



ICCN ★ 2018

Preliminary Program

31st International Congress of Clinical Neurophysiology (ICCN)
of the International Federation of Clinical Neurophysiology (IFCN)

Marriott Wardman Park, Washington, DC
May 1-6, 2018

Co-Hosted by:

American Clinical Neurophysiology Society (ACNS)
Canadian Society of Clinical Neurophysiologists (CSCN)



Welcome

The American Clinical Neurophysiology Society (ACNS) and the Canadian Society of Clinical Neurophysiologists (CSCN) are pleased to announce the 31st International Congress of Clinical Neurophysiology (ICCN) of the International Federation of Clinical Neurophysiology (IFCN) will be held May 1-6, 2018 in Washington, DC, USA.

The ICCN 2018 program will include several of ACNS's signature courses, as well as courses and workshops planned by IFCN Member Societies and other prominent societies in clinical neurophysiology from the US and around the world.

Pre-Congress courses and workshops are designed to provide a solid review of the fundamentals and the latest scientific advances in both central and peripheral clinical neurophysiology.

Three days of general and concurrent Congress sessions will follow including honorary lectures, symposia, platform presentations, controversies sessions, and industry-supported satellite symposia.

ACNS and CSCN are honored to co-host ICCN 2018 and to welcome colleagues to Washington, DC!

Co-Hosting Societies

American Clinical Neurophysiology Society (ACNS)
Canadian Society of Clinical Neurophysiologists (CSCN)

Partner Societies – will hold their meeting in conjunction with ICCN

American Clinical Magnetoencephalography Society (ACMEGS)

Supporting Societies and Organizations – have supported ICCN through organization of a satellite course and representation on the Scientific Advisory Board and Program Planning Committees

American Society for Neurophysiological Monitoring (ASNM)
BrainStem Society
Critical Care EEG Monitoring Research Consortium (CCEMRC)
International League Against Epilepsy (ILAE)
International Society of Intraoperative Neurophysiology (ISIN)
International Society of Peripheral Neurophysiological Imaging (ISPNI)

Contributing Societies – have contributed to ICCN via representation on the Scientific Advisory Board and Program Planning Committees

American Autonomic Society (AAS)
American Epilepsy Society (AES)
ASET – The Neurodiagnostic Society
Organisation of Societies for Electrophysiological Technology (OSET)

Table of Contents

Welcome	2
Presenting Societies	2
Congress Planning Committees.....	3
General Meeting Information	5
Important Dates	5
Washington DC Visitor Information.....	5
Travel.....	5
Airports.....	5
Passports & Visas	5
Invitation Letters	5
Accessibility & Special Needs	5
Attire.....	5
Language	5
Headquarters Hotel	6
Registration	6
Important Dates	6
Reduced Rate Country Registration.....	6
Guest Registration	6
Wire Transfers.....	5
Cancellations & Refunds	6
Exhibitors & Supporters	6
Continuing Medical Education (CME) Information.....	7
Program at a Glance.....	9
Networking Events	9
Welcome Reception.....	9
Gala Reception	9
Award Lectures	10
Satellite & Courses Program	11
Congress Scientific & Educational Program	13
Registration Form	27

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General Meeting Information

Important Dates

Registration Open	October 4, 2017
Abstract Submission Open	September 1, 2017
Abstract Submission Deadline	December 10, 2017
Abstract Notification Date	January 31, 2018
Housing Deadline	April 10, 2018
Registration Deadline	April 10, 2018
Registration Cancellation Deadline	April 20, 2018

Washington, DC Visitor Information

Washington, DC, at a population of 633,000, is the 24th most populous city and the capitol of the United States. Washington is home to the US federal government, many national monuments and museums and 176 foreign embassies, as well as the headquarters of many international organizations, trade unions, non-profit organizations, and professional associations. Behind its public face of luminous marble memorials and government, Washington, DC, leads a wondrously varied life. Musicians trumpet the blues, rock, and jazz at venues throughout Duke Ellington's hometown. DC's local flavor varies from crave-worthy dishes served by celebrity chefs to chili-smothered half-smokes served at a diner. Shopping stores, boutiques, gift shops and malls are around every corner. With no shortage of things to do, Washington, DC remains a top destination.

Time Zone

Washington, DC is in the US EDT – United States Eastern Daylight Time. The time is UTC/GMT -4 hours.

Electricity

The United States operates on 120 volts, compared to the standard 220 volts in Europe.

Climate

In the first week of May, Washington, DC will be transitioning from late spring to early summer with warm daytime temperatures leading into cooler evenings. The average high temperature in May is 75° F or 24° C. The average low temperature in May is 57° F or 14° C.

Currency & Tipping Etiquette

The unit of currency is the United States Dollar, or USD. Visit www.xe.com for the latest exchange rates. The general consumer sales tax in the District of Columbia is 5.75%. It is customary to tip between 15-20%, depending on the quality of the service.

Travel

Airports

The Marriott Wardman Park situated just seven miles (11.25km) from Reagan International Airport (DCA) and 28 miles (45km) from Dulles International Airport (IAD). Baltimore/Washington International Thurgood Marshall Airport (BWI) is also 35 miles from the meeting venue.

The ICCN Secretariat recommends checking with your airline regarding policies and details on carry-on and checked baggage items.

Passports & Visas

Most international travelers are required to obtain a visa from the U.S. Department of State. For more information, visit <http://travel.state.gov/>

Invitation Letters

Delegates requiring official invitation letters to complete their visa applications may contact the ICCN Secretariat at ICCN2018@acns.org.

Accessibility & Special Needs

Delegates requesting accessibility arrangements or with special dietary or other needs are encouraged to contact the ICCN Secretariat at ICCN2018@acns.org at least 30 days prior to the Congress. Special requests may also be made at the time of registration. Special arrangements in order to fully participate in the meeting should provide a written description of such needs to the Registration Desk upon arrival.

Attire

Business (suits) or business casual attire (polo or dress shirt, sport coats) are appropriate for ICCN 2018 courses and sessions; ties are not required. Business casual attire is recommended for the Welcome Reception. Cocktail attire is appropriate for the Gala Reception.

Language

The official language of ICCN 2018 is English. All presentations will be given and all materials will be provided in English. ICCN will not provide simultaneous translation.

Insurance Liabilities & Disclaimer

Delegates and guests will be fully responsible for any claims, liabilities, losses, damages, or expenses, including attorney's fees, relating to or arising out of any loss of injury to, or damage to any person or property of the delegate or guest or any other property where such injury, loss or damage is incident to, arises out of or is in any way connected with the delegate or guest's participation in ICCN 2018, including participation in tours and social events. Delegates and guests shall protect, indemnify, hold harmless, and defend ACNS, IFCN and/or the Marriott Wardman Park, their officers, directors, agents or servants, and employees from and against any and all such claims, liabilities, losses, damages, and expenses, including attorneys' fees, provided that the foregoing shall not apply to injury, loss, or damage caused by or resulting from the negligence or willful misconduct of ACNS, IFCN and/or the Marriott Wardman Park, their officers, directors, agents, or employees.

Headquarters Hotel

Washington Marriott Wardman Park
2660 Woodley Road NW
Washington, District Of Columbia 20008
USA

Rate: \$259 USD per night, plus taxes

Reservation Methods

Online: <http://iccn2018.acns.org/housing-travel>
Phone: (202) 328-200

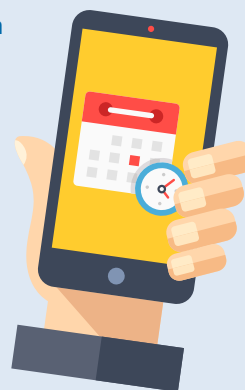


The surrounding Embassy Row area of Washington, DC is largely an up-scale residential neighborhood, with more than 25 restaurants and shops of all varieties within walking distance. The Metro system runs nearly to the door of the Marriott Wardman Park, with a stop on the

Red Line approximately a tenth of a mile (150m) from the hotel. Only three to four Metro stops separate attendees staying at the Marriott Wardman Park from all the major attractions Washington, DC has to offer. The hotel less than two miles (3.2km) from classic Washington attractions, including the National Zoo, Smithsonian Institution, Capitol Hill, White House, and the National Mall monuments and memorials.

ICCN Mobile App — Coming Soon

ICCN will offer a free mobile app for meeting attendees. The app will include and interactive Congress schedule, allowing delegates to bookmark sessions and build a personalized schedule; full text of poster abstracts; meeting space maps; complete exhibitor listings and floorplans and more! More information on the app will be available as ICCN 2018 approaches.



Registration

Important Dates

Registration Open:	October 4, 2017
Advance Registration Deadline	April 10, 2018

The ICCN 2018 Secretariat encourages online registration for the meeting & course at <http://iccn2018.acns.org/registration>.

Delegates and guests may also register by completing and mailing or faxing the registration form on page 27. All registrations will be confirmed via e-mail. If you do not receive an email confirmation within two weeks of submission, please contact the ICCN Secretariat at +1-414-918-9803 or ICCN2018@acns.org.

Reduced Rate Country Registration

Visit <http://iccn2018.acns.org/registration> for a list of countries that qualify for reduced rate registration. Delegates that qualify may register online or by submitting the registration form on page 27.

Guest Registration

Guests of ICCN 2018 delegates age 18 and older may register to attend the social components of the ICCN program, including the Welcome Reception on Thursday, May 3 and the Gala Reception on Friday, May 4, 2018. Guests of ICCN 2018 delegates under age 18 may register to attend the Gala Reception only on Friday, May 4, 2018.

Entrance to the scientific sessions and exhibit hall (except during the Welcome Reception) is not included in guest registration fees. Sorry, no exceptions will be made.

For more information regarding the ICCN 2018 social events and available Washington DC tours, please visit <http://iccn2018.acns.org/social-events>.

Wire Transfers

Delegates may pay ICCN 2018 registration fees via wire transfer. Please contact the ICCN Secretariat at ICCN2018@acns.org for wire transfer information.

Please note that some financial institutions charge a processing fee, which is deducted from the amount of the transfer. Partial payment may result in an incomplete registration.

Cancellations & Refunds

All cancellations must be received in writing. Delegates may fax their cancellation requests to +1-414-276-3349 or email it to ICCN2018@acns.org. Delegates will receive a confirmation and refund within 14 days of receipt of their cancellation notice. ICCN will grant a full refund, less a 10% processing fee, for cancellations received in writing on or before April 20, 2018. No refunds will be granted after April 20, 2018.

Exhibitors & Supporters

Please visit <http://iccn2018.acns.org/exhibits-support> for more details on supporting or exhibiting at ICCN 2018.

Continuing Medical Education (CME) Information

ICCN 2018 will be planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the sponsorship of ACNS. ACNS is accredited by the ACCME to provide continuing medical education for physicians.

Educational Mission Statement

Purpose

The American Clinical Neurophysiology Society (ACNS) is a professional association dedicated to fostering excellence in clinical neurophysiology and furthering the understanding of central and peripheral nervous system function in health and disease through education, research, and the provision of a forum for discussion and interaction.

