



Final Program

PRINCIPLES OF CLINICAL NEUROPHYSIOLOGY COURSES

(Formerly ACNS Fall Courses)

September 29 - October 1, 2023

TABLE OF CONTENTS

ACNS INFORMATION

Officers and Council	3
Principles of Clinical Neurophysiology Committees	3
Executive Office	3

GENERAL MEETING INFORMATION

Important Dates	4
Registration Information	4
Meeting Format	4
Virtual Platform & Handouts	4
ACNS Meeting Policies	4

CONTINUING MEDICAL EDUCATION (CME) INFORMATION

Meeting Description	5
Target Audience	5
Accreditation Statement	5
Credit Designation	5
ASET CEUs	5
Learning Objectives	5
Certificates of Attendance & CME Certificates	6
Conflict of Interest Disclosures	7

SCHEDULE-AT-A-GLANCE..... 10

COURSE AGENDAS - BY TRACK

Basic EEG	11
EMG/NCS - Part I	11
EMG/NCS - Part II	11
Evoked Potentials	11
Neonatal EEG	11
Sleep	11
ICU EEG	12
NIOM	13
SEEG	14

ABOUT 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.

Founded in 1946 and originally named the ACNS is the major professional organization in the United States devoted to the establishment and maintenance of standards of professional excellence in clinical neurophysiology in the practice of neurology, neurosurgery and psychiatry. ACNS members utilize neurophysiology techniques in the diagnosis and management of patients with disorders of the nervous system and in research examining the function of the nervous system in health and disease.

