

**Clinical Supervision of Medical Students:  
Promoting Patient and Student Safety**

**Faculty Guidelines**

Boston University Chobanian & Avedisian School of Medicine

*This document and additional faculty resources can be found on our website at:*

<https://www.bumc.bu.edu/camed/education/medical-education/faculty-resources/>

## Table of Contents

Medical Education Program Objectives.....	4
Clerkship Learning Objectives.....	6
General Responsibilities of the Clinical Faculty .....	7
Goals of the Clinical Clerkship.....	7
Clerkship Structure .....	7
Overall Responsibilities.....	7
School’s Clerkship Director & Assistant Clerkship Director .....	7
Overall Clerkship Coordinator.....	8
Clerkship Site Director .....	8
Clerkship Site Coordinator .....	9
Primary Clinical Educators .....	10
Orientation of the Student to the Clinical Setting.....	10
Setting Expectations for the Student.....	11
Supervising the Student.....	11
Intimate Exam Policy.....	11
Physical Exam Demonstrations.....	12
Supervision and Delegating Increasing Levels of Responsibility .....	12
Student Assessment.....	13
Feedback.....	14
Early Recognition of Learning Problems.....	14
Mid Rotation Meeting.....	15
Final Grade and Narrative Comments .....	15
Home Visit.....	16
Home visit safety.....	16
Important Clerkship Policies .....	16
Attendance Policies.....	16
Learning Environment Expectations .....	17
Appropriate Treatment in Medicine.....	17
Boston University Sexual Misconduct/Title IX Policy .....	17
Needle Sticks and Exposure Procedure .....	17
Appendix A.....	20
Clerkship Learning Objectives.....	23
Contact Information.....	23

Clerkship Specific Information .....	24
Focus of clerkship .....	24
Clerkship Changes Made Based on Feedback .....	25
Diversity, Equity, and Inclusion Initiatives .....	25
Other Recent Changes to the Clerkship .....	25
Clerkship Sites .....	25
Boston Medical Center .....	25
Outpatient Clinic at Boston Medical Center .....	26
General and Stroke Neurology Service at Boston Medical Center .....	26
Neurology ICU at Boston Medical Center .....	27
Pediatric Neurology at Boston Medical Center .....	28
Boston VA: West Roxbury & Jamaica Plain .....	29
Mt. Auburn Hospital .....	29
Rehabilitation Hospital of Braintree .....	29
St. Elizabeth’s Medical Center .....	30
Manchester VA .....	30
Kaiser Permanente Regional Campus, Silicon Valley (Santa Clara and San Jose) .....	30
Assignments .....	31

## Medical Education Program Objectives

A Boston University Chobanian & Avedisian School of Medicine graduate will be able to:		
INSTITUTIONAL LEARNING OBJECTIVES	MEDICAL EDUCATION PROGRAM OBJECTIVES	
Establish and maintain medical knowledge necessary for the care of patients (MK)	MK.1	Describe the normal development, structure, and function of the human body.
	MK.2	Recognize that a health condition may exist by differentiating normal physiology from pathophysiologic processes.
	MK.3	Describe the risk factors, structural and functional changes, and consequences of biopsychosocial pathology.
	MK.4	Select, justify, and interpret diagnostic tests and imaging.
	MK.5	Develop a management plan, incorporating risks and benefits, based on the mechanistic understanding of disease pathogenesis.
	MK.6	Articulate the pathophysiologic and pharmacologic rationales for the chosen therapy and expected outcomes.
	MK.7	Apply established and emerging principles of science to care for patients and promote health across populations.
	MK.8	Demonstrate knowledge of the biological, psychological, sociological, and behavioral changes in patients that are caused by or secondary to health inequities.
Demonstrate clinical skills and diagnostic reasoning needed for patient care (CSDR)	CSDR.1	Gather complete and hypothesis driven histories from patients, families, and electronic health records in an organized manner.
	CSDR.2	Conduct complete and hypothesis-driven physical exams interpreting abnormalities while maintaining patient comfort.
	CSDR.3	Develop and justify the differential diagnosis for clinical presentations by using disease and/or condition prevalence, pathophysiology, and pertinent positive and negative clinical findings.
	CSDR.4	Develop a management plan and provide an appropriate rationale.
	CSDR.5	Deliver an organized, clear and focused oral presentation.
	CSDR.6	Document patient encounters accurately, efficiently, and promptly including independent authorship for reporting of information, assessment, and plan.
	CSDR.7	Perform common procedures safely and correctly, including participating in informed consent, following universal precautions and sterile technique while attending to patient comfort.
	CSDR.8	Utilize electronic decision support tools and point-of-care resources to use the best available evidence to support and justify clinical reasoning.
	CSDR.9	Recognize explicit and implicit biases that can lead to diagnostic error and use mitigation strategies to reduce the impact of cognitive biases on decision making.
Effectively communicate with patients, families, colleagues and interprofessional team members (C)	C.1	Demonstrate the use of effective communication skills, patient-centered frameworks, and behavioral change techniques to achieve preventative, diagnostic, and therapeutic goals with patients.
	C.2	Clearly articulate the assessment, diagnostic rationale, and plan to patients and their caregivers.
	C.3	Effectively counsel and educate patients and their families.
	C.4	Communicate effectively with colleagues within one's profession and team, consultants, and other health professionals.
	C.5	Communicate one's role and responsibilities clearly to other health professionals.

A Boston University Chobanian & Avedisian School of Medicine graduate will be able to:		
INSTITUTIONAL LEARNING OBJECTIVES	MEDICAL EDUCATION PROGRAM OBJECTIVES	
	C.6	Demonstrate appropriate use of digital technology, including the EMR and telehealth, to effectively communicate and optimize decision making and treatment with patients, families and health care systems.
	C.7	Practice inclusive and culturally responsive spoken and written communication that helps patients, families, and health care teams ensure equitable patient care.
	C.8	Communicate information with patients, families, community members, and health team members with attention to health literacy, avoiding medical jargon and discipline-specific terminology.
	C.9	Communicate effectively with peers and in small groups demonstrating effective teaching and listening skills.
Practice relationship centered care to build therapeutic alliances with patients and caregivers (PCC)	PCC.1	Demonstrate sensitivity, honesty, compassion, and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation.
	PCC.2	Demonstrate humanism, compassion, empathy, integrity, and respect for patients and caregivers.
	PCC.3	Demonstrate a commitment to ethical principles pertaining to autonomy, confidentiality, justice, equity, and informed consent.
	PCC.4	Show responsiveness and accountability to patient needs that supersedes self-interest.
	PCC.5	Explore patient and family understanding of well-being, illness, concerns, values, and goals in order to develop goal-concordant treatment plans across settings of care.
Exhibit skills necessary for personal and professional development needed for the practice of medicine (PPD)	PPD.1	Recognize the need for additional help or supervision and seek it accordingly.
	PPD.2	Demonstrate trustworthiness that makes colleagues feel secure when responsible for the care of patients.
	PPD.3	Demonstrate awareness of one's own emotions, attitudes, and resilience/wellness strategies for managing stressors and uncertainty inherent to the practice of medicine.
Exhibit commitment and aptitude for life-long learning and continuing improvement (LL)	LL.1	Identify strengths, deficiencies, and limits in one's knowledge and expertise.
	LL.2	Develop goals and strategies to improve performance.
	LL.3	Develop and answer questions based on personal learning needs.
	LL.4	Actively seek feedback and opportunities to improve one's knowledge and skills.
	LL.5	Locate, appraise, and assimilate evidence from scientific studies related to patients' health.
	LL.6	Actively identify, analyze, and implement new knowledge, guidelines, standards, technologies, or services that have been demonstrated to improve patient outcomes.
Demonstrate knowledge of health care delivery and systems needed to provide optimal care to patients and populations (HS)	HS.1	Identify the many factors that influence health including structural and social determinants, disease prevention, and disability in the population.
	HS.2	Apply principles of epidemiological sciences to the identification of health problems, risk factors, treatment strategies, resources, and disease prevention/health promotion efforts for patients and populations.
	HS.3	Demonstrate respect for the unique cultures, values, roles/responsibilities, and expertise of the interprofessional team and the impact these factors can have on health outcomes.