Content

ACNS is committed to providing continuing medical education to its members and others interested in clinical neurophysiology. Educational objectives include 1) Reviewing current knowledge of clinical neurophysiology including: electroencephalography, evoked potentials, electromyography, nerve conduction studies, intraoperative monitoring, polysomnography and other sleep technology, quantitative neurophysiological methods, magnetoencephalography, sleep disorders, epilepsy, neuromuscular disorders, brain stimulation, brain-computer interfacing, and related areas; and 2) Informing course and meeting attendees of recent technological developments and their implications for clinical practice.

Target Audience

The Society's educational activities are directed to clinical neurophysiologists, neurologists, psychiatrists, physiatrists, neurosurgeons, trainees in these disciplines and other physicians and researchers who utilize clinical neurophysiological techniques and knowledge in the diagnosis and management of patients with disorders of the nervous system.

Expected Result

Attendees will improve competence in clinical neurophysiology procedures and incorporate new technological advancements into their practice.

Gaps and Needs

In compliance with the Updated Accreditation Criteria of the Accreditation Council for Continuing Medical Education (ACCME), the Continuing Medical Education Committee of the ACNS has identified "professional practice gaps." Definition: A "professional practice gap" is the difference between what a health professional is doing or accomplishing compared to what is achievable on the basis of current professional knowledge. The following professional practice gaps and educational needs were identified by a combined effort of the Program, Course and CME Committees.

Gap 1. Emerging Areas of Practice

Several emerging areas of clinical neurophysiology have significant practice gaps in which the opportunities for training and mentoring fall short of the need for experienced and trained neurologists. Intraoperative monitoring, intensive care unit EEG monitoring, Video and Quantitative EEG and invasive evaluation for epilepsy surgery with Stereo EEG are growing areas of clinical neurophysiology with few practicing neurologists having adequate training in these tech-

niques. Adult and pediatric physicians as well as neurodiagnostic technologists with competence in these areas are in great demand. Without additional specialized training, neurologists will not be competent to conduct these types of monitoring.

Gap 2. General Practice of Clinical Neurophysiology

Clinical neurophysiology procedures are performed by a large proportion of practicing US neurologists, many of whom have little or no formal training in clinical neurophysiology. Many clinical neurophysiology procedures (e.g. evoked potentials, invasive EEG) are performed at low volume at most centers, and a forum for review and hands-on interpretation are essential to maintain competence in these areas. Several specific topics with significant gaps between current practice and ideal practice have been identified via review of the literature, review of clinical neurophysiology fellowship curricula, and surveys of ACNS members and Annual Meeting attendees.

Changes In Behavior/Practice

It is intended that, as a result of attending the meeting and/or courses, physician attendees will be able to identify changes in competence or performance that are desirable. Definitions: "Competence" is knowing how to do something. "Performance" is what the physician would do in practice, if given the opportunity.

Evaluation

The updated ACCME accreditation criteria are designed to integrate with the new requirements for maintenance of certification (for more information see www.ABPN.org). Physicians are expected to perform self-assessments of their practice, but the ACNS, as an organization accredited by the ACCME, is expected to measure how its educational activities assist physicians in this activity. Thus, there are new questions in the evaluation form. These questions address your intended changes in competence or performance. In a few months, we will contact all physician meeting attendees to ask you if you actually HAVE experienced changes in competence or performance. Your responses, now and in the future, will assist us and ultimately you in determining educational activities that are most useful to you.

Policy On Financial Disclosures

It is the policy of ACNS to ensure balance, independence, objectivity and scientific rigor in all its individually sponsored or jointly sponsored educational programs. In order to comply with the ACCME's Updated Standards for Commercial Support, ACNS requires that anyone who is in a position to control the content of an educational activity discloses all relevant financial relationships with any commercial interest pertaining to the content of the presentation. Should it be determined that a conflict of interest exists as a result of a financial relationship of a planner of the CME activity, the planner must recuse himself or herself from the planning for that activity or relevant portion of that activity. All presentations for which the presenter disclosed a potential conflict of interest are peer reviewed by two members of the ACNS CME Committee with no relationships. If bias is found, the presenter is asked to make changes to the presentation and it is re-reviewed for bias before final approval. Refusal to disclose a conflict or the inability to resolve an identified conflict precludes participation in the CME activity. Complete conflict of interest disclosure information is printed in the final program for the activity. A learner may request additional information regarding the nature of a planner or speaker's disclosure if "No Relevant Relationships" has been indicated below. To request additional information, contact the ACNS Executive Office at info@acns.org.

Continuing Medical Education (CME) Information

Meeting Description

The 31st International Congress of Clinical Neurophysiology (ICCN 2018) is designed to provide a review of the fundamentals and the latest scientific advances in all aspects of clinical neurophysiology. Presentations at ICCN 2018 are given by leading experts in the field and have value for health care professionals who utilize clinical neurophysiology. Sessions include courses, symposia, workshops, and Special Interest Groups, featuring didactic lectures, expert panels, debates and interactive formats. Poster presentations will highlight the latest work conducted at clinical neurophysiology centers around the world.

Target Audience

The ICCN's educational activities are directed to the following individuals:

- Neurologists, including specialists in epilepsy, neuromuscular disorders, sleep medicine, movement disorders, autonomic disorders, neuro ICU, neurophysiology, neuroimaging, cognitive neurology and general neurologists;
- Neurophysiologists with special interests in EEG, EMG, evoked potentials, sleep medicine, autonomic, MEG, brain stimulation, brain-computer interface, neuroimaging, brain connectivity, cognition and intraoperative monitoring;
- Neurology and clinical neurophysiology trainees; residents, fellows and students;
- Neuroscientists, including researchers of various neurologic disorders, neurophysiology, neuromodulation, neurostimulation, brain connectivity and cognitive neurosciences;
- Technologists involved in a wide array of neurophysiologic tests, including EEG, EMG and nerve conduction studies, evoked potentials, intraoperative monitoring, autonomic, MEG, noninvasive brain stimulation;
- Affiliated personnel, such as nurses, patient care coordinators and business managers involved with the care of patients with neurologic illnesses.

Learning Objectives

At the conclusion of ICCN 2018, the participant will be able to:

1. Describe the indications for use of clinical neurophysiology techniques in diagnosis and management of disorders of the nervous system;
2. Incorporate new neurophysiology procedures and technological advances into his/her own clinical practice;
3. Perform and interpret a broad range of clinical neurophysiology procedures, and integrate the results of these tests into comprehensive patient management plans;
4. Discuss recent advances in clinical neurophysiology techniques and related disorders; and
5. Apply advances in clinical neurophysiology techniques to improve the diagnosis of neurologic disorders.

Accreditation Statement

This activity will be planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the sponsorship of ACNS. ACNS is accredited by the ACCME to provide continuing medical education for physicians.

Credit Designation

ACNS designates the ICCN 2018 Congress for a maximum 22.75 *AMA PRA Category 1 Credit(s)*[™]. Physicians should claim only credit commensurate with the extent of their participation in the activity.

ACNS designates the ICCN 2018 Courses for the following maximum number of *AMA PRA Category 1 Credit(s)*[™].

Intensive Care Unit Electroencephalography
7.25 *AMA PRA Category 1 Credit(s)*[™]

BrainStem Society Meeting
10.0 *AMA PRA Category 1 Credit(s)*[™]

Magnetoencephalography
7.0 *AMA PRA Category 1 Credit(s)*[™]

Advanced Electromyography
3.75 *AMA PRA Category 1 Credit(s)*[™]

Single Fiber Electromyography
3.5 *AMA PRA Category 1 Credit(s)*[™]

Neuromuscular Imaging
11.25 *AMA PRA Category 1 Credit(s)*[™]

Neurophysiological Intraoperative Monitoring
10.50 *AMA PRA Category 1 Credit(s)*[™]

Invasive Electroencephalography
7.0 *AMA PRA Category 1 Credit(s)*[™]

Transcranial Magnetic Stimulation
10.0 *AMA PRA Category 1 Credit(s)*[™]

Please note: Final credit amounts may change as the program develops.

Program at a Glance

Tuesday, May 1, 2018 - Satellite Courses

8:00am	Intensive Care Unit Electroencephalography Course	Advanced Electromyography Course	BrainStem Society Meeting	Magnetoencephalography Course		
8:30am						
9:00am						
9:30am						
10:00am						
10:30am						
11:00am						
11:30am						
12:00pm						
12:30pm						
1:00pm		Single Fiber Electromyography Course				
1:30pm						
2:00pm						
2:30pm						
3:00pm						
3:30pm						
4:00pm						
4:30pm						
5:00pm						

Wednesday, May 2, 2018 - Satellite Courses

8:00am	Neurophysiological Intraoper- ative Monitoring Course	Transcranial Magnetic Stimulation Course	Neuromuscular Imaging Course	Invasive Electroencephalography Course
8:30am				
9:00am				
9:30am				
10:00am				
10:30am				
11:00am				
11:30am				
12:00pm				
12:30pm				
1:00pm				
1:30pm				
2:00pm				
2:30pm				
3:00pm				
3:30pm				
4:00pm				
4:30pm				
5:00pm				

Program at a Glance

Thursday, May 3, 2018 - Satellite Courses & Congress Scientific & Educational Program

7:00am	Neurophysiological Intraoperative Monitoring Course	Neuromuscular Imaging Course	BrainStem Society Meeting	Transcranial Magnetic Stimulation Course	
7:30am					
8:00am					
8:30am					
9:00am					
9:30am					
10:00am					
10:30am	Break				
11:00am	General Session: Opening Ceremonies & ACNS Jasper Lecture				
11:30am					
12:00pm					
12:30pm					
1:00pm	Lunch – Visit Exhibits and Posters				
1:30pm	Intraoperative Motor Evoked Potentials Optimization Techniques	Neonatal EEG: From Basic Concepts to Advanced Techniques	Autonomic Testing and Small Fiber Neuropathies Evaluations	TMS-Evoked EEG Potentials – a Novel Technique to Study Brain Excitability and Connectivity	Ten Years of the IFCN Electrodiagnostic (Awaji) Criteria for Early Diagnosis of ALS Health and Disease
2:00pm					
2:30pm					
3:00pm	Break				
	Standard Formats for Neurophysiology Data Exchange	Applied Cases in Central Neurophysiology and Video EEG	Platform Sessions	Platform Sessions	Guidelines and Evidence-Based Medicine in Electrodiagnostic (EDX) Testing
3:30pm					
4:00pm					
4:30pm					
	Break				
5:00pm	EEG Based Biomarkers in Neuropsychiatric Disorders: Pitfalls and Opportunities	Large Scale Networks in Focal Epilepsy Revealed by High-Density EED and fMRI Studies	Neurophysiology of Tremor	Novel Methodologies in Transcranial Magnetic Stimulation	Update and Advances in the Neurophysiologic Assessment of Neuromuscular Junction Disorders
5:30pm					
6:00pm					
6:30pm	Welcome Reception				
7:00pm					
7:30pm					
8:00pm					

