CEPC MEETING AGENDA
5:00 PM - 6:30 PM
03/13/2023

CHAIR:
Dr. Maureen Francis, MD, MACP, MS-HPEd

VOTING MEMBERS:
Colby Genrich, MD; Fatima Gutierrez, MD; Houriya Ayoubieh, MD; Jessica Chacon, PhD, Munmun Chattopadhyay, PhD; Patricia Ortiz, MD; Khanjani Narges, MD, PhD; Dale Quest, PhD; Wajeeha Saeed, MD

EX-OFFICIO:
Lisa Beinhoff PhD; Martin Charmaine, MD; Tanis Hogg, PhD; Jose Lopez

STUDENT REPRESENTATIVES:
Kristina Ingles MS1 (Voting); Joshua Salisbury MS1 (Ex Officio); Rowan Sankar MS2 (Voting); Nikolas Malize MS2 (Ex Officio); Whitney Shaffer MS3 (Voting); Rohan Rereddy MS3 (Ex Officio); Miraal Dharamsi MS4 (Voting); Daniel Tran MS4 (Ex Officio);

INVITED/GUESTS:
Richard Brower, MD, FAAN; Christiane Herber-Valdez, PhD; Jose Manuel de la Rosa, MD; Priya Harindranathan, PhD; Michael D. Parsa, MD, FAAEM, FACEP; Kelley A. Stanko, MD; Sushma Reddy Yerram, MD; Faheem G. Sheriff, MD; Neha Sehgal, DO; Norman H. Ward, MD; Thwe Htay, MD; Huddleston Melissa and Madeline Goldfarb

APPROVAL OF MINUTES
Minutes will be attached.

ANNOUNCEMENTS
Presenter(s):

CEPC 03/13/2023
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OPEN FORUM

ADJOURN
MEMBERS IN ATTENDANCE:
Maureen Francis, Fatima Gutierrez, Houriya Ayoubieh, Jessica Chacon, Munmun Chattopadhyay, Khanjani Narges, Dale Quest, Wajeeha Saeed, Lisa Beinhoff, Tanis Hogg, Kristina Ingles, Rowan Sankar, Nikolas Malize, Whitney Shaffer

MEMBERS NOT IN ATTENDANCE:
Colby Genrich, Patricia Ortiz, Charmaine Martin, Jose Lopez, Joshua Salisbury, Rohan Rereddy, Miraal Dharamsi, Daniel Tran

PRESENTERS/GUESTS IN ATTENDANCE:
Priya Harindranathan, Sushma Reddy Yerram, Neha Sehgal, Norman H. Ward, Thwe Htay, Madeline Goldfarb

INVITED/GUESTS NOT IN ATTENDANCE:
Richard Brower, Christiane Herber-Valdez, Jose Manuel De La Rosa, Michael D. Parsa, Kelley A. Stanko, Faheem G. Sheriff, Melissa Huddleston

REVIEW AND APPROVAL OF MINUTES

Dr. Francis, CEPC Chair

Meeting minutes from the February 13, 2023 were adopted.

Decision:
Dr. Ayoubieh motions to approve minutes.
Dr. Saeed seconds the motion.
No objections: Minutes were approved.

ITEMS FROM STUDENT REPRESENTATIVES

- No comments or issues to report

ITEM I Clerkship Phase Review Process AY 2021/22 – Emergency Medicine

Presenter(s): Dr. Sehgal

Dr. Sehgal presented on behalf of Dr. Parsa an overview of the Emergency Medicine Clerkship
*Presentation is attached
Required 4 week clerkship
- 98 clinical hours in ED
- EMS ride along (8 hour)
Poison center and 911 call center observation
Procedure workshop (central lines/airway/IO placement/chest tube/LP)
Ultrasound (FAST exam) workshop with SP
Multiple simulations at TECHS North
Assignments with direct feedback include H and P, social history assignment, clinical question presentation, and direct individualized feedback through Elentra
NBME exam-68 (passing) and 82 (honors eligible)

Op Log Requirements (6.2; 8.6)
Students had to complete 30 patient entries to pass and 60 patient entries to be eligible for honors
Required encounters - abdominal pain, chest pain, n/v, trauma, cough/shortness of breath
Book chapters were assigned for any required patient encounters that student did not register
5 procedures had to be logged by the end of the clerkship

Longitudinal/Combined Experiences (9.3) – none

Clinical Experiences (6.2; 5.6; 6.4; 8.7)
1:1 student to faculty ratio (98 hours = 24.5 h/week)
Students saw patients directly, presented to faculty and worked with senior residents
Sites: UMC, THOP Transmountain, and El Paso Children’s Hospital

Pre-Clerkship Integration (6; 8.1; 8.3) - Year 1-2 clinical schemes reviewed with students after relevant simulations

IPE Examples (7.9)
Students interact with non-hospital personnel such as poison center staff, 911 center staff, EMS personnel; In the Emergency Department students worked with nurses, techs, paramedics and respiratory therapists

Selectives (6; 10.9) – N/A

Portfolio of Assessments (9)
Nationally standardized EM shift evaluation form is used

Preparation of Faculty and Residents to Teach (3.1; 4.5; 9.1)
Annual training for all residents and faculty was completed in person
Training manual and materials were sent with read receipts to all faculty and residents
Block Evaluation Summary (8; 3.5; 8.5)
- NBME scores for PLFSOM were 79.5, and national average was 78.7
- Dr. Sehgal highlighted 5.3 rating for “I am satisfied with the methods used to evaluate performance” and 5.6 rating for “I acquired useful knowledge and/or skills during this clerkship”.

Specific Challenges (4.1; 5.4)
- Adding new and expanding sites in San Angelo (Shannon Medical Center), WBAMC, THOP – Memorial and Sierra Campuses to recruit community faculty, prepare for class size expansion, maintain a quality experience for the students and preserve student - faculty ratios.