A Boston University Chobanian & Avedisian School of Medicine graduate will be able to:		
INSTITUTIONAL LEARNING OBJECTIVES	MEDICAL EDUCATION PROGRAM OBJECTIVES	
	HS.4	Work with the interprofessional team to coordinate patient care across healthcare systems and address the needs of patients.
	HS.5	Participate in continuous improvement in a clinical setting, utilizing a systematic and team-oriented approach to improve the quality and value of care for patients and populations.
	HS.6	Initiate safety interventions aimed at reducing patient harm.
	HS.7	Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care.
	HS.8	Integrate preventive interventions into the comprehensive health care of individuals.
	HS.9	Explain how different health care systems, programs and community organizations affect the health of neighborhoods and communities.
Exhibit commitment to promoting and advancing health equity for all patients (HE)	HE.1	Define health equity and describe the individual and population level differences in health outcomes and disease burden due to inequities in health care.
	HE.2	Comprehend the historical and current drivers of structural vulnerability, racism, sexism, oppression, and historical marginalization and how they create health inequity.
	HE.3	Explain how one's own identity, lived experiences, privileges, and biases influences their perspectives of colleagues, patients and clinical decision making.
	HE.4	Comprehend and identify the impact of health care inequities through medical decision making tools, interpreting medical literature and reviewing scientific research.
	HE.5	Identify factors needed to advocate for a more diverse and equitable healthcare environment at a local, community, and systems based level.

## Clerkship Learning Objectives

A third-year clerkship student will:

- Apply discipline specific knowledge within the context of clinical care (MK1-3)
- Gather an organized and hypothesis driven clinical history while being attentive to the patient's needs (CSDR-1)
- Perform a pertinent and accurate physical examination, accurately identifying any common abnormalities while demonstrating sensitivity to the patient. (CSDR-2)
- Analyze clinical data to formulate an assessment including a prioritized differential diagnosis supported by disease prevalence, pathophysiology, and relevant positive and negative clinical findings. (MK4-6, CSDR-3,4)
- Formulate an evidence based management plan that shows comprehension of the underlying disease process(CSDR 4)
- Deliver an accurate, well-structured, and synthesized oral presentations appropriate for the clinical setting.(CSDR-5)
- Document in the medical record in an accurate, organized and timely manner (CSDR-6)
- Communicate effectively with the interprofessional healthcare team (C4,5)
- Demonstrate an ability to perform common procedures safely and correctly, including participating in informed consent, following universal precautions and sterile technique while attending to patient comfort. (CSDR-7)

- Counsel and educate patients and families using patient-centered language that addresses patient concerns and clearly communicates plans of care. (C1-3, C7-8)
- Elicit feedback, communicate learning needs, demonstrate self-directed learning, and take opportunities to improve knowledge and skill gaps. (LL1-4, PPD-1)
- Treat all patients and team members with compassion, respect and empathy (PCC-1, 2)
- Display trustworthiness and an understanding of the responsibilities of a clinical student (PPD-2)
- Apply an understanding of the social and structural determinants of health to clinical care and initiate steps towards addressing the individual needs of patients (HE-1,2,4, MK-8)
- Use electronic decision support tools and point-of-care resources to apply the best available evidence in supporting and justifying clinical reasoning (CSDR-8, LL5-6).
- Practice inclusive and culturally responsive spoken and written communication that ensure equitable patient care (C7)

## General Responsibilities of the Clinical Faculty

### Goals of the Clinical Clerkship

During the clinical clerkships at Boston University Chobanian & Avedisian School of Medicine, we aim to create a learning climate where students have the opportunity to learn high quality clinical skills by:

- Creating a culture that challenges and supports the students
- Providing opportunities for meaningful involvement in patient care with appropriate supervision
- Role modeling by exemplary physicians
- Coaching students by setting clear expectations, providing frequent observations of core clinical skills, asking questions to assess knowledge and reasoning, explicitly modeling and providing timely, specific feedback

### Clerkship Structure

Each clerkship is run by a clerkship director. Each clerkship clinical site is run by a clerkship site director who ensures that students are appropriately supervised. In addition, clerkships usually have multiple clinical faculty that have varying degrees of exposure to the student.

### Overall Responsibilities

Each clerkship is directed by the School's Clerkship Director who oversees all clerkship sites. Each clinical site is directed by a clerkship site director who ensures that students are appropriately supervised and faculty and residents are prepared to teach at their site. Clerkships also have multiple clinical faculty that have varying degrees of exposure to students. The responsibilities of the directors and coordinators are described below more specifically. Clerkship directors are assisted by assistant clerkship directors, clerkship site directors, and clerkship coordinators.

### School's Clerkship Director & Assistant Clerkship Director

- Oversees the clerkship curriculum's design, implementation, and administration
- Defines clerkship specific learning objectives and requirements

- Creates and maintains an appropriate learning environment, modeling respectful and professional behaviors for and toward students
- Ensures student and faculty access to appropriate resources for medical student education
- Orients students to the overall clerkship, including defining the levels of student responsibility requirements (i.e., required diagnoses and procedures, direct observations, forms, feedback) grading structure and student schedule
- Oversees teaching methods (e.g., lectures, small groups, workshops, clinical skills sessions, and distance learning) to meet clerkship objectives
- Develops faculty involved in the clerkship and provide faculty development across sites specific to clerkship needs
- Evaluates and grades students
  - Develops and monitors assessment materials
  - Uses required methods for evaluation and grading
  - Assures timely mid-clerkship meetings at all sites with students
  - Ensures students receive timely and specific feedback on their performance
  - Submits final grade form for students via School of Medicine’s evaluation system
- Evaluates clerkship, faculty, and programs via peer review and annual data from the Medical Education Office (MEO) and national organizations (AAMC, NBME, etc.)
- Supports each student’s academic success and professional growth and development, including identifying students experiencing difficulties and providing timely feedback and resources
- Addresses any mistreatment and professionalism concerns in real time and communicate with MEO
- Participates in the School’s clerkship Educational Quality Improvement and peer review processes with completion of action items
- Ensures LCME accreditation preparation and adherence
- Adheres to the AAMC-developed guidelines regarding Teacher-Learner Expectations

### Overall Clerkship Coordinator

- Supports the clerkship director in their responsibilities above
- Creates and maintains an appropriate learning environment, modeling respectful and professional behaviors for and toward students
- Responds within one business day to student emails and questions
- Maintains student rosters and clinical schedules
- Coordinates orientations and didactic sessions
- Liaises with site directors and administrators to coordinate student experiences across all sites and timely collection of evaluations
- Verifies completion of clerkship requirements, including midpoint and final evaluations for each student, required diagnoses, and FOCuS forms
- Monitors students’ reported work hours and report any work hours violations to the clerkship director
- Coordinates and proctors clerkship exams

