



ACNS FALL COURSES

September 21-22, 2019

ATLANTA, GEORGIA

FINAL PROGRAM

TABLE OF CONTENTS

Message from the President and Course Committee Co-Chairs.....	1
ACNS Information	
Officers and Council.....	2
Fall Courses Committees.....	2
Executive Office.....	2
General Meeting Information	
JW Marriott Atlanta Buckhead Floorplan.....	3
Registration Desk.....	3
Business Center.....	3
Meeting Safety and Responsibility Policy.....	4
Privacy and Data Protection Policy.....	4
Photography and Recording Policy.....	4
CME Information	
Meeting Description.....	5
Learning Objectives.....	5
Certificate of Attendance.....	5
CME Credit Designation.....	5
ASET CEU Disclaimer and Credit Designation.....	6
Conflict of Interest Disclosures.....	7
Course Agendas	
Morning & Evening Courses.....	10
ICU-EEG.....	11
NIOM.....	12
Exhibit Hall Information	
Hours.....	13
Exhibitors.....	13
Product Theater.....	15

MESSAGE FROM THE PRESIDENT AND COURSE COMMITTEE CO-CHAIRS

On behalf of the American Clinical Neurophysiology Society (ACNS), it is our pleasure to welcome you to Atlanta for the 2019 ACNS Fall Courses. The Fall Courses are led by experts in the field and continue to provide an excellent opportunity for professional growth through education in rapidly-evolving areas of clinical neurophysiology.

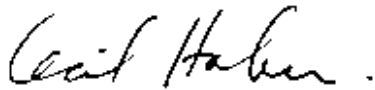
The ACNS Course Committee has developed an exceptional program, including parallel courses on Intensive Care Unit Electroencephalography (ICU EEG) Monitoring and Neurophysiologic Intraoperative Monitoring (NIOM). Introduced last year and continued due to an incredible response, a course on Stereo-Electroencephalography will be offered as well. We also think you will find the return of the Pediatric EEG morning course to be a beneficial addition to this weekend's program.

An exciting addition to this year's program is the "CPT Coding Changes" course, which will focus on neurostimulation codes for VNS, RNS, and DBS as well as recent changes to the Video EEG and EEG Monitoring codes. This is, of course, a timely opportunity for attendees to learn more about the changes that will take effect in just a few short months.

In addition to the courses, please be sure to stop by the Exhibit Hall during meals and breaks on Saturday and Sunday, as well as attend the Welcome Reception on Saturday evening.

On behalf of the ACNS Council and Course Committee, we would like to thank everyone involved in the 2019 Fall Courses for ensuring their continued success. We hope that the courses provide a valuable educational opportunity for all in attendance and wish everyone a safe and enjoyable weekend in Atlanta.

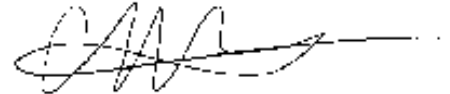
Sincerely,



Cecil D. Hahn, MD, MPH, FACNS
President



Frank W. Drislane, MD, FACNS
Course Committee Co-Chair



Courtney J. Wusthoff, MD, FACNS
Course Committee Co-Chair

ACNS INFORMATION

OFFICERS AND COUNCIL

President

Cecil D. Hahn, MD, FACNS
Hospital for Sick Children

1st Vice President

Gloria M. Galloway, MD, FACNS
Ohio State University Medical Center

2nd Vice President

Suzette M. LaRoche, MD, FACNS
Mission Health

Secretary

Saurabh R. Sinha, MD, PhD, FACNS
Duke University Medical Center

Treasurer

Jaime R. Lopez, MD, FACNS
Stanford University

Immediate Past President

Tobias Loddenkemper, MD, FACNS
Children's Hospital Boston

Past President

Stephan U. Schuele, MD, MPH, FACNS
Northwestern University

Councilors-at-Large

Meriem Bensalem-Owen, MD, FACNS
University of Kentucky
Giridhar Kalamangalam, MD, DPhil, FACNS
University of Texas

Jong Woo Lee, MD, PhD, FACNS
Brigham & Women's Hospital

Daniel L. Menkes, MD, FACNS
William Beaumont Hospital

Eva K. Ritzl, MD, FACNS
Johns Hopkins University

Devon I. Rubin, MD, FACNS
Mayo Clinic

Sarah E. Schmitt, MD, FACNS
Medical University of South Carolina

Tammy Tsuchida, MD, PhD, FACNS
Children's National Health System

Courtney J. Wusthoff, MD, FACNS
Stanford University

AMA Delegate

Marc R. Nuwer, MD, PhD, FACNS
UCLA

Journal Editor

Aatif M. Husain, MD, FACNS
Duke University Medical Center

CONTINUING MEDICAL EDUCATION (CME) COMMITTEE

Co-Chairs

Meriem Bensalem-Owen, MD, FACNS
Jong Woo Lee, MD, PhD, FACNS

Members

Kapil Arya, MD, FACNS
Amy Crepeau, MD
Charles M. Epstein, MD, FACNS
Evan J. Fertig, MD
Gloria M. Galloway, MD, MBA, FACNS
Elizabeth Gerard, MD, FACNS
Hiba A. Haider, MD
Abeer J. Hani, MD
Monica Islam, MD
Pongkiat Kankirawatana, MD, FACNS
Fawad A. Khan, MD
Ammar Kheder, MD
Luis Carlos Mayor-Romero, MD
Juan Ochoa, MD, FACNS
Joel Oster, MD
Jun T. Park, MD, FAES
Karl Erwin Sanzenbacher, MD, MS, FACNS
Sarah E. Schmitt, MD, FACNS
Fahd Sultan, MD
Christa Swisher, MD, FACNS
Ron Tintner, MD

Ex-Officio

Nicholas S. Abend, MD, MSCE, FACNS
Frank W. Drislane, MD, FACNS
Susan T. Herman, MD, FACNS
Leslie Lee, MD, FACNS
Courtney J. Wusthoff, MD, FACNS

