

**Neurological Surgery Residency Program  
Columbia University Medical Center  
Goals and Objectives NS6**

Upon completion of the NS6 year, NS residents will be expected to meet the following educational goals and objectives:

**Patient Care**

- Ability to construct a plan of management for the most complex clinical problems in neurosurgery
- Ability to diagnose brain death and advise next of kin of its significance in a caring compassionate manner
- Ability to function as a consultant in both an inpatient and outpatient setting
- Ability to provide supportive and compassionate care to patients and their families

**Demonstrate surgical proficiency in:**

- Surgical planning
- Patient positioning
- Knowledge of specific procedure
- Speed and efficiency
- Knowledge and use of instruments
- Flow of operation
- Intraoperative judgment
- Use of assistants
- Respect for tissue

**Medical Knowledge**

- Demonstrate detailed knowledge of normal and abnormal anatomy and physiology of the nervous system
- Demonstrate detailed knowledge of neurosurgical disease processes
- Demonstrate ability to teach effectively
- Demonstrate ability to instruct residents in neurosurgical patient evaluation, plan implementation and critical care
- Demonstrate ability to manage and lead the patient care conference
- Demonstrate ability to assist program director in overseeing personal, academic and clinical growth and development of junior residents
- Participate actively and lead conferences

**Practice-based Learning and Improvement**

- Provide instruction about neurosurgical problems to more junior residents and clinical clerks
- Instruct junior residents in neurosurgical operative techniques
- Manage and administrate the quality improvement conference for the neurosurgical service
- Develop skills as program builder and an administrator of the neurosurgical service

### **Interpersonal and Communication Skills**

- Communicate with patients and their families explaining disease processes and treatment options, including benefits and risks, and possible complications in comprehensible terms
- Discuss patient problems in an organized and articulate manner
- Work in cooperative attitude and sensitive manner with other health care personnel
- Give and receive advice in an objective, mature manner

### **Professionalism**

- Demonstrate knowledge of the ethical and legal aspects of neurosurgery
- Be honest, reliable, and respectful in working with patients and colleagues
- Demonstrate sensitivity to the sexual, ethnic, cultural and religious characteristics of patients and family
- Respect each patient's right to privacy

### **Systems-based Practice**

- Direct a team of healthcare professionals managing patients with complex neurosurgical problems
- Understand legal issues in neurosurgery
- Understand medical economics, politics, practice types
- Practice cost effective medicine
- Incorporate evidence based approaches