### Clerkship Site Director

- Oversees the clerkship curriculum and administration at the site
- Creates and maintains an appropriate learning environment, modeling respectful and professional behaviors for and toward students
- Is available and responsive to students’ questions and concerns



- Ensures all faculty and residents teaching students are oriented to students' expectations, responsibilities, learning objectives, requirements, and assessments used in the clerkship
- Ensures student and faculty access to appropriate resources for medical student education
- Orients students to the clinical site when new students arrive at the site
- Reviews clerkship requirements and student expectations at site
  - Provides site specific information including, but not limited to, lockers, library, call rooms as applicable and required by LCME
  - Reviews site-specific schedule, discusses student role and responsibilities at site, supervision at site, and who to contact with questions and concerns
- Supervises students and ensures clerkship specific required observations are completed
- Meets with the student for the Mid-clerkship review
- Meets with the student for the final exit meeting
- Ensures timely and specific formative feedback based on direct observations
- Works with faculty and residents to delegate increasing levels of responsibility to students based on clerkship requirements
- Provides site didactics when applicable
- Recognizes students with academic or professionalism difficulties and communicates to Clerkship Director in a timely fashion
- Completes and ensures the accuracy of student evaluation forms, including formative and summative narratives for students at the site
  - Ensures collection of feedback and evaluation data from all physicians who work with each student by the end of the clerkship block to meet School's grading deadlines
  - Ensures that narrative data are consistent with and support numerical data
  - Evaluates students fairly, objectively, and consistently following medical school and clerkship rubrics and guidelines
- Addresses any student mistreatment concerns immediately and notifies the Clerkship Director
- Adheres to the AAMC Teacher-Learner Expectations guidelines
- Reviews site specific evaluations at mid-year and end of year and facilitates improvements based on data
- Works with School to provide faculty development for faculty and residents
- Answers Clerkship Director's questions or concerns regarding site evaluation or student concerns
- Participates in educational programming and meetings as requested by Clerkship Director or Assistant Dean for Affiliated Sites
- Adheres to LCME guidelines

### Clerkship Site Coordinator

- Supports the clerkship site director in their responsibilities above
- Creates and maintains an appropriate learning environment, modeling respectful and professional behaviors for and toward students
- Responds within one business day to student emails and questions

- Sends out welcome email informing students where and when to arrive at least 72 hours before student start date
- Provides students with their contact information and remains available for questions and concerns during working days and hours
- Ensures students are oriented to clinics and hospital
- Obtains, tracks, and manages student rosters
- Obtains and maintains student information required by the site, as applicable
- Creates and distributes:
  - Student schedules to students, faculty, and staff before clerkship start date
  - Didactics/Presentation schedules, if applicable
- Schedules mid-clerkship evaluations; tracks and keeps record of completion and provides to overall Clerkship Coordinator
- Informs faculty and overall Clerkship Coordinator of student absences
- Arranges and schedules educational resources as applicable (e.g., SIM lab, EMR & Scrub training) and helps students troubleshoot
- Provides students with necessary documents and resources needed to be oriented to site
- Monitors and processes evaluations for distribution to faculty and residents
- Collects timely feedback from faculty for mid and end of clerkship evaluations to meet School's deadlines
- Collects feedback and evaluation data from all physicians who work with each student by end of clerkship block to meet School's grading deadlines
- Understands evaluation system and all site requirements
- Communicates site information changes (e.g., faculty, rotation details) to School's Clerkship Director and Clerkship Coordinator
- Maintains communication with Clerkship coordinator centrally and response within one business day
- Coordinates site specific meetings and faculty development with School

### Primary Clinical Educators

- Sets and clearly communicates expectations to students
- Observes students' history taking and physical exam skills, and documents it on the FOCuS form
- Delegates increasing levels of responsibility to students based on clerkship requirements
- Maintains appropriate levels of supervision for students at site
- Creates and maintains an appropriate learning environment, modeling respectful and professional behaviors for and toward students
- Recognizes students with academic or professionalism difficulties and communicates to Clerkship Director in a timely fashion
- Gives students timely and specific formative feedback based on direct observations
- Assesses students objectively using School of Medicine's evaluation system
- Adheres to the AAMC Teacher-Learner Expectations guidelines

### Orientation of the Student to the Clinical Setting

This sets the tone for the rest of the experience and has a direct effect on the success of the rotation for both student and preceptor. It can also reduce student anxiety. You should:

- Orient the student to the clinical setting, the staff, and team at your site
- Review workflow
- Discuss student's learning experiences to date
- Discuss student's learning goals

## Setting Expectations for the Student

It is important to be clear regarding your expectations for the student. On the first day, describe the expectations around their role, presentations, documentation, and participation. Consider reviewing the assessment form and the specific expectations described. A tool to help set expectations with the student is the *One Minute Learner*, which can be found at:

<https://www.stfm.org/publicationsresearch/publications/educationcolumns/2013/march/>

## Supervising the Student

Initially, the primary clinical faculty members should designate time to observe the student performing: **history taking, focused physical exam, clinical problem-solving and interaction with patients and patient education.** Once the supervisor establishes the student's level of confidence and competency, the student should be delegated increasing levels of responsibility in patient care, as appropriate. Although students may initiate a particular patient encounter on their own and without direct supervision, the faculty must at some point review the encounter with the student and inform the patient in-person that the student's assessment and management plan has been reviewed and approved by the faculty. The faculty is ultimately responsible for the evaluation, treatment, management, and documentation of patient care.

### Under no circumstances should the following occur:

- Patient leaves the office/hospital without having had a direct face-to-face encounter with clinical faculty.
- Primary faculty gives "prior approval" for student to perform intervention (order labs, prescribe meds) without satisfactory review.
- Patient leaves office/hospital without being informed that assessment/ management plan has been directly reviewed and approved by the faculty.
- Learning in which a student is expected to perform an intervention or encounter without the prerequisite training and/or adequate supervision.
- Student note provides the only record of the visit. Although all faculty see all patients, faculty must document that they were actually the person responsible for seeing and examining the patient.

## Intimate Exam Policy

Students participating in an intimate exam with a patient (which includes, pelvic, genitourinary and rectal exam) must have a chaperone with them, irrespective of the gender of the patient or the student.

Permission to participate in an intimate exam must be obtained by the supervisor in advance of the examination itself. The patient has the right to decline student attendance at any examination.

If a student is unable to perform any intimate exam due to patient preference, the student's evaluation will not be impacted and if necessary, the clerkship director will provide an alternative experience.

## Physical Exam Demonstrations

The demonstration of the physical examination on students should not be done by any supervisor of students including residents and attending faculty. Practicing the physical examination on students places them in a position where they may feel pressure to consent to something they may not feel comfortable with.

## Federal Guidelines for documentation

### **CMS Guidelines from February 2, 2018, state:**

*“The Centers for Medicare & Medicaid Services (CMS) is revising the Medicare Claims Processing Manual, Chapter 12, Section 100.1.1, to update policy on Evaluation and Management (E/M) documentation to allow the teaching physician to verify in the medical record any student documentation of components of E/M services, rather than re-documenting the work. Students may document services in the medical record. However, the teaching physician must verify in the medical record all student documentation or findings, including history, physical exam and/or medical decision making. The teaching physician must personally perform (or re-perform) the physical exam and medical decision making activities of the E/M service being billed, but may verify any student documentation of them in the medical record, rather than re-documenting this work.”*

## EMR Documentation

- Students are allowed and encouraged to write complete notes in patient electronic charts as designated by the site and the site's documentation policy.