COURSE COMMITTEE

Co-Chairs

Frank W. Drislane, MD, FACNS
Courtney J. Wusthoff, MD, FACNS

Members

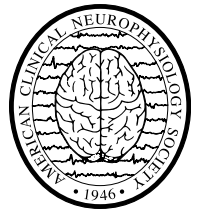
Hiba A. Haider, MD, FACNS
Giridhar P. Kalamangalam, MD, DPhil, FACNS
Leslie H. Lee, MD, FACNS
Jaime R. Lopez, MD, FACNS
Marc R. Nuwer, MD, PhD, FACNS
Arnold J. Sansevere, MD
Sarah E. Schmitt, MD, FACNS
Stephan U. Schuele, MD, MPH, FACNS

Ex-Officio

Nicholas S. Abend, MD, MSCE, FACNS
Meriem Bensalem-Owen, MD, FACNS
Gloria M. Galloway, MD, MBA, FACNS
Leslie Lee, MD, FACNS
Jong Woo Lee, MD, PhD, FACNS

ACNS EXECUTIVE OFFICE

555 E Wells St, Suite 1100
Milwaukee, WI 53202
Phone: (414) 918-9803
Fax: (414) 276-3349
info@acns.org
www.acns.org



Executive Director

Megan M. Hille, CAE, CMP
mhille@acns.org

Senior Meetings Manager

Erin Trimmer
etrimmer@acns.org

Meetings Coordinator

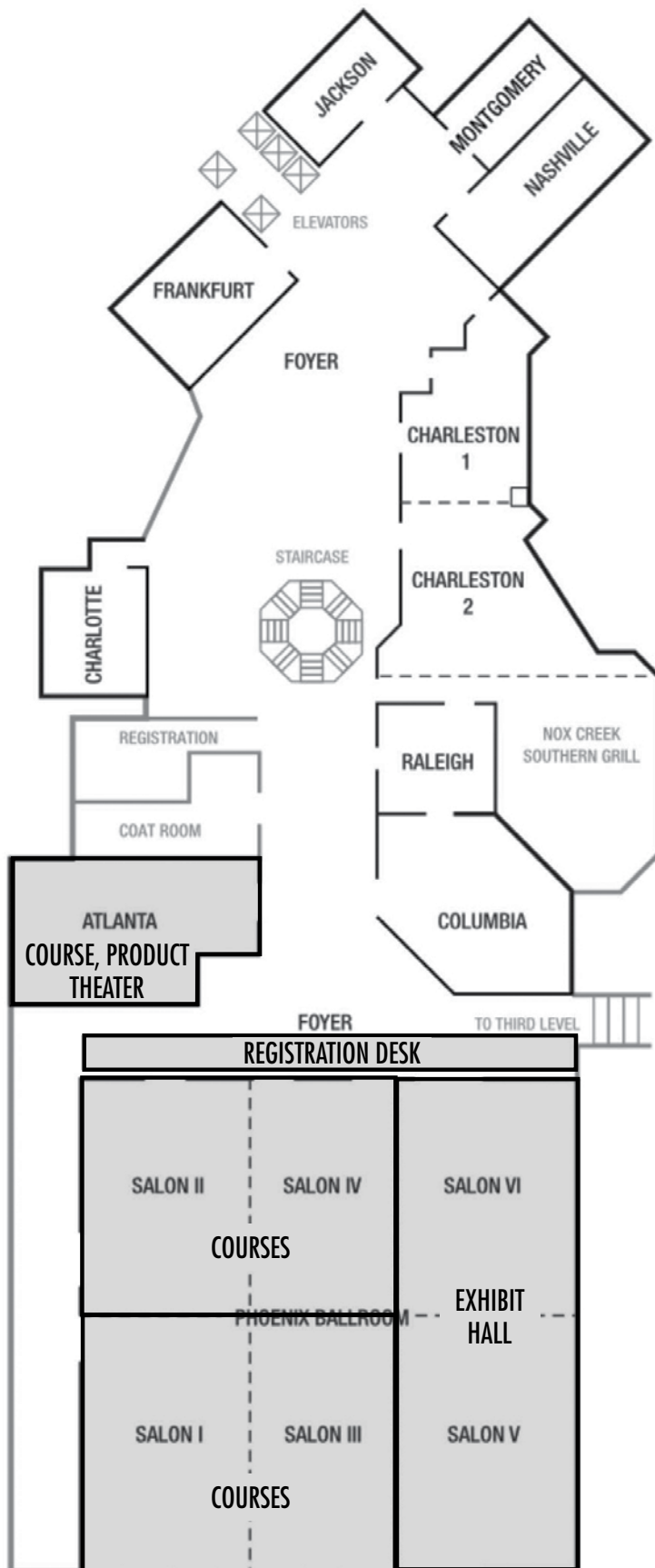
Elizabeth Mueller
emueller@acns.org

GENERAL MEETING INFORMATION

JW MARRIOTT ATLANTA BUCKHEAD FLOOR PLAN

WIRELESS INTERNET

The ACNS will not provide WiFi access to attendees. Please download or print any course materials ahead of arrival to the Fall Courses.



GENERAL MEETING INFORMATION

ACNS MEETING SAFETY & RESPONSIBILITY POLICY

The American Clinical Neurophysiology Society (ACNS) is committed to providing a safe, productive, and welcoming environment for all meeting participants and ACNS/EDI staff. All participants, including, but not limited to, attendees, speakers, volunteers, exhibitors, ACNS/EDI staff, service providers, and others are expected to and, by virtue of registration, invitation or contract acceptance, agree to abide by this Meeting Safety & Responsibility Policy. This Policy applies to all ACNS meeting-related events, including those sponsored by organizations other than ACNS but held in conjunction with ACNS events, in public or private facilities.

Responsible Drinking

At most ACNS networking events both alcoholic and non-alcoholic beverages are served. ACNS expects participants at our events to drink responsibly. ACNS and Meeting host event staff have the right to deny service to participants for any reason, and may require a participant to leave the event.

Personal Safety and Security

ACNS works diligently to provide a safe and secure environment at its meetings and events by working with venue staff to make sure meeting participants are safe. We ask that all attendees report any questionable or concerning activity to ACNS/EDI staff so that they can take immediate action. No concern is too small, if you see something, say something.