Quality Improvement Plan (1.1)
- Closely monitor new sites for quality of educational experience
- 2023-2024 EM will be required for MS3 and optional for MS4

ITEM III Clerkship Phase Review Process AY 2021/22 – Boot Camp
**Presenter(s): Dr. Sehgal**

*Dr. Sehgal presented an overview of the Bootcamp*

*Presentation is attached

- She explained that it is an immersive interdepartmental capstone course utilizing high fidelity simulations, standardized patients, and small group workshops to help fourth year medical students increase confidence in medical decision-making, transitions of care, and clinical reasoning.

- Faculty and staff from 16 departments participate and provide individualized constructive feedback to students.

- Students participate in 25 patient scenarios in both inpatient hospital and outpatient clinic settings.

- Dr. Sehgal provided a list of technical objectives for this course (Slide 4)

**Op Log Requirements (6.2; 8.6) – N/A**

**Combined Integrated & Longitudinal Experiences (9.3)**

- Students have two longitudinal cases where they follow a patient from the ED to the floor, to the ICU, to death/transition off service

**Clinical Experiences (6.2; 5.6; 6.4; 8.7) – N/A**

**Basic Science Examples (6; 8.1; 8.3)**
Pharmacology and Physiology
- Pathology - there is an ultrasound workshop with static and dynamic images of normal and pathologic states

IPE Examples (7.9)
- Students experience a “Day in the Clinic”
- High fidelity simulations require close loop communication with nursing for medication orders and reviewing nursing notes

Selectives (6; 10.9) – N/A

Portfolio of Assessments (9)
- Each activity has formative grading
- Dr. Sehgal provided a list of scheduled activities (slide 11)
- Individualized feedback to students on their notes for admission, progress, off service, death summary, clinic summary, and transition of care (I-PASS & SBAR)
- Peer to peer feedback and review of notes
- Student reflection daily with a 1 minute paper

Preparation of Department Faculty and Residents to Teach (3.1; 4.5; 9.1)
- Onboarding training agenda
- Pairing new facilitators with experienced facilitators
- Post simulation student & TECHS feedback provided via email
- Direct feedback from course director

Block Evaluation Summary (8; 3.5; 8.5)
- There is a 2 week assessment over specific competencies on the last Friday of each session with course directors and coordinators
- Students complete a pre and post MS4 Bootcamp survey to assess confidence
- Night on call- students receive individualized report about their performance
- Students provide feedback about their experience during the last Friday at a structured roundtable
- Dr. Sehgal shared examples of positive student comments (slides 15 & 16)

Specific Challenges – Class Size Expansion & Sites (4.1; 5.4)
In order to maintain the high quality of education as the class size increases to 150, sessions must increase from 4 to 6. Larger rooms will be needed. An increase in class size warrants a reflective increase in FTE, as resource utilization at all levels will be increased. Need for recruitment of engaged and dynamic faculty and residents.

**Quality Improvement Plan (1.1) – AY 2022-2023**
- Recruiting faculty/residents from Neurology, Cardiology, and Surgery
- Promoting senior and chief residents to join faculty for simulation facilitation
- Continuous revision of high fidelity cases that reflect evidence based medicine practice guidelines
- Decreasing online modules
- Adding small group activities relating to pharmacology, EKG telemetry strip recognition, and imaging recognition
- Adding eye exam and gun safety lecture/workshop
- Adding podcasts and FOAM literature to daily morning and lunch lectures
- Revising Thursday Didactics to include interactive lectures – Delivering Bad News, Anticoagulation Management, Management of Agitated Hospitalized Patient

**ITEM II Clerkship Phase Review Process AY 2021/22 – Neurology**
**Presenter(s): Dr. Yerram**

*Dr. Yerram presented an overview of Neurology Clerkship*

*Presentation is attached*

The following objectives were highlighted:
- Ability to perform a neurological interview, examination, and interpret signs
- Consolidate symptoms and signs into syndromes
- Accurately diagnose neurological diseases and identify appropriate evidence-based management strategies

**Op Log Requirements (6.2; 8.6)**
- Student level of involvement for required conditions is to assist or manage
- 20 Op Logs required to pass and 30 for honors
- Videos with an assignment are used for alternate ID experience
- Experience includes outpatient and inpatient setting
- Dr. Yerram provided list of common outpatient and inpatient neurological diseases (Slide 4)

**Combined Integrated & Longitudinal Experiences (9.3)** — there were no combined programs in AY2021-2022

**Clinical Experiences (6.2; 5.6; 6.4; 8.7)**
- Duration (MS4s): 4-week rotation
- 2 weeks inpatient — clinical sites include University Medical Center (UMC) and William Beaumont Army Medical Center (WBAMC). Students see patients directly or under the supervision of the resident, they present to faculty and resident.
- 2 weeks outpatient — clinical sites include TTUHSC and WBAMC/VA. Students see patients directly or under the supervision of a resident and present to a nurse practitioner and faculty.

**Basic Science Examples (6; 8.1; 8.3)**
All neurology lectures have an outline of relevant neuro-anatomy physiology before diving into clinical application and management.

**IPE Examples (7.9)**
- Students on inpatient rotations interact with other specialty residents such as internal medicine, psychiatry, nurses and nurse practitioners
- Students on outpatient clinic interact with clinic staff and medical assistants

**Selectives (6; 10.9) — not offered**

**Portfolio of Assessments (9)**
- History and physical examinations (2 observed, 2 typed)
- Case logs - at least 20 cases/month, 30 to be eligible for honors
- Small topic assignments (during rounds/outpatient clinical rotation)
- Online Med Ed clinical case scenarios
- Redcap case series
- Journal club sessions – milestone articles in neurology that are assigned to students and reviewed with faculty
- Stroke Cards (3) — students are required to write the outcome of stroke patient
- Mid-rotation evaluations- at least 2 done by faculty
Immediate feedback on a daily/weekly basis
- NBME Exam and final evaluation of rotation

**Preparation of Department Faculty and Residents to Teach (3.1; 4.5; 9.1)**
- A mandatory department training with videos is given to all faculty and residents each year
- Faculty participate in faculty development courses offered by institution

**Block Summary Evaluation (8; 3.5; 8.5)**
- Dr. Yerram highlighted that in AY 2021-2022, 26 students passed with honors, 85 students passed on first attempt and 2 passed on the second attempt

**Specific Challenges (4.1; 5.4)**
- AY 2022-2023 will include MS3 class along with MS4. This change will require new sites, adding night and evening shifts
- Recruiting community faculty

**Quality Improvement Plan (1.1)**
- In AY 2023-2024, MS3s will be integrated to Neurology Clerkship. The early exposure to the specialty will encourage students to apply for neurology residency.
- In July 2023 it will be offered as an elective for MS4s (NBME will still be required for evaluation purposes)

**ITEM IV Clerkship Phase Review Process AY 2021/22 – Review Team III**

**Presenter(s): Dr. Dudrey**

*Presentation is attached

Dr. Quest presented the review team findings:

**Syllabi** – Dr. Quest provided a list of strengths for each syllabi. (Slide 2). Overall, each syllabus is clear and provides a comprehensive understanding of the curricular framework, purpose, scope, activities, expectations, PGO linked to learning objectives, and assessment/grading for success in the rotation.

