

FOURTH YEAR ELECTIVE TITLE Subspecialty Subinternship in Stroke and Neurocritical Care		COURSE NUMBER NEUR 9010A	LOCATION RWJUH
ELECTIVE DIRECTOR Igor Rybinnik	ELECTIVE FACULTY Faculty at the Division of Stroke and Neurocritical Care, Dept. of Neurology	ELECTIVE CONTACT NAME/ADDRESS Igor Rybinnik 6 th Floor CAB - 6225	Contact Info Igor Rybinnik Ph. 732-235-3288 Fax: 732-235-7041 igor.rybinnik@rutgers.edu
BLOCKS AVAILABLE 1-12 (See Note)	DURATION/WEEKS 4	HOURS PER WEEK Approx 50	STUDENTS Max: 2
LECTURES/SEMINARS Yes (Neuro Resident Lectures)	OUTPATIENT No	INPATIENT Yes	HOUSESTAFF Yes
NIGHT CALL Yes (1 overnight call per week)	WEEKENDS 1 weekend (Sat, Sun) 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."

This course does not satisfy the 4th-year sub-internship core requirement.

OVERALL EDUCATIONAL GOAL OF ELECTIVE

To experience the role of a junior Neurology resident through inpatient care.

OBJECTIVES:

Students should gain proficiency in the evaluation of critically ill neurological patients and acute neurovascular patients, become familiar with common causes of stroke, and 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 critical care and cerebrovascular 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 may choose to spend 4 weeks on the inpatient Stroke service, inpatient Neurocritical care service, or split their time between the two services.
- 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 rounds, 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 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 gain exposure to basic critical care procedures such as bedside ultrasonography, vascular access, and lumbar puncture, and when appropriate, perform these under supervision
- Students will complete 4 overnight (5pm-8am) and 1 weekend (Saturday and Sunday, 8am-5pm) calls.

SAMPLE DAILY SCHEDULE

STROKE, NCC SUB-INTERNSHIP SCHEDULE

	M	T	W	T	F	WEEKEND
7-8A	Pre-round on assigned patients					8a-5p Saturday and Sunday
8-9A	Resident Morning Report					
930A-12P	Attending Rounds					
12-1P	Stroke conference	NCC conference	Grand rounds	Resident lectures		
1-430P	Floor work New admissions					
430P	Sign-out					
5P-8A	Overnight call					



METHOD OF STUDENT EVALUATION

Students will be evaluated clinically by Neurology housestaff, and attendings who have personally observed at least 3 full case presentation by the student. R.I.M.E.P. paradigm will be used for this purpose in a manner standardized for required MS3 Neurology Clerkship. Qualitative feedback regarding the student’s clinical acumen and ability to function as a member of the neurology team will be solicited from Neurocritical Care Advanced Practice nurses, but they will not enter formal R.I.M.E.P. grades.



	REPORTING	INTERPRETATION	MANAGEMENT	EDUCATION	PROFESSIONALISM
1 +0.5	Not reliable	Unable to form a coherent differential Misses critical or common diagnoses	Limited engagement	No evidence of self-directed learning	Lack of accountability
2 +0.5	Accurate, pertinent. Logical and organized	Logical differential Prioritized problem list, Minor omissions/errors	Reasonable diagnostic, therapeutic next steps Monitors active problems.	Self-directed Understands the pathological processes and clinical rationale	Appropriate interactions Follows through
3	Comprehensive Resourceful data gathering	Rank differential Articulates clinical reasoning Integrates new data.	Independently contributes Sound clinical reasoning	Searches literature Evaluation of the quality, applicability of evidence	Sensitivity to diverse patient populations and Ownership of patient and team responsibilities.

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