**Advanced Clinical Neurology**

**Course Number**
NEUR 9006A

**Location**
RWJUH

**Elective Director**
Igor Rybinnik

**Elective Faculty**
NEUROLOGY FACULTY

**Elective Contact**
NAME/ADDRESS
Igor Rybinnik
6th Floor CAB - 6223

**Contact Info**
Igor Rybinnik
PH. 732-235-7340
FAX: 732-235-7041
EMAIL: ir158@rwjms

**Blocks Available**
2-11 (SEE NOTE)

**Duration/Weeks**
MAX: 4

**Hours per Week**
Approx 50

**Students**
MAX: 1

**Lectures/Seminars**
YES
(NEURO RESIDENT LECTURES)

**Outpatient**
YES

**Inpatient**
YES

**Housestaff**
YES

**Night Call**
YES (SHORT CALL)

**Weekends**
1 WEEKEND CALL

**Lab**
No

**Exam Required**
No

Note: “Prior written authorization is needed before scheduling this Elective. Please contact Dr. Rybinnik directly with the Block period AND Dates in which you wish to take the Elective to confirm availability. If approved, please have him send approval (in writing) to the Registrar’s Office.”

**Overall Educational Goal of Elective**

Experience the basics of neurology practice in the hospital through functioning on the level of a Neurology intern

**Objectives:**
Students should gain proficiency in the evaluation of critically ill neurological patients, become familiar with common causes of disordered states of consciousness as well as their diagnosis and treatment, and learn the key components of care of acute cerebrovascular disorders including an understanding of the patient’s history and physical exam findings, and how these disorders are diagnosed.

I. Patient care – this elective will cover the care of patients admitted to the hospital with Neurological disorders.

II. Medical knowledge – this elective will strengthen & improve application of the students’ knowledge of functional neuroanatomy, blood supply of the brain, diagnosis and treatment of acute cerebrovascular disorders as well as neurological critical care.

III. Practice-based learning and improvement – students will be exposed to the practice-based learning and improvement of the neurology resident curriculum, including resident didactics & journal clubs held during the clerkship, and students will be encouraged to conduct literature searches where applicable to the management of their own patients and share their findings with the team.

IV. Interpersonal and communication skills
Students will practice communicating regarding neurologic symptoms with patients, and appropriate medical terminology use during discussion of patients with neurology attendings and residents as well as other members of the healthcare team.

V. Professionalism
Students will practice professionalism throughout their rotation, including participation in end-of-life discussions, practicing sensitivity when dealing with critically ill patients and their families, and through taking responsibility for the care of their own patients.

VI. Systems-based Practice
Students will advance their understanding of systems-based practice through their experiences in the role of the neurology team and response to code stroke calls, coordination of care and diagnostic resources with other departments and through interaction with neurology residents and attendings.

**Brief Description of Activities**
- Students have a choice for 3 neurological services: Inpatient Stroke service, inpatient Neurocritical care service, and General Neurology consultation service. They may choose to send 4 weeks on one service (with exception of General Neuro consultative service), or split their time evenly between two services of their choosing.
- Students may choose to participate in up to 4 afternoons of subspecialty clinic, provided that clinics are available and not filled with other learners.
- Students will pre-round on the new patients assigned to them daily as well as follow-up patients under their care (a maximum of 5 patients per student in total), presenting cases at morning attending founds, performing focused neurological examinations at bedside, and suggesting evidence-based management and following results of testing and consultations.
- Students will also communicate with patients, family, and primary care physicians regarding the diagnosis, management, and prognosis of the patients under their care.
- Students will demonstrate proficiency in examining poorly responsive or comatose neurologically ill patients in the intensive care unit, recognizing intracranial pressure crisis clinically, and applying the first 4 steps of the Intracranial Pressure Management protocol in appropriate patients.
- Students will attend and participate in Stroke Codes with residents and demonstrate their ability to perform the rapid standardized stroke assessment (NIH Stroke Scale) in a timely fashion.
- Students will apply their knowledge of at least 3 indications and at least 5 contraindications for intravenous TPA, and at least 3 indications for mechanical thrombectomy to select appropriate patients for these interventions.
- Students administer intravenous TPA under supervision where appropriate and monitor for at least 3 immediate side-effects.
- Students will attend and participate in resident lectures, Grand Rounds, morning report, and Neurology journal club.
- Students will demonstrate their proficiency in organized transfer of information at sign-out rounds daily.
- Students will complete 4 overnight and 1 weekend calls.
- Students will demonstrate the ability to recognize the broad physiologic complications of severe neurologic injury and formulate a comprehensive, multi-system plan of care to address these problems in the critically ill neurologic patient.
- Students will complete 4 short calls (5pm-10pm, once weekly), and 1 weekend day call (8am-5pm, Saturday or Sunday)
**METHOD OF STUDENT EVALUATION**

The elective director will evaluate the students’ clinical skills based on their own experiences as well as gathering information from the faculty and other members of the healthcare team (including housestaff, nurse practitioners, nurses etc.) regarding the student’s clinical acumen and ability to function as a member of the neurology team.

---

**STROKE, NCC SUB-INTERNSHIP SCHEDULE**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-8A</td>
<td>Pre-round on assigned patients</td>
</tr>
<tr>
<td>8-9A</td>
<td>Resident Morning Report</td>
</tr>
<tr>
<td>930A-12P</td>
<td>Attending Rounds</td>
</tr>
<tr>
<td>12-1P</td>
<td>Stroke conference</td>
</tr>
<tr>
<td>1-430P</td>
<td>Floor work</td>
</tr>
<tr>
<td>430P</td>
<td>Sign-out</td>
</tr>
<tr>
<td>5F-8A</td>
<td>Overnight call</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>REPORTING</th>
<th>INTERPRETATION</th>
<th>MANAGEMENT</th>
<th>EDUCATION</th>
<th>PROFESSIONALISM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not reliable</td>
<td>Unable to form a coherent differential</td>
<td>Limited engagement</td>
<td>No evidence of self-directed learning</td>
</tr>
<tr>
<td>+0.5</td>
<td></td>
<td>Misses critical or common diagnoses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Accurate, pertinent, Logical and organized</td>
<td>Logical differential</td>
<td>Reasonable diagnostic, therapeutic next steps</td>
<td>Self-directed</td>
</tr>
<tr>
<td>+0.5</td>
<td></td>
<td>Prioritized problem list, Minor omissions/errors</td>
<td>Monitors active problems.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Comprehensive Resourceful data gathering</td>
<td>Rank differential</td>
<td>Independently contributes</td>
<td>Searches literature</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Articulates clinical reasoning</td>
<td>Sound clinical reasoning</td>
<td>Evaluation of the quality, applicability of evidence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Integrates new data.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Are there any prerequisites for this elective?** Neurology Core Clerkship

**Is this elective available to third year medical students as well?** Yes, once they have fulfilled the prerequisite above

---

Updated 06/25/19