Dr. Ward commented that a standardized template would be beneficial.

**Comparability Reports – Sites Specific Data**
- Emergency Medicine – student satisfaction is very high; student satisfaction with feedback received at mid-clerkship was 100%
Difference in honors from spring and fall - large percentage of students not achieving honors despite NBME score
- All clerkships were completed on time. Neuroscience clerkship had lower satisfaction scores in the fall versus the spring
- All rotations provided fair and timely release of grades
- NBME performance in these rotations was very close to national stats

Inpatient and outpatient ratio in the clerkship and block findings and recommendations
- Emergency medicine had 100% ambulatory with no inpatient
- Neurology had 50% ambulatory and 50% inpatient

Block Evaluations
- All three clerkships had positive overall satisfaction ratings.
- Dr. Quest asked review team for additional comments. Student Madeline Goldfarb said that the 1:1 student ratio in emergency medicine was good.

Learning Environment
Overall satisfaction with learning environment was high.

The following recommendations were made:
- EM - to explore the discrepancy between percentage of honors in the spring and fall.
- Neurology - to make small improvements to syllabus, and examine mid-clerkship evaluations to assess for areas of improvement
- Bootcamp - to review “Night on Call” patient encounters and “Boot Camp Colloquium” sessions
- Dr. Quest made a comment that class expansion will require considerable planning and resources to consider.

Kristina Ingles asked why honor designations were lower than the NBME scores in EM. Dr. Francis explained that all clerkships have the same grading policy; student has to meet the minimum NBME requirement, then to achieve honors in clinical settings a minimum of 4 out of the 8 competencies have to be rated as honors, and lastly student cannot have any needs for improvement. Additionally, for EM and Neuro, there are minimum Op Log requirements. She explained that students who received the NBME score and did not receive honors for a final grade did not achieve honors clinically.
Dr. Khanjani moves the motion.
Dr. Chacon seconds the motion.
No objections. The Team review passed.

**ITEM V Clerkship Policy Updates**

**Presenter(s): Dr. Francis**

Dr. Francis asked the group to vote on the Course Evaluation and Reporting Policy. The policy was reviewed during the February’s meeting.
Dr. Quest moves the motion.
Dr. Chattopadhyay seconds the motion.
No objections. The policy passed.

Dr. Francis presented few changes to the Common Clerkship Policy AY 2023-2024. She explained that Year 3 and 4 committee revised the policy and provided additional clarification about the planned absences. The test dates were updated. She added that EM and Neuroscience NBME will be phased out because these are moved to third year. Fourth year electives will be available and students may take the NBME during these electives. The class ranking formula has a change for the next class of third years, Class of 2025, to reflect the OSCE weighted portion of formula as 10%.

Nick Malize commented that other schools have a lower threshold for making honors grades, and that some classmates were concerned about the decreasing competitiveness for residency applications. Dr. Francis stated that the school’s honor scores are at the lower to mid-range from the range proposed by the NBME standard setting committee. She stated that they are not recommending any increase or changes to those at this time.

Dr. Saeed moves the motion.
Dr. Chacon seconds the motion.
No objections. The policy updates passed.

**ADJOURN**

Meeting adjourns at 6:30 pm.
CEPC EM Clerkship Review
AY 2021-22

Michael Parsa, MD
Clerkship Director
Overview

• Required 4 week clerkship for all MS4s consisting of
  • 98 clinical hours in the ED (the core learning experience)
  • EMS ride along (8 hrs)
  • Poison center and 911 call center observation
  • Procedure workshop (central lines/airway/IO placement/chest tube/LP)
  • Ultrasound (FAST exam) workshop with SP
  • Multiple simulations at TECHS North
    • critical medical/trauma patient scenarios, both adult and peds
  • Multiple assignments with direct feedback
    • H and P, social hx assignment, Clinical Question Presentation
  • NBME exam-68 passing, 82 honors eligible
OpLog

• 30 patient entries required to pass
• 60 patient entries required to be honors eligible
• “observe” not acceptable as an entry
• Required patient encounters
  • Abdominal pain, chest pain, n/v, trauma, cough/sob
• Book chapters assigned for any required patient encounters that student did not see
• 5 Procedures must also be logged by the end of the clerkship
  • must be performed to be logged
  • Lac repair, I and D, paracentesis, start IV, foley, central line, intubation...
Longitudinal/Combined Experiences

• N/A
Clinical Experience

• 1:1 student to faculty ratio in the ED (98 hours =24.5h/week)
• See patients directly then present to faculty (+/- resident)
• Sites
  • UMC
  • THOP-TM
  • EPCH
Pre-clerkship integration

• Year 1-2 clinical schemes reviewed after relevant simulations
IPE

• Students interact with non-hospital personnel
  • Poison center staff
  • 911 center staff
  • EMS personnel

• In the ED
  • Nurses
  • Techs
  • Paramedics
  • Respiratory Therapists
Selectives

• N/A
Assessments

• Shift evaluation forms include assessment of students direct patient care
• 67 of 69 students said they were observed doing patient assessments in the ED (2021-22 graduation survey)
• A standardized, nationally developed EM shift evaluation form is used
• One form completed per student per shift
Preparation of Faculty and Residents to teach