Program at a Glance

Friday, May 4, 2018 - Congress Scientific & Educational Program

8:30am	Coffee Break – Visit Exhibits and Posters				
9:00am	General Session: Berger Lecture & Schwab Lecture				
9:30am					
10:00am					
10:30am	Structures Activated by TMS and Stimulating Current Direction	Controversy: Nonconvulsive Seizures and Status Should be Aggressively Treated	Advances in the Neurophysiology of Language: Structure, Time, and Plasticity	Electrophysiology and Immune Mechanisms in Post-Infectious Neuropathies	CNP Program Directors Symposium: Subspecialty Clinical Neurophysiology Training
11:00am					
11:30am	Lunch – Visit Exhibits and Posters				
	Special Interest Groups: Noninvasive Brain Stimulation	Special Interest Groups: Continuous Electroencephalography Monitoring	Special Interest Groups: Neurophysiologic Intraoperative Monitoring	Special Interest Groups: Neuromuscular Ultrasound	Special Interest Groups: Education
12:00pm					
12:30pm					
1:00pm	Sleep Biomarkers in Cognitive Disorders	Quantitative EEG in Epilepsy and Critical Care: Interactive Workshop	How Well Do You See Inside the Brain with Scalp EEG, MEG, EEG-fMRI and Intracerebral EEG?	Peripheral Clinical Neurophysiology in Intensive Care	Teaching Clinical Neurophysiology: Adapting Models to Local Demands
1:30pm					
2:00pm					
2:30pm	Break				
3:00pm	Platform Sessions	Continuous EEG in Targeted Temperature Management: the I-CARE (International Cardiac Arrest EEG Consortium)-CCEMRC Study	Platform Sessions	Pediatric Neuromuscular Disorders	Growing the Optimal Neurodiagnostic Team: Presented by ASET-The Neurodiagnostic Society
3:30pm					
4:00pm					
4:30pm	Break				
4:30pm	General Session: ACNS Presidential Lecture & Adrian Lecture				
5:00pm					
5:30pm					
6:00pm					
6:30pm	Break				
7:00pm	Gala Reception				
7:30pm					
8:00pm					
8:30pm					
9:00pm					

Key

 = "Education in CNP" track

Program at a Glance

Saturday, May 5, 2018 - Congress Scientific & Educational Program

8:30am	Neurophysiological Effects of Deep Brain Stimulation	Neurophysiologic and Imaging Signatures of Pain and Itch	Neurophysiology of Multisensory Integration	Human Brain Connectome from Physiology to Disease	Clinical Neurophysiology of Insular Epilepsy
9:00am					
9:30am					
10:00am	Break				
	General Session: Gloor Lecture & Kugleberg Lecture				
10:30am					
11:00am					
11:30am	Lunch – Visit Exhibits and Posters				
12:00pm			IFCN General Assembly		
12:30pm					
1:00pm					
1:30pm					
2:00pm	Pediatric Noninvasive Brain Stimulation	Contemporary Update on Pedicle Screw Stimulation		Controversy: Ultrasound Is Sufficient For Diagnosis of ALS, CTS Demyelinating Neuropathy	Controversy: Stereo EEG vs. Grids and Strips – Which Is Better, How Do We Chose?
2:30pm					
3:00pm					
3:30pm	Break				
	Neurophysiology of Cannabinoids	Update on Evoked Potential Warning Criteria during Surgery	Advances in Neuromuscular Imaging: A Focus on Nerve Ultrasound	Botulinum Toxin Treatment of Neurologic Disorders: Mechanisms of Action and Ultrasound vs EMG Guidance	The Evolving Role of Neurostimulation in the Management of Medically Refractory Epilepsy
4:00pm					
4:30pm					
5:00pm					
5:30pm	Break				
6:00pm	Neurophys Bowl				
6:30pm					

Sunday, May 6, 2018 - Congress Scientific & Educational Program

8:30am	Contribution of Corticomuscular, Intermuscular and Corticokinematic Coherence in Research on Sensorimotor Interactions	Beyond Sleep Studies and EEG's: Advances in Ambulatory Neurophysiologic Monitoring of Sleep and Epilepsy	New Proposals for Tc-MEP Interpretation in Spinal Deformities and Intramedullary Spinal Cord Tumor (IMSCT) surgeries	Quo Vadis Clinical MEG Worldwide?	Brain Connectivity: What Invasive Electrophysiology Can Do For Mapping Brain Networks
9:00am					
9:30am					
10:00am	Break				
	Sensorimotor Organization in Writer's Cramp	How Sports Affects Neurophysiology: The Good, the Bad, and the Ugly	Optimizing Transcranial Direct Current Stimulation	Quantitative Methods to Follow Neuromuscular Disease	Wide-Band EEG by Neuron and Glia: From Basic and Clinical Application in Epilepsy
10:30am					
11:00am					
11:30am	Break				
12:00pm	General Session: Closing Ceremonies				
12:30pm					

Award Lectures

IFCN Berger Lecture



The IFCN Berger Award is presented every four years by the IFCN for outstanding current contributions to central clinical neurophysiology research.

Margitta Seeck, MD, PhD
Professor
University of Geneva

Prof. Seeck will deliver the Berger Award Lecture on Friday, May 4, 2018.

IFCN Kugelberg Lecture



The IFCN Kugelberg Award is presented every four years by the IFCN for outstanding current contributions to peripheral clinical neurophysiology research.

Mandaville Gourie-Devi, MBBS, MD, DM, DSc
Emeritus Professor of Neurology Department of Neurology
Institute of Human Behaviour and Allied Sciences

Prof. Gourie-Devi will present the Kugelberg Award Lecture on Saturday, May 5, 2018.

IFCN Adrian Lecture



The IFCN Adrian Award is presented every four years by the IFCN for outstanding current contributions to Clinical Neurophysiology research in basic science.

Clifford Saper, MD, PhD
Professor, Beth Israel Deaconess Medical Center

Prof. Saper will present the Adrian Award Lecture on Friday, May 4, 2018.

ACNS Jasper Award Lecture

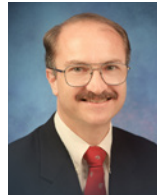


The Herbert H. Jasper Award is presented annually to an individual for a lifetime of outstanding contributions to the field of clinical neurophysiology including research, teaching and mentoring.

Mark Hallett, MD, FACNS
Chief, Human Motor Control Section
National Institute of Neurological Disorders and Stroke, National Institutes of Health

Prof. Hallett's Jasper Award Lecture will be part of the ICCN 2018 Opening Ceremonies on Thursday, May 3, 2018.

ACNS Gloor Award Lecture



The Pierre Gloor Award is presented annually for an individual's outstanding contributions to central clinical neurophysiology research.

Marc R. Nuwer, MD, PhD, FACNS
Professor
University of California Los Angeles

Prof. Nuwer will present the Gloor Award Lecture on Saturday, May 5, 2018.

ACNS Schwab Award Lecture



This Robert S. Schwab Award is presented annually for an individual's outstanding contributions to peripheral clinical neurophysiology research.

Donald Sanders, MD
Professor of Neurology
Duke University Medical Center

Prof. Sanders will present the Schwab Award Lecture on Friday, May 4, 2018.

Networking Events



Welcome Reception

ICCN Exhibit Hall
Washington Marriott Wardman Park

Join us at the official Welcome Reception of ICCN 2018. You will have the chance to connect with colleagues, meet other attendees, view posters, and visit exhibit booths on the opening day of Congress sessions.



Gala Reception

Smithsonian National Air & Space Museum

Connect with colleagues in one of the nation's most prominent museums. The Smithsonian National Air & Space Museum holds the largest collection of historic aircraft and spacecraft in the world, providing a unique backdrop for networking, collaboration, and exploring. Attendees will be able to experience featured exhibits and have access to the IMAX movie theater.

For a list of additional tours and activities offered in Washington, DC that attendees may independently sign up for, visit <http://iccn2018.acns.org/networking-events>

TUESDAY, MAY 1, 2018

8:00am – 5:00pm CONCURRENT COURSES Intensive Care Unit Electroencephalography (ICU EEG)

Jointly developed by the Critical Care EEG Monitoring Research Consortium (CCEMRC)

Co-Directors: Lawrence Hirsch, MD, FACNS (USA) and Eugen Trinko, MD (Austria)

Agenda:

- 8:00am Introduction
Eugen Trinko, MD (Austria)
- 8:10am ICU EEG Terminology (ACNS Guidelines)
Sandor Beniczky, MD, PhD (Denmark)
- 8:40am Defining Nonconvulsive Seizures/NCSE, Clin and EEG
Eugen Trinko, MD (Austria)
- 9:10am ICU EEG Monitoring in Neonates, Including ACNS Guidelines
Courtney J. Wusthoff, MD, MS, FACNS (USA)
- 9:40am When and How To Treat Neonatal Seizures
Ronit M. Pressler, MD, PhD, MRCPCH (United Kingdom)
- 10:10am Break
- 10:30am ICU EEG Monitoring in Children and Adults (ACNS Guidelines)
Nicholas S. Abend, MD, MSCE (USA)
- 11:10am Postanoxic Coma
Michel J. Van Putten, MD, MSc, PhD (Netherlands) and Luis Otavio Caboclo, MD, MSc, PhD (Brazil)
- 12:00pm NORSE/FIRES: New Consensus Definitions
Lawrence Hirsch, MD, FACNS (USA)
- 12:15pm Lunch
- 1:15pm EEG in Encephalopathy
Peter W. Kaplan, MD, FRCP, FACNS (USA)
- 1:45pm Controversial Patterns and the Ictal-Interictal Continuum
Suzette M. LaRoche, MD, FACNS (USA) and Nicolas Gaspard, MD, PhD (Belgium)
- 2:35pm Quantitative EEG: Methodology
Susan T. Herman, MD, FACNS (USA)
- 2:55pm Break
- 3:15pm Quantitative EEG: Application: Detecting Ischemia and Seizures
M. Brandon Westover, MD, PhD, FACNS (USA)
- 3:45pm Use of EEG to Manage Super Refractory SE
Andrew Cole, MD (USA)
- 4:15pm Multimodality Monitoring and Integrating EEG into Neurocritical Care
Jan Claassen, MD, PhD, FNCS (USA)
- 4:45pm Summary and Future
Lawrence Hirsch, MD, FACNS (USA)

BrainStem Society Meeting

Jointly developed by the BrainStem Society

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

Agenda:

- 8:00am Opening
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 Zee (USA)
- 9:15am Eye Movement Disorders due to Brainstem Dysfunctions
Daniel Gold, DO (USA)
- 9:45am Break
- 10:00am Functional Anatomy, Mechanisms of Respiration
Jeff Smith, PhD (USA)
- 10:30am Disorders of Respiration during Sleep
Nancy Foldvary-Schaefer, DO (USA)
- 11:00am Facial Pain Syndromes. Differential Diagnoses
Satu Jaaskelainen, MD, PhD (Finland)
- 11:30am Brainstem and The Control Of Pain. Periaqueductal Grey Matter
Andrea Truini, MD (Italy)
- 12:00pm Lunch
- 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
- 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)
- 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)