## Supervision and Delegating Increasing Levels of Responsibility

It is expected that the level of student responsibility and supervision will be commensurate with student's competency and level of confidence. When the student arrives in your practice, you may wish to have them observe you or the resident for the first session. Thereafter, they should begin to see patients on their own. In the outpatient setting, **the student should initially perform 4-5 focused visits per day in the first week, increasing to 6-12 thereafter. In the inpatient setting, the student should initially follow 1-2 patients and increased to 3-4 thereafter. This will vary slightly by clerkship.** When a student feels that they are being asked to perform beyond their level of confidence or competency, it is the responsibility of

the student to promptly inform the preceptor. It is then the preceptor's responsibility to constructively address the student's concerns and appropriately restructure the teaching encounter to address the student's learning needs.

## Student Assessment

**CLINICAL STUDENT EVALUATION FORM (CSEF):** Boston University Chobanian & Avedisian School of Medicine utilizes a **behaviorally based** evaluation tool for its clinical evaluations. Each clerkship has identified the competencies its students should be evaluated on. This means that you will grade your clerk based on their knowledge/skills/attitudes, rather than how they compare to other students.

There is a description of the behaviors for students who are competent in each domain. Following that are the six choices.

- Not observed or not enough information to make a judgment: If you feel you have not observed a student enough to make a judgment in a certain domain, you should check off this category. That said, if you are able to make a judgment please do so – your feedback is vitally important to the student and their learning.
- Needs intensive remediation in this domain: These are students who despite coaching are unable to succeed in this domain. This category is consistent with a student who would fail in this domain.
- Needs directed coaching in this domain: These are students for whom faculty/residents need to spend significant time coaching in order to perform in this domain.
- Approaching competency in this domain: These are students who are meeting some but not all of the competency behaviors listed for the domain.
- Competent in this domain: These are students who are displaying the behaviors described for the domain.
- Achieving behaviors beyond the 3<sup>rd</sup> year competency criteria: These are students who are exceeding the behaviors described.

The competent and reach behaviors and CSEF for each clerkship can be found at:

<https://www.bumc.bu.edu/camed/education/medical-education/faculty-resources/#clerks>

For each category, you should describe the student's skills you have observed. This section is required when a student is performing in any of the domains except "Competent in this Domain". Educator development videos with additional guidance are available on our website:

<https://www.bu.edu/camed/education/medical-education/faculty-resources/educator-development-videos/>

## Feedback

Feedback is vital for student learning and growth and should be given regularly. Feedback during a clerkship should be given multiple times which include: real-time feedback during patient care, recap feedback at the end of the session/day and summative feedback at the mid and end of the rotation. The **FOCuS (Feedback based on Observation of Clinical Student)** forms required for each clerkship provide formative assessment through direct observation of CSEF behaviors. **FOCuS** forms required for that clerkship must be completed for each student by the end of the rotation. Each clerkship will require one interviewing technique and one physical exam FOCuS form to be completed. The School's Formative Assessment and Feedback Policy can be found here:

<https://www.bumc.bu.edu/camed/education/medical-education/policies/formative-assessment-and-feedback/>

*FOCuS forms for each clerkship are available at: <https://www.bumc.bu.edu/camed/education/medical-education/faculty-resources/#clerks>*

Best practices regarding feedback include:

- Start with getting the student's perspective on how they performed or are performing.
- Feedback should be specific and actionable. What could the student do differently next time?
- Feedback should be based on direct observation. i.e., what you have seen.
- Feedback should be timely (in close proximity to when you observed a behavior).
- Feedback should be respectful and encourage future growth.

## Early Recognition of Learning Problems

The clerkship director and the medical school are committed to providing additional educational support as required for the student's successful completion of the program. The clerkship director should be notified as soon as possible if the preceptor and/or student identify significant deficiencies. This will allow for supportive interventions to be implemented prior to the end of the clerkship.

If a primary faculty is concerned that the student may be at risk of receiving an unsatisfactory rating in **ANY** category, this information should be shared with the student face-to-face **as soon as possible**, and certainly during the mid-clerkship evaluation. Once informed, the student may wish to obtain additional academic assistance from the clerkship director and support personnel. Identifying potential problems early on allows the student the opportunity to enhance performance prior to the end of the clerkship. Faculty should also feel free to contact the clerkship director if learning difficulties or related problems are identified at any time. However, in fairness to the student, the primary faculty should also inform the student of the problem at that time.

## Mid Rotation Meeting

The clinical faculty/site director should sit privately with the student at the mid-point in the rotation to give feedback. It is highly recommended that the faculty working directly with the student complete a copy of the Clinical Student Evaluation Form (CSEF) before the meeting, and then directly address each item on the CSEF with the student to provide more detailed feedback about how they are performing. Feedback for the student, including strengths and areas that need improvement should be reviewed (See Appendix B).

The site director/clerkship director and the student are required to complete the **Mid-clerkship Evaluation form** for the mid rotation meeting. Learning goals for the latter half of the clerkship should be discussed. The student's patient log should be reviewed and a plan should be made for remediation of any deficiencies (e.g. strategizing how the student could see a patient with that clinical condition, discussing opportunities to complete the requirement with an alternative experience, etc.) The student should update and review the summary statistics of their duty hour log and patient log before their meeting with you. FOCuS forms should also be reviewed (Appendix A).

## Final Grade and Narrative Comments

On the last day at the site, the site director and student are to meet for 15-30 minutes to review the final Clinical Student Evaluation Form. This session should allow for an important educational interchange between the clinical site director/faculty and the student. We strongly suggest that evaluations from other faculty and residents with whom the student has worked be collected, and that the evaluation form be completed by the site director **PRIOR TO** the meeting with the student if at all possible. This information is very important to students and is best reviewed with them directly. If you are unable to complete the evaluation form before the final interview, please submit it no later than one week after the end of the clerkship block. It should reflect as closely as possible the substance of your discussion with the student. The narrative portion of the form is especially important.

The comments sections of the CSEF are very important. The more specific you are, including examples, the more helpful the evaluation is to the student and the medical school. The **summative** comments get put in the students' Dean's letters that go out to residency programs- so having accurate, detailed information is very helpful. This box is where you should put what you observe about the student, trying to highlight their strengths and specifics of their performance. The second box is for **areas for improvement**. These are comments that are not included in the Dean's letter. These are the constructive comments for the student- areas to work on, ways they can grow. We encourage every preceptor to provide information to the student in this section so that the student can have direction in what they need to work on in the future.

### Example Narrative Comments:

This is an example of the type of summative comments that the medical school is looking for from one of our sites: (the student's name has been replaced to maintain their anonymity)

*"Rocco did an excellent job during his Family Medicine Clerkship. He is able to develop rapport with patients very quickly and meaningfully. He avoids medical jargon when speaking to patients. He is able to identify the patient's major problems and reason through the most likely diagnosis. His physical exams skills are accurate. He should continue to think about his differential when completing his exam. He generates well thought out differential diagnoses and is able to routinely provide a rationale for his most likely diagnosis. By the end of the rotation, Rocco was able to discuss parts of the plan with the patient and do some brief patient education on nutrition and exercise. His progress notes were always appropriate, well organized, timely, and complete. His case presentations were organized, focused and complete. Rocco demonstrated a solid fund of knowledge right from the beginning and was able to answer questions. He should continue to explore the use of point of care resources in the clinical setting. He exhibited a very calm and professional manner when working with patients, putting them at ease and allowing for more effective and empathetic communication. He was active in the learning process. He routinely identified what he wanted to learn from the rotation and continued to work on those items up to the very last minute of the rotation. He exhibited a professional attitude towards the clinic staff and patients."*

## Home Visit

Certain clerkships have home visits. Primary faculty need to provide complete instructions regarding the home visit and expectations for the student.