• Annual training for all residents and faculty completed in person
• Materials are sent out with read receipts to all faculty and residents after the meeting
• Students do not work with rotating residents from other departments or EM interns as they have not received the training
Clerkship Evaluation Summary

- NBME scores
- our average
- 79.5
- national average
- 78.7
### Fall 2021 In-House Student Feedback

#### Likert Scale 1 – 6

<table>
<thead>
<tr>
<th>Statement</th>
<th>Rating</th>
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<tbody>
<tr>
<td>1. The workload of the clerkship was manageable</td>
<td>5.4</td>
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<tr>
<td>2. The clerkship met the identified learning objectives</td>
<td>5.4</td>
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<td>3. I am satisfied with the methods used to evaluate my performance</td>
<td>5.3</td>
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<td>4. The feedback I received helped improve my performance</td>
<td>5.5</td>
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<tr>
<td>5. Feedback I received Mid-clerkship helped me identify my strengths</td>
<td>5.5</td>
</tr>
<tr>
<td>6. Feedback I received Mid-clerkship helped me identify areas for</td>
<td>5.5</td>
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<tr>
<td>improvement in my performance</td>
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<td>7. I understand how the clerkship content is applicable to the</td>
<td>5.6</td>
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<tr>
<td>practice of medicine</td>
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<tr>
<td>8. I acquired useful knowledge and/or skills during this clerkship</td>
<td>5.6</td>
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<tr>
<td>9. Overall, I am satisfied with this clerkship</td>
<td>5.6</td>
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5=AGREE   6=STRONGLY AGREE
Specific Challenges

• AY2022-23 - required clerkship for all MS3s and MS4s
• Aggressively adding new sites and recruiting community faculty for upcoming years in anticipation of class size expansion
  • San Angelo (Shannon Medical Center)
  • WBAMC
  • THOP-Memorial and Sierra Campuses
Quality Improvement Plan

• Closely monitor new sites for quality of educational experience
  • Fall 2022 data is very positive, excellent feedback from students regarding their experiences at community sites

• 2023-24 EM will be required for MS3 and optional for MS4, no NBME requirement (optional for MS4s, primarily for those considering EM)
A Values Based Culture

Dedicated to Excellence.
Commited to Care.
Clerkship Phase Review
AY 2021-2022

Course Directors Overview
MS4 Bootcamp
Drs. Sehgal & Saeed, Co-Course Directors
MS4 Bootcamp

• Immersive interdepartmental capstone course utilizing high fidelity simulations, standardized patients, and small group workshops to help fourth year medical students increase confidence in medical decision making, transitions of care, and clinical reasoning during high stress patient scenarios.

• Annually, 100 fourth year medical students are immersed in a two week boot camp experience where they address scenarios interns commonly face.

• Faculty and staff from 16 departments across two campuses actively participate and provide timely individualized constructive feedback to students.

• Students are exposed to 25 patient scenarios ranging from high fidelity simulation to standardized patient encounters in both the inpatient hospital and outpatient clinic settings.

A Values BASED CULTURE
Dedicated to Excellence. Committed to Care.
Objectives

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<tr>
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<th>EPA</th>
<th>PLE SOM PGO</th>
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<tbody>
<tr>
<td>a.</td>
<td>Gather a history and perform a physical examination appropriate to the setting in patients of all ages.</td>
<td>1</td>
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<td>b.</td>
<td>Develop a prioritized differential diagnosis.</td>
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<td>c.</td>
<td>Demonstrate appropriate ordering of therapeutics and diagnostic studies.</td>
<td>4</td>
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<td>d.</td>
<td>Demonstrate appropriate interpretation of diagnostic studies</td>
<td>2,3</td>
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<td>e.</td>
<td>Apply evidence-based principles of clinical sciences to diagnostic and therapeutic decision making and clinical problem solving.</td>
<td>7</td>
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<td>f.</td>
<td>Initiate appropriate medication orders and prescriptions.</td>
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<td>g.</td>
<td>Understand when and how to request consultation.</td>
<td>6,9</td>
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<td>h.</td>
<td>Demonstrate when and how to obtain informed consent for treatment and procedures.</td>
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<td>i.</td>
<td>Give and receive transition of patient care</td>
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<td>j.</td>
<td>Understand and apply basic ultrasound principles to patient care</td>
<td>12</td>
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<tr>
<td>k.</td>
<td>Identify potentially life-threatening conditions and initiate basic stabilization and management.</td>
<td>10</td>
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<td>l.</td>
<td>Collaborate as an inter-professional care team.</td>
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<td>m.</td>
<td>Perform appropriate documentation for each clinical setting and encounter.</td>
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<td>n.</td>
<td>Practice professional behavior and adherence to ethical principles in all interactions and settings.</td>
<td>9,13</td>
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<td>o.</td>
<td>Apply quality improvement principles to patient care during simulations, inpatient and ambulatory experiences and debriefs.</td>
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<td>p.</td>
<td>Accept and incorporate feedback into practice.</td>
<td>9</td>
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<td>q.</td>
<td>Recognize heuristics and cognitive biases and apply strategies to improve diagnostic accuracy and enhance patient safety.</td>
<td>13</td>
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<td>r.</td>
<td>Prioritize responsibilities to provide care that is safe, efficient, and effective.</td>
<td>13</td>
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<td>s.</td>
<td>Provide an accurate, concise, and well-organized oral case presentation tailored to the clinical situation.</td>
<td>6</td>
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<tr>
<td>t.</td>
<td>Counsel and educate patients on preventive health care services and chronic care management.</td>
<td>3</td>
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Op Log Requirements and Discussion of Alternate Experiences

1. Not applicable
Combined Integrated & Longitudinal Experiences

- The students have two longitudinal high fidelity cases where they follow a patient from the ED to the floor to ICU to death/transition off service.
  - Students complete an admission note, progress note, order sets, off service note, and death summary.
Clinical Experiences (Including Clinical Sites)

1. Not applicable
Basic Science Examples

- Pharmacology and Physiology – The students work individually and in small groups to learn about common antibiotics, vasopressors, and analgesic therapy. We discuss mechanism of action, side effects, dosing, and modifications based on renal/hepatic insufficiency. Their learning is reinforced with daily podcasts, medication pearls slides, and practice utilization during high fidelity simulations.

