

2024 ACNS Annual Meeting & Courses

Orlando FLORIDA

FEBRUARY 28 - MARCH 3, 2024
RENAISSANCE ORLANDO AT FLORIDA



Preliminary Program

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ABOUT THE AMERICAN CLINICAL NEUROPHYSIOLOGY SOCIETY (ACNS)

ACNS' mission is to serve patients and society by empowering members to advance the science, practice and profession of clinical neurophysiology. This mission serves to fulfill the vision to optimize neurologic health through understanding of nervous system function

Founded in 1946 and originally named the American Electroencephalographic Society (AEEGS), 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.

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ABOUT THE AMERICAN CLINICAL NEUROPHYSIOLOGY SOCIETY (ACNS)

ANNUAL MEETING & COURSES PLANNING COMMITTEES

Course Committee

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Elizabeth Gerard, MD, FACNS
Jong Woo Lee, MD, PhD, FACNS
Sarah E. Schmitt, MD, FACNS

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Sarah E. Schmitt, MD, FACNS

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Chrystal M. Reed, MD, PhD
Maria C. Sam, MD, FACNS
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Juan Ochoa, MD, FACNS
Joel Oster, MD, FACNS
Kimberly Pargeon, MD, FACNS, FAES
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Dawn Eliashiv, MD, FACNS
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Program Committee

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Lynn Liu, MD, MS (HPE), FACNS

Co-Chairs-Elect

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Sarah E. Schmitt, MD, FACNS

GENERAL MEETING INFORMATION

ABOUT THE ANNUAL MEETING & COURSES

The ACNS Annual Meeting & Courses are the flagship educational programs designed to provide a solid review of the fundamentals and the latest scientific advances in both “central” and “peripheral” clinical neurophysiology.

Presentations at the Annual Meeting & Courses are given by leading experts in the field and have value for healthcare professionals who utilize clinical neurophysiology. Sessions include symposia, workshops, and courses, featuring didactic lectures, expert panels, debates, and interactive formats. Poster presentations at the Annual Meeting highlight the latest work conducted at clinical neurophysiology centers around the country.

The meeting also features a number of opportunities for networking, including a Professional Development Mentorship Program in which residents and fellow applicants are paired with senior ACNS members and provided an opportunity to connect.

HEALTH & SAFETY

ACNS strongly encourages full vaccination of all meeting attendees, including booster doses, when appropriate and applicable. Masking is optional during the Annual Meeting & Courses sessions and social functions.

Those who test positive for COVID or exhibit symptoms are encouraged to remain at home and follow CDC guidelines for testing, isolation, and masking.

IMPORTANT DATES

Poster Abstract Submission Open	October 1, 2023
Advance Registration Open	October 15, 2023
Poster Abstract Submission Deadline	November 15, 2023
Poster Abstract Decision Notification	December 13, 2023
Housing Deadline	February 5, 2024
Advance Registration Deadline	February 20, 2024
Registration Cancellation Deadline	February 23, 2024
Courses Handout Website Open	February 26, 2024
CME Certificate Program Opens (pre-registered delegates)	February 28, 2024
CME Certificate Program Opens (delegates registering onsite)	March 11, 2024
Courses Handout Website Closes	May 26, 2024
CME Certificate Claim Deadline	June 1, 2024

REGISTRATION RATES

	ACNS Members*	Non-Members*	Junior*, Tech, RRC Members*	Non-Member Trainees, Tech, RRC*
Advance Registration	\$650	\$950	\$345	\$550
Day Pass - Advance				
Wednesday or Sunday	\$160	\$240	\$85	\$140
Thursday, Friday, or Saturday	\$330	\$480	\$175	\$280
On-Site Registration	\$700	\$1,025	\$375	\$625
Day Pass On-Site				
Wednesday or Sunday	\$180	\$260	\$100	\$160
Thursday, Friday, or Saturday	\$355	\$520	\$190	\$320

*RRC = Reduced Rate Country. [List of countries who qualify for reduced rates as defined by the World Bank.](#)

*ITP discount reflected in cart

Registration Includes:

- Access to over 50 scientific program sessions, workshops and courses, featuring intermediate and the latest advances in clinical neurophysiology;
- A variety of opportunities to connect with leading experts in the field such as Speed Networking, Special Interest Group (SIG) Meet-Ups and the Welcome Reception on Thursday, February 29;
- Access to the Exhibit & Poster Hall and Product Theaters; and
- Coffee breaks and meals served in the Exhibit Hall.

HEADQUARTERS HOTEL

Renaissance Orlando at SeaWorld
6677 Sea Harbor Drive, Orlando, FL, 32821

GROUP REGISTRATION RATE

\$242/night single/double occupancy

Please be advised that guests in the ACNS block will be charged a discounted resort fee of \$20 per room per night, plus applicable taxes at the time of check-in. The resort fee covers:

- Enhanced Wireless In-Room Internet.
- Transportation to Disney World, Universal Studios and the Orlando Premium Outlets (Vineland Ave. location). Reservations need to be made the day prior at the Navigator desk before 9pm.
- Welcome Resort Beverage (Two coupons per room, per stay to include beer and wine).

Reservations at the group rate will be accepted until February 5, 2024, OR until the block is full, whichever occurs first. Reservations may be made on a space-available basis after the housing deadline of February 5 at the hotel's prevailing rates. We recommend booking your hotel as soon as your travel plans have been confirmed.

The ACNS Annual Meeting website is the ONLY ACNS-authorized system for registering for the conference or booking guest rooms at the Renaissance Orlando at SeaWorld. Should you be contacted by any group claiming to represent ACNS and urging you to book hotel rooms or register for the meeting through their services (especially at “lower” rates) please be aware that ACNS does not work through or contract with any such groups.

GENERAL MEETING INFORMATION

POLICIES

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.

Smoking Policy

Smoking is not permitted during any Annual Meeting & Courses activity or event.

Cell Phone Protocol

Please ensure that cell phone ringers, pagers and electronic devices are silenced or turned off during all sessions.

MEETING CONDUCT 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 this 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.

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 reserved the right to prohibit attendance at any future meeting.

CONTINUING MEDICAL EDUCATION (CME) INFORMATION

MEETING DESCRIPTION

The ACNS Annual Meeting & Courses are designed to provide a solid review of the fundamentals and the latest scientific advances in both “central” and “peripheral” clinical neurophysiology. Presentations at the Annual Meeting & Courses are given by leading experts in the field and have value for health care professionals who utilize clinical neurophysiology. Sessions include symposia, workshops and courses featuring didactic lectures, expert panels, debates and interactive formats. Poster presentations at the Annual Meeting highlight the latest work conducted at clinical neurophysiology centers around the country.

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.

LEARNING OBJECTIVES

At the end of the Annual Meeting & Courses, the participant will be able to:

1. Describe the indications for use of clinical neurophysiology techniques in diagnosis of disorders of the nervous system;
2. Incorporate new neurophysiology procedures and technological advances into his/her own clinical practice; and
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 electroencephalography, evoked potentials, ALS, magnetoencephalography, practice technologies, nerve conduction studies and other clinical neurophysiology techniques; and
5. Apply advances in clinical neurophysiology techniques to improve the diagnosis of neurologic disorders.

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 Annual Meeting & Courses for a maximum 34 *AMA PRA Category I Credit(s)*[™]. Physicians should claim only credit commensurate with the extent of their participation in the activity.

CALL FOR POSTER ABSTRACTS

SCIENTIFIC CONTENT

The ACNS Annual Meeting is designed to provide the latest scientific advances in both “central” and “peripheral” clinical neurophysiology. Presentations at the Annual Meeting are given by leading experts in the field and have value for health care professionals who utilize clinical neurophysiology. Poster presentations at the Annual Meeting highlight the latest work conducted at clinical neurophysiology centers around the country.

WHO SHOULD ATTEND

The ACNS Annual Meeting will have value for clinical neurophysiologists, neurologists, psychiatrists, physiatrists, neurosurgeons, trainees in these disciplines, other physicians and researchers, and neurophysiology technologists who specialize in clinical neurophysiology.

SUBMISSION DATES

Poster abstract submission will open on October 1, 2023. All abstracts must be submitted online by November 15, 2023, at 11:59pm ET. No exceptions will be made.

ONLINE ABSTRACT SUBMISSION

Poster abstracts must be submitted through the online abstract submission site. Complete instructions for submission are available online. Abstracts that have been mailed, emailed or faxed will not be accepted. Anyone may submit a poster abstract to ACNS. Membership in ACNS is not required for e-poster abstract submission.

ABSTRACT REVIEW

All abstracts submitted will be reviewed, evaluated for scholarly and relevant content, and graded in blinded fashion by the ACNS Program Committee. The review process takes approximately four weeks, and acceptance notification will be made by email no later than December 13, 2023.

ABSTRACT CATEGORIES

Abstracts submitted to the ACNS 2024 Annual Meeting should be designated for consideration within one of the following categories to be considered for presentation:

Autonomic Function and its Disorders	Functional Imaging
Basic Neurophysiology	Intraoperative Monitoring
CNS Physiology	Magnetoencephalography
Critical Care Monitoring	Neuromuscular Ultrasound
Deep Brain and Cortical Stimulation	Peripheral Nerve and Muscle Physiology
Digital/Quantitative EEG and Topography	Peripheral Neuropathy
EEG	Sensory/Motor Physiology
EMG/NCV Testing	Sleep
Epilepsy: Clinical	Video-EEG Monitoring for Epilepsy
Epilepsy: Pathophysiology	
Evoked Potentials	

ABSTRACT TYPES

Two types of poster abstracts submissions will be accepted: Poster Abstract Regular Submission or Poster Abstract Case Report Submission. Both types of submissions will follow the same review process. Submitted abstracts are limited to 2,000 total characters. All required fields listed below, including the abstract title, will count towards this limit:

Poster Abstract Regular Submission

Introduction
Methods
Results
Conclusion

Poster Abstract Case Report Submission

Introduction
Case Report\Case History
Conclusion

PREVIOUS PUBLICATION OR PRESENTATION

Abstracts which have been published in journals, meeting proceedings, or other publications, as well as those presented at meetings prior to the ACNS meeting are eligible and welcome for submission. All poster abstracts presented at the Annual Meeting will be published in the Journal of Clinical Neurophysiology.

