
2. Describe the complex relationship between brainstem nuclei and cerebellum in the control of balance and equilibrium;
3. Explain the various functions of the pedunculo-pontine tegmental nucleus (PPTn) and evaluate the potential use of this nucleus as therapeutic target.

Agenda:

8:00am Opening of the Meeting
Mark Hallett, MD, FACNS (USA)

Eye and Eyelid Movements

Chairs: Mark Hallett, MD, FACNS (USA)

- 8:15am Spontaneous, Voluntary and Reflex Blinking in Clinical Practice
Josep Valls-Sole, MD (Spain)
- 8:45am Basics of Ocular Motor Control by the Brainstem
David S. Zee, MD (USA)
- 9:15am Eye Movement Disorders due to Brainstem Dysfunctions
Daniel Gold, DO (USA)
- 9:45am Break

Respiration and Sleep

Co-Charis: Markus Kofler, MD (Austria) and Jens Ellrich, MD, PhD (Georgia)

- 10:00am Functional Anatomy, Mechanisms of Respiration
Jeffrey C. Smith, PhD (USA)
- 10:30am Disorders of Respiration During Sleep
Nancy Foldvary-Schaefer, DO, MS (USA)
- 11:00am Facial Pain Syndromes: Differential Diagnoses
Satu Jaaskelainen, MD, PhD (Finland)
- 11:30am Relevance of Brainstem to Pain: Nociceptive System and PGM
Andrea Truini, MD (Italy)
- 12:00pm Lunch (see page 9 for nearby dining options)

Vestibular System

Co-Charis: Josep Valls-Sole, MD (Spain) and Andrea Truini, MD (Italy)

- 1:30pm Brainstem and Cerebellum Control of Balance and Equilibrium
John Rothwell, PhD (United Kingdom)
- 2:00pm How to Study Vestibular Nuclei: cvEMP and ovEMP
James G. Colebatch, DSc, FRACP (Australia)
- 2:30pm Break

Other Brainstem Functions

- 3:00pm Startle and the StartReact Effect: Physiological Mechanisms
Anthony Carlsen, PhD (Canada)
- 3:30pm Autonomic Dysfunction: Vagal Nerve Disorders
Lucy Norcliffe-Kaufmann, PhD (USA)

Non-Invasive Therapy-Oriented Stimulation of Cranial Nerves

- 4:00pm State of the Art in Vagus Nerve Stimulation
Jens Ellrich, MD, PhD (Georgia)
- 4:30pm State of the Art in Trigeminal Nerve Stimulation
Ian Cook, MD, DFAPA (USA)

5:00PM - 6:00PM

BrainStem Society Business Meeting

Location: Delaware A

All persons registered at the meeting may attend the business meeting of the BrainStem Society, but only members of the Society may vote.

8:00AM - 5:00PM

1020: Magnetoencephalography

Location: Delaware B

Developed in conjunction with the American Clinical Magnetoencephalography Society (ACMEGS)

Co-Directors: Angel W. Hernandez, MD, FAAP, FAES (USA); Stefan Rampp, MD (Germany); and Tony W. Wilson, PhD (USA)

Objectives:

At the conclusion of this course, participants should be able to:

1. Understand the neurophysiological underpinnings of the signal as well as the principles of physics governing MEG recording.

Agenda:

- 8:00am Introduction
Richard C. Burgess, MD, PhD, FACNS (USA)
- 8:10am Neurophysiological Basis and Recording Fundamentals of MEG and EEG
Richard C. Burgess, MD, PhD, FACNS (USA)
- 9:00am The Logistics of MEG Operation and Practicing According to the ACMEGS Clinical Practice Guidelines
Anto Bagić, MD, PhD, FACNS (USA)
- 10:00am Break
- 10:15am Dipole Modeling of Epileptiform Activity
John Ebersole, MD (USA)
- 11:00am Normal Variants in MEG
Stefan Rampp, MD (Germany)
- 11:45am Lunch (see page 9 for nearby dining options)
- 12:45pm Source Modeling of Evoked Activity
Tony W. Wilson, PhD (USA)
- 1:30pm Cases (How MEG Contributed to Patient Management) - Adult Cases
Anto Bagić, MD, PhD, FACNS (USA); Andrew Zillgitt, DO (USA)
- 3:00pm Break
- 3:15pm Cases (How MEG Contributed to Patient Management) - Pediatric Cases
Angel W. Hernandez, MD, FAAP, FAES (USA); Dave Clarke, DO (USA)