## Home visit safety

Student and patient safety is a priority for home visits. **Students are required to go to their home visit with another student or clinician (MD, NP, RN, Resident, etc.).** At no time should a student participate in an experience where they are in danger or feel uncomfortable. Please assist the student in finding an appropriate patient for their home visit with respect to educational, patient care, logistical, and safety goals. Students are encouraged to talk with their preceptor or the clerkship director if they have questions or concerns at any point. The student should notify the primary preceptor or a designated staff member of the date and location of their home visit before they go to the patient's home.

## Important Clerkship Policies

### Attendance Policies

On-site hours must be limited to 80 hours per week, averaged over a two-week period. Violations should be reported directly to the clerkship director or to an Associate Dean (Medical Education or Student Affairs). Time off requests must comply with the Attendance & Time Off Policy.



- **Attendance, Time Off, and Personal Days Policy:** <https://www.bumc.bu.edu/camed/education/medical-education/policies/attendance-time-off-policy/>
- **Work Hours:** <https://www.bumc.bu.edu/camed/education/medical-education/policies/work-hours/>
- **Jury Service:** <http://www.bu.edu/dos/policies/lifebook/jury-service/>
- **Religious Observance:** <https://www.bu.edu/chapel/religion/religiouslifepolicies/>
- **Weather Policy:** <https://www.bumc.bu.edu/camed/education/medical-education/policies/weather-policy/>
- **Core Clerkship Personal Days Policy:** <https://www.bumc.bu.edu/camed/education/medical-education/policies/attendance-time-off-policy>

## Learning Environment Expectations

Chobanian & Avedisian School of Medicine has a **ZERO** tolerance policy for medical student mistreatment. We expect students to be aware of the policy for appropriate treatment in medicine, including procedures for reporting mistreatment.

Learning more about the school's efforts to maintain and improve the learning environment at: <https://www.bumc.bu.edu/camed/education/medical-education/learning-environment/>

## Appropriate Treatment in Medicine

Students who have experienced or witnessed mistreatment are encouraged to report it using one of the following methods:

- Contact the chair of the Appropriate Treatment in Medicine Committee (ATM), Dr. Vincent Smith, MD, directly by email ([vincent.smith@bmc.org](mailto:vincent.smith@bmc.org))
- Submit an online Incident Report Form through the online reporting system <https://www.bumc.bu.edu/camed/student-affairs/atm/report-an-incident-to-atm/>

These reports are sent to the ATM chair directly. Complaints will be kept confidential and addressed quickly.

Appropriate Treatment in Medicine website: <https://www.bumc.bu.edu/camed/student-affairs/atm/>

## Boston University Sexual Misconduct/Title IX Policy

<http://www.bu.edu/safety/sexual-misconduct/title-ix-bu-policies/sexual-misconducttitle-ix-policy/>

## Needle Sticks and Exposure Procedure

<https://www.bumc.bu.edu/camed/student-affairs/additional-student-resources/needle-stickexposure/>

### **Boston University School of Medicine Needle Sticks and Exposure Procedure**

**Purpose:** To outline appropriate preventative measures and what to do in case of unprotected exposure to body fluids.

**Covered Parties:** Medical students.

**Procedure:**

To prevent exposure to potentially infectious materials, students must use standard precautions with all patients and when performing any task or procedure that could result in the contamination of skin or clothing with blood, body fluids, secretions, excretions (except sweat), or other potentially infectious material, regardless of whether the those fluids contain visible blood.

Standard precautions are to be observed to prevent contact with blood or other potentially infectious materials. ALL body fluids are considered potentially infectious materials. All students are responsible for their personal safety and the safety of their teammates. Students should follow safe practices when handling sharps. Students must use appropriate personal protective equipment such as, but not limited to, gloves, gowns, laboratory coats, face shields or masks and eye protection, and mouthpieces, resuscitation bags, pocket masks, or other ventilation devices.

Standard Precautions include:

- Hand hygiene
- Eye and face protection
- Use of gowns and gloves
- Sharps management

Additional “Transmission Based Precautions” must be used in addition to standard precautions for patients with known or suspected infection or colonization with highly transmissible or epidemiologically important pathogens.

In the event of a needle stick or any unprotected exposure to blood, bloody body fluids, or other potentially infectious material, either in a lab or a clinical setting you should:

- Wash the exposed area and perform basic first aid
- Notify your supervisor – resident or faculty – of the occurrence and that you are leaving to seek care immediately.
- Get evaluated immediately: it is extremely important to receive counseling regarding the risk of acquiring a communicable disease. If indicated, prophylaxis should be started right away, usually within one hour.

**If you are at Boston Medical Center**

BMC’s Occupational Health clinic during working hours or the BMC Emergency Department after hours and on weekends

**Location**

The Working Well Occupational Health Clinic is located:  
Doctor's Office Building (DOB 7) - Suite 703  
720 Harrison Ave, Boston MA 02118

**Telephone:** 617-638-8400

**Pager:** 3580

**Fax:** 617- 638-8406

**E-mail:** [workingwellclinic@bmc.org](mailto:workingwellclinic@bmc.org)

**Hours:** Monday-Friday, 7:30a.m. - 4:00p.m.

- Tell the receptionist you have had an unprotected exposure (needle stick), and you will be fast-tracked into the clinic.
- A counselor will discuss post-exposure prophylaxis with you
- DO NOT DELAY!

BMC's Occupational Health will notify the Office of Student Affairs of exposures occurring at BMC within 48 hours. These situations can be very stressful and we are here to help. To speak to a dean immediately about the incident, please page the dean on duty by calling (617) 638-5795 and sending a page to #4196 or sending a text page to pager #4196 through the pager [directory](#).

#### **If you are at a non-Boston Medical Center site**

Immediately check with your supervising physician about the site-specific needle-stick protocol

- If the site has its own emergency room or occupational health you will be directed to go there
- If the site does not have its own emergency room or occupational health, you will go to the nearest emergency room
- DO NOT DELAY!

Coverage for provided services is included in the Aetna student health insurance plan offered by the University. In the event that you do not have Boston University School of Medicine health insurance (Aetna), you must contact your carrier and determine the level of services covered. Submit any billing received to your insurance company. The OSA will provide reimbursement for out-of-pocket co-pays. We strongly encourage you to keep your health insurance card in your wallet at all times.

For questions regarding this policy please contact Dr. Angela Jackson, Associate Dean of Student Affairs. Dr. Jackson can be reached in the Office of Student Affairs (617-358-7466).

Revised Jan 2018



Boston University School of Medicine

### MID-CLERKSHIP EVALUATION FORM

Student Name: \_\_\_\_\_

Faculty Reviewer: \_\_\_\_\_

During the Mid-Clerkship Meeting, faculty and student should meet, complete, discuss, and sign the Mid-Clerkship Review form (this paper) by week 2 on a 4 week clerkship, week 3 on a 6 week clerkship and week 4 on an 8 week clerkship.