- Be aware of your surroundings at all times.
- Use the buddy system when walking to and from the event venue, networking event locations during early or late hours.
- Don't wear your meeting badge on the street. Take it off as soon as you leave the building/venue.
- Don't carry a lot of cash or credit cards. Leave these items in your hotel room safe.
- Don't leave personal property unattended anywhere, anytime.

If it is an emergency or if you need immediate assistance, you should ask any ACNS/EDI staff member or the on-site security personnel to help you.

Unacceptable Behavior

- Harassment, intimidation, or discrimination in any form.
- Physical or verbal abuse of any attendee, speaker, volunteer, exhibitor, ACNS/EDI staff member, service provider, or other meeting guest.
- Examples of unacceptable behavior include, but are not limited to, verbal comments related to gender, sexual orientation, disability, physical appearance, body size, race, religion, national origin, inappropriate use of nudity and/or sexual images in public spaces or in presentations, or threatening or stalking any attendee, speaker, volunteer, exhibitor, ACNS/EDI staff member, service provider, or other meeting guest.
- Disruption of presentations at sessions, in the exhibit hall, or at other events organized by ACNS at the meeting venue, hotels, or other ACNS-contracted facilities.

ACNS has zero-tolerance for any form of discrimination or harassment, including but not limited to sexual harassment by participants or our staff at our meetings. If you experience harassment or hear of any incidents of unacceptable behavior, ACNS asks that you inform the ACNS President or ACNS Executive Director Megan M. Hille, CMP, CAE (mhille@acns.org) so that we can take the appropriate action.

ACNS reserves the right to take any action deemed necessary and appropriate, including immediate removal from the meeting without warning or refund, in response to any incident of unacceptable behavior, and ACNS reserves the right to prohibit attendance at any future meeting.

PRIVACY AND DATA PROTECTION POLICY

ACNS takes your privacy seriously and will only collect and use your personal information to administer your registration and attendance at its meetings/courses, to provide services that you have requested, and otherwise as you may expressly consent.

It is necessary for ACNS, and authorized parties working with ACNS in connection with meetings, courses, products and services, to collect and use the information that you provide (name and contact information, demographic/practice information) to administer and facilitate your attendance at meeting/courses. This may include sharing your information with others providing goods and services related to the meeting (i.e., the hotel in which the meeting will be held or program/abstract collection software vendors). In these cases, ACNS has a "legitimate interest" in collecting and sharing your data, and considers your meeting/course registration or product/service purchase your consent to collect, use and share said data.

You will, however, be given the opportunity to opt-out of non-essential collection and use of your information during all meeting/course registration and product/service purchase processes.

PHOTOGRAPHY AND RECORDING POLICY

Photography or video or audio recording of sessions, materials presented in sessions, or exhibits without written permission from ACNS is strictly prohibited. Please note that photographs and video taken by or on behalf of ACNS of event activities and attendees shall be the property of ACNS.

CONTINUING MEDICAL EDUCATION (CME) INFORMATION

MEETING DESCRIPTION

The 2019 Fall Courses are designed around new and rapidly-evolving areas of clinical neurophysiology. Educational activities will cover both basic methodologies, and innovative techniques.

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 neurophysiologic techniques and knowledge in the diagnosis and management of patients with disorders of the peripheral and central nervous system.

LEARNING OBJECTIVES

Stereo-Electro Ecephalography (Stereo EEG)

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

1. Understand the principles of SEEG;
2. Discuss the approach to various epilepsy syndromes with SEEG; and
3. Describe the limitations of SEEG and surgical risk.

Neonatal and Pediatric EEG Symposium - Basic Principles and Advanced Concepts

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

1. Discuss basic concepts to be applied to interpretation of neonatal and pediatric electroencephalography;
2. Identify common patterns that are useful to the diagnostic work up and treatment of neonatal and pediatric disorders; and
3. List common principles of quantitative EEG analysis, and its application to neonatal and pediatric patients.

Neurophysiologic Intraoperative Monitoring (NIOM)

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

1. Describe basic modalities used in NIOM;
2. Recognize the appropriate methods and indications for a variety of common and uncommon NIOM techniques;
3. Recognize differences in NIOM of adult and pediatric cases;
4. Explain a variety of NIOM case presentations and interpretation of neurophysiologic data;
5. Recognize some of the technical challenges and limitations of performing and interpreting NIOM studies; and
6. Discuss relevant billing and medicolegal concerns in the field of NIOM.

Intensive Care Unit EEG Monitoring (ICU EEG)

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

1. Recognize common indications for CEEG in the ICU setting in neonates, children, and adults;
2. Interpret EEG patterns encountered in the ICU, including seizures, periodic patterns and other background patterns important for prognosis and management;
3. Select appropriately dosed treatment options for seizures and status epilepticus, and recognize the nuances in approach to treatment based on EEG findings in nonconvulsive SE, or with rhythmic/periodic patterns that lie on the ictal interictal continuum;
4. Utilize quantitative EEG methods to see long-term trends, screen for seizures rapidly, and to detect signs of ischemia;
5. Describe the value and limitations of EEG monitoring to predict neurologic outcomes in hypoxic ischemic encephalopathy;
6. Recognize the specific EEG patterns induced by different anesthetics used in general anesthesia and in the ICU;
7. Select appropriate equipment for ICU-EEG monitoring, including networking and data storage options; and
8. Determine optimal staffing, data review, and reporting practices.

CPT Coding Changes: EEG Monitoring and Neurostimulation

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

1. Understand the new 2020 CPT codes for EMU video-EEG monitoring;
2. Understand the new 2020 CPT codes for ICU EEG monitoring;
3. Understand the new 2020 CPT codes for ambulatory EEG monitoring;
4. Understand the new 2019 CPT codes VNS, RNS, and DBS;
5. Identify the associated coding instructions for using those codes; and
6. Describe how to apply those codes to their typical services.