POSTER PRESENTATION FORMAT

All posters at the 2024 Annual Meeting will be presented in-person, in Orlando, Florida. E-poster presentation is not available. More specific details related to submission of poster materials and interactive poster tours/presentation are pending and will be provided with poster acceptance notifications.

AUTHOR ATTENDANCE REQUIREMENT

By submitting an abstract to ACNS 2024 Annual Meeting & Courses, abstract authors agree that at least one author will attend the meeting in-person and will be available to participate on the date and at the time assigned by the Program Committee. Virtual participation is not available. Authors will be notified of presentation dates and times at the time of notification of acceptance and are expected to make appropriate travel arrangements to ensure that at least one of the abstract's authors will be in attendance. All presenting authors are expected to register to attend the meeting by the deadline set forth in their acceptance notification. Abstracts for which an author is not pre-registered by the dates set forth will automatically be withdrawn from the program. Poster setup is tentatively scheduled for Wednesday, February 28, 5:00 – 8:00pm and Thursday, February 29, 7:00 – 11:00am; and displayed Thursday, February 29 – Saturday, March 2, 2024.

POSTER CANCELLATION POLICY

At least one author or co-author on all posters is expected to register to attend the meeting for which they are accepted by the deadlines set forth in their acceptance notification. If this author cancels their registration prior to the meeting, the poster may be withdrawn from the program.

ENGLISH TRANSLATION REVIEW

All poster abstracts should be submitted in English. Poster abstract submitters for whom English is not a first language may request assistance from the ACNS International Relations Committee in reviewing abstract drafts for English language translation. To request translation assistance, please email the full text of your draft submission (in English) to Carrie Grossman at the ACNS Executive Office (cgrossman@acns.org), allowing at least 7 days for review of the translation.

CALL FOR POSTER ABSTRACTS

YOUNG INVESTIGATOR TRAVEL AWARDS

Several young physician investigators will be selected, based upon the ranking of the applicant's abstract by the Program Committee.

Eligibility Criteria

Applicant must be: (1) a current ACNS member or apply for membership concurrent with application for the Award; (2) a resident, fellow, or junior faculty within two years of completion of fellowship training; and (3) be the first author of an abstract submitted to the Annual Meeting. Applicant must meet the entire aforementioned criteria in order to be considered for the Young Investigator Award. Prior award recipients are not eligible for an additional award.

Selection

Awardees will be chosen based on the quality of submitted abstracts, as ranked by the ACNS Program Committee. A total of six fellowships will be awarded for the ACNS 2024 Annual Meeting & Courses. Additional travel awards may be awarded if funding is available.

Procedures

Upon close of abstract submission, the ACNS Program Committee will review, evaluate, and rank abstracts, including all candidates for consideration to receive an award. The Program Committee Co-Chairs will select the final six awardees based on the collective rankings from the Program Committee. ACNS will notify awardees of a decision no later than December 13, 2023. Awardees will then be expected to accept the invitation by the deadlines set forth in their acceptance notifications, as well as register for the Annual Meeting.

Cancellation Policy

Award recipients are expected to register to attend the Annual Meeting by the deadlines set forth in their acceptance notification. If an award recipient cancels their registration prior to the meeting, the Travel Award may be withdrawn from the individual and designated to another candidate.

SOCIAL & NETWORKING EVENTS

SPECIAL INTEREST GROUP (SIG) SOCIALS

Saturday, March 2, 2024, 6:30 – 7:30pm

Come learn about the ACNS SIGs in Stereo EEG, NIOM, ICU EEG and Business of Clinical Neurophysiology. Hear about what they have planned in the coming months as they offer key educational content throughout the year.

SPEED NETWORKING

Friday, March 1, 2024, 11:30am - 12:00pm

Annual Meeting & Course delegates aim to meet and greet as many colleagues as possible in this fast-paced networking event, held on Friday, March 1, 11:30am - 12:00pm. Delegates are paired for 2-minute connections before rotating to the next colleague. This networking opportunity is available to all delegates. Take advantage of an opportunity to chat with potential employers, collaborator, and peers.

Don't forget to bring business cards!

WELCOME RECEPTION

Thursday, February 29, 2024, 6:15 – 7:15pm

ACNS invites all delegates to attend the Welcome Reception in the Exhibit Hall on Thursday, February 29.

PROFESSIONAL DEVELOPMENT MENTORSHIP PROGRAM

Participants in the ACNS Professional Development Mentor Program are welcome to make use of a designated meeting area in the common areas during breaks and lunches. Please look for the designated tables as a place to meet.

ACNS Special Interest Group

Connect, network, and participate in topical, interactive education throughout the year.



ACNS Special Interest Groups (SIGs) are organized around several areas of CNP practice

The 2023–2024 Special Interest Groups and their directors are as follows:

Stereo EEG: Giridhar Kalamangalam, MD, and Ramya Raghupathi, MD

NIOM: Michael McGarvey, MD, FACNS and Mirela Simon, MD, MSC, FACNS

ICU EEG: Shavonne Massey, MD, MSCE, FACNS and Zubeda Sheikh, MD, FACNS

**Introducing Business of Clinical Neurophysiology:
Pegah Afra, MD, FACNS and Matthew W. Luedke, MD, FACNS**

More information to come

Visit

<https://www.acns.org/membership/acns-special-interest-groups-sigs>
for more information

Upcoming SIG Events:

Special Interest Group (SIGs) Live Social
Saturday, March 2, 2024
6:30 – 7:30pm

SIG Meet-Ups:

ICU EEG: November 2, 2023
Stereo EEG: January 18, 2024
NIOM: February 1, 2024

AWARD RECIPIENTS & LECTURES

The ACNS Awards Committee, chaired by Jamie R. López, MD, FACNS, is pleased to announce the following award recipients who will be recognized at the upcoming 2024 Annual Meeting in Orlando, Florida.

PIERRE GLOOR AWARD PRESENTATION & LECTURE



Gordon Bryan Young, MD

The Gloor Award is presented annually for outstanding current contributions to clinical neurophysiology research. Dr. Young will be recognized and will deliver the 2024 Gloor Lecture titled "A Review of Periodicity in Electroencephalography" on Saturday, March 2, 2024.

MARC R. NUWER SERVICE AWARD PRESENTATION



Alan D. Legatt, MD, PhD, FACNS

The Marc R. Nuwer Service Award is presented to an individual in recognition of outstanding service to ACNS and its members, including non-scientific contributions. Dr. Legatt will be recognized during the Annual Business Meeting on Friday, March 1, 2024.

ROBERT S. SCHWAB AWARD PRESENTATION & LECTURE



Sanjeev D. Nandedkar, PhD

The Schwab Award is presented annually to an individual who has made significant contributions in the area of clinical neurophysiology. Dr. Nandedkar will be recognized and will deliver the 2024 Schwab Lecture titled "Motor Unit Potential: Measurements & Correlates" on Friday, March 1, 2024.

ACNS DISTINCTION IN TEACHING AWARD



Rebecca Matthews, MD

The Distinction in Teaching Award recognizes a mid-career ACNS member for outstanding accomplishments in teaching clinical neurophysiology to fellows, residents, medical students or EEG technologists. Dr. Matthews will be recognized during the Annual Business Meeting on Friday, March 1, 2024.

HERBERT H. JASPER AWARD PRESENTATION



Michael R. Sperling, MD, FACNS

The Jasper Award is presented annually to an individual who has made a lifetime of outstanding contributions to the field of clinical neurophysiology. Dr. Sperling will be recognized and will deliver the 2024 Jasper Lecture titled "Rethinking Seizures: How Current Concepts Fail to Meet Clinical Needs" on Saturday, March 2, 2024.

ACNS DISTINCTION IN SERVICE AWARD



Adriana Bermeo-Ovalle, MD, FACNS, FAES

The Distinction in Service Award recognizes a mid-career ACNS member who has demonstrated outstanding service to the field of clinical neurophysiology at the institutional or national level. Dr. Bermeo-Ovalle will be recognized during the Annual Business Meeting on Friday, March 1, 2024.

