Basic Neurosurgery For Non-Neurosurgeons - Jacksonville

NSU E 1J | 4th Year Elective | Neurosurgery | Clinical Science
MDT 7650 | Neurosurg for Non-neuros Jax

Course Description

The duration for this course is 4 weeks – shorter duration not available. The rotating medical student will be involved in care of Neurosurgical patients under the supervision of an attending physician. They will take part in outpatient care on clinic days, which will involve a complete neurological examination, discussion of work up plan, differential diagnosis and plan of care. The expectation would be to give the medical student grounding in the work up of patient with neurological illnesses and decision making towards or away from surgery, what to do and when to do it?

The student will attend and participate in the regular M&M, grand round and other conferences. Additionally on non-out patient days, the student will round daily with the supervising attending and APRN / PA-C and will be responsible for history-taking, clinical examination, performing non-invasive maneuvers during a neurological exam. They will participate in educational lectures coordinated between neurosurgery and neurology as well.

Objectives: ability to perform a comprehensive clinical history, examination with appropriate maneuvers, localize the lesion clinically and interpret basic neuro-imaging, nerve conduction and laboratory tests. They will also participate in any bedside procedures as well as assist in the operating room in a variety of neurosurgical cases.

Under faculty supervision, they will:
  • Perform a comprehensive relevant neurological history and examination
  • Localize and come up with differentials
  • Make use of the HPI, understand and correlate with imaging
  • Understand common neurosurgical pathology
  • Understand when to expedite patient care in certain situations
  • Understand basics about pain including headaches, neuralgias and spine pain
  • Bedside external ventricular drain and ICP monitor insertion
  • Principles of ICU care
  • Interpret MRIs and CT scans of the brain and the spine
  • Assist in the operating room with cases
    o Craniotomy for tumors, trauma
    o Cervical and lumbar discectomy
    o Spinal fusion
At the end of the rotation, the student should be able to evaluate a patient clinically, come up with plan of care and correlate with findings on imaging. The student will be evaluated on all the above at the end of the rotation (further criteria on which evaluation is based has been listed separately). Only 1 student will participate during the rotation.

Course Faculty and Staff

- **Daryoush Tavanaiepour MD** (Director)
- **Dani Brown** (Course Staff)
- **Frank J Genuardi MD, MPH** (Other Faculty)
- **Gazanfar Rahmathulla MD** (Other Faculty)

Meeting Place and Time

Department of Neurosurgery; Neuroscience Institute, 580 W. 8th Street, Plaza 1, 8th Floor, Jacksonville, FL 32209

Course Materials

Handbook of Neurosurgery; Reprints of journal articles; Imaging study films

Additional Information

Daily rounds with one attending.

Classes Offered

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<tr>
<th>Period</th>
<th>Length</th>
<th>Credits</th>
<th>(Avail / Max) Slots</th>
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<tbody>
<tr>
<td>Period 1</td>
<td>4 Weeks (May 10 - Jun 6)</td>
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<td>Period 2</td>
<td>4 Weeks (Jun 7 - Jul 4)</td>
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<td>Period 3</td>
<td>4 Weeks (Jul 5 - Aug 1)</td>
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<td>Period 4</td>
<td>4 Weeks (Aug 2 - Aug 29)</td>
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<td>Period 5</td>
<td>4 Weeks (Aug 30 - Sep 26)</td>
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<td>Period 6</td>
<td>4 Weeks (Sep 27 - Oct 24)</td>
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<td>Period 7</td>
<td>4 Weeks (Oct 25 - Nov 21)</td>
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<td>Period 8</td>
<td>4 Weeks (Nov 22 - Dec 19)</td>
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<td>Period 9</td>
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<td>Period 10</td>
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<td>Period 11</td>
<td>4 Weeks (Feb 28 - Mar 27)</td>
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<td>Period 12</td>
<td>4 Weeks (Mar 28 - Apr 24)</td>
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<td>Period 13</td>
<td>4 Weeks (Apr 25 - May 20)</td>
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Evaluated Competencies

#1 Professionalism

**Educational Objectives:** Student will demonstrate professional behavior in all interactions with patients and health care staff.

**Method of Evaluation:** Preceptor observation

#2 Patient Care

**Educational Objectives:** Student will demonstrate competence in the performance of neurologic exams; diagnosis; and medical problem solving.

**Method of Evaluation:** Student participation Task completion Preceptor observation

#3 Medical Knowledge
**Educational Objectives:** Student will demonstrate acquisition of knowledge applicable to diagnosis and problem solving; as well as in the interpretation of imaging studies.

**Method of Evaluation:** Student participation Task completion Preceptor observation

#5 Interpersonal and Communication Skills

**Educational Objectives:** Interpersonal and Communication Skills will be observed by faculty

**Method of Evaluation:** Evaluation by faculty