ACNS OFFICERS AND COUNCIL

President

Saurabh R. Sinha, MD, PhD, FACNS
University of Pennsylvania

First Vice President

Meriem Bensalem-Owen, MD, FACNS
University of Kentucky

Second Vice President

Nicholas S. Abend, MD, MSCE, FACNS
Children's Hospital of Philadelphia

Secretary

Elizabeth Gerard, MD, FACNS
Northwestern University

Treasurer

Courtney J. Wusthoff, MD, MS, FACNS
Stanford University

Immediate Past President

Jaime R. López, MD, FACNS
Stanford University

Past President

Suzette M. LaRoche, MD, FACNS
University of North Carolina

Councilors-at-Large

Pegah Afra, MD, FACNS
UMass Chan Medical School

Adriana Bermeo-Ovalle, MD, FACNS, FAES
Rush University Medical Center

Hiba A. Haider, MD, FACNS, FAES
University of Chicago

Ioannis Karakis, MD, PhD, MSc, FAES
Emory University

Ruple S. Laughlin, MD, FACNS
Mayo Clinic

Lynn Liu, MD, MS (HPE), FACNS
University of North Carolina Chapel Hill

Marcus C. Ng, MD, FRCPC, CSCN, FACNS
University of Manitoba

Jun T. Park, MD, FACNS
Case Western Reserve University of Medicine

Journal Editor

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

Ex-Officio

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

Members

Katie L. Bullinger, MD, PhD
Maureen P. Carroll, R.EEG/EPT, RPSGT, CNIM

Amy Z. Crepeau, MD, FACNS
Naiara Garcia-Losarcos, MD
Elizabeth Gerard, MD, FACNS

PRINCIPLES OF CLINICAL NEUROPHYSIOLOGY COMMITTEES, CONTINUED

Hiba A. Haider, MD, FACNS, FAES

Aline Herlopian, MD

Vasileios Kokkinos, PhD, FACNS

Leslie Lee, MD, FACNS

Shavonne Massey, MD, MSCE, FACNS

Jonathan A. Norton, PhD, FACNS

Devon I. Rubin, MD, FACNS

Ex-Officio

Nicholas S. Abend, MD, MSCE, FACNS

Elizabeth Gerard, MD, FACNS

Jong Woo Lee, MD, PhD, FACNS

Sarah E. Schmitt, MD, FACNS

CME COMMITTEE

Co-Chairs

Jong Woo Lee, MD, PhD, FACNS

Sarah E. Schmitt, MD, FACNS

Co-Chairs-Elect

Ann Hyslop, MD, FACNS

Monica P. Islam, MD, FACNS

Members

Pegah Afra, MD, FACNS

Sasha Alick-Lindstrom, MD, FACNS, FAES, FAAN

Kapil Arya, MBBS, FAAP, FANA, FACNS

Tyson Burghardt, MD

Hanan M. El Shakankiry, MD, PhD

Elizabeth Gerard, MD, FACNS

Rejean M. Guerriero, DO, FACNS

James J. Gugger, Jr., MD, PharmD

Hiba Haider, MD, FACNS, FAES

Abeer J. Hani, MD, FACNS

Akio Ikeda, MD, PhD, FACNS

Mohammed Ilyas, MD, FACNS

Fawad A. Khan, MD, FACNS

Eliane Kobayashi, MD, PhD

Xiangping Li, MD

Jennifer McKinney, MD, FACNS

Yara Mikhaeil-Demo, MD, FACNS

Moshe A. Mizrahi, MD, FAAN, FAHA, FACNS

Ismail S. Mohamed, MD, FACNS

Iryna Muzyka, MD, FACNS

Ika Noviaty, MD

Juan Ochoa, MD, FACNS

Joel Oster, MD, FACNS

Kimberly Pargeon, MD, FACNS, FAES

Jun T. Park, MD, FAES, FACNS

Ognen A. Petroff, MD, FACNS, FAES

FAAN

Prasad N. Policherla, MD, FAHA, FAAN

Chrystal M. Reed, MD, PhD

Maria C. Sam, MD, FACNS

Fahd Sultan, MD, FACNS

Courtney J. Wusthoff, MD, MS, FACNS

Andrew James Zillgitt, DO, FACNS, FAES

Ex-Officio

Meriem Bensalem-Owen, MD, FACNS

Frank W. Drislane, MD, FACNS

Dawn Eliashiv, MD, FACNS

Cecil D. Hahn, MD, MPH, FACNS

Lynn Liu, MD, MS (HPE), FACNS

Krystal E. Sully, MD

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

PRINCIPLES OF CLINICAL NEUROPHYSIOLOGY COMMITTEES

COURSE COMMITTEE

Co-Chairs

Meriem Bensalem-Owen, MD, FACNS
Cecil D. Hahn, MD, MPH, FACNS

Co-Chairs-Elect

Ruple S. Laughlin, MD, FACNS
Lynn Liu, MD, FACNS

GENERAL MEETING INFORMATION

The Principles of Clinical Neurophysiology Courses (PCNP) is a live, virtual event designed to deliver basic and intermediate level content. ACNS's educational activities are directed to clinical neurophysiologists, neurologists, neurosurgeons, trainees in these disciplines, technologists 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. Likewise, the courses can serve as a great refresher for those preparing for board exams.

IMPORTANT DATES

Virtual Platform Available	September 27 - October 1, 2023
Handout Site Available	September 27 - October 1, 2023
CME Certificate Site Opens	September 29, 2023
CME Claim Deadline	November 15, 2023

REGISTRATION INFORMATION

Online registration will be available through October 1. However, since courses are only available live, ACNS recommends registering at least two hours prior to the course start time. To register, please visit <https://www.acns.org/meetings/fall-courses/2023-principles-of-clinical-neurophysiology/registration>.

Registration Rates (in US Dollars)	Single Course	Day Pass	All-Access Pass
ACNS Members	\$145	\$255	\$475
Non-Members	\$165	\$285	\$550
Junior, Tech, RRC* Members	\$65	\$115	\$200
Non-Member Trainees, Techs, RRC*	\$95	\$175	\$300

MEETING FORMAT

PCNP will take place Friday, September 29 – Sunday, October 1, 12:00 – 3:30pm ET. Sessions will be live, online only. No on-demand recordings will be available after the meeting.

VIRTUAL PLATFORM & HANDOUTS

Registered delegates will receive an email on Wednesday, September 27, 2023 from info@acns.org with access to the Virtual Platform. This email will contain a "Launch Courses" button which will automatically log you into the platform. Please do not share this email/access link with anyone as it is unique to you. Attendees may only be logged in via one device as a time, per individual registrations. Please add info@acns.org to your "safe senders" list to ensure you don't miss the email. Be sure to check your junk/spam folder if you have not received the email by 12pm ET on September 27.

Please note, the platform does not support Internet Explorer or Safari. Google Chrome and Firefox are the preferred browsers for this platform.

A separate email will be sent from info@acns.org on September 27 with access instructions to the available course handouts.

REGISTRATION CANCELLATION & REFUND POLICY

Refund requests must be submitted in writing to ACNS by September 28, 2023. A \$50 processing fee will be charged for all refunds. Delegates will receive confirmation and refund within 14 days of receipt of cancellation notice. Refund requests received or postmarked after September 28, 2023 will not be granted.

PHOTOGRAPHY AND RECORDING POLICY

Photography, video or audio recording (including screen capture) of these courses, materials, speaker likenesses or ACNS graphics without written permission from ACNS is strictly prohibited. Please note that photographs and video taken by or on behalf of ACNS shall be property of ACNS.

PRIVACY POLICY

The American Clinical Neurophysiology Society (ACNS) has a strong commitment to privacy. This statement outlines the policies and procedures concerning information gathering and dissemination practices related to www.acns.org, as well as member, meeting attendee, and sponsor/supporter (collectively, "users") data. This policy is in accordance with the European General Data Protection Regulations (GDPR). To review the policy, visit <https://www.acns.org/privacy-policy>.

MEETING CONDUCT, SAFETY, AND 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 abide by the ACNS Meeting Safety & Responsibility Policy. This Policy applies to all ACNS meeting-related events, online and in-person, including those sponsored by organizations other than ACNS but held in conjunction with ACNS events, in public or private facilities.

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 appropriate action may be taken.

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.

CONTINUING MEDICAL EDUCATION (CME) INFORMATION

MEETING DESCRIPTION

The 2023 Principles of Clinical Neurophysiology 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.

ACCREDITATION STATEMENT

ACNS is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

CREDIT DESIGNATION

ACNS designates the Principles of Clinical Neurophysiology courses for the maximum number of *AMA PRA Category 1 Credit(s)*[™] indicated below:

Basic EEG:

1.50 *AMA PRA Category 1 Credits*[™]

Electromyography and Nerve Conduction Studies (EMG/NCS) Part I:

1.50 *AMA PRA Category 1 Credits*[™]

Electromyography and Nerve Conduction Studies (EMG/NCS) Part II:

1.50 *AMA PRA Category 1 Credits*[™]

Evoked Potentials:

1.50 *AMA PRA Category 1 Credits*[™]

Intensive Care Unit EEG Monitoring (ICU EEG) – Part I:

1.50 *AMA PRA Category 1 Credits*[™]

Intensive Care Unit EEG Monitoring (ICU EEG) – Part II:

1.50 *AMA PRA Category 1 Credits*[™]

Intensive Care Unit EEG Monitoring (ICU EEG) – Part III:

1.50 *AMA PRA Category 1 Credits*[™]