SCHEDULE AT A GLANCE

WEDNESDAY, FEBRUARY 28, 2024	
2:30 - 4:00pm	Course: Advanced EEG Course Director: <i>Dan Weber, DO, FAES, FACNS</i>
2:30 - 5:45pm	Course: NIOM Part I Course Directors: <i>Christine Hung, MD and Dinesh Nair, MD, PhD</i>
4:15 - 5:45pm	Course: Ictal Semiology Workshop Course Director: <i>Naiara Garcia-Losarcos, MD</i>
THURSDAY, FEBRUARY 29, 2024	
7:00 - 8:30am	Breakfast
8:00 - 9:30am	Course: Introduction to MEG Course Director: <i>Jeffrey Tenney, MD, PhD, FACNS</i>
8:00 - 11:15am	Course: ICU EEG Monitoring Part I Course Directors: <i>Nicolas Gaspard, MD, PhD and France Fung, MD, FACNS</i>
	Course: NIOM Part II Course Directors: <i>Christine Hung, MD and Dinesh Nair, MD, PhD</i>
	Course: Stereo EEG Part I Course Directors: <i>Birgit Frauscher, MD, PhD and ammar Kheder, MD, FACNS</i>
9:30 - 9:45am	Break
9:45 - 11:15am	Course: Advanced MEG Processing Course Director: <i>Sasha Alick-Lindstrom, MD, FACNS, FAES, FAAN</i>
11:15am - 12:45pm	Lunch
11:30am - 1:00pm	CNP Program Directors Symposium: Recruitment for CNP Fellowship Programs: Lessons Learned and Facing Future Challenges Session Directors: <i>Ioannis Karakis, MD, PhD, MSc, FACNS and Lynn Liu, MD, MS (HPE), FACNS</i>
1:15 - 2:45pm	General Session: 2023 Cosimo-Ajmonie Marsan Award Presentation Innovation Lecture Presidential Address
3:00 - 4:30pm	Advances and Controversies in Cortical, Brainstem, and Spine Neuromonitoring Session Director: <i>Stan Skinner, MD, FACNS</i>
	Growing a Successful Clinical Neurophysiology Service: From OR to ICU to Clinic Session Directors: <i>Pegah Afra, MD, FACNS and Suzette LaRoche, MD, FACNS</i>
	Ictal-Interictal Continuum (IIC) Patterns Across the Age Spectrum Session Directors: <i>Nicolas Gaspard, MD, PhD and France Fung, MD, FACNS</i>
4:30 - 4:45pm	Break
4:45 - 6:15pm	Electrodiagnostic Evaluation of Neuromuscular Junction Disorders Session Director: <i>Rabia Malik, MD</i>
	Intraoperative Neurophysiologic Monitoring in the Surgical Treatment of Neurovascular Compression Syndromes Session Directors: <i>Ignacio Regidor, MD, PhD and Aatif M. Husain, MD, FACNS</i>
	Intraorbital Needle Electrode Placement for Intraoperative Monitoring of Cranial Nerves 3, 4, and 6 Session Directors: <i>Matthew Hoffman, DO, PhD, FACNS and Tatsuya Oishi, MD</i>
	Next Generation of Neurophysiology-Informed Clinical Trials in Hypoxic-Ischemic Brain Injury Session Directors: <i>Jong Woo Lee, MD, PhD, FACNS and Edilbertoamorim, MD</i>
6:15 - 7:15pm	Welcome Reception

 = Courses
 = Scientific Program
 ES = This session will be presented in Spanish.

SCHEDULE AT A GLANCE

FRIDAY, MARCH 1, 2024	
7:00 - 8:30am	Breakfast
8:00 - 9:30am	Course: Hot Topics in Sleep Medicine Course Director: <i>Madeleine Grigg-Damberger, MD, FACNS</i>
8:00 - 11:15am	Course: Business of Clinical Neurophysiology Course Directors: <i>Eva Ritzl, MD, MBA, FACNS, FAAN and Uma Menon, MD, MBA, FACNS</i>
	Course: ICU EEG Monitoring Part II Course Directors: <i>France Fung, MD, FACNS and Nicolas Gaspard, MD, PhD</i>
	Course: Stereo EEG Part II Course Directors: <i>Birgit Frauscher, MD, PhD and ammar Kheder, MD, FACNS</i>
9:30 - 9:45am	Break
9:45 - 11:15am	Course: Evoked Potentials Course Director: <i>Erik Kobylarz, MD, PhD</i>
11:15am - 12:45pm	Lunch
12:30 - 1:00pm	Speed Networking
1:15 - 2:45pm	General Session: Schwab Award Presentation & Lecture Business Meeting
3:00 - 4:30pm	Ambulatory EEG: Clinical Indications and Challenges Session Director: <i>Magdalena Warzecha, R. EEG/EP, CLTM, NA-CLTM</i>
	Course: Quantitative EEG Workshop Session Director: <i>Fabio Nascimento, MD</i>
	Delving Deep into the Deep Learning for Neurophysiology Session Director: <i>Giridhar Kalamangalam, MD, Dphil, FACNS</i>
	OPM-Based Magnetoencephalography: A New Perspective on Magnetic Neurophysiology Session Directors: <i>Pegah Afra, MD, FACNS and Timothy Roberts, PhD</i>
4:30 - 4:45pm	Break
4:45 - 6:15pm	Intraoperative Neurophysiological Monitoring of Human Cognitive Functions: Challenges and Limitations (Joint ACNS/CLA-IFCN Symposium) Session Directors: <i>Daniel San Juan Orta, MD, FACNS, FAES and Kamylla Thiago de Almeida, MD</i>
	Ambulatory EEG Session Directors: <i>Aline Herlopian, MD and William Tatum, DO, FACNS</i>
	Cranial Nerve Conduction Studies Hands-On Workshop Session Director: <i>Ruple Laughlin, MD, FACNS</i>
	The Role of the Thalamus During Stereoelectroencephalography (sEEG) Session Directors: <i>Shruti Agashe, MD, MS, BME and Nicholas Gregg, MD</i>

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SCHEDULE AT A GLANCE

SATURDAY, MARCH 2, 2024	
7:00 - 8:30am	Breakfast
7:00 - 8:00am	A Diverse & Inclusive ACNS: Past Efforts, the Path Forward Session Director: <i>Suzette LaRoche, MD, FACNS</i>
8:00 - 9:30am	Course: Challenging NIOM Cases Course Director: <i>Matthew Hoffman, DO, PhD, FACNS</i>
	Course: Challenging SEEG Cases Course Director: <i>Jun T. Park, MD, FACNS</i>
	Course: Neonatal Neuromonitoring Course Director: <i>Adam L. Numis, MD</i>
	Neurophysiology of Delirium Session Director: <i>Rishi Ganesan, MBBS, MD, DM</i>
9:30 - 9:45am	Break
9:45 - 11:15am	Course: Neuromodulation Workshop: Epilepsy and Beyond Course Director: <i>Lawrence J. Hirsch, MD, FACNS</i>
	Complex Electrodiagnostic Waveforms – An Interactive Case-Based Approach to Interpreting Uncommon Waveforms Session Director: <i>Devon I. Rubin, MD, FACNS</i>
	The EEG as a Window to the Sedated Brain Session Directors: <i>Maria J. Bruzzone Giraldez, MD, FACNS and Eyal Kimchi, MD, PhD</i>
11:15am - 12:45pm	Lunch
11:30am - 1:00pm	Career Development Panel: Career Pathways in Clinical Neurophysiology Session Directors: <i>Ioannis Karakis, MD, PhD, MSc, FACNS and Lynn Liu, MD, MS (HPE), FACNS</i>
1:15 - 2:45pm	General Session: Young Investigator Travel Award Presentation Jasper Award Presentation & Lecture Gloor Award Presentation & Lecture
3:00 - 4:30pm	Amyotrophic Lateral Sclerosis: Neurophysiological Natural History, Estimation and Quantification of Motor Units and Clinical-Electrophysiological Differential Diagnosis (Joint ACNS/IFCN Latinamerican Chapter Symposium) Session Director: <i>Devon I. Rubin, MD, FACNS and Mark Bromberg, MD, PhD</i>
	Advances in Ischemia Neuromonitoring: From the Angio Suite to the ICU and Operating Theater Session Director: <i>Edilbertoamorim, MD and M. Brandon Westover, MD, PhD</i>
	Botulinum Toxin Treatment Under EMG Guidance: Hands-On Workshop Session Director: <i>Jaime R. López, MD, FACNS</i>
	Starts, Ends, Surroundings, and Bends - Effects of Anatomy on Recording and Stimulation of Action Potentials in Axons Session Director: <i>Alan D. Legatt, MD, PhD, FACNS</i>
4:30 - 4:45pm	Break
4:45 - 6:15pm	Brain Mapping During Surgery (Joint ACNS/ Spanish Society for Clinical Neurophysiology Symposium) Session Directors: <i>Jaime López, MD, FACNS and Lidia Cabañes-Martínez, MD, FACNS</i>
	E/MEG Source Localization is Useful in Temporal Lobe Epilepsy: Myth or Fact Session Directors: <i>Ismail S. Mohamed, MD, FAES, FACNS and Jeffrey Tenney, MD, PhD, FACNS</i>
	Multimodal Monitoring in Comatose Patients: EEG and Vascular Correlations and Outcome Prediction Session Director: <i>Olga Selioutski, DO, FACNS, FAES, FACN</i>
	New Trends in Electrical Source Imaging for Presurgical Epilepsy Evaluation: From Current Standard of Care to New Approaches Session Directors: <i>Prachi T. Parikh, MD and Birgit Frauscher, MD, PhD</i>
6:30 - 7:30pm	ACNS Special Interest Group (SIG) Socials

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SCHEDULE AT A GLANCE

SUNDAY, MARCH 3, 2024	
7:00 - 8:30am	Breakfast
8:00 - 9:30am	Peripheral Neuropathies - Beyond Standard Neurophysiological Evaluation (Joint ACNS/Sociedade Brasileira de Neurofisiologia Clínica Symposium) Session Directors: <i>Marcondes C. Franca, Jr., MD, PhD and Catherine Marx, PhD</i> Education and Training of Clinical Neurophysiology in Different International Health Care Systems. Are we Failing a Worldwide Need? (Joint ACNS/Mexican Society of Clinical Neurophysiology Symposium) Session Directors: <i>Jaime R. López, MD, FACNS and Alejandro Zavala, MD, FACSN</i> A Deeper Understanding of Some Aspects of Neurophysiology Session Director: <i>David Gloss, MD, FACNS</i> Thalamic Stereo EEG Session Director: <i>Ramya Raghupathi, MD</i>
9:30 - 9:45am	Break
9:45 - 11:15am	Clinical Neurophysiology Resident and Fellow Symposium Session Directors: <i>Pegah Afra, MD, FACNS and Jeffrey Britton, MD, FACNS</i> Exploring Continuous EEG Monitoring in the Critically Ill: Rapid Availability, Long-Term Monitoring Candidates, and Limited Montages. ^{ES} Session Directors: <i>Lidia Cabañes-Martínez, MD, FACNS and Adriana Bermeo-Ovalle, MD, FACNS, FAES</i> Psychiatry and Neurosurgery - Value of Auditory Evoked Potentials in High Risk Children and Adults (Joint ACNS/Egyptian Society of Neurology Symposium) Session Directors: <i>Ayat Allah Hussein, MD and Aatif M. Husain, MD, FACNS</i> Research Highlights Session Directors: <i>Mirela V. Simon, MD, MSc, FACNS and Olga Taraschenko, MD, PhD, FACNS</i>