ACCREDITATION STATEMENT

This activity has been 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 Fall Courses for the maximum number of *AMA PRA Category 1 Credit(s)*[™] indicated below:

Intensive Care Unit EEG Monitoring (ICU EEG) - Part I: 6 *AMA PRA Category 1 Credits*[™]
Intensive Care Unit EEG Monitoring (ICU EEG) - Part II: 6 *AMA PRA Category 1 Credits*[™]
Neurologic Intraoperative Monitoring (NIOM) - Part I: 6 *AMA PRA Category 1 Credits*[™]
Neurologic Intraoperative Monitoring (NIOM) - Part II: 6 *AMA PRA Category 1 Credits*[™]
Stereo-Electroencephalography (Stereo EEG) - Part I: 2 *AMA PRA Category 1 Credits*[™]
Stereo-Electroencephalography (Stereo EEG) - Part II: 2 *AMA PRA Category 1 Credits*[™]
Neonatal and Pediatric EEG Symposium: 2 *AMA PRA Category 1 Credits*[™]
CPT Coding Changes: 1.75 *AMA PRA Category 1 Credits*[™]

CONTINUING MEDICAL EDUCATION (CME) INFORMATION

ASET CEU STATEMENT

ASET – The Neurodiagnostic Society has granted ASET Continuing Education (ACE) credits as follows for this program. Such crediting, should not be construed by program participants as an endorsement of any type of instruments or supplies mentioned or involved in these presentations.

Intensive Care Unit EEG Monitoring (ICU EEG) – Pt. I: 6 ASET-CEUs

Intensive Care Unit EEG Monitoring (ICU EEG) – Pt. II: 6 ASET-CEUs

Neurophysiologic Intraoperative Monitoring (NIOM)-Pt. I – 6 ASET-CEUs

Neurophysiologic Intraoperative Monitoring (NIOM)-Pt. II – 6 ASET-CEUs

Stereo-Electroencephalography (Stereo EEG) – 7.5 ASET CEUs

Pediatric EEG Update – 1.5 ASET CEUs

Upon completion of the event attendees should follow the below instructions to claim their ASET-CEU credits:

- Print and sign your name on the ASET-CEUs Attendance Roster at the end of the program in order to receive ASET-CEUs. If you arrive late or need to leave the program early (by 30 minutes or more), write the time in the far right column. Your program director will determine the number of credit hours you might be eligible to receive.
- You will also be asked to turn in your completed program evaluation form when you sign out. The evaluation forms are a very important part of the ASET-CEUs process.
- A transcript of your ASET-CEUs hours will be sent to you upon request. If you would like to receive your transcript, please complete the ASET-CEUs Transcript form and mail or fax to the address at the bottom of this page. ASET-CEUs transcripts are free for members and \$25.00 for non-members.

CME CERTIFICATES & CERTIFICATES OF ATTENDANCE

Please visit the ACNS website to claim your CME or Attendance Certificate:

- Go to www.acns.org/meetings/fall-courses/2019/cme-information
- Click the “Claim CME or Attendance Certificate” button;
- Enter your last name and ACNS ID number...
 - o If you registered in advance, your ACNS ID # can be found on the confirmation form/receipt that you received via e-mail and in your registration materials.
 - o If you registered onsite in Atlanta, your ID number will be emailed to you no later than October 15, 2019.
- Indicate the type of certificate you require: CME Certificate or Certificate of Attendance;
- Indicate which sessions you attended and complete session evaluation forms for each;
- Print your certificate or save to your desktop (PDF format). Session attendance and evaluation information are saved in the database, and certificates may be accessed again in the event the certificate is lost or another copy is required.

Delegates are REQUIRED to complete evaluations to obtain a CME or attendance certificate.

All certificates must be claimed online. Certificates will not be mailed or emailed.

If you registered in advance, you may claim your certificate immediately following the completion of the course. If you registered onsite in Atlanta, you will receive an email with your ID # no later than October 15, 2019.

ACNS asks that all CME certificates be claimed no later than December 31, 2019.

Please contact ACNS at info@acns.org for any questions.

CONFLICT OF INTEREST DISCLOSURES

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.

Name of Individual	Institution	Individual's Role(s) in Activity	Nature of Relationship(s)
Council			
Cecil D. Hahn, MD, MPH, FACNS	The Hospital for Sick Children	Planner, Reviewer, Speaker	No Relationships
Gloria M. Galloway, MD, MBA, FACNS	Ohio State University Medical Center	Planner, Reviewer, Speaker	No Relationships
Tobias Loddenkemper, MD, FACNS	Boston Children's Hospital	Planner, Reviewer	Lundbeck: (a); Eisai: (a); Upsher-Smith: (a, b); Mallinckrodt: (a); Sage: (a); Pfizer: (a); Zogenix: (a); Amzell: (b); Advanced Medical: (b); Device Loans
Suzette M. LaRoche, MD, FACNS	Mission Health	Planner, Reviewer, Speaker	Brain Sentinel: (d)
Saurabh R. Sinha, MD, PhD, FACNS	Duke University Medical Center	Planner, Reviewer, Speaker	Basilea Inc.: (d); Cadwell Inc.: (b); Eisai Inc.: (a); UCB Pharmaceuticals: (a, b)
Jaime R. Lopez, MD, FACNS	Stanford University	Planner, Reviewer, Speaker	No Relationships
Stephan U. Schuele, MD, MPH, FACNS	Northwestern University	Planner, Reviewer, Speaker	Eisai Inc.: (d); SK Life Science: (b); Sunovion: (d)
Aatif M. Husain, MD, FACNS	Duke University Medical Center	Planner, Reviewer, Speaker	Eisai Pharmaceuticals: (b, d); Jazz Pharmaceuticals: (b); Marinus Pharmaceuticals: (b, d)
Meriem Bensalem-Owen, MD, FACNS	University of Kentucky	Planner, Reviewer, Speaker	Greenwich Biosciences: (a); Neuropace: (a); Sunovion: (a)
Giridhar P. Kalamangalam, MD, Dphil, FACNS	University of Florida	Planner, Reviewer, Speaker	No Relationships
Jong Woo Lee, MD, PhD, FACNS	Brigham & Women's Hospital	Planner, Reviewer, Speaker	Advance Medical: (f) SleepMed/DigiTrace: (f)
Daniel L. Menkes, MD, FACNS	William Beaumont Hospital	Planner, Speaker	CMTE: (c)
Eva K. Ritzl, MD, FACNS	Johns Hopkins University	Planner, Reviewer, Speaker	No Relationships
Devon I. Rubin, MD, FACNS	Mayo Clinic	Planner, Speaker	No Relationships
Sarah E. Schmitt, MD, FACNS	Medical University of South Carolina	Planner, Reviewer, Speaker	Sage Therapeutics: (d)
Tammy Tsuchida, MD, PhD, FACNS	Children's National Medical Center	Planner	No Relationships
Courtney Wusthoff, MD, FACNS	Stanford University	Planner	Ceribell: (b); Persyst: (b)

Key: a. Grants/Research Support; b. Consultant; c. Stock/Shareholder (self-managed); d. Speaker's Bureau; e. Advisory Board or Panel; f. Salary, Contractual Services; g. Other Financial or Material Support (royalties, patents, etc.)