Magnetoencephalography

Jointly developed by the American Clinical Magnetoencephalography Society (ACMEGS)

Co-Directors: Tony Wilson, PhD (USA), Angel Hernandez, MD (USA), and Stefan Rampp, MD (Germany)

Agenda:

- 8:00am Introduction
Richard C. Burgess, MD, PhD, FACNS (USA)
- 8:10am Welcome
Tony Wilson, PhD (USA)
- 8:30am 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 Bagic, 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
- 12:45pm Source Modeling of Evoked Activity
Tony Wilson, PhD (USA)
- 1:30pm Cases (How MEG Contributed to Patient Management) - Adult Cases
Anto Bagic, MD, PhD, FACNS (USA) and Andrew Zillgitt, DO (USA)
- 3:00pm Break
- 3:15pm Cases (How MEG Contributed to Patient Management) - Pediatric Cases
Angel Hernandez, MD (USA) and Dave Clarke, DO (USA)

8:00am – 12:00pm

Advanced Electromyography

Co-Directors: Devon Rubin, MD, FACNS (USA), Renato Verdugo, MD (Chile)

Agenda:

- 8:00am EDX in Demyelinating Neuropathies (Action Potential and Impulse Conduction)
David Burke, MD, DSc (Australia)
- 8:40am Advances in Cranial Nerve Electrodiagnostic Testing
Jun Kimura, MD (USA)
- 9:20am EDX Advances in Myopathy
Christian Krarup, MD DMSc FRCP FEAN (Denmark)
- 10:00am Break
- 10:10am EDX Advances in Motor Neuron Diseases/ALS
Reinhard Dengler, MD (Germany)
- 10:50am EDX Advances in Sensory Neuropathy
Renato Verdugo, MD (Chile)
- 11:20am EDX Features in Peripheral Nerve Hyperexcitability Disorders
Devon Rubin, MD, FACNS (USA)

1:00pm – 5:00pm

Single Fiber Electromyography

Co-Directors: Erik Stålberg, MD, PhD (Sweden) and Donald Sanders, MD (USA)

Agenda:

- 1:00pm Welcome
Erik Stålberg, MD, PhD (Sweden)
- 1:15pm SFEMG Recording Principles
Erik Stålberg, MD, PhD (Sweden)
- 1:45pm SFEMG Parameters: Jitter, FD (Ways to Measure)
Donald Sanders, MD (USA)
- 2:15pm Demo – Vol SFEMG: FD & Jitter; Normal + Patient
Donald Sanders, MD (USA)
- 2:45pm Break
- 3:15pm Stimulation SFEMG, Method, Pitfalls
Erik Stålberg, MD, PhD (Sweden)
- 3:35pm CNE Jitter - Method, Definition, Pitfalls
Erik Stålberg, MD, PhD (USA)
- 3:55pm DEMO CNE Jitter – Vol and Stim
João Aris Kouyoumdjian, MD, PhD (Brazil)
- 4:25pm Jitter in MG and LEMS
Donald Sanders, MD (USA)

WEDNESDAY, MAY 2, 2018

8:00am – 5:00pm CONCURRENT COURSES

Neuromuscular Imaging

Jointly developed by the International Society of Peripheral Neurophysiological Imaging (ISPNI)

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

Agenda:

- 8:00am Welcome
Lisa D. Hobson-Webb, MD (USA) and Luca Padua, MD, PhD (Italy)
- 8:10am Intro to Neuromuscular Imaging
Francis O. Walker, MD, FACNS (USA)
- 8:45am NMUS in UE Focal Neuropathies (Including Demo)
Simon Podnar, MD (Slovenia)
- 9:30am NMUS in LE Focal Neuropathies (Including Demo)
Jeff Strakowski, MD (USA)
- 10:15am Break
- 10:30am NMUS in Immune-Mediated Polyneuropathy
Alexander Grimm, MD (Germany)
- 11:15am NMUS in Motor Neuron Disease
Stefanie Schreiber, MD (Germany)
- 12:00pm Lunch
- 1:00pm MRI of Spinal Nerve Roots
Darryl B. Sneag, MD (USA)
- 1:45pm MR Neurography
Roberto Gasparotti, MD (Italy)
- 2:30pm Advanced Neuromuscular Imaging
Einar P. Wilder-Smith, MD (USA)
- 3:15pm *PNS and CNS Trauma: Damage, Regeneration, and Neuroplasticity. US to Monitor Brain, Vessels, Nerves, and Muscles*
Luca Padua, MD, PhD (Italy)
- 4:00pm Disease-Specific Scoring Systems in NMUS
Alexander Grimm, MD (Germany) and Antonios Kerasnoudis, MD, PhD (Greece)
- 4:30pm Interesting Cases in NMUS
David Preston, MD (USA)

Demonstration Stations:

30-minute demonstration stations will be offered with a break from 3:00 – 3:30pm

Demonstration Stations to be included are:

Median Nerve	Muscle
Radial Nerve	Brachial Plexus
Fibular Nerve	Free Scan Station
Tibial Nerve	

Instructors will be:

<i>Hobson-Webb, MD (USA)</i>	<i>Stefanie Schreiber, MD (Germany)</i>
<i>Francis O. Walker, MD, FACNS (USA)</i>	<i>Monika Krzesniak-Swinarska, MD (USA)</i>
<i>Luca Padua, MD, PhD (Italy)</i>	<i>Leo Visser, MD (Netherlands)</i>
<i>Daniele Coraci, MD, PhD (Italy)</i>	<i>Ana Lucila Moreira, MD (Brazil)</i>
<i>Michael Cartwright, MD (USA)</i>	<i>Vanessa Baute, MD (USA)</i>

<i>Lisa D. Peter Inkpen, MD (USA)</i>	<i>Einar P. Wilder-Smith, MD (USA)</i>
<i>David Mayans, MD (USA)</i>	<i>John Norbury, MD (USA)</i>
<i>Jeremy D. Bland, MB ChB (USA)</i>	<i>Jeff Strakowski, MD (USA)</i>
<i>Sarada Sakamuri, MD (USA)</i>	<i>Joon-Shik Yoon (Korea (the Republic of))</i>
<i>Craig Zaidman, MD (USA)</i>	<i>Eman Tawfik, MD (USA)</i>

Neurophysiological Intraoperative Monitoring

Jointly developed by the American Society for Neurophysiological Monitoring (ASNM) and the International Society of Intraoperative Neurophysiology (ISIN)

Co-Directors: *Jaime López, MD, FACNS (USA), Jay Shils, PhD, D.ABNM, FACNS (USA), and Andrea Szelenyi, MD, PhD (Germany)*

Agenda:

- 8:00am Welcome & Introduction
Jaime Lopez, MD, FACNS (USA)
- 8:05am Electroencephalography
Marc R. Nuwer, MD, PhD, FACNS (USA)
- 8:40am Somatosensory Evoked Potentials
David MacDonald, MD, FRCP(C), ABCN (Saudi Arabia)
- 9:15am Brainstem Auditory Evoked Potentials
Alan D. Legatt, MD, PhD, FACNS (USA)
- 9:50am Discussion
- 10:05am Break
- 10:25am Motor Evoked Potentials
Ronald Emerson, MD, FACNS (USA)
- 11:00am Anesthesia
Antoun Koht, MD (USA)
- 11:35am Discussion
- 11:50am Lunch
- 12:50pm Welcome & Introduction- Afternoon
- 12:55pm Neuromonitoring of Lumbar Surgery and Transposas Procedures
Lawrence R. Wierzbowski, AuD, D.ABNM, BCS-IOM (USA)
- 1:30pm Brain Tumor Surgery and Motor and Language Mapping
Andrea Szelenyi, MD, PhD (Germany)
- 2:05pm Spinal Cord Tumors and Utility of D Waves and Spinal Cord Mapping
Francesco Sala, MD (Italy)
- 2:40pm Discussion
- 2:55pm Break
- 3:15pm NIOM of Cranial Nerves and Brainstem Mapping
Jaime Lopez, MD, FACNS (USA)
- 3:50pm Monitoring of Peripheral Nerve Surgery
Jorge E. Gutierrez, MD, MSc (Colombia)
- 4:25pm NIOM of Cerebrovascular Procedures
Leslie H. Lee, MD, FACNS (USA)

Satellite & Courses Program

Invasive Electroencephalography

Jointly developed by the International League Against Epilepsy (ILAE)
Co-Directors: *Stephan Schuele, MD, MPH, FACNS (USA)*, and *Jean Gotman, PhD, FACNS (Canada)*

Agenda:

- 8:00am Where Does iEEG Fit in the Pre-Operative Investigation?
Stephan Schuele, MD, MPH, FACNS (USA)
- 8:30am Why Do We Need iEEG When We Have High Density EEG, MEG and EEG-fMRI?
Jean Gotman, PhD, FACNS (Canada)
- 9:00am Diagnostic Utility of EEG for Epilepsy Surgery: Indications, Modalities, and Techniques (Report of ILAE Task Force)
Prasanna Jayakar, MD (USA)
- 9:30am The Physics of Intracranial EEG
Ronald Lesser, MD (USA)
- 10:00am Break
- 10:30am Surgical Techniques and Complications
Giorgio Lo Russo, MD (Italy)
- 11:00am The Normal Intracerebral EEG
Birgit Frauscher, MD (Canada)
- 11:30am Functional Mapping
Nathan E. Crone, MD (USA)
- 12:00pm Lunch
- 1:00pm iEEG in Temporal and Temporal plus Epilepsies
Cigdem Ozcara, MD (Turkey)
- 1:30pm iEEG in Focal Cortical Dysplasia (including children)
Laura Tassi, MD (Italy)
- 2:00pm iEEG in Nodular Heterotopias
Francois Dubeau, MD (Canada)
- 2:30pm Break
- 3:00pm iEEG in Non-Lesional Epilepsy
Philippe Kahane, MD, PhD (France)
- 3:30pm Seizure Onset Patterns and Their Significance
Lara Jehi, MD (USA)
- 4:00pm Does Removing the Seizure Onset Provide the Best Outcome?
Maeike Zijlmans, MD, PhD (Netherlands)

Transcranial Magnetic Stimulation

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

Agenda:

- 8:00am Introduction
Mark George, MD (USA)
- 8:05am Physics of Intracranial Current Flow Induced By TMS and TES and of Membrane Excitation
Alexander Opitz, PhD (Germany)
- 8:45am Essentials of Transcranial Magnetic Stimulation
John Rothwell, PhD (United Kingdom)
- 9:30am Physiology of Transcranial Magnetic Stimulation
Vincenzo Di Lazzaro, MD (Italy)
- 10:15am Break
- 10:30am Essentials of Transcranial Electric Stimulation
Walter Paulus, MD (Germany)
- 11:15am Transcranial Stimulation and Imaging
Hartwig R. Siebner, MD (Germany)
- 12:00pm Lunch
- 1:00pm Transcranial Stimulation and Memory
Agnes Floel, MD (Germany)
- 1:45pm Recent Advances with TMS for Treating Depression
Mark George, MD (USA)
- 2:30pm Using TMS or tSCS to Treat Addiction
Elliot Stein, PhD (USA)
- 3:15pm Break
- 3:30pm NIH Initiatives Using NIBS in Health and Disease
Sarah H. Lisanby, MD (USA)
- 4:15pm NIBS Approaches to Treating Bipolar Disorder
Robert M. Post, MD (USA)

