ADULT EPILEPSY RESIDENT ROTATION

**Background:** Epilepsy is a common neurological disease. The lifetime risk of a single seizure approaches 10% and approximately 1% of the population has recurrent seizures or epilepsy. For many people, antiepileptic medications completely control their seizures. However, approximately one-third of the people with epilepsy are not completely controlled by medication. For some of these people, epilepsy surgery may provide a cure. Unfortunately, people with refractory seizures suffer for an average of 20 years before undergoing epilepsy surgery.

**Overall Goal:** Provide a focused experience in the inpatient and outpatient evaluation and treatment of epilepsy in adults including an introduction to the interpretation of routine, extended and video EEG recording.

**Specific Objectives:**

1. Participate in the daily review of video/EEG and extended EEG studies
2. Participate in the daily review of routine EEG studies
3. Attend adult epilepsy clinic
4. Attend epilepsy surgery conference
5. Attend Clinical Neurophysiology conference
6. Attend monthly resident EEG conference

**Rotation Coordinator:** R. Edward Hogan, M.D.

**Contact Person:** Donna Theiss 363-8766
I. Purpose

The purpose of this document is to broadly define the content of the core knowledge and principles to be mastered during the resident rotation in Adult Epilepsy.

II. Definition of Subspecialty

Adult epilepsy is a subspecialty of Neurology that involves the diagnosis and treatment of adults with epilepsy. This subspecialty includes expertise in the use and interpretation of EEG and video/EEG in the diagnosis and management of epilepsy and other conditions which may mimic epilepsy. This specialty also includes expertise in the evaluation of patients with refractory epilepsy for surgical treatments.

III. Core Curriculum

Residents should gain a basic knowledge which may include but not necessarily be limited to the following:

A. EEG
   - Understand how EEG data is displayed including the polarity convention, the difference between bipolar and referential montages and familiarity with commonly used montages
   - Identify the patterns in normal EEG including awake background activity, drowsiness and sleep
   - Identify artifacts and be able to distinguish from abnormal patterns
   - Identify normal variants and be able to distinguish from abnormal patterns
   - Identify and lateralize/localize abnormal patterns
   - Distinguish epileptiform from non-epileptiform abnormalities
   - Identify EEG patterns associated with common epilepsy syndromes

B. Epilepsy
   - Be familiar with the basic epidemiology of epilepsy
   - Be able to obtain a focused history including the presence or absence of common risk factors for epilepsy and precipitants of seizures
   - Be able to obtain a clear description of all of the patient’s clinical events
   - Identification and treatment of common epilepsy syndromes in adults
   - Be familiar with the clinical semiology of common seizure types
   - Be familiar with the clinical pharmacology and pharmacokinetics of Antiepileptic drugs (AEDs)
   - Be familiar with the uses and limitations of ancillary testing including outpatient EEG and MRI.
• Be familiar with the identification and evaluation of potential epilepsy surgery candidates

C. Emergencies
• Be familiar with the identification and treatment of convulsive and non-convulsive status epilepticus
**Weekly Schedule (applicable only to the days assigned for rotation on the adult EEG service)**

**Monday:**  
8:00 AM - 12:00 PM  Video/EEG review (EMU 11400)  
1:00 PM - 4:00 PM  Epilepsy Clinic (CAM 6th floor, Suite C)  
4:00 PM  Routine EEG review (EMU 11400)

**Tuesday:**  
8:00 AM - 12:00 PM  Video/EEG review (EMU 11400)  
1:00 PM - 4:00 PM  Epilepsy Clinic (CAM 6th floor, Suite C)  
4:00 PM  Routine EEG review (EMU 11400)

**Wednesday:**  
8:00 AM - 12:00 PM  Video/EEG review (EMU 11400)  
12:00 PM - 1:00 PM  Resident Conference (Schwartz Auditorium)  
1:00 PM - 4:00 PM  Routine EEG review (EMU 11400)  
4:00 PM - 5:00 PM  Clinical Neurophysiology Conference (Choi)

**Thursday:**  
8:00 AM - 9:00 AM  Epilepsy Surgery Conference (EMU 11400)  
9:00 AM - 12:00 PM  Video/EEG review (EMU 11400)  
1:00 PM - 5:00 PM  Routine EEG review (EMU 11400)

**Friday***:  
8:00 AM - 9:00 AM  Neurology Grand Rounds  
9:00 AM - 12:00 PM  Video/EEG review (EMU 11400)  
1:00 PM - 4:00 PM  Routine EEG review (EMU 11400)

*On the 2nd Friday of the month, there is a residents EEG conference at noon in Schwartz auditorium.*