CONFLICT OF INTEREST DISCLOSURES

Course Committee (if not listed above)			
Frank W. Drislane, MD, FACNS	Beth Israel Deaconess Medical Center	Planner	No Relationships
Leslie H. Lee, MD, FACNS	Stanford University Medical Center	Planner, Speaker	No Relationships
Marc R. Nuwer, MD, PhD, FACNS	UCLA	Planner, Speaker	Corticare: (c)
Hida A. Haider, MD, FACNS	Emory University	Planner, Speaker	No Relationships
Arnold J. Sansevere, MD	Boston Children's Hospital	Planner, Speaker	No Relationships
CME Committee (if not listed above)			
Kapil Arya, MD, MBBS	Arkansas Children's Hospital	Reviewer	No Relationships
Amy Crepeau, MD	Mayo Clinic	Reviewer	No Relationships
Charles M. Epstein, MD, FACNS	Emory University School of Medicine	Reviewer	No Relationships
Evan J. Fertig, MD	Providence Brain and Spine Institute	Reviewer	No Relationships
Elizabeth Gerard, MD, FACNS	Northwestern University	Reviewer	Sunovion Pharmaceuticals, Inc.: (a)
Abeer J. Hani, MD, FACNS	Lebanese American University	Reviewer	No Relationships
Monica Islam, MD, FACNS	Nationwide Children's Hospital	Reviewer	No Relationships
Pongkiat Kankirawatana, MD, FACNS	Children's of Alabama- UAB	Reviewer	No Relationships
Fawad A. Khan, MD, FACNS	Ochsner Health System	Reviewer	Engage Therapeutics: (a); Sage Therapeutics: (a)
Ammar Kheder, MD	Penn Epilepsy Center	Reviewer	No Relationships
Luis Carlos Mayor-Romero, MD	Hospital Universitario Fundacion Santa Fe de Bogota	Reviewer	No Relationships
Joel Oster, MD, FACNS	Tufts University	Reviewer	No Relationships
Jun T. Park, MD, FAES	Case Western Reserve University	Reviewer	No Relationships
Karl Erwin Sanzenbacher, MD, MS, FACNS	Eastern Maine Medical Center	Reviewer	No Relationships
Fahd Sultan, MD	University Tubingen	Reviewer	No Relationships
Christa Swisher, MD, FACNS	Duke University Medical Center	Reviewer	StimLabs: (c)
Ron Tintner, MD	Houston Methodist Hospital	Reviewer	No Relationships
Nicholas S. Abend, MD, MSCE, FACNS	Children's Hospital of Philadelphia	Reviewer	No Relationships
Susan T. Herman, MD, FACNS	Beth Israel Deaconess Medical Center	Reviewer	Pfizer: (a); UCB Pharmaceuticals: (a); Epilepsy Therapy Development Project: (a)

Key: a. Grants/Research Support; b. Consultant; c. Stock/Shareholder (self-managed); d. Speaker's Bureau; e. Advisory Board or Panel; f. Salary, Contractual Services; g. Other Financial or Material Support (royalties, patents, etc.)

CONFLICT OF INTEREST DISCLOSURES

Course Faculty (if not listed above)			
Dana B. Harrar, MD, PhD	Children's National Medical Center	Speaker	No Relationships
Rejean M. Guerriero, DO	St. Louis Children's Hospital, Washington University School of Medicine	Speaker	No Relationships
Lawrence W. Verhoef, MD	University of Alabama Birmingham	Speaker	No Relationships
Jon T. Willie, MD, PhD	Emory University School of Medicine	Speaker	AIM Medical: (b); Medtronic: (a); : (b); (d); MRI Interventions: (b); Neuropace: (a, b, d)
Daniel L. Drane, PhD	Emory University School of Medicine	Speaker	Medtronic: (a); Neuropace: (b)
Shavonne Massey, MD, MSCE	The Children's Hospital of Philadelphia	Speaker	No Relationships
Brandon Foreman, MD, FACNS	University of Cincinnati	Speaker	UCB Pharmaceuticals: (d)
Peter W. Kaplan, MD, FRCP, FACNS	Johns Hopkins Bayview Medical Center	Speaker	No Relationships
Monica Dhakar, MD, MS	Emory University	Speaker	Adamas Pharmaceuticals: (b); UCB Biopharma SPRL: (a)
Edilberto Amorim, MD	Massachusetts General Hospital	Speaker	No Relationships
M. Brandon Westover, MD, PhD, FACNS	Massachusetts General Hospital	Speaker	No Relationships
Andres Rodriguez Ruiz, MD	Emory University School of Medicine	Speaker	No Relationships
Ronald Emerson, MD, FACNS	Hospital for Special Surgery / Weill Cornel Med Ctr	Speaker	Amgen: (c); Bristol Myers Squibb: (c); Eli Lilly & Company: (c); General Electric: (c); Ice Neurosystems, Inc: (c); Johnson & Johnson, Inc.: (c); Neuropace : (c); Pfizer: (c); Quality Care Properties: (c); Reach Bionics: (c); Thermo Fisher Scientific: (c)
Alan D. Legatt, MD, PhD, FACNS	Montefiore Medical Center	Speaker	No Relationships
Mirela V. Simon, MD, FACNS	Massachusetts General Hospital	Speaker	No Relationships
Paul Garcia, MD, PhD	Columbia University	Speaker	No Relationships
Ioannis Karakis, MD, PhD, MSc, FACNS	Emory University School of Medicine	Speaker	No Relationships
Jonathan C. Edwards, MD, MBA, FACNS	Medical University of South Carolina	Speaker	No Relationships
Executive Office Staff			
Megan M. Hille, CMP, CAE	ACNS	Other (staff)	No Relationships
Erin Trimmer	ACNS	Other (staff)	No Relationships
Deedee Mader	ACNS	Other (staff)	No Relationships
Elizabeth Mueller	ACNS	Other (staff)	No Relationships

Key: a. Grants/Research Support; b. Consultant; c. Stock/Shareholder (self-managed); d. Speaker's Bureau; e. Advisory Board or Panel; f. Salary, Contractual Services; g. Other Financial or Material Support (royalties, patents, etc.)