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ANNUAL MEETING & COURSES

WEDNESDAY, FEBRUARY 28, 2024

2:30 – 4:00pm

Course: Advanced EEG

Course Director: Dan Weber, DO, FAES, FACNS

Learning Objectives Coming Soon

2:30pm Introduction to Advanced EEG, Beyond Visual Review

Dan Weber, DO, FAES, FACNS

2:35pm Electrical Source Imaging

Susan T. Herman, MD, FACNS

3:00pm EEG Functional Connectivity Analysis

Patrick Davis, MD

3:25pm The Future of AI in EEG Interpretation

Sandor Beniczky, MD, PhD, FACNS

2:30 – 5:45pm

Course: Neuropysiological Intraoperative Monitoring - Part I

Course Co-Directors: Christine Hung, MD and Dinesh G. Nair, MD, PhD

Course Agenda Coming Soon

4:15 – 5:45pm

Course: Ictal Semiology Workshop

Course Director: Naiara Garcia-Losarcos, MD

Learning Objectives Coming Soon

4:15pm Introductory Case

Naiara Garcia-Losarcos, MD

4:25pm Case 1

Stephan Schuele, MD, MPH, FACNS, FAAN

4:50pm Case 2

Prakash Kotagal, MD, FACNS, FAAN

5:15pm Case 3

Charles Szabo, MD

5:40pm Discussion

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ANNUAL MEETING & COURSES

THURSDAY, FEBRUARY 29, 2024

7:00 – 8:30am

Breakfast

8:00 – 9:30am

Course: Introduction to MEG

Course Director: Jeffrey Tenney, MD, PhD

Learning Objectives Coming Soon

- 8:00am How is it Different from EEG? – MEG Physics and Physiology
Susan Bowyer, PhD
- 8:25am When to Order MEG? - 10 Common, Evidence Supported Indications for MEG in Epilepsy Surgery
Anto I. Bagic, MD, PhD, FAES, FACNS
- 8:50am What Should I Expect? – MEG Source Localization and Reporting
Andrea Lowden, MD, FACNS
- 9:15am Discussion

8:00 – 11:15am

CONCURRENT SESSIONS

Course: ICU EEG Monitoring Part I

Course Co-Directors: France Fung, MD, FACNS and Nicolas Gaspard, MD, PhD

Learning Objectives Coming Soon

- 8:00am Introduction
France Fung, MD, FACNS and Nicolas Gaspard, MD, PhD, FACNS
- 8:05am Consensus & Guidelines on Continuous EEG in Critically Ill
Susan T. Herman, MD, FACNS
- 8:30am ACNS Terminology Part I
Lawrence J. Hirsch, MD, FACNS
- 8:55am ICU EEG Monitoring for Status Epilepticus
Nicolas Gaspard, MD, PhD
- 9:20 am Break
- 9:35am Ictal-Interictal Continuum (IIC)
Aaron Struck, MD, FACNS
- 10:00am Advanced Pediatric ICU EEG
Nicholas S. Abend, MD, MSCE, FACNS
- 10:30am Advanced Neonatal EEG
Courtney J. Wusthoff, MD, MS, FACNS
- 11:00am Discussion

Course: Neuropysiological Intraoperative Monitoring - Part II

Course Co-Directors: Christine Hung, MD and Dinesh G. Nair, MD, PhD

Course Agenda Coming Soon

Course: Stereo EEG Part I

Course Co-Directors: Birgit Frauscher, MD, PhD and Ammar Kheder, MD

Learning Objectives Coming Soon

- 8:00am Challenges and Controversies in Indication and Patient Selection for SEEG
Shasha Wu, MD, PhD
- 8:30am Advanced Surgical Anatomy, Preoperative Planning and Imaging
David Stern, MD
- 9:00am SEEG Interpretation: Part 1 – Intermediate
Steven Parrish Winesett, MD, MBA
- 9:30am Break
- 9:45am SEEG interpretation: Part 2 – Advanced
Birgit Frauscher, MD, PhD
- 10:15am Anatomic-Electro-Clinical Correlation: Temporal vs. Extratemporal
Andreas Alexopoulos, MD, MPH and Laurence Martineau, MD
- 11:05am Discussion

9:30 – 9:45am

Coffee Break

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ANNUAL MEETING & COURSES

THURSDAY, FEBRUARY 29, 2024

9:45 – 11:15am

Course: Advanced MEG Processing

Course Director: Sasha Alick-Lindstrom, MD, FACNS, FAES, FAAN

Learning Objectives

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

1. Identify which intractable epilepsy cases would benefit from magnetic source imaging (MEG/MSI) and describe approved and advanced emerging methods for processing and multimodal imaging integration;
2. Understand evoked fields which may be acquired by MEG and useful for surgical planning purposes. This session will focus on language processing methodologies, their clinical utility and research advancements; and
3. Describe emerging methods and applications for advanced MEG processing. Emphasis will be on Alzheimer's dementia and various translational research applications.

9:45am From Acquisition to Final Product: Demystifying the Elusive Dipole and Understanding Basic MEG Processing

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

10:10am MEG Evoked Fields: Available Modalities, Language Acquisition, and Comparison of Language Processing Methods

Susan Bowyer, PhD

10:35am Emerging MEG and Imaging Analysis Translational Research Methods

Elizabeth M. Davenport, PhD

11:00am Discussion

11:15am – 12:45pm

Lunch

11:30am – 1:00pm

CNP Program Directors Symposium: Recruitment for CNP Fellowship Programs: Lessons Learned and Facing Future Challenges

Session Directors: Ioannis Karakis, MD, PhD, MSc, FACNS and Lynn Liu, MD, MS (HPE), FACNS

Learning Objectives

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

1. Review the experience of CNP fellowship program directors with recently launched, unifying recruitment processes;
2. Review the experience of CNP fellowship program directors with the traditional recruitment pathways; and
3. Discuss the lessons learned from the changing fellowship recruitment landscape, the challenges lying ahead and how to tackle them.

11:30am Introduction

11:35am Recruitment for the CNP/EEG Fellowship Programs through the AES Match

Sarah E. Schmitt, MD, FACNS

11:55am Recruitment for the CNP/EMG Fellowship Programs through the AANEM Portal

Ruple S. Laughlin, MD, FACNS

12:15pm Recruitment for the EEG/EMG and Other CNP Fellowship Programs Without a Standardized Process

Deepti Zutshi, MD, FAAN, FAES

12:35pm A Unifying Recruitment Process for CNP Fellowship Programs: Lessons Learned and Challenges Lying Ahead

Saurabh R. Sinha, MD, PhD, FACNS

12:55pm Discussion

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ANNUAL MEETING & COURSES

THURSDAY, FEBRUARY 29, 2024

1:15 – 2:45pm

General Session: 2023 Cosimo-Ajmone Marsan Award Presentation | Innovation Speaker | Presidential Address

- 1:15pm Welcome
Frank W. Drislane, MD, FACNS and Lynn Liu, MD, MS (HPE), FACNS
- 1:20pm Presentation of the 2023 Cosimo-Ajmone Marsan Award
Stephan U. Schuele, MD, MPH, FACNS
- 1:25pm Introduction of the Innovation Speaker
- 1:30pm Innovation Speaker Lecture
Silvia Mazzali-Verst, MD, PhD
- 2:05pm Introduction of ACNS President
Frank W. Drislane, MD, FACNS
- 2:10pm Presidential Address
Saurabh R. Sinha, MD, PhD, FACNS

3:00 – 4:30pm

CONCURRENT SESSIONS

Advances and Controversies in Cortical, Brainstem, and Spine Neuromonitoring

Session Director: Stan Skinner, MD, FACNS

Learning Objectives

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

1. Describe and critique means to monitor the corticospinal tract during supratentorial lesion resection;
2. Describe and select brainstem reflexes during various posterior fossa surgeries; and
3. Discuss and defend current neuromonitoring evidence with surgeons before and during extradural spine procedures.

- 3:00pm When Surgeons Ask: What is the Evidence to Support Neuromonitoring in Extradural Spine Surgery?
Stan Skinner, MD, FACNS
- 3:25pm Supratentorial Lesion Motor Monitoring: How do we Choose Transcranial v Direct Cortical Stimulation? Does NIOM per se Improve Outcomes?
Andrea Szelenyi, MD
- 3:50pm Brainstem Reflexes: Which do we use in various Posterior Fossa Scenarios?
Maria J. Tellez, MD
- 4:15pm Discussion

Growing a Successful Clinical Neurophysiology Service: From OR to ICU to Clinic

Session Directors: Pegah Afra, MD, FACNS and Suzette LaRoche, MD, FACNS

Learning Objectives

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

1. Understand underlying process starting an IONM program and making decisions whether to utilize contract services, provide in-house monitoring or a hybrid of both;
2. Recognize key factors relevant to developing continuous EEG monitoring services and opportunities for expanding access to EEG services for hospitals of all sizes; and
3. Appreciate the challenges and considerations in incorporating NCS/EMG, including advanced techniques such as single fiber EMG, in a hospital EMG practice.

