

NEUROLOGICAL SURGERY RESIDENCY TRAINING PROGRAM

PROGRAM DESCRIPTION

GRANT MEDICAL CENTER/DOCTORS HOSPITAL OHIO UNIVERSITY COLLEGE OF OSTEOPATHIC MEDICINE

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Requirements of Applicants:

All applicants must be graduates of a college of osteopathic medicine approved by the American Osteopathic Association. The applicant shall have satisfactorily completed a minimum one-year AOA approved internship. The applicant should meet the moral, ethical, and professional requirements of the hospital. The applicant shall be licensed or eligible for licensure to practice medicine in the State of Ohio. It is recommended but not required that the applicant rotate on the Neurological Surgery Service at Grant Medical Center during their clinical clerkship, internship, or residency training within the usually allotted twelve month period.

Program Goals:

The goal of the Neurological Surgery Training Program at Grant Medical Center/Doctors Hospital-OUCOM is to provide the necessary training and education to osteopathic physicians who desire to prepare themselves for the practice of neurological surgery. The program outlined herein shall provide the basic requirements of training leading toward eventual certification in neurological surgery by the American Osteopathic Association through the American Osteopathic Board of Surgery. It is intended that the resident shall be qualified in neurological surgery to practice the discipline at the end of the residency training period.

General Information:

1. **Contracts:** The residency is offered for a period of one year subject to renewal of upon application of the resident and upon review and approval by the member or members of the Division of Neurological Surgery and Grant Medical/Doctors Hospital. The training period shall include a minimum of five (5) years. A resident shall not expect automatic renewal of contract for the training program. The resident's performance shall be reviewed on an annual basis by the faculty in the division of neurological surgery as well as other individuals involved in medical education at Grant Medical Center/Doctors Hospital. The residents shall meet the standards required by the Division, Grant Medical Center/Doctors Hospital and the AOA as well as the ACOS. It is essential that the resident

meeting the requirements in providing resident surgical logs, and additional requirement deemed necessary. Preparation of a scientific display for the ACOS annual clinical assembly is encouraged, as is an academic/clinical presentation at the ACAOS.

2. Meetings: All residents will participate in regularly scheduled meetings for the Division of Neurological Surgery. Residents are to attend tumor board meetings when germane. Residents in the program are encouraged to attend other meetings in other disciplines when deemed appropriate and as time allows. The available residents will participate in daily rounds with the faculty.
3. Residents are required to become a resident member of the American College of Osteopathic Surgeons and shall be a member in good standing with the American Osteopathic Association.
4. During the final year of resident training, the resident is required to attend the annual meeting of the American College of Osteopathic Surgeons, Discipline Neurological Surgery and is strongly encouraged to present a scientific paper or topic.
5. During the residency training program in neurological surgery, residents will be required to present at least one scientific poster or exhibit representing a topic or subject that he or she has been involved with during their training period.

Requirements of Residents in the Department of Neurological Surgery:

Residents in the Division of Neurological Surgery at Grant Medical Center/Doctors Hospital-OUCOM will be required to participate in direct patient care such as patient assessment and case management under the supervision of the attending neurosurgeon. They will be expected to perform to the utmost standards set forth by the AOA, ACOS and to the expectations of the division and hospital. They will be assessed on a quarterly basis as required currently by Grant Medical Center/Doctors Hospital and OUCOM as set forth by the Department of Medical Education and the AOA. Each resident is required to maintain an accurate surgical log as well as a log that records reading assignments, conferences attended, etc. These will be submitted to the Department of Medical Education on a quarterly basis.

Residents shall participate in preoperative and postoperative care of all patients on the Neurological Surgery Service at Grant Medical Center/Doctors Hospital or other hospitals where attending staff participate. The resident shall assist in surgery as well as floor care and emergency department visits and outpatient clinics. Residents will be required to participate in an office setting or clinic or outpatient facility. They will also Participate in medical education and in the teaching of medical students, interns and other residents including the medical staff and nurses and even patients of the Neurological Surgery Service at Doctors Hospital

Residents shall make rounds at least once a day and they shall keep the attending staff well-informed of the patient's condition and progress at all times. It is an absolute requirement that residents communicate with the attendings regarding their patients on a daily basis. A resident call schedule will be made available to all members of the Division of Neurological Surgery and provided by the senior resident on a timely basis. The senior resident in neurological surgery will set forth an example for underclassmen and shall be held at a standard established by the division to set an example for other residents and future residents.

Program Outline:

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-today 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.

**PGY5: 9 months neurosurgery
3 months elective**

Academic Skills:

The resident will have become well versed in the underlying scientific basis of neuropathophysiology and how that relates to the formulation of management options and how those options produce the desired effects. It is anticipated that the resident will have acquired the ability to critically evaluate neurosurgical literature, particularly journal articles, relative to form, structure and validity.

The resident will begin to spend more time involved in the training of the more junior residents in the program by lectures and discussions concerning various aspects of the junior resident academic curriculum, by supervising and critiquing patient evaluations, and by supervising operative aspects of patient care.

Clinical Skills:

The resident will assume more responsibility for patient care including performing more of the surgery under supervision. With the guidance of the attending neurosurgeons, the resident will begin doing the major part of the surgery along with junior residents who will assist. The resident will be expected to demonstrate progressing advancement in clinical and technical skills culminating in the completion 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.

Description of the Neurologic Surgery Division/Service:

Currently at Grant Medical Center there are five full time faculty members. There are other neurosurgeons on staff, but they do not routinely invite or welcome resident participation in their cases. The scope of practice includes all manners of spinal procedures, from the out-patient microdissecting through the complex spine reconstruction. Cranial surgery at Grant does not routinely include vascular cases; these are usually done at a sister institution. Cranial stereotaxy and stereotactic radiosurgery are available on-site or in the system. Our residents and staff work closely with a very active plastic/reconstruction surgery staff, learning and assisting in craniofacial reconstruction. The faculty and resident staff are active participants in the Level I Trauma Program at Grant Medical Center.

Case presentations, morbidity/mortality, QA and journal clubs are held weekly; often the Division welcomes guest speakers. Usually led by the chief resident, these conferences are informative, supportive and frank in the discussion of care management. Teaching rounds occur daily and any free resident is expected to be present.

Residents are strongly encouraged to perform/participate in clinical research projects that been clears by IRB and agreed to by the faculty. Projects that include other disciplines are strongly encouraged.

Affiliation Agreements for Outside Rotations:

1. Interventional Radiology-Riverside Methodist Hospital, Columbus, Ohio
2. Pediatric Neurosurgery-Nationwide Children's Hospital of Columbus, Ohio