THURSDAY, MAY 3, 2018

7:00 – 10:30am CONCURRENT SESSIONS

Neurophysiological Intraoperative Monitoring (continued)

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

Agenda:

- 7:00am Welcome & Introduction
- 7:05am NIOM of Functional Neurosurgery (DBS, SCS, MCS)
Jay L. Shils, PhD, D.ABNM, FASNM, 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, FASNM (USA)
- 9:25am Alert Criteria in NIOM
Lilia de La Maza, MD (Mexico)
- 10:00am Discussion

Neuromuscular Imaging (continued)

Co-Directors: Lisa D. 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) and 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)

BrainStem Society Meeting (continued)

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

Agenda:

- 7:00am Welcome
John Rothwell, PhD (USA)
- 7:05am Anatomy of the Reticular Formation and the PPN
Clifford Saper, MD, PhD (USA)
- 7:30am Functions of the PPN
Edgar Garcia-Rill, PhD (USA)
- 8:00am Prepulse Inhibition
Markus Kofler, MD (Austria)
- 8:30am Break
- 8:45am The PPN and Freezing of Gait
Jorik Nonnekens, MD, PhD (Netherlands)
- 9:15am PPN DBS. Indications and Potential Secondary Effects
Andres Lozano, MD, PhD, FRCSC, FRSC, FCAHS (Canada)
- 9:45am Discussion
Josep Valls-Sole, MD (Spain)
- 10:15am Final Remarks
Mark Hallett, MD, FACNS (USA)

Transcranial Magnetic Stimulation, continued

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)
- 7:00am Essentials of Repetitive Transcranial Magnetic Stimulations
Yoshikazu Ugawa, MD, PhD (Japan)
- 7:45am Break
- 8:00am Transcranial Stimulation and Pharmacology
Ulf Ziemann, MD (Germany)
- 8:45am Transcranial Stimulation and EEG
Paolo Maria Rossini, MD, PhD (Italy)
- 9:30am Summary and General Q&A
Mark George, MD (USA)

10:30 – 11:00am

Coffee Break

Visit Exhibits and Posters

11:00am – 12:30am

Opening Ceremonies & General Session

- ACNS Jasper Award Lecture
Mark Hallett, MD, FACNS

12:30 – 1:30pm

Lunch

Visit Exhibits & Posters

Congress Scientific & Educational Program

1:30 – 3:00pm CONCURRENT SESSIONS

10 Years of IFCN Electrodiagnostic (Awaji) Criteria for Early Diagnosis of ALS

Chair: *Ryuji Kaji, MD, PhD (Japan)*

Agenda:

Meta-Analysis of the Sensitivity and the Specificity of IFCN Awaji Criteria
David Burke, MD, DSc (Australia)

Expanded Use of IFCN Awaji Criteria with Ultrasound
Reinhard Dengler, MD (Germany)

How to Implement Awaji IFCN Criteria in EMG practice
Ryuji Kaji, MD, PhD (Japan)

Autonomic Testing and Small Fiber Neuropathies Evaluations

Chair: *Peter Novak, MD, PhD (USA)*

Agenda:

Autonomic Testing
Thomas Chelimsky, MD (USA)

Central Dysautonomia
Max Hilz, MD (Germany)

Quantitative Grading of Autonomic Failure, Severity of Small Fiber Neuropathy, Autonomic Overactivity and Orthostatic Intolerance
Peter Novak, MD, PhD (USA)

Intraoperative Motor Evoked Potentials Optimization Techniques

Chair: *Bernard Allan Cohen, PhD, FACNS (USA)*

Agenda:

Double Train Stimulation
Henricus L. Journee, MD, PhD (Netherlands)

Quadripolar MEP Stimulation
Bernard A. Cohen, PhD, FACNS (USA)

Peripheral Nerve Stimulation and Other Techniques
Ronald Emerson, MD, FACNS (USA)

Neonatal EEG: From Basic Concepts to Advanced Techniques

Chair: *Cecil Hahn, MD, MPH, FACNS (Canada)*

Agenda:

Neonatal EEG: Pearls and Pitfalls
Fabrice Wallois, MD, PhD (France)

Diagnosing Neonatal Seizures with Amplitude-Integrated EEG and Conventional EEG
Ronit M. Pressler, MD, PhD, MRCPCH (United Kingdom)

Logistics of EEG Monitoring in the Neonatal Intensive Care Unit
Cecil D. Hahn, MD, MPH, FACNS (Canada)

TMS-Evoked EEG Potentials – A Novel Technique to Study Brain Excitability and Connectivity in Health and Disease

Chair: *Ulf Ziemann, MD (Germany)*

Agenda:

Pharmacological Characterization of TMS-Evoked EEG Potentials
Ulf Ziemann, MD (Germany)

Utility of TMS-Evoked EEG Potentials in Epilepsy
Vasilios K. Kimiskidis, MD, PhD (Greece)

Utility of TMS-Evoked EEG Potentials in Disorders of Consciousness
Mario Rosanova, MD (Italy)

3:00 – 3:15pm

Break

3:15 – 4:45pm CONCURRENT SESSIONS

Applied Cases in Central Neurophysiology and Video EEG

Chair: *William O. Tatum, IV, DO, FACNS (USA)*

Agenda:

Clinical Neurophysiology: Pearls and Pitfalls
William O. Tatum, IV, DO, FACNS (USA)

Challenges in Video-EEG Monitoring
Selim R. Benbadis, MD, FACNS (USA)

Mystery Pediatric Cases
Phillip Pearl, MD, FACNS (USA)

Guidelines and Evidence-Based Medicine in Electrodiagnostic Testing

Chair: *Anders Fuglsang-Frederiksen, DMSc (Denmark)*

Agenda:

Guidelines and Standards in Electrodiagnostic Medicine
Kirsten Pugdahl, MS, PhD (Denmark)

Utility of EDX in Polyneuropathy
Hatice Tankisi, MD, PhD (Denmark)

Utility of EDX in Amyotrophic Lateral Sclerosis
Mamede de Carvalho, MD, PhD (Portugal)

Standard Formats for Neurophysiology Data Exchange

Chair: *Jonathan J. Halford, MD (USA)*

Agenda:

The Need for Standard Neurophysiology Formats
Jonathan J. Halford, MD (USA)

Brain Imaging Data Structure (BIDS)
Cyril Pernet, PhD (United Kingdom)

Design of the Multiscale Electrophysiology Format, Version 3 (MEF3)
Squire M. Stead, MD, PhD (USA)

4:45 – 5:00pm

Break

Congress Scientific & Educational Program

5:00 – 6:30pm CONCURRENT SESSIONS

EEG Based Biomarkers in Neuropsychiatric Disorders: Pitfalls and Opportunities

Chair: Joshua Ewen, MD, FACNS (USA)

Agenda:

EEG Based Biomarkers in Neuropsychiatric Disorders: Pitfalls and Opportunities

Sandra Loo, PhD (USA)

EEG Based Biomarkers in Neuropsychiatric Disorders: Pitfalls and Opportunities

Sandor Beniczky, MD, PhD (Denmark)

EEG Based Biomarkers in Neuropsychiatric Disorders: Pitfalls and Opportunities

Joshua Ewen, MD, FACNS (USA)

Large Scale Networks in Focal Epilepsy Revealed by High-density EEG and fMRI Studies

Chair: Margitta Seeck, MD, PhD (Switzerland)

Agenda:

Cognitive Impairment in Focal Epilepsy - Large Scale Network Disturbance

Pierre Mégevand, MD, PhD (Switzerland)

Large-Scale Epileptic Networks in Temporal Lobe Epilepsy: Evidence from HD-EEG in Patients and Animal Models

Christoph M. Michel, PhD (Switzerland)

Noninvasive Source Imaging of Seizure from High Density Scalp EEG

Bin He, PhD (USA)

Novel Methodologies in Transcranial Magnetic Stimulation

Chair: Ricci Hannah, PhD (United Kingdom)

Agenda:

Selective Neuronal Stimulation with Controllable Pulse Parameter TMS: Physiological and Behavioural Evidence

Ricci Hannah, PhD (United Kingdom)

Behavioural Consequences of Quadripulse Stimulation (QPS): Interactions with Response Inhibition in Healthy Individuals and Parkinson's Disease Patients

Masashi Hamada, MD, PhD (Japan)

Brain-State Dependent TMS: Live Methodological Demonstration and Evidence for Enhanced Neuromodulation Effectiveness

Christoph Zrenner, MD (Germany)

Neurophysiology of Tremor

Chair: Dietrich Haubenberger, MHSc, MD (Austria)

Agenda:

Parkinson's Tremor

Rick C. Helmich, MD, PhD (Netherlands)

Essential Tremor

Dietrich Haubenberger, MHSc, MD (Austria)

Dystonic Tremor

Pattamon Panyakaew, MD (Thailand)

Update and Advances in the Neurophysiologic Assessment of Neuromuscular Junction Disorders

Chair: Devon Rubin, MD, FACNS (USA)

Agenda:

Repetitive Nerve Stimulation: Advances, Techniques, and Limitations

Devon Rubin, MD, FACNS (USA)

Update in Single Fiber EMG and Concentric Needle EMG in the Diagnosis of Neuromuscular Junction Disorders

Daniel Menkes, MD, FACNS (USA)

Advancing Neurophysiologic Techniques in the Evaluation of Neuromuscular Junction Disorders

Hans D. Katzberg, MD, MSc, FRCPC (Canada)

6:30 – 8:00pm

Welcome Reception

Exhibit Hall

(see p. 13 for more information)

FRIDAY, MAY 4, 2018

7:00 – 8:30am

Breakfast Product Theaters

8:30 – 9:00am

Coffee Break

9:00 – 10:30am

General Session

IFCN Berger Award Presentation & Lecture

Margitta Seeck, MD, PhD

ACNS Schwab Award Presentation & Lecture

Donald Sanders, MD

10:00 – 10:15am

Break

10:15 – 11:45am

CONCURRENT SESSIONS

CNP Program Directors Symposium: Subspecialty Clinical Neurophysiology Training

Chair: Jeffrey Britton, MD, FACNS (USA)

Agenda:

American Perspectives

Jeffrey Britton, MD, FACNS (USA)

European Perspectives

Jonathan Cole, MA, MSc, DM (Oxon), FRCP (United Kingdom)

Asian Perspectives

Ryusuke Kakigi, MD, PhD (Japan)

