Brief Program Overview:

Carolinas Healthcare System (CHS) is the second largest public healthcare system in the Nation, and the largest healthcare system in the Carolinas. Carolinas Medical Center (CMC) is a 874-bed tertiary care center and the core component of Carolinas HealthCare System.

The faculty of Carolinas Healthcare System’s Neurological Surgery Residency Training Program at Carolinas Medical Center are all members of Carolina Neurosurgery & Spine Associates (CNSA). Established in 1940, CNSA is one of the oldest, largest and most advanced neurosurgical practices in the country. With a multidisciplinary team of neurosurgeons, physiatrists, and physical therapists, the practice offers comprehensive nonsurgical and surgical care for patients with brain and spine disorders.

The Neurological Surgery Residency Training Program at Carolinas Medical Center is a subspecialty-based program designed to train skilled and compassionate neurological surgeons who aspire to assume national leadership roles in clinical innovation, medical education, and neuroscience research.

Residents will be trained by a core faculty of twelve neurological surgeons, representing a comprehensive breadth of subspecialty practice and clinical research, including:

- Vascular neurosurgery
- Endovascular surgery
- Skull base neurosurgery
- Spine surgery
- Pediatric neurosurgery
- Pain and functional neurosurgery
- Peripheral nerve surgery
- Radiosurgery
- Epilepsy surgery (adult and pediatric)
- Neurotrauma

The service makes extensive use of midlevel providers to increase care efficiencies and improve care delivery. As such, we believe residents in this program will gain exposure to an unprecedented volume of high quality clinical, educational and research opportunities.

Approximately 3,500 operative neurosurgical procedures are performed each year at CMC (an additional 1200 neurosurgical cases are performed at the adjacent Carolinas Center for Specialty Surgery). Cutting edge clinical and surgical facilities include intraoperative imaging and newly built and recently opened neuro-critical care units, inpatient neurosurgery ward, neurosurgery clinics, and a pediatric surgery specialty ward. Various clinical faculty within the department serve as investigators for a variety of clinical and translational research projects.

We have a special commitment to training surgeons skilled in the techniques of practice science as defined by the systematic collection and analysis of data from practice, the generation of new knowledge and the application of that knowledge to processes of change and continual improvement in practice.