**Step 1:** Faculty please complete a Mid-Clerkship CSEF, review each domain with the student and provide feedback and/or review completed FOCuS Forms with the student.

**Step 2:** Please review student's required patient encounter log, duty hour log and their FOCuS forms

#### **PATIENT LOG (REQUIRED DIAGNOSES and PROCEDURES)**

Required patient encounters remaining:

Plan and timeline for completion or alternative experiences:

**FOCuS FORMS** Review complete: Yes  No

Direct Observation and Feedback Forms Remaining:

Plan and timeline for completion:

**DUTY HOUR LOG** Review complete: Yes  No

#### **Step 3: Written feedback**

**List AT LEAST 2 SPECIFIC student strengths and comments on their performance (List behaviors, skills, etc.)**

**List AT LEAST 2 SPECIFIC items to work on during the second half of the clerkship (discuss action plan with student):**

**Please provide feedback on professionalism:**

**Step 4: Action Plan**

**Students:** Write 3 learning goals for the rest of the rotation based on the feedback you received and discuss them with your faculty reviewer

1.

2.

3.

---

Student signature \_\_\_\_\_

Faculty signature \_\_\_\_\_

Clerkship director signature \_\_\_\_\_  
(if not the same as above)

# **Neurology Clerkship**

**Academic Year 2024-2025**

**Neurology Department  
MEDMD 303  
2024-25**

**Clerkship Director: Katelyn Bird, MD, MS  
Associate Director: Ariel Marks, MD  
Clerkship Coordinator: Joey Russo**

## Clerkship Learning Objectives

(Linked to Medical Education Program Objectives in parentheses)

By the end of the Clerkship the student will be able to:

- a. Gather an organized neurological history effectively using clinical reasoning and differential diagnosis driven questioning.
- b. Demonstrate competency in performing and interpreting the neurological history and examination.
- c. Recognize abnormal findings on the examination and put these together with the history to localize the lesion in the nervous system.
- d. Assess, formulate a prioritized differential diagnosis, and propose initial evaluation and management for patients with common neurological disorders based on localization.
- e. Apply neurology specific knowledge to propose routine treatment plans for common neurological diseases and be able to discuss the risks of these treatments.
- f. Tailor oral presentations and documentation to the neurology subspecialty in a way that is organized, accurate, and timely.
- g. Recognize the indications for, possible complications of, and basic interpretations of results from routine neurological tests such as electroencephalography, electromyography, computerized tomography, and magnetic resonance imaging.
- h. Understand the indications and contraindications for performing LPs and know the general approach for performing LPs. Be able to interpret the results of the CSF studies.
- i. Describe how end of life and cultural competency issues are addressed in neurologic patients.
- j. Discuss how health care disparities can affect underserved populations and impact neurological care.
- k. Reliably demonstrate professional behavior consistent with the values of the medical profession.

## Contact Information



### **Clerkship Director**

**Katelyn Bird, MD, MS**

Telephone: (317) 529-5636 (cell)

Email: [kbird@bu.edu](mailto:kbird@bu.edu)

Office: 85 East Concord St. G012



### **Assistant/Associate Clerkship Director**

**Ariel Marks, MD**

Telephone: (786) 514-2112 (cell)

Email: [marks@bu.edu](mailto:marks@bu.edu)

Office: 85 East Concord St. 1120



### **Clerkship Coordinator**

**Joey Russo**

Telephone: 781-799-5660 (cell)

Email: jnrusso@bu.edu

Office: 85 East Concord St. G100

## **Clerkship Specific Information**

### **Focus of clerkship**

The purpose of the third-year clerkship in Neurology is to provide the basics of neurological disease seen in inpatient and outpatient neurology settings. This Clerkship focuses on immersing the student to Neurology and prepare them for any encounter of Neurological disease in the student's future career in any chosen specialty. The clerkship will teach the basics of taking a neurological history and performing an examination with the goal of localizing the lesion in the nervous system. It will also teach how to synthesize information from history and physical in order to produce a differential diagnosis and treatment plan. You will be exposed to the outpatient clinic where you will encounter chronic disorders and to the inpatient setting where you will be involved in treatment of acute neurological disorders. Students will also learn the indications and contraindications for performing LPs and know the general approach for performing LPs through simulation. In addition, the clerkship offers support to those considering Neurology as a future career.

### **What to Expect During the Neurology Clerkship**

You will work in high volume ambulatory and inpatient practices of Neurologists and residency programs.

During the clerkship, you will:

- Learn how to complete a neurological examination in a timely manner, interpret the findings of the neurological examination, and localize the lesion.
- Learn how to work in a large team and focus on patient care.
- You will be taking care of patients, working with your team, preparing for rounds, and keeping-up with supplementary self- directed reading.
- You will understand the concepts of evidence-based neurology.
- You will get exposure to a lumbar puncture simulation.

### **How to Succeed**

To successfully complete the clerkship, the student is required to do the following:

- Always remain professional.
- Participate fully in ALL didactics, inpatient, and outpatient settings. Show interest and motivation. Ask questions.
- Conquer Neurophobia.
- Be pro-active about seeing patients. Read about the conditions you see in real time. Integrating clinical work with Shelf preparation will help you to retain everything you learn.
- Consider giving 5-minute topic presentations on the floors.
- Review your neuroanatomy and radiology.
- Practice your neurological exam whenever possible.



- For the differential mention the most common, the most treatable, most dangerous, and a couple of zebras.
- Do practice questions throughout the clerkship. It is a short clerkship, so start studying for the Shelf EARLY.

#### ***Pre-requisite knowledge and skills***

Students must have completed their second-year curriculum and the Transitional Clerkship and have taken the Step-I exam prior to taking this clerkship.

Students in the Clerkship are expected to have passed the second year Neurology PISCES and Advanced Integration.

#### **Clerkship Changes Made Based on Feedback**

- Create a more balanced rotation regarding the mix of inpatient and outpatient time.
- Better communication with preceptors prior to outpatient sessions as well as with student evaluations.
- Creating a more uniform experience across all sites.

#### **Diversity, Equity, and Inclusion Initiatives**

We begin orientation by emphasizing our department's commitment to providing an inclusive and welcoming environment for both learners and patients.

We have reviewed and updated the wording in our teaching clinical cases to ensure that they contain appropriate terminology and inclusive language.

As a department we have adopted Health Equity Rounds (HER) in our department, this was an initiative created at BMC in 2016 by a group of residents, fellows, and faculty, to address the impact of implicit bias and structural racism on patient care and health outcomes. It is a case-based, interdisciplinary forum in which we explore implicit biases, structural racism, and their historical and present-day contexts and brainstorm systems-based solutions. These Rounds take place every 3 months.

#### **Other Recent Changes to the Clerkship**

- Updated written OSCE.
- Introduced new didactic topics.
- New site directors at Mt. Auburn and Boston VA.

#### **Clerkship Sites**

##### **Boston Medical Center**

One Boston Medical Center Pl. Boston, MA 02118 Site Director: **Katelyn Bird, MD, MS** [kbird@bu.edu](mailto:kbird@bu.edu), (317) 529-5636

Site Administrator: **Joey Russo**, [jrusso@bu.edu](mailto:jrusso@bu.edu), (781) 799-5660

## **Outpatient Clinic at Boston Medical Center**

All BMC students are required to complete 1-2 weeks in the outpatient neurology clinic.