- 3:00pm Starting or Transitioning an IONM In-House Service
Pegah Afra, MD, FACNS
- 3:30pm Building and Expanding EEG Monitoring Services: Models for Success
Suzette LaRoche, MD, FACNS
- 4:00pm Incorporating NCS/EMG, Including Advanced Techniques, in the Hospital and Outpatient Setting
Devon Rubin, MD, FACNS

Ictal-Interictal Continuum (IIC) Patterns Across the Age Spectrum

Session Directors: Nicolas Gaspard, MD, PhD and France Fung, MD, FACNS

Learning Objectives

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

1. Define periodic and rhythmic and ictal-interictal continuum patterns across the age spectrum (adult, pediatric, neonatal);
2. Outline the associated risks of these patterns with seizures and outcomes (adult, pediatric, neonatal); and
3. Explore potential strategies for management and targeted treatment of ictal-interictal continuum patterns across the age spectrum.

- 3:00pm Introduction
- 3:15pm IIC EEG Patterns in Adults and Elderly
Aaron Struck, MD, FACNS
- 3:40pm Periodic and Rhythmic Patterns and IIC in Critically Ill Children
France Fung, MD, FACNS
- 4:05pm Brief Rhythmic Discharges (BRDs) in Critically Ill Neonates
Janette Mailo, MD, PhD, FRCP

4:30 – 4:45pm

Coffee Break

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THURSDAY, FEBRUARY 29, 2024

4:45 – 6:15pm

CONCURRENT SESSIONS**Electrodiagnostic Evaluation of Neuromuscular Junction Disorders**

Session Director: Rabia Malik, MD

Learning Objectives

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

1. Describe the technique, physiology and common technical pitfalls of repetitive nerve stimulation studies;
2. Explain the technique, physiology and common technical pitfalls of single fiber EMG studies; and
3. List and recognize common and uncommon neuromuscular junction diseases.

4:45pm Pearls and Pitfalls in Repetitive Nerve Stimulation (RNS) Studies
Rabia Malik, MD

5:15pm Introduction to Single Fiber EMG (SFEMG)
Ryan Jacobson, MD

5:45pm Common and Uncommon Disorders of the Neuromuscular Junction
Olivia Gutsell, MD

Intraoperative Neurophysiologic Monitoring in the Surgical Treatment of Neurovascular Compression Syndromes

Session Directors: Ignacio Regidor, MD, PhD and Aatif M. Husain, MD, FACNS

Learning Objectives

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

1. Know the basics of pre-surgical electrodiagnostic studies of cranial nerves in patients with neurovascular compression syndromes;
2. Perform technical troubleshooting and optimizing the available intraoperative neurophysiologic techniques for mapping and monitoring useful in these surgeries; and
3. Identify the neurophysiological changes in the operating room and apply alarm criteria.

4:45pm Introduction

4:50pm Preoperative Electrodiagnostic Studies of the Facial Nerve and Other Cranial Nerves
Lidia Cabañes-Martínez, MD, FACNS

5:15pm Intraoperative Neurophysiology during Microvascular Decompression Surgery for Hemifacial Spasm
Guillermo Martín Palomeque, MD, FACNS

5:40pm Intraoperative Neurophysiology During Microvascular Decompression Surgery for Trigeminal and Other Cranial Nerve Neuralgias
Jaime R. López, MD, FACNS

6:05pm Discussion

Intraorbital Needle Electrode Placement for Intraoperative Monitoring of Cranial Nerves 3, 4, and 6

Session Directors: Matthew Hoffman, DO, PhD, FACNS and Tatsuya Oishi, MD

Learning Objectives

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

1. Describe the orbital anatomy relevant to placement of needle electrodes in extraocular muscles;
2. Evaluate techniques for recording EMG activity from cranial nerves 3, 4, and 6; and
3. Employ sensitive, selective, and safe techniques for recording and interpreting intraoperative free-running and triggered EMG responses from cranial nerves 3, 4, and 6.

4:45pm Orbital Anatomy and Techniques for Recording EMG from Extraocular Muscles
Matthew Hoffman, DO, PhD, FACNS

5:20pm Deep Intraorbital Electrode EMG Recordings from Extraocular Muscles
Tatsuya Oishi, MD

Next Generation of Neurophysiology-Informed Clinical Trials in Hypoxic-Ischemic Brain Injury

Session Directors: Jong Woo Lee, MD, PhD, FACNS and Edilberto Amorim, MD

Learning Objectives

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

1. Discuss the unresolved questions raised by the TELSTAR trial regarding indication for treatment of seizures and patterns in the ictal interictal continuum in HIBI, rationale for TELSTAR2 and GRECO trials;
2. Describe the mechanism of postanoxic status epilepticus treatment targeted by the VIGAB-STAT study; and
3. Describe the mechanism of postanoxic status epilepticus treatment targeted by the VIGAB-STAT study.

4:45pm Introduction

5:00pm RESTORE: buRst-supprESSion TO stop REfractory Status Epilepticus Post-Cardiac Arrest
Edilberto Amorim, MD

5:25pm VIGAB-STAT: A Mechanism-Based Clinical Trial of Postanoxic Status Epilepticus
Carolina Maciel, MD, MSCR

5:50pm TELSTAR2 and GRECO: Is There Sign of Intelligent Life after TELSTAR?
Michel van Putten, MD, PhD

6:15 – 7:15pm

Welcome Reception

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ANNUAL MEETING & COURSES

FRIDAY, MARCH 1, 2024

7:00 – 8:30am

Breakfast

8:00 – 9:30am

Course: Hot Topics in Sleep Medicine

Course Co-Directors: Eva K. Ritzl, MD, MBA, FACNS, FAAN and Uma Menon, MD, MBA, FACNS

Learning Objectives

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

1. Learn how sleep in being evaluated using stereo-EEG and used to assess seizure localization, cognitive function, and parasomnias;
2. Appreciate the latest developments in the impact of sleep and sleep disordered breathing in epilepsy, stroke, dementia, neuromuscular disorders, and neurodegeneration; and
3. Understand how sleep contributes to brain health.

8:00am Latest Developments in Sleep and Epilepsy
Birgit Frauscher, MD, PhD

8:25am Advances Diagnosing and Understanding Central Hypersomnia Disorders
Nancy Foldvary-Schaefer, DO

8:50am Best Studies on Impact of Sleep in Neurological Disorders
Madeleine M. Grigg-Damberger, MD

9:15am Discussion

8:00 – 11:15am

CONCURRENT SESSIONS

Course: Business of Clinical Neurophysiology

Course Director: Madeleine M. Grigg-Damberger, MD

Course Agenda Coming Soon

Course: ICU EEG Monitoring Part II

Course Co-Directors: France Fung, MD, FACNS and Nicolas Gaspard, MD, PhD

Learning Objectives Coming Soon

8:00am Introduction

8:05am Advanced Concepts in QEEG for Seizure Detection in the ICU
Cecil D. Hahn, MD, MPH, FACNS

8:35am ACNS Terminology Part II
Hiba A. Haider, MD, FACNS, FAES

9:00am ICU EEG Monitoring for Acute Encephalopathy
Sarah E. Schmitt, MD, FACNS

9:25am Break

9:40am ICU EEG Monitoring in Acute Brain Injury
Emily Gilmore, MD, FNCS, FACNS

10:10am Advanced Multimodal Monitoring
Brandon Foreman, MD, FACNS

10:35am Advanced Cases in ICU EEG Monitoring
Suzette LaRoche, MD, FACNS

11:00am Discussion

Course: Stereo EEG Part I

Course Co-Directors: Birgit Frauscher, MD, PhD and Ammar Kheder, MD

Learning Objectives Coming Soon

8:00am Special Considerations in Pediatric Patients
Ammar Kheder, MD

8:30am Controversies in SEEG (Unilateral or Bilateral, Reimplant, Stimulation, Thalamic)
Patrick Chauvel, MD and Andrew Cole, MD

9:30am Break

9:45am Challenges in Functional Mapping with SEEG
Ravindra Arya, MD, DM

10:15am Lessons from SEEG Failures - Neurological and Neurosurgical Perspective
Stephan Schuele, MD, MPH, FACNS, FAAN and Robert Gross, MD, PhD

11:05am Discussion

9:30 – 9:45am

Coffee Break

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ANNUAL MEETING & COURSES

FRIDAY, MARCH 1, 2024

9:45 – 11:15am

Course: Evoked Potentials

Course Director: Erik J. Kobylarz, MD, PhD

Course Agenda Coming Soon

11:15am – 12:45pm

Lunch

12:30 – 1:00pm

Speed Networking

1:15 – 2:45pm

General Session: Schwab Award Presentation & Lecture | Business Meeting

1:15pm Robert S. Schwab Award Presentation

1:20pm Robert S. Schwab Award Lecture: "Motor Unit Potential: Measurements & Correlates"
Sanjeev D. Nandedkar, PhD

1:55pm ACNS Member Business Meeting

3:00 – 4:30pm

CONCURRENT SESSIONS

Ambulatory EEG: Clinical Indications and Challenges

Session Director: Magdalena Warzecha, R. EEG/EP, CLTM, NA-CLTM

Learning Objectives

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

1. Define the patient groups for which AEEG is a valuable solution;
2. Understand the capabilities and limitations of AEEG; and
3. Learn about best practices for ambulatory EEG.