- Pathology - Ultrasound workshop with static and dynamic images of normal and pathologic states
  - Reinforced during high fidelity simulations with abnormal pathology ultrasound clips.
IPE Examples

- Students appreciate nursing roles/responsibilities
  - Day in the Clinic – nursing interruptions
  - High Fidelity Simulations – close loop communication with nursing for medication orders and reviewing nursing notes.
Selectives (if offered)

1. Not applicable
Portfolio of Assessments – Please include observed activities

1. Each activity has formative grading

2. Students are exposed to 25 patient scenarios ranging from high fidelity simulation to standardized patient encounters in both the inpatient hospital and outpatient clinic settings.

3. Small group activities – Antibiotics review, role play for informed consent & challenging patient scenarios, EKG & Imaging analysis

4. Thursday Didactics – interactive lectures
Portfolio of Assessments –

1. Example of high fidelity simulation assessment

2. Individualized feedback to students on their notes – admission, progress, off service, death summary, clinic summary, and transition of care (I-PASS & SBAR)
   1. Peer to Peer – Opportunity for students to review their peer’s note and provide feedback

3. Student reflection daily – 1 minute paper
Preparation of Department Faculty & Residents to Teach

- Onboarding agenda:
  - Welcome: Intro to team & TECHS along with overview of Bootcamp
  - Confirmation of contact information and facilitation dates/times
  - Case review in detail (page by page)
  - Review of debriefing process – PEARLS & DASH handout
  - Dry run with TECHS team and orientation to the room & layout

- Pairing new facilitators with experienced facilitators

- Post simulation student & TECHS feedback provided via email

- Direct feedback from Course Director
Block Evaluation Summary

1. Final 2 week assessment on last Friday of each session with Course Directors and Coordinators
   1. Knowledge of Practice, Patient Care & Procedural Skills, Interpersonal & Communication Skills, Practice Based Learning & Improvement, System Based Practice, Professionalism, Interprofessional Collaboration, and Personal & Professional Development

2. Students complete a pre and post MS4 Bootcamp survey to assess confidence.

3. Night on Call – Collaboration with NYU & MCW. Students receive individualized report about their performance in comparison to other programs.

4. Students provide feedback about their experience during the last Friday – structured roundtable to hear the students’ perspective and constructive criticisms.
“The simulations are a great opportunity to practice medicine and see the effects of your actions -- I think it was the single most beneficial thing I have participated in during medical school. I also appreciate the way the course works together -- from inpatient to outpatient medicine, I felt that the course was comprehensive and helped me to identify areas that need improvement before intern year. I also really enjoyed the broad variety of specialties and topics covered!”

“The simulations were all fantastic. They put all the strongest aspects forward, namely forcing communication, teamwork, decision-making, forming a diagnostic plan, and documentation. These all felt like real scenarios. The whole course was great for similar reasons but the sims in particular stood out.”

“I learned how to feel comfortable in making decisions.”

“This is the first time in medical school I have experienced such high quality education. The faculty and residents were invested in the learning experience and made each experience meaningful. We were challenged to think on our feet and given extensive feedback on how to improve. I didn’t expect that bootcamp would be helpful before I started but every single day has been valuable to my training as a future intern.”
“Faculty and resident. Everyone I interacted with was happy to be there and patient with us. Feedback. Whether that’s notes or simulations, the feedback is what allowed me to reflect and debrief on my own at the end of the day. My classmates. Great set of people who make me feel comfortable sharing and interacting.”

“Formulating a plan and managing the patient are emphasized without shortcuts. Focuses on specifics of management and the consequences of wrong or substandard care. Safe space to learn and grow.”

“Great high acuity simulations that force us students to take direct control of patient care and build confidence to make difficult decisions. Working with other team members such as students/residents/faculty to help foster a great healthcare team dynamic.”

“Pushes you outside your comfort zone, prepares you for how difficult intern year will be, encourages/advises you on avenues for self care.”

“The amount of feedback we got was amazing. We are forced to run a team, to make key decisions.”

“We actually were allowed to deliver patient care. We were allowed to have responsibility and actually act as a physician.”
Specific Challenges – Class Size Expansion & Sites

1. In order to maintain the high quality of education as the class size increases to 150, we need to increase from 4 to 6 sessions. Increasing the session class size alone without adding sessions will dilute the experience for all students and overwhelm the current resources.

2. The larger class size will warrant larger rooms for all teaching activities, if we attempt to continue with four sessions. The increase in class size alone will entail increasing workload for: daily notes/assignment grading, daily group and individual feedback, and final assessment evaluations. This increasing workload is taken on primarily by the Course Directors, who during Bootcamp already spend 10-12 hours daily on campus directly engaging with students.

3. A 50% increase in class size warrants a reflective increase in FTE, as resource utilization at all levels will be increased

4. Recruitment of engaged and dynamic faculty & residents.
Quality Improvement Plan – AY 2022-2023

Please include changes for upcoming year and major changes anticipated in the syllabus

1. Recruiting faculty/residents from Neurology, Cardiology, and Surgery.

2. Promoting senior & chief residents to join faculty for simulation facilitation.

3. Continuous revision of high fidelity cases to reflect evidence based medicine practice guidelines.

4. Decreasing online modules.

5. Adding small group activities relating to pharmacology (antibiotics), EKG telemetry strip recognition, and imaging recognition.