Intensive Care Unit EEG Monitoring (ICU EEG) – Part IV:

1.50 *AMA PRA Category 1 Credits*[™]

Neonatal EEG:

1.50 *AMA PRA Category 1 Credits*[™]

Neurologic Intraoperative Monitoring (NIOM) – Part I:

1.50 *AMA PRA Category 1 Credits*[™]

Neurologic Intraoperative Monitoring (NIOM) – Part II:

1.50 *AMA PRA Category 1 Credits*[™]

Neurologic Intraoperative Monitoring (NIOM) – Part III:

1.50 *AMA PRA Category 1 Credits*[™]

Neurologic Intraoperative Monitoring (NIOM) – Part IV:

1.50 *AMA PRA Category 1 Credits*[™]

Sleep:

1.50 *AMA PRA Category 1 Credits*[™]

Stereo-Electroencephalography (Stereo EEG) – Part I:

1.50 *AMA PRA Category 1 Credits*[™]

Stereo-Electroencephalography (Stereo EEG) – Part II:

1.50 *AMA PRA Category 1 Credits*[™]

Stereo-Electroencephalography (Stereo EEG) – Part III:

1.50 *AMA PRA Category 1 Credits*[™]

Stereo-Electroencephalography (Stereo EEG) – Part IV:

1.50 *AMA PRA Category 1 Credits*[™]

The number of credits above also constitutes the estimated time to complete each activity.

ASET CEUS

ASET - The Neurodiagnostic Society has granted ASET Continuing Education Units [ASET CEUs] for this program. Such crediting, however, should not be construed by program participants as an endorsement of any type of instruments or supplies mentioned or involved in these presentations.

The courses have been approved for 10 ASET-CEUs total for the series of live webinars.

LEARNING OBJECTIVES

Basic EEG

At the conclusion of this activity, the learner will be able to:

1. Recognize and distinguish benign variants, variations of normal and artifact in standard EEG recording;
2. Classify epileptiform discharges and the implications for patients with seizures and epilepsies; and
3. Understand the foundation for physiological recording and abnormal slowing as it relates to pathological conditions.

EMG / NCS Parts I & II

At the conclusion of this activity, the learner will be able to:

1. Describe the basic concepts of nerve conduction studies and electromyography, the abnormalities that occur in different categories of disorders, and the pitfalls that may occur during the performance of the studies;
2. Describe the approach, findings, and limitations of EDX testing in patients with commonly referred diagnoses such as polyneuropathy, radiculopathy, median and ulnar mononeuropathies;
3. Review concepts needed to distinguish more complex disorders such as plexopathies, neuromuscular junction disorders, anterior horn cell disorders, and myopathies; and
4. Explain the decision-making process with selection of specific EDX studies after various case presentations.

Evoked Potentials

At the conclusion of this activity, the learner will be able to:

1. Explain the basics of evoked potential testing including the technical aspects of stimulation, recording, and signal generation;
2. Identify the components of brainstem auditory, visual, and somatosensory evoked potentials and their clinical meaning; and
3. Classify EP findings as normal or abnormal and provide an accurate interpretation/guidance of the findings when the study is abnormal.

CONTINUING MEDICAL EDUCATION (CME) INFORMATION

ICU EEG Parts I, II, III & IV

At the conclusion of this activity, the learner will 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 and rhythmic patterns and as well as background features 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 non-conclusive 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 detect signs of ischemia;
5. Describe the value and limitations of EEG monitoring to predict neurologic outcomes in hypoxic-ischemic encephalopathy and
6. EEG and ICU neuromonitoring if continuous EEG is not always available and resources are limited

Neonatal EEG

At the conclusion of this activity, the learner will be able to:

1. Interpret neonatal EEG patterns from extreme prematurity to full term;
2. Identify abnormal neonatal EEG patterns;
3. Utilize neonatal EEG for clinical correlation and prognostication;
4. Identify neonatal EEG seizure patterns; and
5. Diagnose and manage neonatal seizures.

NIOM Parts I, II, III & IV

At the conclusion of this activity, the learner will be able to:

1. Describe basic modalities used in NIOM;
2. Recognize the appropriate methods and indications for a variety of common NIOM techniques;
3. Explain a variety of NIOM case presentations and interpretation of neurophysiologic data; and
4. Recognize some of the technical challenges and limitations of performing and interpreting NIOM studies.

Sleep

At the conclusion of this activity, the learner will be able to:

1. Review the methodology and indications of in-laboratory sleep tests and the diagnosis of common sleep disorders;
2. Discuss the clinical and neurophysiologic manifestations of parasomnias and sleep-related movement disorders and demonstrate how to tailor evaluations to optimize recordings; and
3. Illustrate the differential diagnosis, evaluation, and diagnostic dilemmas of the central disorders of hypersomnolence using case discussions.

Stereo EEG Parts I, II, III & IV

At the conclusion of this activity, the learner will be able to:

1. Discuss the process for presurgical evaluation and how this is used to formulate a plan for SEEG;
2. Discuss the process for interpretation of SEEG data, including electrical stimulation mapping;
3. Discuss the limitations and risks of SEEG; and
4. Discuss the approach to various epilepsy syndromes with SEEG.

CERTIFICATES OF ATTENDANCE & CME CERTIFICATES

CME certificates will be available to registered delegates at the end of each day of the meeting at <https://www.acns.org/meetings/fall-courses/2023-principles-of-clinical-neurophysiology/cme--ceu-information>.