3:00pm Ambulatory EEG: Clinical Indications and Filling the Gap of Healthcare Disparities in Epilepsy
Anna Serafini, MD

3:25pm Making Decisions: Which Pediatric Patients are Served Best by an Ambulatory EEG?
Loreto Rios-Pohl, MD

3:50pm Ambulatory EEG: Best Practices and Limitations
Stephan Schuele, MD, MPH, FACNS, FAAN

4:15pm Discussion

Course: Quantitative EEG Workshop

Course Director: Fabio A. Nascimento, MD

Learning Objectives Coming Soon

3:00pm Introduction
Fabio A. Nascimento, MD

3:05pm qEEG Basics + Detection of Seizures / IIC
M. Brandon Westover, MD, PhD

3:30pm qEEG for Detection of Ischemia, High ICP, Depolarization
Lawrence J. Hirsch, MD, FACNS

3:55pm qEEG Case-Based Game

4:20pm Discussion

Delving Deep into the Deep Learning for Neurophysiology

Session Director: Giridhar Kalamangalam, MD, DPhil, FACNS

Learning Objectives

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

1. Discuss concepts of deep learning in artificial intelligence and its relationship with clinical neurophysiology and basic neuroscience;
2. Describe the application of deep learning to neurophysiological data for speech decoding and synthesis; and
3. Explain the evolution of learning computing structures and their application to the specific use case of visual systems.

3:00pm Introduction
Imran Quraishi, MD, PhD

3:15pm Deep Learning for the Neurophysiologist: An Introduction
Ravindra Arya, MD, DM

3:40pm From Brainwaves to Speech: Illuminating the Path with Deep Learning and Electrophysiology
Abbas Babajani-Feremi, PhD

4:05pm Real Brains and Artificial Intelligence: A Closing Gap
Daniel Yamins, PhD

= Courses = Scientific Program ES = This session will be presented in Spanish.

FRIDAY, MARCH 1, 2024

3:00 – 4:30pm

CONCURRENT SESSIONS

OPM-Based Magnetoencephalography: A New Perspective on Magnetic Neurophysiology

Session Directors: Pegah Afra, MD, FACNS and Timothy P. Roberts, PhD

Learning Objectives

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

1. Recognize the multiple ways that OPM technology may impact magnetoencephalography, not just from increased sensitivity, but also by transformative opportunities to study participants who move;
2. Assess the relevance of OPM-based MEG to their research and clinical practice; and
3. Explain utility of OPM-based imaging, and how it helps us understand interactions between different regions of the nervous system during natural movement.

3:00pm Beyond Sensitivity: Other Enabling Opportunities of OPMs
*Timothy P. Roberts, PhD*3:30pm MEG Based on Optically-Pumped Magnetometers: Current State and Clinical Potential
*Joonas Iivanainen, MD*4:00pm OPM-Based Millisecond-Scale Functional Connectivity Between the Brain, Spinal Cord, and Muscle
Meaghan E. Spedden, PhD

4:30 – 4:45pm

Coffee Break

4:45 – 6:15pm

CONCURRENT SESSIONS

Intraoperative Neurophysiological Monitoring of Human Cognitive Functions: Challenges and Limitations (Joint ACNS/CLA-IFCN Symposium)

Session Directors: Daniel San Juan Orta, MD, FACNS, FAES and Kamylla Thiago de Almeida, MD

Learning Objectives

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

1. Review the cortical and subcortical IOM mapping of language and other cognitive functions. The Brazilian experience;
2. Describe practical adaptations of the premotor and visual IOM mapping in Mexico; and
3. Discuss advances, limitations and challenges to the implementation of intraoperative cortical-cortical evoked potentials in multiple centers, and potential solutions.

4:45pm Practical Applications of Cortical and Subcortical IOM Mapping in Supplementary Motor Areas and Visual Cortices
*Daniel San Juan Orta, MD, FACNS, FAES*5:15pm Implementation of Cortical and Subcortical IOM Mapping of Language and Other Cognitive Functions: The Brazilian Experience
*Kamylla Thiago de Almeida, MD*5:45pm Use of Cortical-Cortical Evoked Potential in IOM of Cognitive Functions in Humans
*Riki Matsumoto, MD, PhD***Ambulatory EEG**

Session Directors: Aline Herlopian, MD and William O. Tatum, IV, DO, FACNS

Learning Objectives

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

1. Recognize indications for AEEG and technical requirements for performing study;
2. Distinguish artifacts, epileptiform activity, and normal variants captured on AEEG recordings; and
3. Determine nature of spells captured on AEEG study.

4:45pm Introduction

4:50pm Epileptiform Activity and Benign Variants
*Sandor Beniczky, MD, PhD*5:15pm Diagnosis of "Spells"
*Barbara Dworetzky, MD*5:40pm Pitfalls and Technical Limitations
Stephan Schuele, MD, MPH, FACNS, FAAN

6:05pm Discussion

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ANNUAL MEETING & COURSES

FRIDAY, MARCH 1, 2024

4:45 – 6:15pm

CONCURRENT SESSIONS

Cranial Nerve Conduction Studies Hands-On Workshop

Session Director: Ruple S. Laughlin, MD, FACNS

Learning Objectives

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

1. Perform cranial nerve conduction studies (facial, blinks, spinal accessory, masseter inhibitory reflex and Jaw jerk);
2. Identify technical factors that can alter the NCS findings; and
3. Understand when these tests would be of clinical utility, and interpret the findings in the context of disease.

4:45pm Cranial NCS: Facial Motor NCS, Spinal Accessory NCS and Blink Reflexes

Ruple S. Laughlin, MD, FACNS

5:30pm Cranial NCS: Masseter Inhibitory Reflex, Jaw Jerk, Lateral Spread Studies

Devon I. Rubin, MD, FACNS

The Role of the Thalamus During Stereoelectroencephalography (sEEG)

Session Directors: Shruti Agashe, MD, MS, BME and Nicholas Gregg, MD

Learning Objectives

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

1. Describe potential electrophysiological biomarkers from thalamic sEEG recordings;
2. Assess the evidence guiding implantation of thalamic nuclei during sEEG in anticipation of permanent DBS/RNS implantation; and
3. Evaluate the role of thalamic stimulation trials during sEEG.

4:45pm Potential Electrophysiological Biomarkers from Thalamic sEEG Recordings

Shruti Agashe, MD, MS, BME

5:10pm Evaluate the Role of Thalamic Stimulation Trials During sEEG

Nicholas Gregg, MD

5:35pm Assess the Evidence Guiding Implantation of Thalamic Nuclei During sEEG in Anticipation of Permanent DBS/RNS Implantation

Sandipan Pati, MD

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ANNUAL MEETING & COURSES

SATURDAY, MARCH 2, 2024

7:00 – 8:30am

Breakfast

7:00 – 8:00am

A Diverse & Inclusive ACNS: Past Efforts, the Path Forward

Session Director: Suzette LaRoche, MD, FACNS

Learning Objectives Coming Soon

- 7:00am Review of Past Symposia
Gloria M. Galloway, MD, MBA, FABEM, FACNS
- 7:10am Review of DEI Survey Results
Sasha Alick-Lindstrom, MD, FACNS, FAES, FAAN
- 7:20am Small Group Discussion
- 7:50am Report Out/Wrap Up

8:00 – 9:30am

CONCURRENT SESSIONS

Course: Challenging NIOM Cases

Course Director: Matthew Hoffman, DO, PhD, FACNS

Course Agenda Coming Soon

Course: SEEG Illustrative Case Discussions

Course Director: Jun T. Park, MD, FACNS

Learning Objectives

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

1. Understand how a hypothesis of epileptogenic zone is formulated;
2. Identify how a hypothesis of epileptogenic zone is used to strategize intracerebral electrode placements; and
3. Understand the concepts of SEEG.

- 8:00am Introduction
Jun T. Park, MD, FACNS
- 8:15 Illustrative Case Discussion I
Laurence Martineau, MD
- 8:40 Illustrative Case Discussion II
Roohi Katyal, MD
- 9:05 Illustrative Case Discussion III
Neel Fotedar, MD

Course: Neonatal Neuromonitoring

Course Director: Adam L. Numis, MD

Learning Objectives

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

1. Compare and contrast the utility of continuous EEG (cEEG) versus clinical judgment or amplitude-integrated EEG (aEEG) for the diagnosis of seizures in the critically-ill neonate;
 2. Assess the yield of cEEG for detection of neonatal seizures in high-risk conditions including hypoxia-ischemia, stroke, and congenital heart disease; and
 3. Resolve the clinically relevant information that can be gained from cEEG in the evaluation of the term and preterm infant with neonatal encephalopathy.
- 8:00am Systematic Review of Continuous EEG (cEEG) in the Neonatal ICU: Comparing cEEG to Amplitude-Integrated EEG (aEEG) and Clinical Acumen for Seizure Identification
Courtney J. Wusthoff, MD, MS, FACNS
- 8:35am Resource Allocation of cEEG: Which High-Risk Neonates Should be Monitored for Evaluation of Seizures?
Shavonne Massey, MD, MSCE, FACNS
- 9:00am Beyond Seizures: Can cEEG Help Understand Brain Function and Prognosis in the Encephalopathic Term and Preterm Infant?
Tammy Tsuchida, MD, PhD, FACNS
- 9:25am Discussion

Neurophysiology of Delirium

Session Director: Rishi Ganesan, MBBS, MD, DM, FACNS

Learning Objectives

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

1. Describe EEG findings in patients with delirium and its subtypes across the age spectrum;
 2. Describe neurophysiological basis of delirium, and
 3. Describe neurophysiological basis of delirium.
- 8:00am Raw & Quantitative EEG Changes in Delirium
Robert Fleischmann, MD
- 8:30am Network Dysconnectivity in Delirium
Rishi Ganesan, MBBS, MD, DM, FACNS
- 9:00am Newer Approaches to Studying Brain Networks in Delirium
Eyal Y. Kimchi, MD, PhD

9:30 – 9:45am

Coffee Break

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ANNUAL MEETING & COURSES

SATURDAY, MARCH 2, 2024

9:45 – 11:15am

CONCURRENT SESSIONS

Complex Electrodiagnostic Waveforms – An Interactive Case-Based Approach to Interpreting Uncommon Waveforms

Session Director: Devon I. Rubin, MD, FACNS

Learning Objectives

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

1. Recognize the features and causes of unusual and complex nerve conduction study waveforms (motor, sensory, and repetitive nerve stimulation);
2. Identify atypical or complex EMG waveforms and distinguish among different types of EMG waveforms; and
3. Understand the significance of complex NCS and needle EMG waveforms in the context of peripheral nerve and neuromuscular disorders.

