



2024 Annual MEG Course
Tuesday, February 27, 2024
Renaissance Orlando at SeaWorld · Orlando, Florida

7:30 – 8:00 AM	<i>Breakfast</i>
8:00 – 11:50 AM	<i>Part I: Principles and Practice of Clinical MEG</i>
8:00 AM	<i>Introduction, Welcome and Course Overview</i> <i>Jeffrey R. Tenney, MD, PhD</i>
8:05 AM	<i>Neurophysiologic Basis and Recording Fundamentals of MEG and EEG</i> <i>Richard C. Burgess, MD, PhD</i>
8:50 AM	<i>The Logistics of MEG Operation and Practicing According to the ACMEG Clinical Practice Guidelines (CPG)</i> <i>Anto Bagic, MD, PhD</i>
9:35 AM	<i>Break</i>
9:45 AM – 2:30 PM	<i>Part II: Best Practices in Clinical MEG</i>
9:45 AM	<i>Best Practices in Clinical MEG – Patient preparation and Data Acquisition</i> <i>John Mosher, PhD</i>
10:30 AM	<i>Dipole Modeling of Epileptiform Activity Using Equivalent Current Dipole (ECD) – How to Pick and Analyze a Spike</i> <i>Michael Funke, MD, PhD</i>
11:15 AM	<i>Other Mechanisms of Modeling Epileptiform Activity with MEG</i> <i>Jeffrey R Tenney, MD, PhD</i>
12:00 PM	<i>Lunch</i>
1:00 PM	<i>Normal Variants and Artifacts in MEG</i> <i>Richard C. Burgess, MD, PhD</i>
1:45 PM	<i>Source Modeling of Evoked Activity</i> <i>Susan Bowyer, PhD</i>
2:30 PM	<i>Break</i>

2:40 – 5:00 PM

Part III: MEG Contributions to Patient Management

2:40 PM

Evidence-Based MEG Indications in Presurgical Epilepsy Evaluation

Anto Bagic, MD, PhD

3:25 PM

MEG Role & Integration with Other Non-Invasive Modalities

Robert Knowlton, MD

CASE PRESENTATIONS

3:55 PM

Functional Mapping

Clifford Calley, MD

Adult Epilepsy Cases

4:10 PM

Andrew Zillgitt, MD

4:25 PM

Robert Knowlton, MD

Pediatric Epilepsy Cases

4:40 PM

Andrea Lowden, MD

4:55 PM

Gautam Popli, MD

5:10 PM

Wrap-Up Discussion

5:15 PM

Adjourn

CME INFORMATION

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.

ASET-CEUs

ACMEGS will apply to ASET to accredit the Annual MEG Course for ASET-CEUs. Additional information will be provided upon approval.