This will be primarily in-person. Please email the attending 2-3 days before to coordinate, when emailing include the following:

- Your cell phone number.
- Ask for the attending's cell phone number.
- Any particular workflow expectations or preparatory work needed.

## **Workflow**

Please make sure you can see the schedule for the attending that you are working with.

Show up to your outpatient clinic most commonly in **Shapiro Building on the 7<sup>th</sup> floor, Suite 7B** by 8:00 AM (or depending on your attending's schedule for the day). Introduce yourself to the attending and verify workflow expectations.

Expectations for outpatient:

- Be well prepared to present your patient with a thorough history, relevant past medical history, ROS, medications, prioritized differential, and plan.
- If the clinic is slow, research your patient(s) and their disorders, volunteer to take on more patients, or study independently.
- Reading up on your patients ahead of time will help you to stand out.

## **General and Stroke Neurology Service at Boston Medical Center**

Some students will spend a portion of their neurology rotation on the general neurology service. The service pagers are 6381 (Gen Primary team), 6380 (Gen Consult team), 3278 (Stroke).

Please go to sign-out at 7:00am in the Menino 7 work room to coordinate with your team. Please go to Morning Report from 7:30-8:00am in the Menino 7 work room.

Pre-rounding includes: checking with your resident regarding any overnight issues, seeing your patient with a focused history and exam, checking Epic for new labs or imaging, reviewing vital signs and notes from consults, seeing if there are any overnight event notes or consult recommendations in the chart, and checking telemetry at the nursing station, if applicable.

After pre-rounding, you will report back to the workroom for rounds, where you will present the patient that you have pre-rounded on. The time that rounds begin depends on the attending for that day. Pre-rounding generally runs from 8-9.

Throughout the course of the day, the neurology team will be paged about patients presenting with neurologic complaints in the emergency room and throughout the hospital. You may be asked to independently evaluate a patient. Neurology is consulted for a wide variety of reasons, but some of the most common include possible seizure, altered mental status, headache, dizziness, or focal weakness.

## Expectations

- Pick-up at least one patient (approved by a resident) to present at rounds.
- Pre-round on your patient(s). Specific responsibilities are listed above. In general, be aware of the results in Epic for all vitals, labs, imaging, tests, notes left by consulted teams, overnight events, etc. for your patient.
- Be well-prepared to present your patient(s) succinctly during sit down rounds, with a prioritized differential, plan, and any updates.
- Take a thorough history (including relevant past medical history and medications) and perform a comprehensive neurologic exam for a consult. Present to a resident, fellow, or attending, and include a prioritized differential, and plan.
- Complete at least one H&P or progress note daily and ask your resident or attending to evaluate and review it with you.
- Sometimes you may be able to witness procedures being done, such as lumbar punctures. Try to participate in such procedures, or assist your resident/attending, as needed.
- Research your patients or other interesting patients on the team if the service is slow, volunteer to take on more patients, teach on topics, or study. If there is work to do, you should volunteer to help.
- **Weekends:** students are responsible for one weekend shift for the entire clerkship (one day, not both) while they are on an inpatient service.

## Neurology ICU at Boston Medical Center

Some students will spend a portion of their neurology rotation in the neurology intensive care unit. The ICU service tends to be the busiest service and covers very complex patients. The service pager is 8000.

Report to the NeuroICU work room at 6:30am for sign-out and then pre-round in the ICU on your patient(s). Please go to Morning Report from 7:30-8:00am in the Menino 7 work room.

Rounds are at 8am or 8:30am depending on the attending for the week. *See General Neurology Service Expectations above for more information on pre-rounding.*

Rounds typically start after sign-out and morning report, where you will present the patient you have pre-rounded on. This is the service where you will learn the most about medical management of your patients. You are expected to research management and treatment options for your patient. You serve as a liaison for your patient to other services and with the family. You may or may not write notes on your patient's every day. You should be prepared to present short (2-10 min) presentations on topics related to your patients. These may be presented during rounds, after rounds, or during downtime.

## Expectations:

- Pre-round on your patients and be prepared for rounds with ALL information from tests, images, consults, vitals, vent settings, ins and outs, and any other ICP or line information that is available.
- Know the pulmonary, cardiac, GI, GU, hepatic, and renal function of each patient assigned to you. On this service you will be managing not only the neurological aspects of your patients but ALL systems.
- Learn how to do coma and brain death examinations. Many of the patients will be intubated so you will have a chance to learn these.

- Research your patients or other interesting patients on the team if the service is slow, volunteer to take on more patients, teach on topics, or study. If there is work to do, you should volunteer to help.
- **Weekends:** students are responsible for one weekend shift for the entire clerkship (one day, not both) while they are on an inpatient service.

### **Pediatric Neurology at Boston Medical Center**

Some students will elect or be assigned to spend a portion of their neurology rotation on the pediatric neurology service. These students will receive an email from the pediatric neurology coordinator with specific instructions and a schedule. This email will tell you where to report.

The pediatric neurology clinic is located on the **8th floor of the Shapiro building, Suite 8C**. Patients report to the pediatric neurology clinic for a variety of conditions and disorders, including, but not limited to: seizure management, migraine management, concussions, cerebral palsy, or autism. These patients may present for an initial work-up or evaluation, treatment, or for follow-up.

The chief resident will orient to the current in-patients. The chief resident will also assign you a presentation topic for Thursday or Friday. This can be a 10–15-minute brief talk.

The time for attending rounds will be decided at the start of each day. During the day, the pediatric neurology team may be paged about patients presenting with neurologic issues in the emergency room or on the floor. After rounds, you will see these consults with your resident. Work after rounds will include reviewing these patients' records in Epic, speaking with patients and families about updates, and communicating the issues to the team. You may be expected to go and evaluate a patient alone. Pediatric neurology is consulted for a wide variety of reasons, but some of the most common include possible seizures, altered mental status, or headache.

Expect to attend neuroradiology rounds on Friday afternoons, and EEG rounds, pediatric neurology grand rounds, and other educational lectures as scheduled throughout the week. The times will be listed on your schedule.

### **Expectations**

- Prepare a 10–15-minute presentation on both a topic and date approved by your chief resident.
- Prepare for outpatient clinic days by reading up on scheduled patients in Epic. The patients will be scheduled under the attending's name.
- Take a thorough history (including relevant past medical history and medications) and perform a comprehensive neurologic exam, if asked to see a patient in the clinic or emergency room. Present to the attending, fellow, or resident, and include a prioritized differential and plan.
- Complete at least one H&P or progress note and ask your resident or attending to evaluate and review it with you.
- Attend all scheduled teaching conferences including Grand Rounds, EEG rounds, and neuroradiology rounds on Thursdays and Fridays.
- Sometimes you may be able to witness procedures being done, such as lumbar punctures. Try to participate in such procedures, or assist your resident/attending, as needed.
- Research your patients or other interesting patients on the team if the service is slow, volunteer to take on more patients, or study. If there is work to do, you should volunteer to help.