6. Adding Eye exam & Gun Safety lecture/workshop.

7. Adding Podcasts and FOAM literature to daily morning and lunch lectures.

8. Revising Thursday Didactics to include interactive lectures on: Delivering Bad News, Anticoagulation Management, Management of Agitated Hospitalized Patient.
Thank you!
Neurology
Clerkship Phase Review
AY 2021-2022
Course Directors Overview

Clerkship Director: Sushma Yerram
Assistant Clerkship Director: Faheem Sheriff
Objectives

The primary purpose of the Clinical Neuroscience Clerkship offered in the MS IV year is to provide the medical student

- Ability to perform a neurological interview and examination, interpret signs,
- Consolidate symptoms and signs into syndromes,
- Accurately diagnose neurological diseases,
- Identify appropriate evidence-based management strategies.
Op Log Requirements and Discussion of Alternate Experiences

- Level of involvement for required conditions is **assist or manage**.
- 20 Op-logs are required to Pass and 30 to Honor.
- Videos assigned with assignment for alternative ID experience

**Outpatient (Clinical Sciences Building-Basement)**

**General Neurology Clinic**
Movement Disorders (Parkinson’s Disease, Essential tremor and deep brain stimulation)
Epilepsy Clinic (Different types of seizure disorders and their treatment including the use of Vagus nerve stimulation)
Electro diagnosis (EMG) (optional)
Basis of Geriatric Medicine relevant to Neurology (i.e. Dementia, syncope, fall, etc...)
Headache Clinic
Ophthalmology Clinic (only if assigned)

**Inpatient (Team meets at Neurology Conference room)**

**General Neurology**
Neurological complications of systemic diseases
Stroke rounds
Stroke rehabilitation
Epilepsy Unit Service
Combined Integrated & Longitudinal Experiences

N/A
Clinical Experiences (Including Clinical Sites)

**Duration (MS4s):** 4-week rotation

2 weeks inpatient – University Medical Center and William Beaumont Medical Center
Sees patient directly or under supervision of Resident and presents to Faculty
Documents notes in EMR
Rounds on patients with the medical team
Attends Stroke codes

2 weeks outpatient - TTUHSC and WBAMC/VA
Sees patients directly or under supervision of Resident and presents to Nursepractioner and Faculty
Basic Science Examples

All Neurology lectures have an outline of relevant Neuro-anatomy, physiology before diving into clinical application, management.
For example:
1. Basics of Action potential, cortical generators of electroencephalography for EEG lecture
2. Anatomy of neural structures for Demyelination lecture
IPE Examples

1. Students on Inpatient interact with
   Other Specialty residents (Internal Medicine, Psychiatry)
   Nurses
   Nurse Practitioners

2. Students on Outpatient clinic interact with
   Clinic staff
   Medical Assistants
Selectives

Not offered
Portfolio of Assessments

- **History and Physical Examinations** (2 Observed, 2 Typed)
- **Case logs**: At least 20 cases/month (30 to be eligible for honors).
- **Small topic Assignments** (During rounds/outpatient clinical rotation).
- **Online Med ED clinical case scenarios**
- **Redcap case series**
- **Journal Club sessions**
- **Stroke Cards** (3)
- **Mid-rotation evaluations**: (at least 2 evaluations done by Faculty, NP/2 weeks period).
  - Immediate feedbacks on an ongoing basis
  - Op Logs
  - NMBE for MS4s
- Final Evaluation of the rotation
Preparation of Department Faculty & Residents to Teach

1. Training with videos are given to all residents (including incoming) and faculty each year. Signatures of those present are collected during this training. Material given to those not present to review followed by signature.

2. Faculty participate in Faculty development courses offered by the Institution.
Block Evaluation Summary

- Honors: 26 (~30%)
- Pass first attempt: 85 (~97%)
- Total: Honors + Pass on First Attempt (97%)
- Pass on second attempt: 2 (2.2%)
- Honors: Score of > 85 on NBME and 4 out of 8 individual competencies with Honors and should not have needs improvement grade on any competency and > 30 oplogs.
- Pass: NBME Score > 68, minimum OpLogs 20, If Professionalism grade is needs improvement, Pass or fail will be at the discretion of Clerkship director.
Specific Challenges – Class Size Expansion & Sites

1. AY2022-23 will include MS3 class along with MS4s
2. This change will require new sites, adding different shifts such as night and evening shifts.
3. Recruiting community faculty
Quality Improvement Plan

- 2023-2024 MS3s will be integrated to Neurology Clerkship – Early exposure to the Specialty will encourage students to apply for Neurology Residency.
- From July 2023 MS4s will have it as an elective (NBME will still be required for evaluation purposes)
A Values Based Culture

Dedicated to Excellence.
Committed to Care.
**EM Syllabus**

1. Syllabus is well formatted and can serve as a resource for students
   1. Initial table lists clearly objectives and deadlines for deliverables
2. Follow EM National Curriculum Guidelines
3. Online review video linked in syllabus for course preparation
4. Integrated topics and CP’s listed and outlined
5. Duty hours and absenteeism explained clearly
6. Pre-hospital clinical exposures are unique opportunities
7. Grading well defined with graduated evaluations
   1. Honors/Pass/Fail

**Neurology Syllabus**

1. Format is acceptable with required information included
   1. Difficult to navigate and find specific information
2. Locations are difficult to understand, 3 are stated but VA locations are also included
3. Certain conference rooms and meeting sites are not listed
4. Goals are subdivided nicely into pathology
5. Integration chart is present with longitudinal CP’s listed
6. Lectures are listed by faculty with the formal schedule not provided until the rotation
   1. No mention of policy for substitutions or changes in lectures
7. The evaluation “work ups” and “checklists” are not included for students to reference

**Boot Camp Syllabus**

1. Overall syllabus is well formatted and serves a good source for students to reference.
2. “Course has been designed to prepare medical students for their first day of residency”
3. High Fidelity Simulations, Day in the Clinic, Lab Sessions, Night on Call, Didactics and Documentation components of the course are all well defined.
4. Mandatory course with P/F grading
   1. Grading based on professionalism and participation
   2. Remediation and make up assignments are also included

**curricular frameworks:** reassurance that the rotation curriculum conforms to externally recognized contemporary standards
- EM: “based on national curriculum guidelines for EM clerkships”; “this syllabus contains all the information you will need to succeed during the rotation.”
- Neuro: “The goals and objectives outlined below have been developed internally and are consistent with the neurology core curriculum developed by the Consortium of Neurology Clerkship Directors and the Undergraduate Education Subcommittee of the American Academy of Neurology.”
- Boot Camp: “Address AAMC core Entrustable Professional Activities for Entering Residency”
comments on the three syllabi

1. AY 2021-2022  Emergency Medicine clerkship syllabus [Pp. 18]

Considered separately, each syllabus is clearly written and each provides a comprehensive understanding of the curricular framework, purpose, scope, activities, expectations, PGO-linked learning objectives, and assessment/grading for success in the rotation. Minor recommendation: check grammar.