COURSE AGENDAS

MORNING COURSES

7:00 - 9:00am

Neonatal and Pediatric EEG Symposium - Basic Principles and Advanced Concepts

Location: Salon I & III

Course Director: Arnold J. Sansevere, MD

7:00am Welcome and Introduction

7:05am Key Concepts of Neonatal and Pediatric Electroencephalography
Arnold J. Sansevere, MD

7:40am Pathognomonic Neonatal and Pediatric Patterns: A Case-Based Approach to Diagnostic and Therapeutic Implications
Dana B. Harrar, MD, PhD

8:15am Advanced Concepts: Quantitative Analysis in Neonatal and Pediatric EEG
Réjean M. Guerriero, DO

8:50am Discussion

Stereo-Electro Encephalography (Stereo EEG)

Location: Salon II & IV

Course Co-Directors: Stephan U. Schuele, MD, MPH, FACNS and Giridhar P. Kalamangalam, MD, DPhil, FACNS

Part I - Saturday, September 21, 2019

7:00am Welcome and Introduction

7:05am Defining the Epileptogenic Zone with SEEG
Stephan U. Schuele, MD, MPH, FACNS

7:30am Temporal Lobe Epilepsy Syndromes
Giridhar P. Kalamangalam, MD, DPhil, FACNS

8:00am Frontal Lobe Epilepsy Syndromes
Saurabh R. Sinha, MD, PhD, FACNS

8:30am Posterior Cortex Epilepsy Syndromes
Stephan U. Schuele, MD, MPH, FACNS

Part II - Sunday, September 22, 2019

7:00am Magnetoencephalography (MEG)
Lawrence W. VerHoef, MD

7:30am Pediatric Stereo-Electro Encephalography
John T. Willie, MD, PhD

8:00am Surgical Aspects
Jon T. Willie, MD, PhD

8:30am Cognitive Outcome
Daniel L. Drane, PhD

EVENING COURSE

5:15pm - 7:00pm

CPT Coding Changes: EEG Monitoring and Neurostimulation

Location: Atlanta Room

Course Director: Marc R. Nuwer, MD, PhD, FACNS

5:15pm RUC Process to Value New Codes
Eva K. Ritzl, MD, FACNS

5:45pm Neurostimulation Codes for VNS and RNS
Jonathan C. Edwards, MD, MBA, FACNS

6:15pm 2020 New CPT Codes for Video-EEG and EEG Monitoring
Marc R. Nuwer, MD, PhD, FACNS



WELCOME & NETWORKING RECEPTION

Saturday, September 21

5:00 - 8:00pm

Exhibit Hall - Salon V - VI

Join ACNS leaders, course speakers and colleagues for lively conversation and light refreshments.

The reception will begin at the end of the full-day courses on Saturday, September 21 (5:00pm) and continue through the end of the CPT Coding Changes Course (8:00pm) to allow all to attend.

COURSE AGENDAS

INTENSIVE CARE UNIT EEG MONITORING (ICU EEG)

Location: Salon I & III

Course Co-Directors: Hiba A. Haider MD, FACNS and Sarah E. Schmitt, MD, FACNS

Part I - Saturday, September 21, 2019

- 9:00am Breakfast
- 9:20am Welcome and Introduction
- 9:30am ICU EEG Monitoring: An Overview Across the Ages
Cecil D. Hahn, MD, MPH, FACNS
- 10:15am ICU EEG: Guidelines
Susan T. Herman, MD, FACNS
- 10:45am Coffee Break and Visit Exhibits
- 11:00am The Ictal Interictal Continuum: Identifying Seizures, Periodic Patterns and Everything in Between
Suzette M. LaRoche, MD, FACNS
- 11:30am Seizures: Early Management in Adults
Sarah E. Schmitt, MD, FACNS
- 12:00pm Seizures: Management of Refractory and Super-Refractory Status Epilepticus
Hiba A. Haider, MD, FACNS
- 12:30pm Impact of Seizure Management on Outcome: Risk-Benefit Calculus
Aatif M. Husain, MD, FACNS
- 1:00pm Lunch — provided in Exhibit Hall (Salon V-VI)
- 2:00pm Seizures: Management in Neonates and Children
Shavonne Massey, MD, MSCE
- 2:30pm Seizures: Unusual Types of Status Epilepticus
Frank W. Drislane, MD, FACNS
- 3:00pm Multimodal and Invasive Monitoring
Brandon Foreman, MD, FACNS
- 3:30pm Coffee Break and Visit Exhibits
- 3:45pm EEG in Toxic/Metabolic Encephalopathy (Delirium): Adults
Peter W. Kaplan, MD, FRCP, FACNS
- 4:15pm Adult Case Presentations
Monica B. Dhakar, MD, MS
- 4:30pm Pediatric Case Presentations
Shavonne Massey, MD, MSCE
- 4:45pm Conclusion
- 5:00pm Welcome & Networking Reception