Delegates are REQUIRED to complete session evaluations to obtain a CME Certificate or Certificate of Attendance. Delegates should log on to the website listed above and enter their last name and the ID # listed at the top of their confirmation receipt. The system will then ask delegates to indicate which sessions they attended, to complete evaluation forms for each of those sessions, and then will generate a PDF certificate which may be printed or saved to the delegate's computer. 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. Please note that certificates will not be mailed or emailed after the meeting. The online certificate program is the only source for this document. Please contact ACNS at info@acns.org for any questions. ACNS asks that all CME certificates be claimed no later than December 31, 2023.

Please email your ASET ID to info@acns.org once you complete the course evaluations.

CONTINUING MEDICAL EDUCATION (CME) INFORMATION

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 ineligible company 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 mitigate 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.

Full Name	Role	Organization	Financial Relationships
Nicholas S. Abend, MD, MSCE, FACNS	Planner	CHOP / UPenn	No Relationships
Pegah Afra, MD, FACNS	Planner	UMass Chan Medical School	Livanova (a)
Brian Appavu, MD	Speaker	Phoenix Children's Hospital	Natus Neuroscience (d)
Thandar Aung, MD, MS	Speaker	University of Pittsburgh Medical Center	No Relationships
Grayson Beecher, MD, FRCPC	Speaker	University of Alberta	No Relationships
Meriem Bensalem-Owen, MD, FACNS	Planner	University of Kentucky	NeuroPace (a)
Adriana Bermeo-Ovalle, MD, FACNS, FAES	Planner	Rush University Medical Center	No Relationships
Stephen W. Briggs, MD, PhD	Speaker	Montefiore Medical Center	No Relationships
Katie Bullinger, MD, PhD	Planner	Emory University	Neuropace (a)
Lidia Cabañes Martínez, MD, FACNS	Planner	Hospital Ramón y Cajal, Madrid, Spain	No Relationships
Maureen P. Carroll, REEG, EPT, RPSGT, CNIM	Planner	ASET-The Neurodiagnostic Society	No Relationships
Lauren Cazares	Planner	ACNS Staff	No Relationships
Felix Chang, MD	Speaker	Stanford University	No Relationships
Patrick Chauvel, MD	Speaker; Planner	University of Pittsburgh	No Relationships
Pitcha Chompoonong, MD	Speaker	University of Minnesota	No Relationships
Amy Crepeau, MD, FACNS	Planner	Mayo Clinic	No Relationships
Priya Dhawan, MD, FRCPC	Speaker	University of British Columbia	No Relationships
Gea Drost, MD, PhD	Speaker	University Medical Center Groningen, Groningen, the Netherlands	No Relationships
Ronald Emerson, MD, FACNS	Speaker	Hospital for Special Surgery, Weil Cornell Medical Center	Amgen (c); Bristol Meyers Squibb (c); Eli Lilly (c); General Electric (c); Ice Neurosystems (c); Johnson & Johnson (c); Neuropace (c); Pfizer (c); Quality Care Products (c); Thermo Fisher (c)
Nancy Foldvary-Schaefer, DO, MS	Planner	Cleveland Clinic	Jazz Pharmaceuticals (a,e); Takeda Pharmaceuticals (a); Vanda pharm (a)
Brandon Foreman, MD, MS, FACNS, FNCS	Speaker	University of Cincinnati	Marinus Pharmaceuticals (a,e); Natus Neuroscience (d); Sage Therapeutics, Inc (e); UCB Pharma (d)
France Fung, MD, FACNS	Speaker	Children's Hospital of Philadelphia, University of Pennsylvania	No Relationships
Naiara Garcia-Losacos, MD	Planner	UHCMC	No Relationships

a. Grant/Research Support; b. Consultant; c. Stock Shareholder (self-managed); d. Speaker's Bureau; e. Advisory Board or Panel; f. Contractual Services; g. Other Financial or Material Support

