

# Neurosurgery Curriculum

## Program Curriculum

### PGY1: The Intern Year

Currently the intern year is housed at and managed by Doctors Hospital. The intern syllabus is defined by the AOA/ACOS/RESC. Eight months will be spent at Doctors Hospital and four months will be served electively at Grant Medical Center.

Matriculation to the PGY 2-R1 year is dependent on successfully completing the interning year in the standard twelve months.

### PGY2-R1: 3 months of neurology

1 month of neuroradiology

8 months of surgery/neurosurgery (includes adult neurosurgery, vascular surgery, plastic surgery and trauma)

### Academic Goals:

Access basic neurologic/neurosurgical knowledge basis through elective rotations, readings (assigned and self-selected), conferences and hospital teaching rounds. This year is designed to promote the vocabulary and basic dexterity skills needed to progress. Bedside/daily care of the neurologically impaired or compromised patient is stressed.

### Clinical Skills:

History taking, neurologic examinations and interpreting data will be stressed. The resident will see and present all consults to residents and staff. In OR, this year will build basic skills learned in the PGY1 year and support and surgical assistantship and wound management will be stressed daily. This year will actually serve as the beginning steps in the resident's learning to be a surgeon.

**PGY3-R2: 3 months pediatric surgery****9 clinical neurosurgery-up to three (3) months may be off-site in adult elective surgery****Academic Skills:**

The resident will continue to read both assigned topics and readings designed to expand the neurosurgical knowledge base. The depth and breadth of case management discussions will be expected to expand. Residents will be expected to be able to manage the patients on service with supervision by the chief resident and the attending staff, but, hopefully with a decreasing reliance on them for day-to-day management direction.

**Clinical Skills:**

The resident will continue to assist in surgery and function as the first assistant in most cases. The resident will be expected to develop skills on a level to allow the resident to perform under supervision more of the surgical procedures; specifically being able to open, expose the relevant pathology, assist in its removal, and close most cranial and spinal cases. The resident will begin to perform under supervision more of some of the less complex surgical procedures.

The resident will continue to evaluate all emergency room patients for whom neurosurgical consultation is requested. The resident will be expected to demonstrate improved skills in the areas of diagnosis and management of these patients.

The residents will also continue to participate in the office care of neurological patients to become more familiar with out-patient management problems and their solutions and also to gain additional facility in clinical diagnostic skills.

**PGY4-R3: 12 month adult neurosurgery: up to three (3) months may be served as an elective; electives may be on-site, research, neuro-critical care or in radiosurgery****Academic Skills:**

The resident will be expected to broaden the scope of his reading branching out from the usual text reference and begin to explore other available literature on topics relevant to the problems encountered on service. The resident will be directly responsible for the medical students assigned to the neurosurgical service for elective rotations.

The annual scientific paper is expected to be more sophisticated in nature than those of the first two years. A poster session for the Annual Clinical Assembly of Osteopathic Specialists may be submitted in lieu of the paper for this or succeeding years.

**Clinical Skills:**

The resident will be assuming a greater role in the management of the outpatient office population. He will be expected to be able to evaluate new patients in this setting and to discuss their diagnosis and management options.

In the operating room, the resident should be performing more of the surgical procedures under supervision and with the attending staff acting as first assistant during the phases of the operation performed by the resident. The technical skill level of the resident will be expected to improve through the course of the residency program.

## **PGY6: 12 months neurosurgery**

### **Academic Skills:**

The resident will continue to expand his knowledge base by additional reading on a variety of topics. In addition, the resident will be expected to be responsible for more of the junior level resident education.

### **Clinical Skills:**

During this year, the resident will serve as a chief resident and will assume management of the Neurosurgical Service. This will provide the resident with the continued opportunity to evaluate patients, select management options, and perform surgery along with junior residents who will assist. The resident will be expected to demonstrate progressive advancement of clinical and technical skills culminating in the completion of the residency program. The resident will also take a more active role in the outpatient office activities. In addition, he will be expected to coordinate junior resident activities such as academic programs, call and vacation schedules, and other administrative activities.

As PGY 6, the resident shall spend the entire year in-house at Grant Medical Center/Doctors Hospital performing the majority of neurosurgical cases as he is qualified as deemed by the trainers.

In addition, required courses during the five years of training beyond internship include attendance at the Armed Forces Institute of Pathology in neurosciences, and the review course in neurological surgery provided through Rush Presbyterian School of Medicine in Chicago. Other courses and conferences can be attended as found appropriate and approved by trainers with the Department of Neurological Surgery.