Advances in the Neurophysiology of Language: Structure, Time, and Plasticity

Chair: *Ellen Lau, PhD (USA)*

Agenda:

Neural Representations of Speech in Auditory Cortex
Jonathan Z. Simon, PhD (USA)

Neural Encoding of Linguistic Structure Across Time
Ellen Lau, PhD (USA)

Plasticity in the Neural Implementation of Language: Insights from Studies with Blind Individuals
Marina Bedny, PhD (USA)

CONTROVERSY: Nonconvulsive Seizures and Status Should be Aggressively Treated

Moderator: *Frank Drislane, MD, FACNS (USA)*

Agenda:

Pro
Andrea Rossetti, MD, PhD (Switzerland)

Con
Lawrence Hirsch, MD, FACNS (USA)

Electrophysiology and Immune Mechanisms in Post Infectious Neuropathies

Chair: *YL Lo, MD (Singapore)*

Agenda:

Axonal Guillain-Barre Syndrome: New Concepts
Satoshi Kuwabara, MD (Japan)

Electrophysiologic Features of Postinfectious Neuropathies
YL Lo, MD (Singapore)

Nodopathies of the Peripheral Nervous System
Marcondes C. Franca, MD, PhD (Brazil)

Structures Activated by TMS and Stimulating Current Direction

Co-Chairs: *Yoshikazu Ugawa, MD, PhD (Japan)* and *John Rothwell, PhD (United Kingdom)*

Agenda:

Based on Own Human Experimental Data
Yoshikazu Ugawa, MD, PhD (Japan)

Based on Epidural Recording Data
John Rothwell, PhD (United Kingdom)

Based on Modelling Data
Vincenzo Di Lazzaro, MD (Italy)

11:45am – 1:00pm

Lunch

Visit Exhibits and Posters

Special Interest Groups (SIGs)

Noninvasive Brain Stimulation
Director: Walter Paulus, MD

Education
Director: Jonathan Cole, MA, MSc, DM (Oxon), FRCP

Neuromuscular Ultrasound
Director: Francis Walker, MD, FACNS

Continuous EEG
Director: Sarah Schmitt, MD, FACNS

Neurophysiologic Interoperative Monitoring
Director: Lilia de La Maza, MD

1:00 – 2:30pm CONCURRENT SESSIONS

How Well Do You See Inside the Brain with Scalp EEG, MEG, EEG-fMRI and Intracerebral EEG?

Chair: *Jean Gotman, PhD, FACNS (Canada)*

Agenda:

Strengths and Limitations of Scalp EEG and MEG in Identifying Deep Neuronal Sources
Andreas Alexopoulos, MD (USA)

Combining EEG and fMRI to See the Source of Deep Epileptic Discharges
Jean Gotman, PhD, FACNS (Canada)

Intracerebral EEG Can See Deep in the Brain, but with Tunnel Vision
Laura Tassi, MD (Italy)

Peripheral Clinical Neurophysiology in Intensive Care

Co-Chairs: *Mamede de Carvalho, MD, PhD (Portugal)* and *Hatice Tankisi, MD, PhD (Denmark)*

Agenda:

Intensive Care Unit Myopathy
Hatice Tankisi, MD, PhD (Denmark)

Intensive Care Unit Neuropathy
Birger Johnsen, MD, PhD (Denmark)

Respiratory Evaluation
Mamede de Carvalho, MD, PhD (Portugal)

Quantitative EEG in Epilepsy and Critical Care: Interactive Workshop

Chair: *Susan T. Herman, MD, FACNS (USA)*

Agenda:

Quantitative EEG for Assessment of Background Abnormalities
Michel J. Van Putten, MD, MSc, PhD (Netherlands)

Quantitative EEG for Identification of Seizures and Periodic Patterns
Susan T. Herman, MD, FACNS (USA)

Quantitative EEG for Identification of Ischemia
M. Brandon Westover, MD, PhD, FACNS (USA)

Congress Scientific & Educational Program

Sleep Biomarkers in Cognitive Disorders

Chair: *Madeleine M. Grigg-Damberger, MD, FACNS (USA)*

Agenda:

Sleep Biomarkers in Alzheimer's Disease and Minimal Cognitive Impairment
Madeleine M. Grigg-Damberger, MD, FACNS (USA)
Prognostic Significance of Sleep Disorders in Mild Traumatic Brain Injury
Sanjeev Kothare, MD (USA)
Sleep Biomarkers in Parkinson's Disease
Birgit Högl, MD (Austria)

Teaching Clinical Neurophysiology: Adapting Models to Local Demands

Chair: *Paulo Andre Kimaid, MD, PhD (Brazil)*

Agenda:

Clinical Neurophysiology in Brazil – A New Paradigm
Learning Distance and Intensive Practical Sessions
Paulo Andre A. Kimaid, MD, PhD (Brazil)
Web Based EEG Teaching Techniques
Sandor Beniczky, MD, PhD (Denmark)
The Role of IFCN and Other World Organizations in Teaching CNP
Hiroshi Shibasaki, MD, PhD (Japan)

2:30 – 2:45pm

Break

2:45 – 4:15pm **CONCURRENT SESSIONS**

Continuous EEG in Targeted Temperature Management: the I-CARE (International Cardiac Arrest EEG Consortium)-CCEMRC Study

Chair: *Jong Woo Lee, MD, PhD, FACNS (USA)*

Agenda:

Approaches to Continuous EEG in Cardiac Arrest
Michel J. Van Putten, MD, MSc, PhD (Netherlands)
Advances in Assessing EEG Reactivity in Targeted Temperature Management
M. Brandon Westover, MD, PhD, FACNS (USA)
Dynamic Nature of Brain Injury in Targeted Temperature Management
Jong Woo Lee, MD, PhD, FACNS (USA)

Growing the Optimal Neurodiagnostic Team: Presented by ASET-The Neurodiagnostic Society

Chair: *Maureen Carroll, R.EEG/EP T, CNIM, RPSGT (USA)*

Agenda:

Education Without Boundaries: Self-directed Distance Learning in Neurodiagnostics
Maureen Carroll, R. EEG/EP T., RPSGT, CNIM (USA)
The Road from Didactics to Clinical Competence in Neurodiagnostics
Cheryl Plummer, R.EEG T, CLTM, FASET (USA)
Global Neurodiagnostic Educational Resources through OSET
Maggie Marsh-Nation, R.EEG T, CNIM, MSIDT (USA)

Pediatric Neuromuscular Disorders

Chair: *Nancy Kuntz, MD (USA)*

Agenda:

Congenital Myasthenic Syndromes: Update on EDX and Treatment
Liying Cui, MD (China)
Hereditary Neuropathies: Navigating EDX and Genetic Testing
Nancy Kuntz, MD (USA)
Diagnostic Features and Treatment Update
Kathryn Selby, BSc, MBChB, MRCP, FRCPC (Canada)

4:15 – 4:30pm

Break

4:30 – 6:00pm

General Session

ACNS Presidential Lecture
Stephan U. Schuele, MD, MPH, FACNS
IFCN Adrian Award Presentation & Lecture
Clifford Saper, MD, PhD

7:00 – 9:00pm

Gala Reception

Smithsonian National Air & Space Museum
(see p. 13 for more information)

SATURDAY, MAY 5, 2018

8:30 – 10:00am

CONCURRENT SESSIONS

Clinical Neurophysiology of Insular Epilepsy

Chair: *Dang K. Nguyen, MD, PhD, FRCPC (Canada)*

Agenda:

Video-scalp EEG Investigation of Insular Epilepsy
Dang K. Nguyen, MD, PhD, FRCPC (Canada)
Magnetoencephalographic Investigation of Insular Epilepsy
Ismail Mohamed, MD (USA)
Invasive EEG Investigation of Insular Epilepsy
Philippe Kahane, MD, PhD (France)

Human Brain Connectome from Physiology to Disease

Chair: *Fabrizio Vecchio, PhD (Italy)*

Agenda:

Anatomical and Functional Connectivity: From Cell to Whole Brain
Hartwig R. Siebner, MD (Denmark)
Functional Connectivity in Physiological and Pathological Aging from EEG Network Analysis During Rest and Task
Fabrizio Vecchio, PhD (Italy)
Connectivity and Neurodegeneration
Paolo Maria Rossini, MD, PhD (Italy)

Congress Scientific & Educational Program

Neurophysiologic and Imaging Signatures of Pain and Itch

Chair: Sung-Tsang Hsieh, MD, PhD (Taiwan)

Agenda:

Neurophysiological Signatures of Pain and Their Clinical Use
Praveen Anand, MD (United Kingdom)
Imaging Signatures of Nerve Degeneration-Induced Neuropathic Pain
Sung-Tsang Hsieh, MD, PhD (Taiwan)
Itch Perception in Humans
Ryusuke Kakigi, MD, PhD (Japan)

Neurophysiological Effects of Deep Brain Stimulation

Chair: Josep Valls-Sole, MD (Spain)

Agenda:

Stimulated Area and Local Field Potentials. Near Effects of DBS
Jerrold Vitek, MD, PhD (USA)
Beyond Basal Ganglia. Effects of DBS on Cortical Activity
Robert Chen, MD (Canada)
Lateral Effects on Sensory and Motor Pathways
Josep Valls-Sole, MD (Spain)

Neurophysiology of Multisensory Integration

Chair: John Foxe, PhD (USA)

Agenda:

Shifting Among Multiple Senses
John Foxe, PhD (USA)
Timing in the Brain: Multi-Modal Investigations
Mark Wallace, MD (USA)
Title coming soon
Sophie Molholm, PhD (USA)

10:00 – 10:15am

Break

10:15 – 11:45am

General Session

ACNS Gloor Award Presentation & Lecture
Marc R. Nuwer, MD, PhD, FACNS
IFCN Kugleberg Award Presentation & Lecture
Mandaville Gourie-Devi, MBBS, MD, DM, DSc

11:45am – 1:00pm

Lunch

Visit Posters and Exhibits

12:00 – 2:30pm

IFCN General Assembly

2:00 – 3:30pm CONCURRENT SESSIONS

Contemporary Update on Pedicle Screw Stimulation

Chair: Gloria Galloway, MD, MBA, FACNS (USA)

Agenda:

Alert Criteria in PS Placement and Chronically Compressed Nerve Roots
Gloria Galloway, MD, MBA, FACNS (USA)
Value of NIOM in PS Placement Review of the Data
Armando Tello, MD, PhD (Mexico)
Complications of PS Placement with Review of Case Studies
Jaime Ramos-Peek, MD (Mexico)

CONTROVERSY: Stereo VS Grids and Strips – Which is Better, How Do We Choose?

