



**ACMEGS**  
AMERICAN CLINICAL MEG SOCIETY

**2023 Annual MEG Course**  
**Saturday, March 25, 2023**

<b>7:30 – 8:00am</b>	<i>Breakfast</i>
<b>8:00 – 11:50am</b>	<b><i>Part I: Principles and Practice of Clinical MEG</i></b>
8:00 AM	<b><i>Introduction, Welcome and Course Overview</i></b> <i>Jeffrey R. Tenney, MD, PhD</i>
8:10 AM	<b><i>Neurophysiologic Basis and Recording Fundamentals of MEG and EEG</i></b> <i>Richard C. Burgess, MD, PhD</i>
9:00 AM	<b><i>The Logistics of MEG Operation and Practicing According to the ACMEG Clinical Practice Guidelines (CPG)</i></b> <i>Anto Bagic, MD, PhD</i>
9:50 AM	<i>Break</i>
10:00 AM	<b><i>Best Practices in Clinical MEG – Patient preparation and Data Acquisition</i></b> <i>John Mosher, PhD</i>
10:50 AM	<b><i>Dipole Modeling of Epileptiform Activity Using Equivalent Current Dipole (ECD) – How to Pick and Analyze a Spike</i></b> <i>Michael Funke, MD, PhD</i>
11:20 AM	<b><i>Other Mechanisms of Modeling Epileptiform Activity with MEG</i></b> <i>Jeffrey R Tenney, MD, PhD</i>
11:50 AM	Discussion
12:00 PM	<i>Lunch</i>
1:00 PM	<b><i>Normal Variants and Artifacts in MEG</i></b> <i>Richard C. Burgess, MD, PhD</i>
1:50 PM	<b><i>Source Modeling of Evoked Activity</i></b> <i>Michael Funke, MD, PhD</i>
2:30 PM	<i>Break</i>

**2:45 – 5:00 PM**      **Part II: MEG Contributions to Patient Management**

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2:45 PM      ***Evidence-Based MEG Indications in Presurgical Epilepsy Evaluation***  
*Anto Bagic, MD, PhD*

3:30 PM      ***Adult MEG Cases***  
*Manoj Raghavan, MD, PhD*  
*Sasha Alick-Lindstrom, MD*

4:00 PM      ***Pediatric MEG Cases***  
*Clifford Calley, MD*  
*Ismail Mohamed, MD*

4:30 PM      Discussion

5:00 PM      Adjourn

## **CME INFORMATION**

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**Educational Needs:** Digital processing of EEG and MEG is required to utilize fully the clinical information in these signals. Few training programs provide with experience with these forms of advanced data analysis, which creates a significant gap between current levels of practice and what is ideally needed. This program provides both didactic and workshop experience with advanced analysis methods for source characterization and localization using clinical MEG and EEG data. This experience will enhance competence in modern clinical magnetoencephalographic and electroencephalographic techniques.

### **Learning Objectives**

At the conclusion of this program, the learner should be able to:

1. Describe the underlying physics of MEG generation and recording;
2. Describe the most common and efficient organization of an MEG laboratory;
3. Identify epileptiform MEG waveforms with and without EEG correlates;
4. Process MEG and EEG data with source localization software;
5. Interpret dipole models of MEG and EEG epileptiform spikes and normal evoked fields;
6. Distinguish abnormal MEG transients from normal variants; and
7. Provide a localization of MEG and EEG activity to aid in pre-surgical epilepsy evaluations.

**Target Audience:** This educational activity is 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.

### **Accreditation Statement**

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of the American Clinical Neurophysiology Society (ACNS) and the American Clinical Magnetoencephalography Society (ACMEGS). ACNS is accredited by the ACCME to provide continuing medical education for physicians.

### **Credit Designation**

ACNS designates this activity for a maximum of *7.5 AMA PRA Category 1 Credit(s)*<sup>TM</sup>. Physicians should claim only credit commensurate with the extent of their participation in the activity.

### **ASET-CEUs**

ASET - The Neurodiagnostic Society, has granted 7.5 ASET Continuing Education Unites (ASET-CEUs) for this program. Such credentialing, however, should not be construed by program participants as an endorsement of any type of instruments or supplies mentioned in these presentations.

## ACNS 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 financial relationships with any ineligible company. Should it be determined that a conflict of interest exists as a result of a financial relationship of a planner of the CME activity, the planner must recuse himself or herself from the planning for that activity or relevant portion of that activity. All presentations for which the presenter disclosed a potential conflict of interest are peer reviewed by two members of the ACNS CME Committee with no relationships. If bias is found, the presenter is asked to make changes to the presentation and it is re-reviewed for bias before final approval. Refusal to disclose a conflict or the inability to resolve an identified conflict precludes participation in the CME activity. 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](mailto:info@acns.org).

Name	Institution	Role	Disclosure
Sasha Alick-Lindstrom, MD	University of Texas Health Sciences Center of Houston	Speaker	No Relationships
Anto Bagic, MD, PhD	University of Pittsburgh	Planner, Speaker	No Relationships
Susan Bowyer, PhD	Henry Ford Health System	Planner	No Relationships
Richard C. Burgess, MD, PhD	Cleveland Clinic Epilepsy Center	Speaker	No Relationships
Clifford Calley, MD	University of Texas at Austin	Speaker	No Relationships
Michael Funke, MD, PhD	University of Texas Health Sciences at Houston	Planner, Speaker	MEGIN (b)
Ismail S. Mohamed, MD	UAB, Birmingham	Planner, Speaker	GW Pharma (a); Marinus Pharmaceuticals (a)
John Mosher, PhD	Cleveland Clinic Epilepsy	Speaker	No Relationships
Manoj Raghavan, MD, PhD	Froedtert Hospital	Speaker	No Relationships
Jeffrey R. Tenney, MD, PhD	Cincinnati Children's Hospital Medical Center	Planner, Speaker	No Relationships
Wenbo Zhang, MD	Minnesota Epilepsy Group	Planner	No Relationships
Andrew Zillgitt, DO	Beaumont Health	Planner	Eisai (b, d); Jazz Pharma (b, d); Neuropace (b, d); SK Lifesciences (b, d); UCB (b, d)
<b>ACNS CME COMMITTEE REVIEWERS</b>			
Jong Woo Lee, MD, FACNS	Brigham Health	Reviewer	Bioserenity (f); Soterya, Inc (c, e); Teladoc (f)
Sarah E. Schmitt, MD, FACNS	Medical University of South Carolina	Reviewer	No Relationships

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