Considered together, these clerkship syllabi differ substantially in format and the order of common sections. Movement to a standardized format could have advantages:

- clarity and efficiency for orientation of students
- facilitation of future phase reviews, auditing and mapping to LCME standards across rotations
- ease of updating dynamic sections of syllabus (example: the EM syllabus has a table of contacts with personnel names and their coordinates up front, whereas the Boot Camp syllabus has contact information near the end [Sec.15] and distributed under sections, for instance, “Disability Support Services, Dr. Tammy Salazar, http://elpaso.ttuhs.edu/studentservices/disability-support-services. Neuro under Schedule of Clinical Teaching/Learning Sessions assigned names of specific clinical faculty to update each AY.
Comparability Reports – Site Specific Data

1. Emergency Medicine clerkship [ED:96h; pre-hosp:10h; poison ctl:4h; plus SIMs, presentations, assignments; duty Hrs stable @31hrs;  
   • NBME 79-80% = nat’l 77.5-78.2±6.9-7.5%, honors Fall 44% v Spring 9% (no fails); student satisfaction >90% incl. feedback rec’d at mid-clerkship 100%.  
   • OpLog pt/student [required=30: X~53; Dx and procedures managed > assists > obsv stable AY 18/19…21/22;  
   • substantial difference between %Honors for Spring and Fall  
   • large percentage of students not achieving Honors despite NBME score

2. Clinical Neuroscience clerkship [4-wk: 50% amb/50% in-pt; duty Hrs stable @28hrs]  
   • NBME 81-83% = nat’l 80-81±7.5%, honors Fall 47% v Spring 19% (no fails); student satisfaction >95% except on feedback rec’d at mid-clerkship 69-72%.  
   • OpLog pt/student [required=20: X~29-30; Dx managed > assists > obsv stable AY 18/19…21/22 except 2020 CoVid year; procedures assists > obsv > performed

3. MS4 Boot Camp: not applicable.
Comparability Reports – Mid-Clerkship Completion

Emergency Medicine clerkship 100%
100% completion at all timepoint, consistent with prior years

Clinical Neuroscience clerkship 100%
100% completed as scheduled
Discrepancy between Spring and Fall with negative feedback for Mid-Clerkship Feedback

<table>
<thead>
<tr>
<th>Feedback</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>The feedback I received mid-clerkship helped me identify my strengths.</td>
<td>72%</td>
<td>87%</td>
</tr>
<tr>
<td>Feedback I received mid-clerkship helped me identify areas for improvement in my performance</td>
<td>69%</td>
<td>89%</td>
</tr>
</tbody>
</table>

MS4 Boot Camp: Mid-clerkship not required for bootcamp since bootcamp is only 2 weeks long
Comparability Reports – Fair & Timely Release of Grades

Emergency Medicine: All grades submitted within 21 days for all rotations, most within 10 days.

Neurology: All grades submitted within 21 days for all rotations, most within 10 days.

Boot Camp: No Mid-Clerkship Feedback
Comparability Reports – NBME Results Compared to National Data

1. Emergency Medicine clerkship [improving]
   - NBME 79-80% = nat’l 77.5-78.2±6.9-7.5% [Spring = Fall]

2. Clinical Neuroscience clerkship [improving since AY 19/20]
   - NBME 81-83% = nat’l 80-81±7.5%
   - USMLE Step 2 data suggests there may be additional concerns with neuro performance (Students take Step 2 (in general) before they take the neurology clerkship in 4th year)
   - Performance on System “Nervous System & Special Senses” with 37% lower performance

3. MS4 Boot Camp:  There is no NBME for bootcamp
Inpatient/Outpatient Ration in the Clerkship & Block

1. Emergency Medicine: ambulatory 100%; inpatient 0%

2. Clinical Neuroscience: ambulatory 50%; inpatient 50%

3. Boot Camp: NA
## Block Evaluations

<table>
<thead>
<tr>
<th>Block</th>
<th>Rating (%)</th>
<th>Overall Satisfaction</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Medicine</td>
<td>95-100% positive</td>
<td>100%</td>
<td>Coordinator also with strong ratings. Autonomy, diverse patient encounters, staff, and residents touted as strengths.</td>
</tr>
<tr>
<td>Clinical Neuroscience</td>
<td>79-100% positive</td>
<td>78.95%</td>
<td>Simulations and teaching appear to be the strongest factors for the course.</td>
</tr>
<tr>
<td>Boot Camp</td>
<td>80-100% positive</td>
<td>98.8%</td>
<td>Evaluations with concerns: Schedule not clear and/or consistent. Mid-clerkship feedback with lower marks however specifics are not mentioned in comments. Several comments about NBME practice question answers not being available. Absence policy not clear and consistent with institutional guidelines in regards to residency interviews. “Night son call” and “boot camp colloquium” criticized for necessity and value.</td>
</tr>
</tbody>
</table>

### Feedback Questions

1. The workload of the clerkship was manageable.
2. The clerkship met the identified learning objectives.
3. I am satisfied with the methods used to evaluate my performance.
4. The feedback I received helped improve my performance.
5. Feedback I received during Mid-clerkship helped me identify my strengths.
6. Feedback I received during Mid-clerkship helped me identify areas for improvement in my performance.
7. I understand how the clerkship content is applicable to the practice of medicine.
8. I acquired useful knowledge and/or skills during this clerkship.
9. Overall, I am satisfied with this clerkship.
student feedback:

**Emergency Medicine**

- 100% are satisfied with Non-Clinical and Clinical items and as well as with Clinical Specific Items
- Negative on professionalism is 58%- 64%
- Offensive or negative behaviors is only 1%-2%
- Practicing the EM presentation in medical skills and more patient encounters
- More understanding on basic and clinical knowledge of common clinical scenarios.
- More shifts at UMC, emphasizing on following the patients all the way to discharge.
- A stronger emphasis on pharmacologic mechanism of action of drugs
- More emphasis on intubation pharmacology, exposure to critical care and resuscitation
- More EM experience in 3rd year; standard number of night shifts.
Neurology