9:45am Complex Needle Electromyography Waveforms
Devon I. Rubin, MD, FACNS

10:25am Complex Nerve Conduction Study Waveforms
Christopher Lamb, MD

Course: Neuromodulation Workshop: Epilepsy and Beyond

Course Director: Lawrence J. Hirsch, MD, FACNS

Learning Objectives Coming Soon

9:45am Introduction

9:50am Neuromodulation for Epilepsy in Adults
Imran Quraishi, MD, PhD

10:15am Neuromodulation in Pediatric Neurology and Psychiatry
Carolina Gorodetsky, MD

10:40am Noninvasive Neuromodulation
Alexander Rotenberg, MD, PhD

11:05am Discussion

The EEG as a Window to the Sedated Brain

Session Directors: Maria Bruzzone Giraldez, MD, MSCR and Eyal Y. Kimchi, MD, PhD

Learning Objectives

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

1. Identify the key quantitative EEG findings of the developing brain under anesthesia;
2. Identify the key quantitative EEG findings of the developing brain under anesthesia; and
3. Distinguish the prevalent quantitative EEG patterns associated with altered states of consciousness in critically ill patients.

9:45am The EEG as a Window to the Sedated Brain in the Pediatric Population
Giulia Benedetti, MD

10:10am The EEG as a Window to the Sedated Brain in the Perioperative Setting
Paul S. Garcia, MD, PhD

10:35am The EEG as a Window to the Sedated Brain in the Critically Ill
Shawniqua Williams Roberson, M.Eng., MD, MSCI

11:00am Discussion

11:15am – 12:45pm

Lunch

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ANNUAL MEETING & COURSES

SATURDAY, MARCH 2, 2024

11:30am – 1:00pm

Career Development Panel: Career Pathways in Clinical Neurophysiology

Session Directors: Ioannis Karakis, MD, PhD, MSc, FACNS and Lynn Liu, MD, MS (HPE), FACNS

Learning Objectives

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

1. Provide examples of various career pathways in clinical neurophysiology;
2. Provide interactive advice on the pros and cons of each of these pathways; and
3. Assess how each of these pathways impact lifestyle and quality of life.

11:30am Introduction

11:40am The Practice of Clinical Neurophysiology in a Major Academic Center

Emily Gilmore, MD, FNCs, FACNS

12:00pm The Practice of Clinical Neurophysiology in the Community

Rajdeep Singh, MD

12:20pm The Practice of Clinical Neurophysiology through Telemedicine

Eric Anderson, MD, PhD, MBA

12:40pm The Practice of Clinical Neurophysiology through Collaboration with Industry

M. Brandon Westover, MD, PhD

1:15 – 2:45pm

General Session: Young Investigator Travel Award Presentation | Jasper Award Presentation & Lecture | Gloor Award Presentation & Lecture

1:15pm Presentation of the Young Investigator Travel Awards

Lynn Liu, MD, MS (HPE), FACNS

1:25pm Herbert H. Jasper Award Presentation

Frank W. Drislane, MD, FACNS

1:30pm Herbert H. Jasper Award Lecture: "Rethinking Seizures: How Current Concepts Fail to Meet Clinical Needs"

Michael R. Sperling, MD, FACNS

2:05pm Pierre Gloor Award Presentation

2:10pm Pierre Gloor Award Lecture: "A Review of Periodicity in Electroencephalography"

Gordon Bryan Young, MD

3:00 – 4:30pm

CONCURRENT SESSIONS

Amyotrophic Lateral Sclerosis: Neurophysiological Natural History, Estimation and Quantification of Motor Units and Clinical-Electrophysiological Differential Diagnosis (Joint ACNS/Latin American Chapter Symposium)

Session Directors: Devon Rubin, MD, FACNS and Mark Bromberg, MD, PhD

Learning Objectives

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

1. Describe the anatomical and electrophysiological changes in motor nerves and muscle attributable to motor neuron degeneration/ALS;
2. Understand, interpret and use the information derived from the techniques used for the estimation/ quantification of motor units in motor neurone disease; and
3. Perform an appropriate approach to the clinical and electrophysiological diagnosis of motor neuron disease, in particular ALS.

3:00pm Clinical and Electrophysiological Differential Diagnosis with Diseases that Mimic ALS

Devon Rubin, MD, FACNS

3:30pm Methods of Estimation and Quantification of Motor Units including MUNE, MUNIX, CMAP Scan. etc.

Mark Bromberg, MD, PhD

4:00pm Natural History of Electrophysiological Changes in Motor Nerve Conductions and the Denervation Process in NMD/ALS

Gustavo E. Ramos Burbano, MD, MSc

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ANNUAL MEETING & COURSES

SATURDAY, MARCH 2, 2024

3:00 – 4:30pm

CONCURRENT SESSIONS

Advances in Ischemia Neuromonitoring: From the Angio Suite to the ICU and Operating Theater

Session Directors: Edilberto Amorim, MD and M. Brandon Westover, MD, PhD

Learning Objectives

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

1. Describe applications and recent advances of machine learning for stroke prevention using intraoperative neurophysiology monitoring;
2. Understand the concepts and pitfalls of delayed ischemia prediction in subarachnoid hemorrhage; and
3. Identify barriers and opportunities to use rapid EEG for large vessel occlusion detection in adult and children in pre-hospital and emergency settings.

3:00pm Delayed Cerebral Ischemia Monitoring for Subarachnoid Hemorrhage in Critical Care: Qualitative and Quantitative Strategies

Jennifer Kim, MD, PhD

3:25pm Intraoperative Monitoring During Cardiovascular Interventions: Pushing the Envelope on Performance Through Machine Learning

Partha Thirumala, MD, FACNS

3:50pm Pre-Hospital and Emergency Room Rapid EEG Monitoring for Large Vessel Occlusion and Intracerebral Hemorrhage

Edilberto Amorim, MD

4:15pm Discussion

Botulinum Toxin Treatment Under EMG Guidance: Hands-On Workshop

Session Director: Jaime R. López, MD, FACNS

Learning Objectives

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

1. Understand the different botulinum;
2. Describe the benefit of using EMG; and
3. Accurately localize the commonly injected muscles in dystonia, spasticity, and migraine.

3:00pm Use of EMG Guidance and Hands-On Demonstration on How to Perform Botulinum Toxin Treatment Using Simulated Devices

Jaime R. López, MD, FACNS

3:25pm Botulinum Toxin Treatment in Neurologic Disorders-A Review

Felix Chang, MD

3:50pm Hands-On Demonstration on How to Perform Botulinum Toxin Treatment Using Simulated Devices

Alejandro Zavala, MD

Starts, Ends, Surroundings, and Bends -- Effects of Anatomy on Recording and Stimulation of Action Potentials in Axons

Session Director: Alan D. Legatt, MD, PhD, FACNS

Learning Objectives

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

1. Describe how far-field potentials are generated by action potentials in axons only when they are located at certain anatomically-determined points in the axons;
2. Describe how electrical fields within tissue stimulate axons, and how nerves are most easily stimulated where they bend and/or traverse a bony foramen; and
3. Describe how the current flows elicited by TCMS and which structures are stimulated are affected by the anatomy of the brain and CSF.

3:00pm Effects of Anatomy on Generation of Far-Field Potentials from Propagating Action Potentials in Axons

Alan D. Legatt, MD, PhD, FACNS

3:30pm Biophysics of Stimulation of Axons and Action Potential Initiation Sites During Nerve Stimulation

Jonathan Norton, PhD

4:00pm Induced Current Interaction with Action Potential Initiation Sites with Stimulation in Motor Pathways

Alexander Rotenberg, MD, PhD

4:30 – 4:45pm

Coffee Break

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SATURDAY, MARCH 2, 2024

4:45 – 6:15pm

CONCURRENT SESSIONS

Brain Mapping During Surgery (Joint ACNS/ Spanish Society for Clinical Neurophysiology (SENFC) Symposium)

Session Directors: Lidia Cabañes-Martínez, MD, FACNS and Jaime R. López, MD, FACNS

Learning Objectives

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

1. Define the various tools used in iONM for a safe and effective cortical mapping;
2. Plan a safe individual cortical mapping either in asleep or awake patients; and
3. Discuss common cortical mapping results and events.

4:45pm Introduction

4:55pm Mapping of Sensory and Motor Cortical Areas
Alan D. Legatt, MD, PhD, FACNS

5:20pm Peculiarities of Neurophysiological Mapping in Awake Patients
Victoria Fernandez, MD, PhD

5:45pm Mapping of Language in Bilingual Patients
Estela Llado Carbo, MD, PhD

E/MEG Source Localization is Useful in Temporal Lobe Epilepsy: Myth or Fact

Session Directors: Ismail S. Mohamed, MD, FAES, FACNS and Jeffrey Tenney, MD, PhD, FACNS

Learning Objectives

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

1. Understand the role of ESI and MSI in the presurgical evaluation of temporal lobe epilepsy and its mimics;
2. Interpret different patterns of EMSI source localization and their relationship to invasive recordings; and
3. Understand how advances in MEG signal analysis can improve the detection of deep mesial temporal generators and better characterize language networks.

