

CLINICAL NEUROLOGICAL SCIENCES - Division of Neurosurgery

Program Director: Dr. Fawaz Siddiqi
Clerkship Director: Dr. Mel Boulton
Contact: Ms. Lisa Baker-Spiller
Rm B7-005, University Hospital - LHSC
Tel: 519 663-3696 Fax: 519 663-3982
Email: lisa.bakerspiller@lhsc.on.ca

DESCRIPTION

The Year 4 Elective in Neurosurgery offers the students a continuation of their introduction to Clinical Neurological Sciences that they began in first and second year. It provides an opportunity for students to consolidate their knowledge by using it in clinical situations in the care of patients. It also allows the students to be exposed to the Neurosurgical experience as part of career decision-making.

The Neurosurgical experience is a more surgical approach to neurological problems. The types of neurological problems presenting to Neurologists and Neurosurgeons tend to differ – with Neurosurgical problems tending to represent structural lesions and trauma. However, at the London Health Sciences Centre there also an opportunity to be exposed to surgical management of such problems as epilepsy, movement disorders, chronic pain and spasticity.

Students will be assigned to a Neurosurgery Team at University Campus of the London Health Science Centre, and commensurate with their abilities, will be responsible for the investigation and treatment of patients seen on the out-patient, in-patient, and emergency services.

LEARNING OBJECTIVES

1. Medical Expert

- a) Obtain a focused neurological history from the patient/caregiver
- b) Perform a detailed and focused neurological examination and an appropriate general physical examination
- c) Localize the lesion in the neuraxis, using information from the history, physical examination and knowledge of neuroanatomy and neurophysiology.
- d) Provide a differential diagnosis
- e) Outline the initial steps in management
- f) Identify acuity of the conditions when prompt management is warranted
- g) Be familiar with the initial steps in the management of common head and spinal injuries
- h) Identify situations in which patients with head injuries would require surgical interventions
- i) Be able to perform procedures, commensurate with their abilities, under the direct supervision of the consultants and residents. These procedures may include, but are not limited to, surgical exposure, wound closure, lumbar puncture, application of external orthosis, external ventricular drainage.

2. Communicator

- a) Conduct patient-centered interviews that explore the patient's feelings, ideas, impact on function, and expectations.
- b) Develop relationships with patients characterized by compassion, empathy, respect, and genuineness, demonstrating a willingness to collaborate with the patient about management.
- c) Perform a physical examination without causing the patient embarrassment.
- d) Adapt treatment plans to the individual with consideration for the patient's age, general health, special needs, expectations, cultural background, progress, or changes in condition.
- e) Demonstrate skill in communication of information with clear, concise explanations that are understandable to patients.
- f) Recognize risk factors and be able to counsel patients on risk reduction.

3. Collaborator

- a) Demonstrate the ability to work effectively as a member of a team, as participant or leader.
- b) Collaborate effectively with patients and families without having to take charge.
- c) Demonstrate skill in finding common ground when differences of opinion exist.
- d) Establish effective relationships with colleagues and other member of the health care team by:
 - i. Considering their suggestions and criticisms.
 - ii. Tactful handling of differences of opinion.

4. Leader

- a) Assist patients in accessing the health care system for physical, psychological, social, and economic rehabilitation or long-term care.
- b) Recognize that neurosurgical care is resource-intensive.
- c) Recognize the limitations of the availability of neurosurgery-related resources in non-university settings.
- d) Use the concepts of evidence-based medicine to guide patient care decisions.
- e) Identify potential conflict between individual and population interests and seek advice from others.

5. Health Advocate

- a) Identify the rights and legal responsibilities of physicians to patients and the community.
- b) Recognize lifestyle / risk factors that are associated with the patient's condition and collaborate with patient to promote wellness.
- c) Describe the determinants of health and apply them appropriately to enhance individual and community well-being.
- d) Apply the concept of cost-effectiveness to public health interventions.

6. Scholar

- a) Demonstrate skill in self-directed learning by:
 - i. Ability to identify areas of deficiency in one's own knowledge and skills.
 - ii. Ability to find appropriate educational resources.
 - iii. Ability to evaluate personal learning progress.
 - iv. Ability to use new knowledge in the care of patients.
- b) Determine the validity and applicability of published data through critical appraisal.

7. Professional

- a) Demonstrate commitment to one's teachers, classmates, patients, the profession and society through ethical behavior

- b) Demonstrate social accountability through a commitment to one's colleagues, patients, the profession and society.
- c) Demonstrate a commitment to personal health, balancing the goal of excellence in education with a sustainable work ethic.
- d) Demonstrate a commitment to reflective practice.
- e) Demonstrate honesty and trustworthiness in assessment, study and learning.
- f) Demonstrate responsibility and respect.
- g) Recognize personal biases and ensure that they do not interfere with the patient's best interests.
- h) Be willing to seek help, advice or consultation when needed.
- i) Respond to personal and family needs and develop effective support systems

CLINICAL DUTIES

In general, the student is expected to function as a member of the neurosurgical clinical team. This includes being present at morning patient rounds, seeing preoperative patients and patients in the emergency department. Students may attend at operative cases and assist in the operating room.

The rotation provides an opportunity for the students to consolidate his/her clinical examination skills. The greatest exposure to patient examination will be in the outpatient clinic and in the emergency department (during the day, or while on call). Students are encouraged to take advantage of these opportunities.

If a student wishes to concentrate on specific aspects of this rotation (e.g. extensive out-patient experience) then he should discuss this with the Program Director.

NIGHT AND WEEK-END CALL

Students rotating on the Neurosurgical service will be assigned 1 night of call per week on service and are expected to see patients with the resident on call. The student will also attend at least 2 clinics and 1 O.R. per week.

NUMBER OF STUDENTS ACCEPTED

LHSC-UH – 1 student will be accepted as part of the general Neurosurgical elective.