

## Neuro-Oncology Resident Rotation

**Background.** The past decade has witnessed significant strides in our ability to manage breast, lung, colon, and prostate cancer. These advances are a direct result of our improved ability to diagnose and treat these cancers. Unfortunately, the survival of patients diagnosed with the most common form of brain cancer has not improved, despite years of scientific investigation and numerous clinical trials. In the United States alone, there are over 17,000 new cases of malignant brain tumor diagnosed per year, and this figure has been increasing by 1-2% per year over the past decade. Unlike other cancers, brain tumors are often undetected until late and represent difficult tumors to completely remove and effectively treat with conventional therapies. In this regard, the majority of patients with malignant brain tumors die within 9-12 months despite aggressive treatment, and less than 3% survive more than 3 years.

**Overall Goal.** Provide an outpatient-oriented combined pediatric and adult neuro-oncology experience for adult neurology residents and pediatric neurology fellows.

### **Specific Objectives:**

1. Attend multidisciplinary adult and pediatric neuro-oncology clinics and case conferences (tumor boards)
2. Attend adult and pediatric radiation oncology clinics
3. Attend neuropathology brain tumor review
4. Participate in subspecialty brain tumor clinics
5. Attend monthly brain tumor research conferences

**Rotation coordinator.** David H. Gutmann, MD, PhD ([gutmannd@neuro.wustl.edu](mailto:gutmannd@neuro.wustl.edu))

## **Weekly Schedule**

### **Monday**

- 8:30 am – 11:30 am Timothy Hullar, MD (ENT)  
CAM 11<sup>th</sup> Floor
- 1:00 pm – 4:00 pm Keith Rich, MD (Neurosurgery)  
CAM 6<sup>th</sup> Floor; Suite C
- 4:00 pm – 5:00 pm Adult Tumor Board  
5<sup>th</sup> Floor McMillan Conference Room

### **Tuesday**

- 8:30 am – 11:30 am Albert Kim, MD, PhD (Neurosurgery)  
CAM 6<sup>th</sup> Floor; Suite C
- 1:00 pm – 4:00 pm Jeff Michalski, MD (Radiation Oncology)  
Lower Level, CAM

### **Wednesday**

- 7:00 am – 8:00 am Multidisciplinary Case Conference  
5<sup>th</sup> Floor McMillan Conference Room
- 8:30 am – 10:30 am Pediatric Neuro-Oncology (2<sup>nd</sup> and 4<sup>th</sup> weeks only)  
SLCH, 4<sup>th</sup> Floor; Neurosurgery Suite
- 1:00 pm – 4:00 pm Michael Chicoine, MD (Adult Neurosurgery)  
Gerald Linette, MD, PhD (Neuro-Oncology Consultations)  
CAM 6<sup>th</sup> Floor; Suite C

### **Thursday**

- 8:00 am – 10:00 am Pediatric Neuro-Oncology  
SLCH, 4<sup>th</sup> Floor; Neurosurgery Suite
- 10:00 am – 3:00 pm Neurofibromatosis (2<sup>nd</sup> and 4<sup>th</sup> weeks only)  
SLCH, 2<sup>nd</sup> Floor; Suite D
- 3:30 pm – 4:30 pm Pediatric Tumor Board  
SLCH, 4<sup>th</sup> Floor; Neuro-Oncology Offices (across from clinic)

### **Friday**

- 8:30 am – 12:00 pm Joseph Simpson, MD (Adult Radiation Oncology)  
Lower Level, CAM
- 1:00 pm – 5:00 pm David Tran, MD, PhD (Medical Neuro-Oncology)  
CAM 7<sup>th</sup> Floor; Suite C

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
7am			Multidisciplinary Case Conference McMillan 5th Floor		
8am					
9am	Timothy Hullar, MD (ENT) CAM 11th Floor	Albert Kim, MD, PhD (Neurosurgery) CAM 6th Floor; Suite C	Pediatric Neuro-Oncology SLCH, 4th Floor (Neurosurgery) (2nd and 4th weeks only)	Pediatric Neuro-Oncology SLCH, 4th Floor (Neurosurgery)	Adult Radiation Oncology Lower Level; CAM
10am				Neurofibromatosis Clinic Suite D, SLCH 2nd and 4th weeks only	
11am					
12pm					
1pm					
2pm	Adult Neurosurgery (Keith Rich) CAM 6th Floor; Suite C	Jeff Michalski, MD (Radiation Oncology) Lower Level, CAM	Adult Neurosurgery (Michael Chicoine) CAM 6th Floor; Suite C		David Tran, MD, PhD CAM, 7th Floor, Suite C
3pm					
4pm	Adult Tumor Board McMillan 5th Floor			Pediatric Tumor Board 4th Floor SLCH	
5pm					

**American Academy of Neurology  
Neuro-oncology Section  
Residency Core Curriculum**

**10/01/01**

**I. Purpose:**

The purpose of this document is to broadly define the content of the core knowledge and principles to be mastered during rotation of resident on Neuro-Oncology services.

**II. Core Curriculum:**

A. Definition of sub-specialty:

Neuro-Oncology is a specialty which involves the management of primary and metastatic central and peripheral nervous system neoplasms; neurologic complications of cancer and related disorders; and neurologic complications of therapy utilized in such patients.

B. Core Content and Knowledge Base:

Rotations of residents in Neuro-Oncology during training programs will have the following goals:

1. Residents should gain a basic knowledge which may include but not be necessarily limited to the following:
  - a. Basic familiarity with the common primary nervous system malignancies, including:
    - Recognition of common clinical presentations for the different common primary brain tumors.
    - Ordering of appropriate diagnostic testing or consultations.
    - Common therapeutic interventions, in particular acute or emergent supportive care measures.
  - b. Basic familiarity with basic principles of diagnosis and management of metastatic cancer to the nervous system including:
    - Brain and spinal cord metastasis
    - Neoplastic meningitis
    - Epidural cord compression

- Nerve and plexus metastasis
- c. Basic familiarity with diagnosis and management of cancer related neurologic complications including:
- Encephalopathy
  - CNS infections
  - Cerebrovascular disease
  - Seizures
  - Increased intracranial pressure
  - Basic palliative and end-of-life management principles pertaining to neuro-oncology
  - Recognition of neurologic complications of radiation, chemotherapy and other cancer therapeutics