4:45pm Introduction

4:50pm EEG Source Imaging in the Surgical Evaluation of Temporal Lobe Epilepsy
Benjamin Cox, MD

5:15pm Improving Detection of Hippocampal Epileptiform Activity Using Magnetoencephalography
Jeffrey Tenney, MD, PhD, FACNS

5:45pm Unraveling the Language Network: A Multi-Modal Approach with MEG and other Techniques
Abbas Babajani-Feremi, PhD

Multimodal Monitoring in Comatose Patients: EEG and Vascular Correlations and Outcome Prediction

Session Director: Olga Selioutski, DO, FACNS, FAES, FACN

Learning Objectives

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

1. Define multimodal monitoring practices utilized in the ICUs;
2. List multimodal monitoring modalities applicable in comatose patients; and
3. Define principals of combined vascular and EEG monitoring modalities applicable in comatose patients with various etiologies of coma.

4:45pm Introduction

4:50pm Multimodal Monitoring Practices in the ICUs
Emily Gilmore, MD, FNCS, FACNS

5:15pm Applicability of Near-Infrared Spectroscopy (NIRS) in ICU
Jennifer Kim, MD, PhD

5:40pm Applicability of Diffuse Correlation Spectroscopy (DCS) in Monitoring of Critically Ill Patients
Regine Choe, PhD

New Trends in Electrical Source Imaging for Presurgical Epilepsy Evaluation: From Current Standard of Care to New Approaches

Session Directors: Prachi Parikh, MD and Birgit Frauscher, MD, PhD

Learning Objectives

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

1. Discuss ESI and its use in presurgical evaluation by case demonstrations;
2. Review the different tools to facilitate ESI in clinical practice; and
3. Describe the role of ESI across different epileptic (interictal vs. Ictal) and vigilance (wake vs. NREM vs REM) states on ESI.

4:45pm ESI is Useful in our Presurgical Armamentarium: Case Series
Prachi Parikh, MD

5:10pm ESI: From Low-Resolution to Fully Automatic Approaches
Daniel Mansilla, MD

5:35pm Ictal ESI: Advantages and Pitfalls
Sandor Beniczky, MD, PhD

6:00pm Discussion

6:30 – 7:30pm

Special Interest Group (SIG) Meet-Ups

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ANNUAL MEETING & COURSES

SUNDAY, MARCH 3, 2024

7:00 – 8:30am

Breakfast

8:00 – 9:30am

CONCURRENT SESSIONS

Peripheral Neuropathies - Beyond Standard Neurophysiological Evaluation (Joint ACNS/Sociedade Brasileira de Neurofisiologia Clínica Symposium)

Session Directors: Catherine Marx, PhD and Marcondes Franca Jr, MD, PhD

Learning Objectives

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

1. Describe how to perform/interpret late onset responses and discuss how they can be used in the diagnosis/classification of peripheral neuropathies;
2. Describe the main causes of nodo/paranodopathies and key neurophysiological features in this group of neuropathies; and
3. Review the key features of sensory neuronopathies and review neurophysiological techniques to distinguish them from sensory.

8:00am Late Responses – A and F Waves - In the Assessment of Peripheral Neuropathies

Jose Antonio Garbino, MD

8:25am How to Recognize Nodo/Paranodopathies

Marcus Vinicius Pinto, MD

8:50am Neurophysiological Techniques in the Differential Diagnosis Between Sensory Polyneuropathies and Sensory Ganglionopathies
Marcondes Franca Jr, MD, PhD

9:15am Discussion

Education and Training of Clinical Neurophysiology in Different International Health Care Systems. Are we Failing a Worldwide Need?

Session Directors: Alejandro Zavala, MD, FACNS and Jaime R. López, MD, FACNS

Learning Objectives

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

1. Identify the challenges in the training of clinical neurophysiologists in Spain, Mexico and the United States;
2. Describe the strengths in the training of physician clinical neurophysiologists in Spain, Mexico and the United States and propose applications of these strengths among the different health systems; and
3. Analyze the maldistribution of clinical neurophysiologists in Spain, Mexico and the United States, and propose possible incentives to alleviate the situation.

8:00am Introduction

8:10am Education and Training of Clinical Neurophysiology in Different International Health Care Systems. Are we Failing a Worldwide Need?

Jaime R. López, MD, FACNS

8:35am Education and Training of Clinical Neurophysiology in Different International Health Care Systems, the Situation in Mexico
Samantha Pineda, MD

9:00am Education and Training of Clinical Neurophysiology in Different International Health Care Systems. The Situation in Spain
Lidia Cabañes-Martínez, MD, FACNS

A Deeper Understanding of Some Aspects of Neurophysiology

Session Director: David Gloss, MD, FACNS

Learning Objectives

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

1. Describe why we use the stimulus settings for SSEPs;
2. Describe the underlying physiological changes of EEG changes seen during carotid surgery; and
3. Describe the meaning of positive results for direct brainstem MEPs.

8:00am Evoked Potential Settings

Eva K. Ritzl, MD, MBA, FACNS, FAAN

8:25am Whys of Motor Mapping

Alan D. Legatt, MD, PhD, FACNS

8:50am EEG Changes During Carotid Surgery

David Gloss, MD, FACNS

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ANNUAL MEETING & COURSES

SUNDAY, MARCH 3, 2024

8:00 – 9:30am

CONCURRENT SESSIONS

Thalamic Stereo EEG

Session Director: Ramya Raghupathi, MD

Learning Objectives

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

1. Identify the use of stereo EEG and epilepsy surgery as tools for patients beyond conventional indications;
2. Describe the limitations of stereo EEG and surgery in the era of neuro-modulation; and
3. Discuss and compare the process of decision making in surgical conferences across different surgical centers.

8:00am Introduction

8:15am Case Discussion
Prachi Parikh, MD

8:40am Patient Selection and Indications
Francesca Pizzo, PhD

9:05am Implantation Strategies and Neurosurgery Perspective
Jimmy Yang, MD

9:30 – 9:45am

Coffee Break

9:45 – 11:15am

CONCURRENT SESSIONS

Clinical Neurophysiology Resident and Fellow Symposium

Session Director: Ramya Raghupathi, MD

This session will feature case presentations by clinical neurophysiology trainees, selected by the ACNS Resident & Fellow Education Committee from submitted case abstracts. To be considered for a podium presentation in this session, be sure to opt in when submitting your poster abstract no later than Wednesday, November 15, 2023. (see the complete Call for Poster Abstracts on pages 8-9).

Exploring Continuous EEG Monitoring in the Critically Ill: Rapid Availability, Long-Term Monitoring Candidates, and Limited Montages ^{ES}

Session Directors: Lidia Cabañes-Martínez, MD, FACNS and Adriana Bermeo-Ovalle, MD, FACNS, FAES

Learning Objectives

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

1. Identify patterns that are highly associated with seizures and understand how can assist in identifying patients at heightened risk of experiencing seizures;
2. Acquire the knowledge to implement an early mobilization of EEG resources for the diagnosis of status epilepticus and gain insight into an EEG workflow that incorporates a risk-stratifying score; and
3. Identify rapid EEG and limited montages that are accessible and applicable within the local setting, thus expanding their utilization.

9:45am Introduction

9:50am Time is Brain: Accelerating Code Status Epilepticus to EEG Time
Guillermo Martín Palomeque, MD, FACNS

10:15am Embracing the 2HELPS2B Seizure Risk Score: A Valuable Approach for Seizure Detection in the Hospital Settings
Clio Rubinos, MD, MS

10:40am Exploring Alternatives to Continuous EEG Monitoring: Beyond the Norm
Maria Bruzzzone Giraldez, MD, MSCR

11:05am Discussion

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ANNUAL MEETING & COURSES

SUNDAY, MARCH 3, 2024

9:45 – 11:15am

CONCURRENT SESSIONS

Psychiatry and Neurosurgery - Value of Auditory Evoked Potentials in High Risk Children and Adults (Joint ACNS/ Egyptian Society of Neurology Symposium)

Session Directors: Ayat Allah F. Hussein, MD and Aatif M. Husain, MD, FACNS

Learning Objectives

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

1. Understand the basics of auditory evoked potentials, technical considerations in adults, normative values and clinical applications;
2. Understand auditory evoked potentials in infants and the normal development process and their role in assessment of Neurodevelopment delay in high risk Infants; and
3. Learn the value of auditory evoked potentials in predicting coma outcomes.

9:45am Auditory Evoked Potentials Basics, Technical Considerations and Clinical Applications in Adults
Hanan Hosney, MD

10:15am Utility of Auditory Evoked Potentials in Assessment of Neurodevelopment Delay in High Risk Infants
Ayat Allah F. Hussein, MD

10:45am Value in Predicting Coma Outcomes with Auditory Evoked Potentials
Aatif M. Husain, MD, FACNS

Research Highlights

Session Directors: Olga Taraschenko, MD, PhD and Mirela Simon, MD, MSc, FACNS

The Clinical Research Committee will select from poster abstracts, highlighting the top 3-4 research papers submitted to this year's Annual Meeting. To be considered for a podium presentation in this session, submit your poster abstract no later than Wednesday, November 15, 2023 (see the complete Call for Poster Abstracts on pages 8-9).

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AMERICAN CLINICAL NEUROPHYSIOLOGY SOCIETY
555 East Wells Street, Suite 1100
Milwaukee, WI 53202

2024 ACNS Annual Meeting & Courses

Orlando FLORIDA

FEBRUARY 28 - MARCH 3, 2024