Part II - Sunday, September 22, 2019

- 9:00am Breakfast
- 9:20am Welcome and Introduction
- 9:30am QEEG: Overview of Available Tools and Uses
Hiba A. Haider, MD, FACNS
- 10:05am QEEG at the Bedside: Seizure Detection and Beyond
Christa Swisher, MD, FACNS
- 10:45am Coffee Break and Visit Exhibits
- 11:00am QEEG: Seizure Recognition Tutorial
Edilberto Amorim, MD
- 11:30am QEEG: Ischemia Detection
M. Brandon Westover, MD, PhD, FACNS
- 12:00pm QEEG: Adult Case Presentations
Christa Swisher, MD, FACNS
- 12:15pm QEEG: Pediatric Case Presentations
Tammy Tsuchida, MD, PhD, FACNS
- 12:30pm EEG in ICU Sedation Monitoring
M. Brandon Westover, MD, PhD, FACNS
- 1:00pm Lunch — provided in Exhibit Hall (Salon V-VI)
- 2:00pm HIE: EEG in Anoxic Brain Injury /Targeted Temperature Management
Jong Woo Lee, MD, PhD, FACNS
- 2:30pm HIE: Prognosis in Adults
Edilberto Amorim, MD
- 3:00pm HIE: Prognosis in Children and Neonates
Tammy Tsuchida, MD, PhD, FACNS
- 3:30pm Coffee Break
- 3:45pm Artifacts in the ICU: Navigating a (Electrically) Hostile Environment
Sarah E. Schmitt, MD, FACNS
- 4:15pm Setting Up Your ICU EEG Service: Staffing, Personnel, Workflow and Logistics
Andres Rodriguez Ruiz, MD
- 4:45pm Conclusion

COURSE AGENDAS

NEUROPHYSIOLOGIC INTRAOPERATIVE MONITORING (NIOM)

Location: Salon II & IV

Course Co-Directors: Leslie H. Lee, MD, FACNS and Jaime R. Lopez, MD, FACNS

Part I - Saturday, September 21, 2019

- 9:00am Breakfast
- 9:20am Welcome & Introduction
Leslie H. Lee, MD, FACNS
- 9:25am SEP
Atif M. Husain, MD, FACNS
- 10:05am MEP
Ronald Emerson, MD, FACNS
- 10:45am Coffee Break and Visit Exhibits
- 11:00am BAEP Monitoring
Alan D. Legatt, MD, PhD, FACNS
- 11:40am EEG Monitoring
Mirela V. Simon, MD, FACNS
- 12:20pm EMG and Peripheral Nerve Monitoring
Gloria M. Galloway, MD, MBA, FACNS
- 1:00pm Lunch — provided in Exhibit Hall
(Salon V-VI)
- 2:00pm Cranial Nerve Monitoring
Jaime R. López, MD, FACNS
- 2:40pm Anesthesia During NIOM
Paul Garcia, MD, PhD
- 3:20pm Discussion
- 3:30pm Coffee Break and Visit Exhibits
- 3:45pm Troubleshooting Issues in NIOM
Ioannis Karakis, MD, PhD, MSc, FACNS
- 4:25pm Billing Issues in NIOM
Marc R. Nuwer, MD, PhD, FACNS
- 5:00pm Welcome & Networking Reception

Part II - Sunday, September 22, 2019

- 9:00am Breakfast
- 9:20am Welcome and Introductions
Jaime R. López, MD, FACNS
- 9:25am Spinal Column Surgery
Eva K. Ritzl, MD, FACNS
- 10:05am NIOM of Spinal Cord Tumors
Eva K. Ritzl, MD, FACNS
- 10:45am Coffee Break and Visit Exhibits
- 11:00am Pediatric Considerations in NIOM
Gloria M. Galloway, MD, MBA, FACNS
- 11:40am NIOM of Cerebrovascular Cases
Leslie H. Lee, MD, FACNS
- 12:20pm Special Studies in IOM (Reflex Studies, Use of IOM in Orthopedic Joint Surgeries, VEPs, etc.) vs. Case Discussion
Ronald Emerson, MD, FACNS vs. Panel
- 1:00pm Lunch — provided in Exhibit Hall
(Salon V-VI)
- 2:00pm Monitoring of Posterior Fossa Surgeries
Alan D. Legatt, MD, PhD, FACNS
- 2:40pm Functional Mapping of the Brain
Mirela V. Simon, MD, FACNS
- 3:20pm Discussion
- 3:30pm Coffee Break
- 3:45pm Practical Considerations in IOM
Leslie H. Lee, MD, FACNS
- 4:25pm Medicolegal Concerns in IOM
Jaime R. López, MD, FACNS

Program is tentative; topics and speakers are subject to change.

EXHIBIT HALL INFORMATION

EXHIBIT HALL HOURS

Location: Phoenix Ballroom, Salon V - VI

Saturday, September 21, 2019

8:00am - 8:00pm (including Welcome & Networking Reception 5:00 - 8:00pm)

Sunday, September 22, 2019

8:00am – 2:00pm

ACNS provides exhibit space at scientific meetings for commercial exhibits related to the fields of basic and clinical neurophysiology. The Society makes no attempt to evaluate any aspect of the material exhibited. Noncompliance with guidelines published by the ACNS has not been considered by the Society in allotting commercial space. Hence, acceptance of these commercial exhibits should not be construed as indicated sponsorship or approval of their products by ACNS.

EXHIBITORS

The American Board of Clinical Neurophysiology (ABCN)

ABRET Neurodiagnostic Credentialing & Accreditation
2908 Greenbriar Drive
Springfield, IL 62704
(217) 726-7980
janice@abcn.org
www.abcn.org
www.abret.org

The American Board of Clinical Neurophysiology (ABCN) has a 65-year history of promoting excellence in Clinical Neurophysiology and offers examinations with added competency in Epilepsy Monitoring, Neurophysiologic Intraoperative Monitoring, Critical Care EEG, or General Clinical Neurophysiology. International testing is available. Stop by to see the new on-line CNP Self-Assessment program! Coming soon – Pediatric EEG Track.

ABRET Neurodiagnostic Credentialing & Accreditation offers five credentials for technologists and practitioners (R. EEG T.®, R. EP T.®, CNIM®, CLTM®, CAP®) and a Certificate Program, CMEG®. For labs wanting to demonstrate a commitment to standards and quality, laboratory accreditation programs are available, LAB-EEG, LAB-NIOM, and LAB-LTM.

Cadwell Industries, Inc.

909 N. Kellogg Street
Kennewick, WA 99336
(509) 735-6481
info@cadwell.com
www.cadwell.com

Cadwell celebrates 40 years of delivering neurophysiology solutions. In 1979, John Cadwell, BSEE, MD partnered with his brother Carl Cadwell, DDS, to form Cadwell Laboratories in Washington State. Cadwell combines customer input, employee expertise and USA-made components to develop Arc EEG for at-home ambulatory and clinical use, EMU, and LTM; the innovative Sierra Summit EMG/EP/NCS with optional integrated ultrasound; Cascade Surgical Studio IONM and CadX simulator for training; Easy III in-lab PSG and integrated ApneaTrak HSAT; CadLink Data Management; and neuro consumables. Our sales managers, support teams, and distributors serve physicians and medical centers worldwide. Cadwell: Helping you help others.

