# Mayo Clinic Electroencephalography (EEG), Electromyography (EMG) and Neurophysiology in Clinical Practice

- Mayo Clinic Education Center/Phoenix, Arizona
- Sunday, February 28 – Friday, March 4, 2016

**Sunday, February 28, 2016**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 a.m.</td>
<td>Registration &amp; Continental Breakfast</td>
</tr>
<tr>
<td>8:00</td>
<td>Welcome &amp; Pre-test</td>
</tr>
</tbody>
</table>
| 8:15 | Pediatric EEG: Normal/Normal Variants  
      Lily Wong-Kisiel, M.D. |
| 9:00 | Pediatric EEG: Abnormal/Epileptiform  
      Raj D. Sheth, M.D. |
| 10:00 | Break |
| 10:15 | Adult EEG: Normal/Normal Variants  
       Matthew T. Hoerth, M.D. |
| 11:00 | Adult EEG Abnormal  
      Jeffrey W. Britton, M.D. |
| 11:45 | Questions & Answers |
| Noon | Break (pick up lunch) |
| 12:30 | EEG Misadventures *(Lunch and learn)*  
       William O. Tatum, D.O. |
| 1:30 | Long Term EEG Recording Skills  
      Amy Z. Crepeau, M.D. |
| 2:30 | Break |
| 2:45 – 4:15 | EEG Skills Workshop  
**Workshop I**  
Adult EEG Interpretation Report Generation – (Room A)  
Jerry J. Shih, M.D. |
| 4:15 | EEG Billing and Coding  
      Jeffrey W. Britton, M.D. |
| 4:45 p.m. | Adjourn |

Program schedule is subject to change without notice.
### Monday, February 29, 2016 (Leap Year)

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 a.m.</td>
<td>Continental Breakfast</td>
</tr>
<tr>
<td>8:00</td>
<td>Routine EEG in the Epilepsy Evaluation: Specificity Utility /Effectiveness Joseph I. Sirven, M.D.</td>
</tr>
<tr>
<td>8:45</td>
<td>EEG in the ICU: Coma/Encephalopathy/Brain Death Elson L. So, M.D.</td>
</tr>
<tr>
<td>9:30</td>
<td>EEG in Status Epilepticus                                        Katherine H. Noe, M.D., Ph.D.</td>
</tr>
<tr>
<td>10:15</td>
<td>Break</td>
</tr>
<tr>
<td>10:30</td>
<td>Pitfalls and Confounders in Long-term EEG Recordings Amy Z. Crepeau, M.D.</td>
</tr>
<tr>
<td>11:00</td>
<td>Advanced/Boutique EEG: Intracranial recordings/ECoG and HFO's/Devices for Epilepsy Matthew Hoerth, M.D.</td>
</tr>
<tr>
<td>11:45</td>
<td>Questions &amp; Answers</td>
</tr>
<tr>
<td>Noon</td>
<td>Break (pick up lunch)</td>
</tr>
<tr>
<td>12:30</td>
<td>Essentials of the Neurophysiology of Sleep  <em>(Lunch and learn)</em> Michael H. Silber, M.B., Ch.B.</td>
</tr>
<tr>
<td>1:30</td>
<td>Break</td>
</tr>
<tr>
<td>1:45</td>
<td><strong>Workshop I EMU Skills: Adult – (Room A)</strong> Joseph F. Drazkowski, M.D.</td>
</tr>
<tr>
<td></td>
<td><strong>Workshop II EMU Skills: Peds – (Room B)</strong> Elaine C. Wirrell, M.D.</td>
</tr>
<tr>
<td>3:45</td>
<td>Post-test</td>
</tr>
<tr>
<td>4:00</td>
<td>Adjourn</td>
</tr>
</tbody>
</table>

Program schedule is subject to change without notice.
Tuesday, March 1, 2016
Clinical Neurophysiology Fundamentals

7:30 a.m.  Continental Breakfast

8:00  Essentials of Electricity, Filters and Circuit Analysis: Electrical Safety & Cortical Physiology
"What do I need to for the Boards?"
Terrence D. Lagerlund, M.D.

9:15  Quiz on Technical Aspects EEG
Faculty

10:00  Break

10:15  Autonomic Disorders
Brent P. Goodman, M.D.

11:15  Lunch (pick up lunch)

11:45  Visual and Brainstem Evoked Potentials (Lunch and learn)
Jonathan L. Carter, M.D.

12:30  Somatosensory Evoked Potentials
James C. Watson, M.D.

1:15  Intraoperative Monitoring Spinal/Cranial/Peripheral
Brian A. Crum, M.D.

2:00  Neurophysiology of Balance
Jamie M. Bogle, Ph.D.

2:45  EMG Billing and Coding
Andrea J. Boon, M.D.

3:30  Ultrasound as a Complement to Electrodiagnosis (using ultrasound machine and subject)
Andrea J. Boon, M.D.

4:30  Ultrasonography Demonstration (using ultrasound machine and subject)
James C. Watson, M.D. and Andrea J. Boon, M.D.