CONTINUING MEDICAL EDUCATION (CME) INFORMATION

Nicolas Gaspard, MD, PhD	Speaker	Service de Neurologie, Université Libre de Bruxelles–Hôpital Universitaire de Bruxelles - Hôpital Erasme	UCB Pharma (b, e)
Elizabeth Gerard, MD, FACNS	Planner	Northwestern University, Comprehensive Epilepsy Center	Xenon Pharmaceuticals (a, e)
Andres Gonzalez, MD, MMM, FAAN, FACNS	Speaker	Surgical Neurophysiology, California University of Science and Medicine	No Relationships
Madeleine M. Grigg-Damberger, MD, FACNS	Speaker	University of New Mexico School of Medicine	No Relationships
Cecil D. Hahn, MD, MPH, FACNS	Planner	The Hospital for Sick Children, University of Toronto, Canada	Holberg EEG (b); Takeda Pharmaceuticals (a, b); UCB Biopharma (a, b)
Hiba A. Haider, MD, FACNS, FAES	Speaker; Planner	University of Chicago	No Relationships
Aline Herlopian, MD	Speaker; Planner	Yale University	No Relationships
Lawrence J. Hirsch, MD, FACNS	Speaker	Yale University	Accure (b); Ceribell (b); Eisai (b); Gilead (b); Marinus (b); Neurelis (b); Neuropace (b, d); Rafa (b); UCB (b); Vial Health (b); Natus (d); UCB (d)
Aatif M. Husain, MD, FACNS	Speaker	Duke University	Neumoratx (b)
Ann Hyslop, MD, FACNS	Reviewer	Stanford University School of Medicine	Jazz Pharmaceuticals (e), (d); Marinus Pharmaceuticals (d, e); Supernus (e)
Monica P. Islam, MD, FACNS	Reviewer	Nationwide Children’s Hospital/ The Ohio State University	Abbott Inc. (c); AbbVie pharmaceuticals (c); Eli Lilly Co. (c); Pfizer (c)
Aditya Joshi, MD	Speaker	Hospital of the University of Pennsylvania	No Relationships
Peter Kaplan, MD, FRCP, FACNS	Speaker	Johns Hopkins University	No Relationships
Ioannis Karakis, MD, PhD, MSc, FACNS	Planner	Emory University	GlaskoSmithKline (b)
Inna Keselman, MD, PhD, FACNS	Speaker	UCLA	No Relationships
Sudha Kilaru Kessler, MD, MSCE	Speaker	Children’s Hospital of Philadelphia Perelman School of Medicine, University of Pennsylvania	GW Pharma (e); Holberg EEG (a); Takeda Pharmaceuticals (e); The Epilepsy Study Consortium (b)
Ammar Kheder, MD, MRCP, FACNS	Speaker	Emory University School of Medicine, Children’s Healthcare of Atlanta	No Relationships
Vasileios Kokkinos, PhD, FACNS	Planner	Massachusetts General Hospital	No Relationships
Christopher J. Lamb, MD	Planner; Speaker	Mayo Clinic	No Relationships
Suzette LaRoche, MD, FACNS	Planner	University of North Carolina - Chapel Hill	No Relationships
Ruple S. Laughlin, MD, FACNS	Planner	Mayo Clinic	No Relationships
Jong Woo Lee, MD, PhD, FACNS	Speaker; Planner; Reviewer	Brigham Health	Bioserenity/Digitrace (b); SK Life Science (b); Soterya, Inc (b); Teladoc (f)
Leslie Lee, MD, FACNS	Planner	Stanford University	No Relationships
Alan D. Legatt, MD, PhD, FACNS	Speaker	Albert Einstein College of Medicine, Bronx, New York	GE Healthcare Technologies (c); General Electric (c); Johnson & Johnson (c); Merck Group (c); Pfizer (c); Proctor & Gamble (c)
Lynn Liu, MD, MS (HPE), FACNS	Planner	University of Rochester	Moderna (c); Pfizer (c)
Jaime R. López, MD, FACNS	Speaker; Planner	Stanford University School of Medicine	No Relationships
Janette Mailo, MD, PhD	Speaker; Planner	University of Alberta, Stollery Children’s Hospital	No Relationships

a. Grant/Research Support; b. Consultant; c. Stock Shareholder (self-managed); d. Speaker’s Bureau; e. Advisory Board or Panel; f. Contractual Services; g. Other Financial or Material Support

CONTINUING MEDICAL EDUCATION (CME) INFORMATION

Shavonne Massey, MD, MSCE, FACNS	Planner	Children's Hospital of Philadelphia	Sun Pharmaceuticals (b)
Michael McGarvey, MD, FACNS	Planner	University of Pennsylvania	Medtronic (e); Medtronic (b)
Laura Mora-Munoz, MD	Speaker	Universidad del Rosario	No Relationships
Iryna Muzyka, MD, FACNS	Speaker; Planner	Mayo Clinic	No Relationships
Fabio A. Nascimento, MD	Speaker	Washington University School of Medicine	No Relationships
Marcus C. Ng, MD, FRCPC, CSCN (EEG), FACNS	Planner	University of Manitoba	Eisai Canada (d, e); Paladin Canada: (e); UCB Canada: (d, e)
Anca Nica, MD	Speaker	University Hospital Rennes	No Relationships
Jonathan Norton, PhD, FACNS	Planner	University of Saskatchewan	No Relationships
Marc R. Nuwer, MD, PhD, FACNS	Planner	UCLA Health	Corticare (c)
Prachi Parikh, MD	Speaker	Duke University	No Relationships
Jun Park, MD, FACNS	Planner	Rainbow Babies & Children's Hospital	No Relationships
Phillip L. Pearl, MD, FACNS	Planner; Speaker	Boston Children's Hospital/Harvard Medical School	Boston Health Care/PTC Therapeutics (a, b)
Ronit M. Pressler, MD, PhD, MRCPCH	Speaker	Great Ormond Street Hospital for Children and UCL Institute for Child Health	Accure (a, e); Ceribell (a, e); Eisai (a, e); Gilead (a, e); Marinus (a, e); Neurelis (a, e); Neuropace (a, e); Rafa (a, e); UCB (a, e); Vial Health (a, e); Kephala (b); Natus (d)
Ramya Raghupathi, MD	Speaker	Hospital of University of Pennsylvania	No Relationships
Eva K. Ritzl, MD, MBA, FACNS	Speaker	Mass General Brigham, Boston, MA	No Relationships
Carlos L. Rodriguez, MD	Speaker	Cleveland Clinic	No Relationships
Andrea O. Rossetti, MD	Speaker	Centre Hospitalier Universitaire Vaudois	Marinus Pharmaceuticals (b)
Devon Rubin, MD, FACNS	Planner	Mayo Clinic	No Relationships
Sarah E. Schmitt, MD, FACNS	Reviewer; Planner	Department of Neurology, MUSC	No Relationships
Stephan U. Schuele, MD, MPH, FACNS	Planner	Northwestern University Feinberg School of Medicine	Bioserenity/Digitrace (b); Jazz Pharmaceuticals (d); Monteris (b); Neurelis (d); SK Life Science (d); Sunovion (d)
Mirela Simon, MD, MSc, FACNS	Speaker	Harvard Medical School	No Relationships
Saurabh R. Sinha, MD, PhD, FACNS	Speaker; Planner	University of Pennsylvania Perelman School of Medicine	NAMSA (e); Neumoratx (f);
Sri Raghav Sista, MD	Speaker	McGovern Medical School, UTHealth	No Relationships
Michael Skolka, MD	Speaker	Mayo Clinic Rochester Department of Neurology	No Relationships
Aaron Struck, MD, FACNS	Planner; Speaker	University of Wisconsin School of Medicine and Public Health	Ceribell Corporation: (a)
Nitin Tandon, MD, FACNS	Speaker	UT Health Houston	BrainDynamics (c); Nervonik (c)
William O. Tatum, DO, FACNS	Planner; Speaker	Mayo Clinic	Bioserenity (b); Natus (d)
Parthasarathy D. Thirumala, MD, FACNS	Speaker	University of Pittsburgh Medical Center	No Relationships
Courtney J. Wusthoff, MD, MS, FACNS	Planner	Stanford University	No Relationships
Elissa Yozawitz, MD, FAES	Speaker	Montefiore Medical Center Albert Einstein College of Medicine	No Relationships