Chair: Saurabh Sinha, MD, PhD, FACNS (USA)

Agenda:

Saurabh R. Sinha, MD, PhD, FACNS (USA)
Francois Dubeau, MD (Canada)
Gregory Bergey, MD (USA)

CONTROVERSY: Ultrasound is Sufficient for Diagnosis of ALS, CTS, Demyelinating Neuropathy

Moderator: Francis O. Walker, MD, FACNS (USA)

Agenda:

Pro
David Preston, MD (USA)
Con
Leo Visser, MD (Netherlands)

Pediatric Noninvasive Brain Stimulation

Chair: Alex Rotenberg, MD, PhD (USA)

Agenda:

Moving Targets: Developmental Neurobiology
Considerations in NBS
Alexander Rotenberg, MD, PhD (USA)
Therapeutic Targets in ADHD
Michael Siniatchkin, MD (Germany)
Therapeutic Prospects for NBS in Pediatric Stroke
Adam Kirton, MD, MSc (Canada)

3:30 – 3:45pm

Break

3:45 – 5:15pm CONCURRENT SESSIONS

Advances in Neuromuscular Imaging: A Focus on Nerve Ultrasound

Chair: Lisa D. Hobson-Webb, MD (USA)

Agenda:

Emerging Technologies in Neuromuscular Imaging: An Overview
Lisa D. Hobson-Webb, MD (USA)
Integrating Imaging with Electrodiagnostic Testing
Michael Cartwright, MD (USA)
Elastography Techniques in Neuromuscular Imaging
Daniele Coraci, MD, PhD (Italy)

Congress Scientific & Educational Program

Botulinum Toxin Treatment of Neurologic Disorders: Mechanism of Action and Ultrasound vs EMG Guidance

Chair: *Jaime Lopez, MD, FACNS (USA)*

Agenda:

The Clinical Neuropharmacology and Neurophysiology of Botulinum Toxins
Janice Massey, MD (USA)
Ultrasound Guidance of Botulinum Toxin Therapy
Katharine Alter, MD (USA)
EMG and Electrical Stimulation Guidance for Botulinum Toxin
Jaime Lopez, MD, FACNS (USA)

Neurophysiology of Cannabinoids

Chair: *Jose Tellez-Zenteno, MD, PhD, FRCP(C), CSCN (EEG) (Canada)*

Agenda:

Neurophysiology of CBD in Epilepsy
Jose Tellez-Zenteno, MD, PhD, FRCP(C), CSCN (EEG) (Canada)
Neurophysiology of CBD in Pain
Sung-Tsang Hsieh, MD, PhD (Taiwan)
Neurophysiology of CBD in Sleep
Charlene Gamaldo, MD (USA)

The Evolving Role of Neurostimulation in the Management of Medically Refractory Epilepsy

Chair: *Dawn Eliashiv, MD, FACNS, FAAN (USA)*

Agenda:

Cranial Nerve Stimulation in Epilepsy: Update and Future Trends
Christopher De Giorgio, MD (USA)
Responsive Neurostimulation: Patient Selection and Advanced Programming Strategies
Lawrence Hirsch, MD, FACNS (USA)
Neurostimulation 2020 and Beyond
Dawn Eliashiv, MD, FACNS (USA)

Update on Evoked Potential Warning Criteria during Surgery

Chair: *Aatif Husain, MD, FACNS (USA)*

Agenda:

Somatosensory Evoked Potentials
David MacDonald, MD, FRCP(C), ABCN (Saudi Arabia)
Motor Evoked Potentials
Andrea Szelenyi, MD, PhD (Germany)
Brainstem Auditory Evoked Potentials
Aatif M. Husain, MD, FACNS (USA)

5:15 – 5:45pm

Break

5:45 – 6:45pm

General Session

Journal of Clinical Neurophysiology (JCN) Cosimo
Ajmone-Marson (CAM) Award Presentation
Neurophys Bowl

SUNDAY, MAY 6, 2018

8:30 – 10:00am CONCURRENT SESSIONS

Brain Connectivity – What Invasive Electrophysiology Can Do for Mapping Brain Networks

Chair: *Riki Matsumoto, MD, PhD (Japan)*

Agenda:

Mapping Brain Networks with ECoG Spectral Analysis
Nathan E. Crone, MD (USA)
Probing Brain Effective Connectivity Using Cortico-Cortical Evoked Potential
Riki Matsumoto, MD, PhD (Japan)
Exploring Brain Functional Connectivity Using Direct White Matter Stimulation
Hugues Duffau, MD, PhD (France)

Beyond Sleep Studies and EEGs: Advances in Ambulatory Neurophysiologic Monitoring of Sleep and Epilepsy

Chair: *Tobias Loddenkemper, MD, FACNS (USA)*

Agenda:

Monitoring of Neurophysiological Biomarkers during Wakefulness and Sleep
Milena Pavlova, MD (USA)
Seizures, Sleep and SUDEP
Elson So, MD (USA)
Circadian Seizure Patterns and Ambulatory Detection Devices
Tobias Loddenkemper, MD, FACNS (USA)

Contribution of Corticomuscular, Intermuscular and Corticokinematic Coherence in Research on Sensorimotor Interactions

Chair: *Sylvain Crémoux, PhD (France)*

Agenda:

Potential of Corticomuscular and Intermuscular Interactions to Evaluate and Detect Alteration of Motor Control in Healthy People and People with Cervical Spinal Cord Injury
Sylvain Crémoux, PhD (France)
Corticomuscular Coherence During Walking: Investigating The Cortical Control Of Human Gait in Young and Older Adults and People With Parkinson's Disease
Tjeerd Boonstra, PhD (Australia)
Corticokinematic Coherence: A Biomarker of the Proprioceptive Feedbacks to the Sensorimotor Cortex
Mathieu Bourguignon, PhD (Spain)

Congress Scientific & Educational Program

New Proposals for Tc-MEP Interpretation in Spinal Deformities and Intramedullary Spinal Cord Tumor (IMSCT) Surgeries

Chair: *Martin J. Segura, MD, PhD (Argentina)*

Agenda:

A New Alarm Criterion for MEP-NIOM and an Alternative Gold Standard to Better Identify True "False Positive" Findings

Martin J. Segura, MD, PhD (Argentina)

A Proposed New Algorithm for Decision Making in the Face of Neurophysiological Alarms During Spinal Deformity Surgeries

Ricardo Ferreira, MD (Brazil)

A Tailored Neurophysiological Approach to Warning MEP Criteria in Intramedullary Spinal Cord Tumors

Francisco J. Soto, MD (Chile)

Quo Vadis Clinical MEG Worldwide?

Chair: *Anto Bagic, MD, PhD, FACNS (USA)*

Agenda:

Japanese Perspective on the Current State and Future Direction of Clinical MEG

Kazutaka Jin, MD, PhD (Japan)

European Perspective on the Current State and Future Direction of Clinical MEG

Stefan Rammpp, MD (Germany)

USA Perspective on the Current State and Future Direction of Clinical MEG

Anto Bagic, MD, PhD, FACNS (USA)

10:00 – 10:15am

Break

10:15 – 11:45am CONCURRENT SESSIONS

Optimizing Transcranial Direct Current Stimulation

Chair: *Michael A. Nitsche, MD (Germany)*

Agenda:

More Is Not Better, Just Different

Michael A. Nitsche, MD (Germany)

Targeting Networks

Giulio Ruffini, PhD (Spain)

tDCS and Drugs

Alexander Rotenberg, MD, PhD (USA)

Quantitative Methods to Follow Neuromuscular Disease

Chair: *Seward Rutkove, MD (USA)*

Agenda:

Quantitative Needle EMG Methods

Mark Bromberg, MD, PhD (USA)

Electrical Impedance Myography

Seward Rutkove, MD (USA)

Motor Unit Estimates

Jeremy Shefner, MD, PhD (USA)

Sensorimotor Organization in Writer's Cramp

Chair: *Mathew Alexander, MD, DM (India)*

Agenda:

Pathophysiology of Dystonia

Pattamon Panyakaew, MD (Thailand)

Noninvasive Brain Stimulation as a Therapeutic Tool in FHD

Angelo Quartone, MD (Italy)

Sensori-Motor Processing Abnormalities in Writer's Cramp

Mathew Alexander, MD, DM (India)

How Sports Affects Neurophysiology: The Good, the Bad, and the Ugly

Chair: *Claus Reinsberger, MD, PhD, FACNS (Germany)*

Agenda:

Better Performance by Better Sleep: The Role of Sleep in Elite Sports (The Good)

Hugh Fullagar, PhD (Australia)

Neurophysiology of Acute Concussion (The Bad)

Claus Reinsberger, MD, PhD, FACNS (Germany)

Task-Specific Dystonia in Sports: 'Waggles', 'Staggers' and 'Yips' (The Ugly)

Sarah Pirio Richardson, MD (USA)

Wide-Band EEG by Neuron and Glia: from Basic and Clinical Application in Epilepsy

Chair: *Akio Ikeda, MD, PhD, FACNS (Japan)*

Agenda:

Basic Generator Mechanism of Wide-Band EEG in Epilepsy

Christophe Bernard, PhD (France)

Clinical Observation of HFO in Epilepsy

Jean Gotman, PhD, FACNS (Canada)

Clinical Observation of DC Shifts in Epilepsy

Akio Ikeda, MD, PhD, FACNS (Japan)

11:45am – 12:00pm

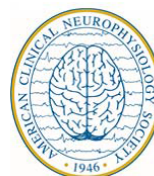
Break

12:00 - 12:45pm

Closing Ceremonies

**31ST INTERNATIONAL CONGRESS OF CLINICAL NEUROPHYSIOLOGY (ICCN) OF
THE INTERNATIONAL FEDERATION OF CLINICAL NEUROPHYSIOLOGY (IFCN)
ADVANCE REGISTRATION FORM**

May 1-6, 2018 | Marriott Wardman Park | Washington DC, USA



To register for the meeting online, please visit: <http://iccn2018.acns.org/>

Advance Registration Deadline: April 10, 2018

Onsite prices will increase.

(Please type or print clearly.)

First (Given) Name _____ Middle Initial _____ Last (Family) Name _____

Designation (MD, PhD, DO, etc.) _____ Institution _____

Mailing Address _____

City _____ State/Province _____

Zip/Postal Code _____ Country _____

Phone _____ Fax _____ Email _____

☐ I do not wish to be included on the delegate list provided to supporters.

☐ I do not wish to be included on any published delegate list including programs, mobile apps, etc.

SATELLITE COURSES – Tuesday, May 1 – Thursday, May 3, 2018

Please note that the scheduled times of some courses listed below may conflict. Please refer to the Preliminary Program for complete course scheduling information to make your selections. Delegates registering for the Congress below qualify for discounted course registration rates.