Courses Program

THURSDAY, MAY 3, 2018

7:00 - 10:30AM CONCURRENT COURSES

2000: Neuromuscular Imaging (continued from Wednesday, May 2)

Location: Maryland

Co-Directors: Lisa Hobson-Webb, MD (USA); Luca Padua, MD, PhD (Italy); and Michael Cartwright, MD (USA)

Agenda:

- 7:00am MRI vs US in Clinical Practice
Craig Zaidman, MD (USA)
- 7:45am Imaging of the Brachial Plexus (Including Demo)
Michael Cartwright, MD (USA)
- 8:15am Imaging of the Diaphragm (Including Demo)
Andrea Boon, MD (USA)
- 8:45am New Imaging Technologies
Lisa D. Hobson-Webb, MD (USA)
- 9:30am Keynote Address – Opportunities in Muscle US
Nens van Alfen, MD, PhD (Netherlands)
- 10:20am Conclusion, Intro to Next Meeting
Lisa D. Hobson-Webb, MD (USA); Luca Padua, MD, PhD (Italy)

Demonstration Stations:

- Brachial Plexus US
Leo Visser, MD (Netherlands)
- Diaphragm US
Andrea Boon, MD (USA)
- US-Guided CTS Injection
John Norbury, MD (USA);
- US-Guided Other Nerve Injection
Jeff Strakowski, MD (USA)
- Small Nerves UE
Monika Krzesniak-Swinarska, MD (USA)
- Small Nerves LE
Luca Padua, MD, PhD (USA)

7:00 - 10:30AM

1015: BrainStem Society Meeting (continued from Tuesday, May 1)

Location: Delaware

Co-Directors: Mark Hallett, MD, FACNS (USA) and Josep Valls-Sole, MD (Spain)

Agenda:

Focus on the Pedunculo-Pontine Nucleus

Co-Chairs: John Rothwell, PhD (USA) and Satu Jaaskelainen, MD, PhD (Finland)

- 7:00am Welcome
- 7:15am Anatomy of the Reticular Formation and the PPN
Clifford B. Saper, MD, PhD (USA)
- 7:45am Functions of the PPN
Edgar Garcia-Rill, PhD (USA)
- 8:15am Prepulse Inhibition
Markus Kofler, MD (Austria)
- 8:45am The PPN and Freezing of Gait
Jorik Nonnekes, MD, PhD (Netherlands)

9:15am PPN DBS. Indications and Potential Secondary Effects
Andres Lozano, MD, PhD, FRCSC, FRSC, FCAHS (Canada)

9:45am Discussion

9:45am Final Remarks
Mark Hallett, MD, FACNS (USA)

7:00 - 10:30AM

2015: Transcranial Magnetic Stimulation (continued from Wednesday, May 2)

Location: Harding

Co-Directors: Walter Paulus, MD (Germany) and Mark George, MD (USA)

Agenda:

- 7:00am Towards EEG Biomarkers of Response to TMS in Depression and Other Neuropsychiatric Diseases
Zafiris Daskalakis, MD, PhD, FRCPC (Canada)
- 7:45am Essentials of Repetitive Transcranial Magnetic Stimulations
Yoshikazu Ugawa, MD, PhD (Japan)
- 8:15am Transcranial Stimulation and Pharmacology
Ulf Ziemann, MD (Germany)
- 9:00am Transcranial Stimulation and EEG
Paolo Maria Rossini, MD, PhD (Italy)
- 9:45am Summary and General Discussion
Mark George (USA)

7:00 - 10:30AM

2005: Neurophysiological Intraoperative Monitoring (continued from Wednesday, May 2)

Location: Wilson

Co-Directors: Jay Shils, PhD, D.ABNM, FASN, FACNS (USA); Jaime Lopez, MD, FACNS (USA); and Andrea Szelenyi, MD, PhD

Agenda:

- 7:00am Welcome & Introduction
- 7:05am NIOM of Functional Neurosurgery (DBS, SCS, MCS)
Jay L. Shils, PhD, D.ABNM, FASN, FACNS (USA)
- 7:40am NIOM Using Reflex and Other Modalities
Vedran Deletis, MD, PhD (Croatia)
- 8:15am Evidence Based Data in NIOM
Robert N. Holdefer, PhD (USA)
- 8:50am NIOM of Vascular Surgery (Cardiac and Aortic)
Mark Stecker, MD, PhD, D.ABNM, FASN (USA)
- 9:25am Alert Criteria in NIOM
Lilia de la Maza, MD (Mexico)
- 10:00am Discussion

10:30 - 11:00AM

Coffee Break

Location: Marriott Foyer
