

Elective Description

Campus: Southeast (Fargo)

Elective/Experience Title: Neurosurgery

Location of Elective: Sanford Health – Fargo, ND

Department: Surgery

Course Number: SURG 9235

Preceptor(s): Alexander Drofa, MD; Adam Jackson, MD; Marcus Keep, MD; Tong Yang, MD

Period(s) Offered: All periods

Number of students per period: 1 student

Course Prerequisites: Completion of Surgery Clerkship

Revised Curriculum Phase(s): 2 & 3

Purpose: Students will learn about neurological and neurosurgical disorders and management of patients with such disorders.

Objectives: Following successful completion of this elective, the student will be able to:

1. Display competency obtaining a neurologic history, performing a neurologic examination, and differentiating between common disorders affecting the nervous system.
2. Appreciate the roles of various specialized diagnostic procedures such as EEG, EMG, CAT scanning, MRI, angiography, and other neuroradiological studies in the evaluation of neurological and neurosurgical disorders.
3. Describe the diagnostic approach to patients with neurological and neurosurgical disorders and develop treatment plans for patients with such disorders.
4. Describe how to correlate neurological findings with the location of neuroanatomical and neurophysiological lesions.
5. Describe the short-term and long-term management of patients with neurological and neurosurgical disorders.

Instructional Activities: During this elective, the student will be involved in/experience:

1. Functioning as in intern in close association with the neurosurgical teaching staff and under the supervision of the chief of the Department of Neurosurgery.
2. Assignment of certain patients for diagnostic workups, special diagnostic procedures, and assist in the surgical procedures for the patients after the student has gained experience in diagnostic evaluations.
3. Involvement in the postoperative care and management in association with the neurosurgical staff.
4. Participation in evening rounds and participation in emergency call and in the emergency care of those patients requiring such care.
5. The opportunity to accompany members of the neurosurgical staff on recheck of outpatient visits.
6. Participation in all autopsies that are carried out during the period of the elective.
7. The opportunity of becoming involved in research activities.

Criteria for Grading: During and following this elective, the preceptor will:

1. Assess by direct observation the ability of the student to obtain a neurologic history and perform a neurologic examination.
2. Assess by direct observation the ability of the student to present a patient and discuss a differential diagnosis and treatment plan.

3. Judge by direct observation the competency of the student in ordering appropriate laboratory, x-ray, and specific diagnostic studies.
4. Assess by direct observation the ability of the student to relate the neurological findings to the neuroanatomical and neuropathological location of the lesion.
5. Evaluate the student's written histories, examinations and consult reports.
6. Judge by direct observation the competency of the student in meeting standards of performance.
7. Judge by direct observation the student's professional attitudes and behavior to medical staff and patients.
8. Utilize the standardized UNDSMHS senior elective form.