a. Grant/Research Support; b. Consultant; c. Stock Shareholder (self-managed); d. Speaker's Bureau; e. Advisory Board or Panel; f. Contractual Services; g. Other Financial or Material Support

SCHEDULE-AT-A-GLANCE

FRIDAY, SEPTEMBER 29, 2023	
12:00 - 1:30 PM ET	Basic EEG <i>Course Director: William O. Tatum, IV, DO, FACNS</i>
	Evoked Potentials <i>Course Director: Iryna Muzyka, MD, FACNS</i>
	EMG / NCS Part I <i>Course Director: Christopher Lamb, MD</i>
2:00 - 3:30 PM ET	Neonatal EEG <i>Course Director: Philip Pearl, MD, FACNS</i>
	Sleep <i>Course Co-Directors: Marcus C. Ng, MD, FRCPC, CSCN (EEG), FACNS and Nancy Foldvary-Schaefer, MD, FACNS</i>
	EMG / NCS Part II* <i>Course Director: Christopher Lamb, MD</i>
SATURDAY, SEPTEMBER 30, 2023	
12:00 - 1:30 PM ETw	ICU EEG Monitoring Part I <i>Course Co-Directors: Aaron Struck, MD and Janette Mailo, MD, PhD</i>
	NIOM Part I <i>Course Co-Directors: Lidia Cabañes-Martinez, MD, FACNS and Michael McGarvey, MD, FACNS</i>
	Stereo EEG Part I <i>Course Co-Directors: Patrick Chauvel, MD and Saurabh R. Sinha, MD, PhD, FACNS</i>
2:00 - 3:30 PM ET	ICU EEG Monitoring Part II* <i>Course Co-Directors: Aaron Struck, MD and Janette Mailo, MD, PhD</i>
	NIOM Part II* <i>Course Co-Directors: Lidia Cabañes-Martinez, MD, FACNS and Michael McGarvey, MD, FACNS</i>
	Stereo EEG Part II* <i>Course Co-Directors: Patrick Chauvel, MD and Saurabh R. Sinha, MD, PhD, FACNS</i>
3:45 - 5:00 PM ET	<p>Meet the ACNS Special Interest Groups to learn about their interactive program and what they have planned in the coming months. To stay up-to-date with the SIG offerings, visit their website!</p> <p>ICU EEG Monitoring – <i>Co-Directors: Shavonne Massey, MD, MSCE, FACNS and Zubeda Sheikh, MD, FACNS</i></p> <p>NIOM – <i>Co-Directors: Michael McGarvey, MD, FACNS and Mirela Simon, MD, MSC, FACNS</i></p> <p>Stereo EEG – <i>Co-Directors: Giridhar Kalamangalam, MD, DPhil, FACNS and Ramya Raghupathi, MD</i></p>
SUNDAY, OCTOBER 1, 2023	
12:00 - 1:30 PM ET	ICU EEG Monitoring Part III <i>Course Co-Directors: Aaron Struck, MD and Janette Mailo, MD, PhD</i>
	NIOM Part III <i>Course Co-Directors: Lidia Cabañes-Martinez, MD, FACNS and Michael McGarvey, MD, FACNS</i>
	Stereo EEG Part III <i>Course Co-Directors: Patrick Chauvel, MD and Saurabh R. Sinha, MD, PhD, FACNS</i>
2:00 - 3:30 PM ET	ICU EEG Monitoring Part IV* <i>Course Co-Directors: Aaron Struck, MD and Janette Mailo, MD, PhD</i>
	NIOM Part IV* <i>Course Co-Directors: Lidia Cabañes-Martinez, MD, FACNS and Michael McGarvey, MD, FACNS</i>
	Stereo EEG Part IV* <i>Course Co-Directors: Patrick Chauvel, MD and Saurabh R. Sinha, MD, PhD, FACNS</i>

*These sessions are designed in a more interactive format with case presentations.