- Slightly agree to disagreement on workload, learning objectives, evaluations and feedback show almost 10-15%
- Around 21% residents are not overall satisfied.
- Almost 98% are satisfied with Clinical Evaluation
- There is more need for practice on full neuro exam in years 1-2 and particularly in year 3 would help.
- More understanding of medications in certain neurological scenarios.
- Provide a detailed brain imaging, stroke lectures and stroke management.
- Good variety and number of patient interactions - NBME questions.
- More interaction with attending physicians will be helpful for assessments.
- Night shifts are not helpful, seems not much learning.
- Lack of professionalism 70% and offensive or negative behaviors 3%
- Changes in neurology curriculum by Clerkship Director without adhering to the syllabus, virtual lectures.
student feedback:

**Bootcamp**

- A stronger pharmacology curriculum, especially dosing of commonly used medications
- More dosages and management on devices such as oxygen and ventilators.
- More simulation activities in first and second year
- More ICU related activities and EM exposure
- Provide PowerPoint for lectures ahead of time; question relevance of colloquium topics and short didactics days
- Almost 99% are satisfied with Non-Clinical and Clinical items and 89% with Clinical Specific Items
- Negative on professionalism is 58%
- Offensive or negative behaviors is only 1%
- There is need for this course at the beginning of 4th year or in year 3 would help.
- More understanding on preparation for the delivering bad news.
- More realistic Night on Call experience.
# Learning Environment Surveys

## Boot Camp

8. I experienced offensive or negative behaviors

<table>
<thead>
<tr>
<th>Emergency Medicine</th>
<th>FM sub-I</th>
<th>IM sub-I</th>
<th>Surgery Sub-I</th>
<th>OB/gyn Sub-I</th>
<th>Peds Sub-I</th>
<th>SICU</th>
<th>MICU</th>
<th>MICU Thor</th>
<th>NICU</th>
<th>Neuro</th>
<th>CVCU</th>
<th>PICU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes/No</td>
<td>Yes/No</td>
<td>Yes/No</td>
<td>Yes/No</td>
<td>Yes/No</td>
<td>Yes/No</td>
<td>Yes/No</td>
<td>Yes/No</td>
<td>Yes/No</td>
<td>Yes/No</td>
<td>Yes/No</td>
<td>Yes/No</td>
<td>Yes/No</td>
</tr>
</tbody>
</table>

### Fall

I experienced offensive or negative behaviors

<table>
<thead>
<tr>
<th>Emergency Medicine</th>
<th>FM sub-I</th>
<th>IM sub-I</th>
<th>Surgery Sub-I</th>
<th>OB/gyn Sub-I</th>
<th>Peds Sub-I</th>
<th>SICU</th>
<th>MICU</th>
<th>MICU Thor</th>
<th>NICU</th>
<th>Neuro</th>
<th>CVCU</th>
<th>PICU</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/46</td>
<td>0/9</td>
<td>0/25</td>
<td>0/7</td>
<td>0/5</td>
<td>0/7</td>
<td>0/8</td>
<td>1/10</td>
<td>0/5</td>
<td>0/44</td>
<td>1/2</td>
<td>1/3</td>
<td></td>
</tr>
</tbody>
</table>

### Spring

I experienced offensive or negative behaviors

<table>
<thead>
<tr>
<th>Emergency Medicine</th>
<th>FM sub-I</th>
<th>IM sub-I</th>
<th>Surgery Sub-I</th>
<th>OB/gyn Sub-I</th>
<th>Peds Sub-I</th>
<th>SICU</th>
<th>MICU</th>
<th>MICU Thor</th>
<th>NICU</th>
<th>Neuro</th>
<th>CVCU</th>
<th>PICU</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/29</td>
<td>0/5</td>
<td>0/17</td>
<td>1/2</td>
<td>0/1</td>
<td>0/4</td>
<td>0/9</td>
<td>0/8</td>
<td>0/4</td>
<td>3/33</td>
<td>1/7</td>
<td>0/3</td>
<td></td>
</tr>
</tbody>
</table>
EM learning environment:
1. 1/29 students experienced offensive or negative behaviors during the Spring
2. 1/46 students experienced offensive or negative behaviors during the Fall
   One of these is likely related to this feedback from evaluations:
   “An attending in the Peds ED told me that my specialty was "not real medicine" that it was a good field for "women to be home to take care of the kids". He continued to repeat that "if he were president he would strip away the licenses of all those in our field" because it is not a real practice of medicine. Comments like these, even if joking are not appropriate and unprofessional. I had to endure a 12 hour shift of numerous comments like this and countless comments about how my specialty is not only not competitive but a waste of training. Several other students had this same experience with the same attending.”

Neurology learning environment:
1. Fall results with 0/44 stating they experienced offensive or negative behaviors
2. Spring results with 3/33 having experienced offensive or negative behaviors
   Could these be attributed to a single individual or event?

Boot Camp learning environment:
1. 1 student out of 80 (1.23%) experienced offensive or negative behavior
   Possibly related to ‘Dr. Sehgal lost one of my assignments and daily insisted that I needed to ‘look for it’” feedback
Recommendations

EM Clerkship rotations:
1. Overall no concerns, course is well received by students
2. Would explore the discrepancy between %Honors from Spring to Fall
3. Recommend potentially discussing the negative evaluation with staff

Neurology Clerkship rotations:
1. The rotation appears to have a dichotomous response from students with positive and negative feedback being present
2. The syllabus could be updated and reformatted to include rubrics, templates, an example schedule, and other components to assist students with understanding how to succeed.
3. Identify if there were significant differences in personnel or circumstances surrounding the Spring and Fall semesters.
4. Examine the Mid-Clerkship evaluations to assess for areas of improvement.

Boot Camp rotations: Strong and well received course, Course instructors receive high praise from students
1. The simulations are the most positively referenced aspect of the course

Recommendations:
1. Would recommend reviewing the Canvas structure for the course to ensure it is functioning as intended.
2. Review the “Night on Call” patient encounters, and “Boot Camp Colloquium” sessions