5:30 p.m.  Adjourn

Program schedule is subject to change without notice.
Wednesday, March 2, 2016

EMG

7:15 a.m. Registration & Continental Breakfast

7:45 a.m. Welcome, Introductions and Pre-Test
Benn E. Smith, M.D.

8:00 Nerve Conduction Studies Basics:
Localization & Recognition Tools
Brent P. Goodman, M.D.

8:45 Uncommon Motor Nerve Conduction Studies,
Including F Waves and H Reflexes
Sarah E. Berini, M.D.

9:30 Uncommon Sensory Studies – Technique and Utility
Mark A. Ross, M.D.

10:15 Neuromuscular Junction Physiology and Electrodiagnostic Testing
Brent P. Goodman, M.D.

11:15 Pitfalls of Nerve Conduction Studies: Technical and Physiologic
Devon I. Rubin, M.D.

12:15 p.m. Break (pick up food)

12:30 Lumbosacral Radiculoplexus Neuropathies (lunch and Learn)
P. James B. Dyck, M.D.

1:30-4:00 Workshop I – Common Nerve Conduction Studies (Room A)
Motors = Median, Ulnar, Peroneal (EDB), Tibial with F waves, Facial
Sensories = Median, Ulnar (anti and palmars), Sural, Superficial Peroneal, Plantars
Others: Blink Reflex, H-reflex

Workshop II – Uncommon Nerve Conduction Studies (Room B)
Somatosensory Evoked Potentials (Meidan and Tibial)
Motors = 4 point Ulnar, Ulnar/FDI, Radial, Accessory, Musculocutaneous, Peroneal/AT, Facial
Sensories = Dorsal Ulnar Cutaneous, Radial, Medial and Lateral Cutaneous, Medial and Lateral Plantars

Program schedule is subject to change without notice.
Mayo Clinic Electroencephalography (EEG), Electromyography (EMG) and Neurophysiology in Clinical Practice
Mayo Clinic Education Center/Phoenix, Arizona
Sunday, February 28 – Friday, March 4, 2016

Others: Repetitive Stimulation techniques, Blink Reflexes

4:00 Question & Answer
4:30 p.m. Adjourn

Thursday, March 3, 2016

EMG

7:00 a.m. Continental Breakfast

7:30 Technique of Needle Examination
Devon I. Rubin, M.D.

8:30 Unusual Muscles and EMG
Eric J. Sorenson, M.D.

9:30 Break

9:45 EMG Waveform Analysis: Introduction
Devon I. Rubin, M.D.

11:30 Crafting the EMG Report
Benn E. Smith, M.D.

Noon Break (pick up food)

12:30 p.m. Electrophysiology-Pathology Correlates (Lunch and learn)
P. James B. Dyck, M.D.

1:30 – 4:30 Workshop I – Needle EMG Common Muscles (Room A)
Needle Technique
Upper and Lower Common Muscles
Ultrasound Technique

Workshop II – Needle EMG Uncommon Muscles and Techniques (Room B)
Needle Technique
Upper and Lower Uncommon Muscles
Quantitative Electromyography (QEMG)
Single Fiber EMG (SFEMG)

5:00 Dinner

Program schedule is subject to change without notice.
Mayo Clinic Electroencephalography (EEG), Electromyography (EMG) and Neurophysiology in Clinical Practice
Mayo Clinic Education Center/Phoenix, Arizona
Sunday, February 28 – Friday, March 4, 2016

5:30  An Evening of EMG Waveforms: Food, Fun, and Fibrillations
      Devon I. Rubin, M.D. and Elliot L. Dimberg, M.D.

9:30 p.m.  Adjourn

Friday, March 4, 2016

EMG

7:00 a.m.  Continental Breakfast

7:30  Carpal Tunnel Syndrome
      James C. Watson, M.D.

8:30  Electrodiagnostic Approach to Brachial Plexopathy
      Sarah E. Berini, M.D.

9:30  Break

9:45  EMG Approach to Muscle Diseases
      Elliot L. Dimberg, M.D.

10:45  Lower Limb Mononeuropathies
       Elliot L. Dimberg, M.D.

11:45  Ulnar Neuropathy
       Ruple S. Laughlin, M.D.

12:45 p.m.  Break (pick up lunch)

1:00  Electrophysiology of Radiculopathies (Lunch and learn)
      Eric J. Sorenson, M.D.

1:45  Cranial Mononeuropathies
      Charles Gervais, M.D.

2:30  Neurophysiology of the Motor Neuron Diseases
      Mark A. Ross, M.D.

3:15  Nerve Conduction Studies and Electromyography in the Pediatric Population
      Randa G. Jarrar, M.D.

4:00  Break

Program schedule is subject to change without notice.
4:15  Electrodiagnostic Approach to Neuromuscular Junction Disorders  
Brent P. Goodman, M.D.

5:00  Clinical Utility of Epidermal Skin Biopsy: An Evidence Based Approach  
Charlene R. Hoffman-Snyder, C.N.P., D.N.P., R.N.

5:45  Evaluation of Peripheral Neuropathies  
Ruple S. Laughlin, M.D.

6:30  Post-test
6:45  Adjourn

Program schedule is subject to change without notice.