Ceribell

2483 Old Middlefield Way
Suite 120
Mountain View, CA 94043
(800) 436-0826
eeg@ceribell.com
www.ceribell.com

Ceribell is focused on making EEG widely accessible, more efficient, and more cost-effective to improve the diagnosis and treatment of patients at risk for seizures. The System can be set up by any healthcare provider within minutes and offers a Brain Stethoscope function that dramatically simplifies interpretation of EEG results.

DIXI Medical USA Corp

11910 Fox Ridge Drive
Plymouth, MI 48170
(888) 664-3494
sales@diximedus.com
www.diximedus.com

Designer and manufacturer of medical devices for functional and stereotactic neurosurgery for the treatment of epilepsy. Since 1975 DIXI Medical has been developing & producing intracranial electrodes. DIXI possesses the skills and resources necessary to design and manufacture invasive and non-invasive medical instruments for neurosurgery.

Ideal Health Careers, Inc.

3455 Peachtree Rd #500
Atlanta, GA 30326
404-816-9988
dcruz@idealhealthcareers.com
www.idealhealthcareers.com

Ideal Health Careers is a professional search firm focusing solely on the clinical neurophysiology market, enabling us to become a key strategic asset for our clients. We have been recruiting in this space since 2005 and have successfully placed dozens of interpreting physicians and 200+ IOM/EEG clinical, sales, and marketing professionals across the country. We understand the neurodiagnostic market! We have several full-time opportunities for experienced clinical neurophysiologists (IOM) as well as those completing fellowships in 2019/2020.

EXHIBIT HALL INFORMATION

Lifelines Neurodiagnostic Systems

411 Edwardsville Road
Suite A
Troy, IL 62294
(618) 667-6445
sales@lifelinesneuro.com

Inspired by our users, Lifelines Neuro creates EEG products and solutions that help our customers perform at their best every day, to provide the highest quality patient care. Our platform anticipates users' needs and emerging industry trends to create intuitive products that enable our customers to imagine EEG anywhere. Our Rendr Platform cloud software connects patients to physicians in real-time, all the time, on any device. Lifelines Neuro Trackit EEG amplifiers and systems are known globally for their exceptional engineering and durability. Our headquarters is in Louisville, KY, with corporate offices in Troy, IL, Stockbridge, UK and Dublin, IRL.

Neurotech

626 W. Moreland Blvd.
Waukesha, WI 53188
(262) 754-0898
info@neurotecheeg.com
www.neurotecheeg.com

Neurotech, LLC specializes in EEG services including in-home, long-term, and continuous hospital EEG monitoring. Accredited by the Joint Commission and partnered with many academic facilities, our in-home, long-term EEG monitoring services improves our patients' comfort and provides a cost-effective alternative to a hospital stay. Neurotech cEEG Partners, LLC provides hospitals with continuous EEG monitoring in the ICU and EMU to improve patient safety and outcomes.

Persyst Development Corporation

420 Stevens Avenue
Suite 210
Solana Beach, CA 92705
(928) 708-0705
sales@persyst.com
www.persyst.com

Persyst is the worldwide leader in EEG software. Our software is used daily by thousands of neurologists at hundreds of hospitals around the world. We have pioneered the use of digital signal processing and neural networks in order to remove artifacts and interpret EEG data.

PMT Corporation

1500 Park Road
Chanhassen, MN 55317
(952) 470-0866
info@pmtcorp.com
www.pmtcorp.com

PMT® Corporation is the premier supplier of an extensive line of neurosurgical products. Offering high-end neck braces, including halo systems and orthotic vests for cervical, thoracic and lumbar spinal immobilization. PMT® also offers Cortac® Cortical Surface Electrodes, sEEG and Dephthalon® Depth Electrodes for epilepsy monitoring; microsurgical and irrigation instruments. PMT® Corporation has nationwide direct sales force available 24 hours a day and 365 days a year, along with distributors worldwide.

UCB

1950 Lake Park Drive
Smyrna, GA 30080

UCB is a global biopharma company that manufactures VIMPAT (lacosamide), BRIVIACT (brivaracetam), and Nayzilam (midazolam) nasal spray. Information for these products can be found at <https://www.vimpat.com/>, <https://www.briviact.com/>, and <https://www.nayzilam.com/> respectively.

PRODUCT THEATER

This session is supported and programmed by a single supporting company and will feature presentations on topics and technologies selected by the company. Boxed lunches will be provided by ACNS, and are not reportable according to the Sunshine Act.

CME credits are NOT available for the Product Theaters.

RAPID RESPONSE EEG: WHY DO WE NEED IT?

Presented by Ceribell

Saturday, September 21

1:15 – 2:00pm

Atlanta Room

Instructor:

Josef Parvizi, MD, PhD

Professor of Neurology

Stanford Comprehensive Epilepsy Center

Stanford University Medical Center

In this hour, we will present the history of the Ceribell Rapid Response EEG from its inception, explain why it was invented, and review the latest results from studies validating performance and diagnostic utility. Conventional practice of EEG over the last 60 years has relied on the standardized International 10-20 system, in which over half of the electrodes are placed over the midline and parasagittal regions of the brain. This practice has been dependent on specialized technicians and, traditionally, on large recording rigs. We have followed this same convention both in the emergency stat EEGs to detect non-convulsive seizures and status and also when we are looking for subtle signs of epileptic abnormality to confirm the diagnosis of epilepsy. While the coverage afforded by the 10-20 EEG system is valuable in standardizing EEG recordings across sites, the added value of this approach in neuro emergency settings is highly questionable. Letting go of old traditions may be necessary if we are to make a significant advancement in the practice of EEG.

FEBRUARY 5-9, 2020



2020 Annual Meeting & Courses

New Orleans, Louisiana

THE ROOSEVELT NEW ORLEANS

Registration & Housing Open *October 1*
Poster Abstract Submission Open *October 1-November 15*
at *www.acns.org*