COURSE AGENDAS

Basic EEG

Friday, September 29, 2023 • 12:00 - 1:30 PM ET

Course Director: William O. Tatum, IV, DO, FACNS

- 12:00 PM Normal EEG (Physiology, Ontogeny, Activation, Benign Variants, Artifacts)
Sudah Kessler, MD, MSCE
- 12:30 PM Abnormal EEG (Focal & Generalized Slowing)
Peter W. Kaplan, MD, FRCP, FACNS
- 12:55 PM Epileptiform Activity (Epileptiform Discharges, Periodic Patterns)
Fabio A. Nascimento, MD
- 1:25 PM Case Presentation – Test Your Knowledge!
William O. Tatum, IV, DO, FACNS

EMG / NCS – Part I

Friday, September 29, 2023 • 12:00 - 1:30 PM ET

Course Director: Christopher Lamb, MD

- 12:00 PM NCS: Principles & Waveform Parameters
Sri Raghav S. Sista, MD
- 12:25 PM NCS: Common Mononeuropathies & Polyneuropathies
Pitcha Chompoopong, MD
- 12:50 PM NCS: Artifacts, Other Techniques & Introduction to Repetitive Nerve Stimulation
Christopher Lamb, MD
- 1:15 PM Discussion

EMG / NCS Part II

Friday, September 29, 2023 • 2:00 - 3:30 PM ET

Course Director: Christopher Lamb, MD

- 2:00 PM EMG: Spontaneous Activity - Case
Grayson Beecher, MD
- 2:25 PM EMG: MUP Recruitment & Morphology - Cases
Priya Dhawan, MD, FRCP
- 2:50 PM EMG: Technique & Study Design - Cases
Michael Skolka, MD
- 3:15 PM Discussion

Evoked Potentials

Friday, September 29, 2023 • 12:00 - 1:30 PM ET

Course Director: Iryna Muzyka, MD, FACNS

- 12:00 PM Somatosensory Evoked Potentials
Gea Drost, MD, PhD
- 12:25 PM Visual Evoked Potentials
Parthasarathy Thirumala, MD, FACNS
- 12:50 PM Brainstem Auditory Evoked Responses
Aatif M. Husain, MD, FACNS
- 1:15 PM Discussion

Neonatal EEG

Friday, September 29, 2023 • 2:00 - 3:30 PM ET

Course Director: Philip L. Pearl, MD, FACNS

- 2:00 PM Normal Neonatal EEG
Phillip L. Pearl, MD, FACNS
- 2:25 PM Abnormal Neonatal EEG & Prognostication
Ronit M. Pressler, PhD, MD
- 2:50 PM Neonatal Seizures
Elissa Yozawitz, MD
- 3:15 PM Discussion

Sleep

Friday, September 29, 2023 • 2:00 - 3:30 PM ET

Course Co-Directors: Marcus C. Ng, MD, FRCP, CSCN (EEG), FACNS and Nancy Foldvary-Schaefer, DO, MS

- 2:00 PM Introduction to Sleep Diagnostic Testing
Madeleine M. Grigg-Damberger, MD, FACNS
- 2:25 PM Neurophysiology of Parasomnias and Sleep-Related Movement Disorders
Carlos Rodriguez, MD
- 2:50 PM Neurophysiologic Differentiation of CNS Disorders of Hypersomnolence: Case Discussion
Laura Mora-Munoz, MD
- 3:15 PM Discussion

COURSE AGENDAS - ICU EEG MONITORING

ICU EEG Monitoring – Part I

Saturday, September 30, 2023 • 12:00 - 1:30 PM ET

Course Co-Directors: Aaron F. Struck, MD, FACNS and Janette A. Mailo, MD, PhD

- 12:00 PM Personnel, Equipment, When and Whom to Monitor
Hiba A. Haider, MD, FACNS, FAES
- 12:25 PM History of ICU EEG and the ACNS Critical Care EEG Terminology
Lawrence J. Hirsch, MD, FACNS
- 12:50 PM Seizure Prediction and the Ictal-Interictal Continuum
Aaron F. Struck, MD, FACNS
- 1:15 PM Discussion

ICU EEG Monitoring – Part II

Saturday, September 30, 2023 • 2:00 - 3:30 PM ET

Course Co-Directors: Aaron F. Struck, MD, FACNS and Janette A. Mailo, MD, PhD

- 2:00 PM Benefits and Costs of ICU EEG Monitoring: What is the Evidence?
Nicholas S. Abend, MD, MSCE, FACNS
- 2:25 PM Critical Care EEG in Resource Limited Settings: Neonatal & Pediatric Protocols & Cases
Janette A. Mailo, MD, PhD
- 2:50 PM Critical Care EEG in Resource Limited Settings: Adult Protocols & Cases
Andrea Rossetti, MD
- 3:15 PM Discussion

ICU EEG Monitoring – Part III

Sunday, October 1, 2023 • 12:00 - 1:30 PM ET

Course Co-Directors: Aaron F. Struck, MD, FACNS and Janette A. Mailo, MD, PhD

- 12:00 PM Contribution of Electrographic Seizures & Status Epilepticus to Outcomes
Nicolas Gaspard, MD, PhD
- 12:25 PM Seizure Prediction and Targeted EEG Monitoring in the Pediatric ICU
France W. Fung, MD, FACNS
- 12:50 PM Cardiac Arrest: Monitoring and Outcome Prediction
Jong Woo Lee, MD, PhD, FACNS
- 1:15 PM Discussion

ICU EEG Monitoring – Part IV

Sunday, October 1, 2023 • 2:00 - 3:30 PM ET

Course Co-Directors: Aaron F. Struck, MD, FACNS and Janette A. Mailo, MD, PhD

- 2:00 PM Introduction to Quantitative EEG
Brandon Foreman, MD, MS, FACNS, FNCS
- 2:25 PM Quantitative EEG Cases
Brain L. Appavu, MD
- 2:50 PM Multimodal Monitoring and Ancillary Testing
Aline Herlopian, MD
- 3:15 PM Discussion

COURSE AGENDAS - NIOM

NIOM – Part I

Saturday, September 30, 2023 • 12:00 - 1:30 PM ET

Course Co-Directors: Lidia Cabañes-Martinez, MD, FACNS and Michael McGarvey, MD, FACNS