	Physician	Physician w/ Congress Discount	Student*/ Technologist	Student*/ Technologist w/ Congress Discount	Reduced Rate Countries**	Reduced Rate Countries w/ Congress Discount**
Tuesday, May 1						
8:00 - 17:00 ICU EEG	☐ \$200 USD	☐ \$150 USD	☐ \$125 USD	☐ \$95 USD	☐ \$125 USD	☐ \$95 USD
8:00 - 17:00 MEG	☐ \$200 USD	☐ \$150 USD	☐ \$125 USD	☐ \$95 USD	☐ \$125 USD	☐ \$95 USD
8:00 - 12:00 Advanced EMG	☐ \$100 USD	☐ \$75 USD	☐ \$65 USD	☐ \$50 USD	☐ \$65 USD	☐ \$50 USD
13:00 - 17:00 Single Fiber EMG	☐ \$100 USD	☐ \$75 USD	☐ \$65 USD	☐ \$50 USD	☐ \$65 USD	☐ \$50 USD
Tuesday, May 1 (8:00 – 17:00) & Thursday, May 3 (7:00-10:30)						
BrainStem Society	☐ \$175 USD	☐ \$100 USD	☐ \$100 USD	☐ \$75 USD	☐ \$100 USD	☐ \$75 USD
Wednesday, May 2						
8:00 – 17:00 Invasive EEG	☐ \$200 USD	☐ \$150 USD	☐ \$125 USD	☐ \$95 USD	☐ \$125 USD	☐ \$95 USD
Wednesday, May 2 (8:00 – 17:00) – Thursday, May 3 (7:00-10:30)						
Neuromuscular Imaging	☐ \$400 USD	☐ \$350 USD	☐ \$250 USD	☐ \$200 USD	☐ \$250 USD	☐ \$200 USD
NIOM	☐ \$275 USD	☐ \$200 USD	☐ \$175 USD	☐ \$135 USD	☐ \$175 USD	☐ \$135 USD
TMS	☐ \$275 USD	☐ \$200 USD	☐ \$175 USD	☐ \$135 USD	☐ \$175 USD	☐ \$135 USD

Satellite Courses Total (A): _____

	Physician	Student*/ Technologist	Reduced Rate Countries**
CONGRESS REGISTRATION Thursday, May 3 - Sunday, May 6, 2018	☐ \$500 USD	☐ \$300 USD	☐ \$300 USD

Congress Total (B): _____

* To qualify for the student rate, please submit a letter from a supervisor verifying student status with this registration form.

**Please visit <http://iccn2018.acns.org/registration> for a list of countries that qualify for "reduced rate countries" registration. Delegates that qualify may register online or by submitting the registration form.

SOCIAL EVENTS

☐ Welcome Reception - Thursday, May 3, 2018	Complimentary
☐ Gala Reception - Friday, May 4, 2018	\$85

Social Events Total (C): _____

GUEST REGISTRATION

Guests – Age 18 and over <i>Welcome and Gala Receptions only</i> Guest Name: _____ Guest Name: _____	\$175 x _____
Guests - Under Age 18 <i>Gala Reception only (must be accompanied by a registered delegate)</i> Guest Name: _____ Guest Name: _____	\$60 x _____

Guest Total (D): _____

SPECIAL NEEDS
☐ I have a religious or allergy-related dietary restriction. Please explain:

☐ I have a need for physical assistance. Please explain:
PAYMENT:
Satellite Courses (A): _____ **+ Congress (B):** _____ **+ Social Events (C):** _____ **Guests (D):** _____ **=**
TOTAL DUE: _____
☐ Please invoice me (invoice must be paid by April 10, 2018)

☐ Company check - payable to American Clinical Neurophysiology Society (*in US Dollars, drawn on a US bank*)

☐ Credit Card (*check one*): ☐ VISA ☐ MasterCard ☐ Discover ☐ American Express

Credit Card Number _____ Expiration Date _____

Card Holder Name _____

Authorized Signature _____ Date _____

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Signature of Agreement: I am hereby registering to attend the 31st International Congress of Clinical Neurophysiology (ICCN) of the International Federation of Clinical Neurophysiology (IFCN), May 1-6, 2018, at the Marriott Wardman Park in Washington, DC. I understand that the event registration rate listed above will be charged to the credit card I have listed. I understand further that all registration charges must be paid in full upon completion of this form. If registration is not paid for in full at time of event, I may be asked to provide payment upon arrival at the meeting.

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Please return this registration form with payment to:

ICCN Secretariat • 555 E. Wells Street, Suite 1100 • Milwaukee, WI 53202 • Fax: (414) 276-3349 • E-mail: ICCN2018@acns.org

Please check below the Congress sessions you plan to attend. Pick one from each time segment.

These sessions are included in the Congress registration fee at no additional charge. Anticipated attendance information will be used to assign sessions to appropriate meeting space. You are not obligated to attend the sessions you check.

Thursday, May 3

13:30-15:00

- ☐ 3000: Autonomic Testing
- ☐ 3005: Intraoperative Motor Evoked Potentials Optimization Techniques
- ☐ 3010: Neonatal EEG: From Basic Concepts to Advanced Techniques
- ☐ 3015: Ten years of the IFCN Electrodiagnostic (Awaji) Criteria for Early Diagnosis of ALS
- ☐ 3020: TMS-evoked EEG Potentials – A Novel Technique to Study Brain Excitability and Connectivity in Health and Disease

15:15-16:45

- ☐ 3025: Applied Cases in Central Neurophysiology and Video EEG
- ☐ 3030: Guidelines and Evidence-Based Medicine in Electrodiagnostic (EDX) Testing
- ☐ 3035: Standard Formats for Neurophysiology Data Exchange

17:00-18:30

- ☐ 3050: EEG Based Biomarkers in Neuropsychiatric Disorders: Pitfalls and Opportunities
- ☐ 3055: Large Scale Networks In Focal Epilepsy Revealed by High-Density EED and fMRI Studies
- ☐ 3060: Neurophysiology of Tremor
- ☐ 3065: Novel Methodologies in Transcranial Magnetic Stimulation
- ☐ 3070: Update and Advances in the Neurophysiologic Assessment of Neuromuscular Junction Disorders

Friday, May 4

10:15-11:45

- ☐ 4000: CNP Program Directors Symposium: Subspecialty Clinical Neurophysiology Training
- ☐ 4005: Controversy: Nonconvulsive Seizures and Status Should Be Aggressively Treated
- ☐ 4010: Electrophysiology and Immune Mechanisms in Post-Infectious Neuropathies
- ☐ 4015: Advances in the Neurophysiology of Language: Structure, Time, and Plasticity
- ☐ 4020: Structures Activated By TMS and Stimulating Current Direction

11:45-13:00

- ☐ 4080: Special Interest Group: Noninvasive Brain Stimulation
- ☐ 4081: Special Interest Group: Education
- ☐ 4082: Special Interest Group: Ultrasound
- ☐ 4083: Special Interest Group: Electroencephalogram
- ☐ 4083: Special Interest Group: Intraoperative Monitoring

13:00-14:30

- ☐ 4025: How Well Do You See inside the Brain with Scalp EEG, MEG, EEG-fMRI and Intracerebral EEG?
- ☐ 4030: Peripheral Clinical Neurophysiology in Intensive Care
- ☐ 4035: Quantitative EEG in Epilepsy and Critical Care: Interactive Workshop
- ☐ 4040: Sleep Biomarkers in Cognitive Disorders
- ☐ 4045: Teaching Clinical Neurophysiology: Adapting Models to Local Demands

14:45-16:15

- ☐ 4050: Continuous EEG in Targeted Temperature Management: the I-CARE (International Cardiac Arrest EEG Consortium)-CCEMRC Study
- ☐ 4055: Growing the Optimal Neurodiagnostic Team: Presented by ASET-The Neurodiagnostic Society
- ☐ 4060: Pediatric Neuromuscular Disorders

Saturday, May 5

8:30-10:00

- ☐ 5000: Clinical Neurophysiology of Insular Epilepsy
- ☐ 5005: Human Brain Connectome from Physiology to Disease
- ☐ 5010: Neurophysiologic and Imaging Signatures of Pain and Itch
- ☐ 5015: Neurophysiological Effects of Deep Brain Stimulation
- ☐ 5020: Neurophysiology of Multisensory Integration

14:00-15:30

- ☐ 5025: Contemporary Update on Pedicle Screw Stimulation
- ☐ 5030: Controversy: Stereo EEG vs. Grids and Strips – Which Is Better, How Do We Choose?
- ☐ 5035: Controversy: Ultrasound Is Sufficient For Diagnosis of ALS, CTS Demyelinating Neuropathy
- ☐ 5040: Pediatric Noninvasive Brain Stimulation

15:45-17:15

- ☐ 5045: Advances in Neuromuscular Imaging: A Focus on Nerve Ultrasound
- ☐ 5050: Botulinum Toxin Treatment of Neurologic Disorders: Mechanisms of Action and Ultrasound vs EMG Guidance
- ☐ 5055: Neurophysiology of Cannabinoids
- ☐ 5060: The Evolving Role of Neurostimulation in the Management of Medically Refractory Epilepsy
- ☐ 5065: Update on Evoked Potential Warning Criteria during Surgery

Sunday, May 6

8:30-10:00

- ☐ 6000: Brain Connectivity: What Invasive Electrophysiology Can Do For Mapping Brain Networks?
- ☐ 6005 Contribution of Corticomuscular, Intermuscular and Corticokinematic Coherence in Research on Sensorimotor Interactions
- ☐ 6010: New Proposals for Tc-MEP Interpretation in Spinal Deformities and Intramedullary Spinal Cord Tumor (IMSCT) surgeries
- ☐ 6015: Quo Vadis Clinical MEG Worldwide?
- ☐ 6040: Beyond Sleep Studies and EEG's: Advances in Ambulatory Neurophysiologic Monitoring of Sleep and Epilepsy

10:15-11:45

- ☐ 6020: Optimizing Transcranial Direct Current Stimulation
- ☐ 6025: Quantitative Methods to Follow Neuromuscular Disease
- ☐ 6030: Sensorimotor Organization in Writer's Cramp
- ☐ 6035: Wide-band EEG by Neuron and Glia: From Basic and Clinical Application in Epilepsy
- ☐ 6045: How Sports Affects Neurophysiology: The Good, the Bad, and the Ugly

SOCIAL EVENTS

☐ Welcome Reception - Thursday, May 3, 2018	Complimentary
☐ Gala Reception - Friday, May 4, 2018	\$85

Social Events Total (C): _____

GUEST REGISTRATION

Guests – Age 18 and over <i>Welcome and Gala Receptions only</i> Guest Name: _____ Guest Name: _____	\$175 x _____
Guests - Under Age 18 <i>Gala Reception only (must be accompanied by a registered delegate)</i> Guest Name: _____ Guest Name: _____	\$60 x _____

Guest Total (D): _____

SPECIAL NEEDS
☐ I have a religious or allergy-related dietary restriction. Please explain:

☐ I have a need for physical assistance. Please explain:
PAYMENT:
Satellite Courses (A): _____ + Congress (B): _____ + Social Events (C): _____ Guests (D): _____ =
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American Clinical Neurophysiology Society
555 E. Wells Street
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Milwaukee, WI 53202

ICCN ★ 2018

Marriott Wardman Park, Washington, DC
May 1-6, 2018

IMPORTANT DATES

Abstract Decision Notification	January 2018
Exhibit & Support Application Deadline	March 20, 2018
Housing Deadline	April 10, 2018
Registration Deadline	April 10, 2018