## Boston VA: West Roxbury & Jamaica Plain

**Jamaica Plain:** 150 S Huntington Ave, Boston, MA 02130

**West Roxbury:** 1400 VFW Parkway, West Roxbury, MA 02132

Site Director: **Orly Moshe-Lilie, MD**, [orly.moshe-lilie@va.gov](mailto:orly.moshe-lilie@va.gov), (951) 623-9491

Site Administrator: **Isabelle Beckley**, [isabelle.beckley@va.gov](mailto:isabelle.beckley@va.gov), (857) 364-5824

Students will spend time on the combined ward/consult service at the West Roxbury VA, (WR) and in the outpatient clinics at the Jamaica Plain VA, (JP). ***Students return to BUMC for Tuesday didactic sessions.***

Students who have a special interest in neurosurgery may inquire for opportunities with the site director.

**Orientation:** In the afternoon after orientation at BMC, the students assigned to the VAMC will go to the JPVA, 6D, and meet with Dr. Moshe-Lilie. She will orient you to the schedule and procedures at the VA. Any questions regarding the VA may be brought to the site director.

**Weekends:** students will be scheduled for no more than 1 weekend of the clerkship if their scheduled days fall on a weekend.

**Parking:** Free parking is available at both the JP and WR sites. Shuttle buses run between BUMC and JPVA and WRVA. The ride is 10-15 minutes (depending on the traffic). The BUMC shuttle does not begin until mid-morning.

## Mt. Auburn Hospital

330 Mt. Auburn St, Cambridge, MA 02138

Site Director: **Linda Wendell, MD**, [linda.wendell@mah.org](mailto:linda.wendell@mah.org), (617) 868-0880

Site Administrator: **Mary Hewitt**, [mhewitt@mah.harvard.edu](mailto:mhewitt@mah.harvard.edu), (617) 499-5140

Students will participate in outpatient patient interactions with a focus on general neurology and multiple sclerosis. Students will also have the opportunity to participate in the inpatient neurology consult service. ***Students are expected to return to BUMC for Tuesday didactic sessions.***

**Weekends:** in place of a weekend shift students will take a “latestay” to perform new consults that may be called in.

**Parking:** Please check in with the Mt. Auburn director and coordinator for more details.

## Rehabilitation Hospital of Braintree

250 Pond Street, Braintree, MA 02184

Site Director: **Brigid Dwyer, MD**, [Brigid.Dwyer@bmc.org](mailto:Brigid.Dwyer@bmc.org), (617) 638-8456

Site Administrator: **Mackenzie Kelshaw**, [Mackenzie.kelshaw@encompasshealth.com](mailto:Mackenzie.kelshaw@encompasshealth.com), (781) 348-2150

Students will participate in a predominantly inpatient service with a focus on traumatic brain injury, stroke, and movement disorder inpatient rehabilitation. Students may also be exposed to the outpatient clinics if possible. ***Students are expected to return to BUMC for Tuesday didactic sessions.***

**Weekends:** there is no weekend coverage expectations, to maximize clinical exposure students will take 1 late stay shift at Braintree where they will stay late and evaluate new admission patients up until 10:30pm

**Parking:** A car is needed but free parking is available at the hospital.

### St. Elizabeth's Medical Center

736 Cambridge St, Boston, MA 02135

Site Director: **Margarita Ebril-Lel, MD**, [margarita.ebril-lel@steward.org](mailto:margarita.ebril-lel@steward.org), (617) 784-0951

Site Administrator: **Sarah McMahan**, [sarah.mcmahan@steward.org](mailto:sarah.mcmahan@steward.org), (617) 789-2375

Students will participate in a mix of inpatient and outpatient training. The student will have the opportunity to work in the movement disorders, and general neurology clinics. Additional participation in the epilepsy, stroke, and neuromuscular clinics may also be coordinated. On the inpatient service, the student will have the opportunity to evaluate patients in the ED, on the ward, and in the ICU. The student will see a wide range of patient types including stroke, epilepsy, neuroinfectious, neurotrauma, neurooncology, and patients with neurological issues related to systemic diseases to name a few.

**Weekends:** students will be scheduled for no more than 1 weekend of the clerkship if their scheduled days fall on a weekend.

**Parking:** Students can park on the first day in Lot B and then will receive information on parking during orientation. Students will be expected to drive to off-site satellite locations for outpatient clinics- access to a car is strongly recommended.

### Manchester VA

718 Smyth Rd. Manchester, NH 03104

Site Director: **Tatiana Nabioullina, MD**, [Tatiana.nabioullina@va.gov](mailto:Tatiana.nabioullina@va.gov)

Site Administrator: **Sherri Henry**, [Sherri.Henry2@va.gov](mailto:Sherri.Henry2@va.gov), (603)-624-4366 x6663

Manchester VA Medical Center is an all-outpatient facility where clinically trained neurologists see a variety of neurological diseases daily.

The student will join orientation and didactics in person during the first week of the clerkship. They will then drive up to Manchester and begin on Wednesday of week 1. The Manchester portion of the rotation is purely outpatient. They will remain in Manchester, where housing is provided, until Tuesday of week 3, where they will return to in person attendance in Boston. They will complete their inpatient portion of the rotation at BMC (please see further details above in the BMC section).

### Kaiser Permanente Regional Campus, Silicon Valley (Santa Clara and San Jose)

**Santa Clara:** 700 Lawrence Expy, Santa Clara, CA 95051

**San Jose:** 250 Hospital Pkwy, San Jose, CA 95119

Site Director: **Edwin Tasch, MD**, [Ted.S.Tasch@kp.org](mailto:Ted.S.Tasch@kp.org), (408)-829-6350

Site Administrator: **Sandeep Tumber**, [Sandeep.X.Tumber@kp.org](mailto:Sandeep.X.Tumber@kp.org), (408)-972-3807

Students will participate in a mix of outpatient and inpatient Neurology patient interactions. Students have the option of Pediatric Neurology or other Neurology electives like MS, epilepsy, or neurosurgery at Kaiser Santa Clara or Redwood City. Please send Dr. Tasch your choice a few weeks in advance. Students should plan to attend Tuesday didactics via ZOOM.

**Weekends:** depending on the schedule students will be scheduled for an afterhours experience which may consist of a late stay or weekend shift, students will be scheduled for no more than 1 weekend of the clerkship if they are scheduled for a weekend

**Parking:** Please discuss the parking situation once on site in CA.

## Assignments

### Student Presentations

Each student will provide a 10-minute talk on a pre-approved topic of their choosing during one of the didactic days. You will choose your topic and receive your assigned time slot during the first week.

- The informational portion of the talk should be no more than 8 minutes (8-10 slides) long and should include a framework for evaluating your topic.
- Two minutes are allotted for the question & answer portion of the talk.
  - You will present **3** USMLE style questions based on your topic.
  - **The questions should be original and in a USMLE multiple-choice format.**
- Please practice so that you are not rushed. It is better to present less info effectively than to try to cover everything at lightning-speed.
- Your presentation will be evaluated on content, presentation skills, inclusion of a framework, USMLE type question preparation, AND ADHERENCE TO THE 10 MIN TIME LIMIT.
- When evaluating the literature for your oral presentation focus on evidence-based medicine (EBM).
  - There is an excellent breakdown of levels of evidence for each article in our journal *Neurology*.
  - Remember that in general, the highest quality information comes from double-blinded placebo-controlled trials.

### Bedside Skills Session (BS)

This is the direct one to one observation of students on history and neuro examination.

Attendings/Residents/Fellows are expected to observe the student perform a history and physical examination. They should then complete the FOCuS forms on evaluating the interview and physical examination.

The goal of BS is to provide students with formative feedback on interview and examination. The diagnosis and clinical reasoning will not be tested for this exercise.