- 12:00 PM Somatosensory Evoked Potentials in NIOM
Aatif M. Husain, MD, FACNS
- 12:25 PM Motor Evoked Potentials in NIOM
Ronald Emerson, MD, FACNS
- 12:50 PM Brainstem Auditory Evoked Potentials in NIOM
Andres A. Gonzalez, MD, MMM, FAAN, FACNS
- 1:15 PM Discussion

NIOM – Part II

Saturday, September 30, 2023 • 2:00 - 3:30 PM ET

Course Co-Directors: Lidia Cabañes-Martinez, MD, FACNS and Michael McGarvey, MD, FACNS

- 2:00 PM Case: Cardiac & Aortic Procedure
Aditya Joshi, MD
- 2:15 PM Cardiac & Aortic NIOM
Mirela V. Simon, MD, MSc, FACNS
- 2:40 PM Case: Spinal Cord Procedure
Irena Muzyka, MD, FACNS
- 2:55 PM Spinal Cord NIOM
Eva K. Ritzl, MD, MBA, FACNS
- 3:20 PM Discussion

NIOM – Part III

Sunday, October 1, 2023 • 12:00 - 1:30 PM ET

Course Co-Directors: Lidia Cabañes-Martinez, MD, FACNS and Michael McGarvey, MD, FACNS

- 12:00 PM EEG in Intraoperative Monitoring
Inna Keselman, MD, PhD, FACNS
- 12:25 PM EMG, Nerve Conduction Studies, and Peripheral Nerve Mapping in NIOM
Jaime R. Lopez, MD, FACNS
- 12:50 PM Motor, Language, and Sensory Mapping
Alan D. Legatt, MD, PhD, FACNS
- 1:15 PM Discussion

NIOM – Part IV

Sunday, October 1, 2023 • 2:00 - 3:30 PM ET

Course Co-Directors: Lidia Cabañes-Martinez, MD, FACNS and Michael McGarvey, MD, FACNS

- 2:00 PM Case: Cranial Nerve Procedure
Felix Chang, MD
- 2:15 PM Cranial Nerve Monitoring in NIOM
Jaime R. Lopez, MD, FACNS
- 2:40 PM Case: Aneurysm or AVM Procedure
Stephen W. Briggs, MD, PhD
- 2:55 PM NIOM in Intracranial Vascular Surgeries
Felix Chang, MD
- 3:20 PM Discussion

COURSE AGENDAS - SEEG

Stereo EEG – Part I

Saturday, September 30, 2023 • 12:00 - 1:30 PM ET

Course Co-Directors: Patrick Y. Chauvel, MD and Saurabh R. Sinha, MD, PhD, FACNS

- 12:00 PM Pre-surgical Evaluation: Clinical History, Imaging & Neuropsychology
Ammar Kheder, MD, FACNS
- 12:25 PM Pre-surgical Evaluation: Video EEG & Electro-Clinical Correlation
Anca Nica, MD
- 12:50 PM SEEG Implantation Planning
Saurabh R. Sinha, MD, PhD, FACNS
- 1:15 PM Discussion

Stereo EEG – Part II

Course Co-Directors: Patrick Y. Chauvel, MD and Saurabh R. Sinha, MD, PhD, FACNS

Saturday, September 30, 2023 • 2:00 - 3:30 PM ET

- 2:00 PM Evaluation and Planning of Temporal Lobe/Limbic Cases
Ramya Raghupathi, MD
- 2:25 PM Evaluation and Planning of Frontal Lobe Cases
Prachi Parikh, MD
- 2:50 PM Evaluation and Planning of Posterior Quadrant Cases
Thandar Aung, MD
- 3:15 PM Discussion

Stereo EEG – Part III

Sunday, October 1, 2023 • 12:00 - 1:30 PM ET

Course Co-Directors: Patrick Y. Chauvel, MD and Saurabh R. Sinha, MD, PhD, FACNS

- 12:00 PM SEEG Interpretation
Patrick Y. Chauvel, MD
- 12:25 PM Stimulation and Mapping
Patrick Y. Chauvel, MD
- 12:50 PM Surgical Intervention
Nitin Tandon, MD, FACNS
- 1:15 PM Discussion

Stereo EEG – Part IV

Sunday, October 1, 2023 • 2:00 - 3:30 PM ET

Course Co-Directors: Patrick Y. Chauvel, MD and Saurabh R. Sinha, MD, PhD, FACNS

- 2:00 PM Results and Outcomes of Temporal Lobe/Limbic Cases
Ramya Raghupathi, MD
- 2:25 PM Results and Outcomes of Frontal Lobe Cases
Prachi Parikh, MD
- 2:50 PM Results and Outcomes of Posterior Quadrant Cases
Thandar Aung, MD
- 3:15 PM Discussion

Special Interest Group (SIG) Happy Hour

Saturday, September 30, 2023 • 3:45 - 5:00 PM ET

Meet the ACNS SIGs to learn about their new interactive program and what they have planned in the coming months.

ICU EEG Monitoring

Co-Directors: Shavonne Massey, MD, MSCE, FACNS, and Zubeda Sheikh, MD, FACNS

NIOM

Co-Directors: Michael McGarvey, MD, FACNS, and Mirela Simon, MD, MSC, FACNS

Stereo EEG

Co-Directors: Giridhar Kalamangalam, MD, DPhil, FACNS, and Ramya Raghupathi, MD

The SIG Happy Hour is not eligible for CME credits.