Resident Medical Education Pathway

The Medical Education pathway is intended to provide didactics on educational theory coupled with hands on experience and formative feedback necessary to train future educators in internal medicine. Residents in the program will participate in a multitude of educational experiences, complete the medical education elective and work closely with a mentor in Medical Education to develop their skills. Residents who complete the Pathway will graduate from Jefferson Internal Medicine Residency with a Distinction in Education. If interested, email Dr. Stewart (Emily.Stewart@jefferson.edu) with your plan to join the pathway and provide a brief description of your educational interests.

Goals and Objectives:

- 1. The resident will gain exposure to several adult learning theories and their application in graduate and undergraduate medical education. (PBLI)
- 2. The resident will practice setting expectations and giving feedback to learners. (PBLI, ICS)
- 3. The resident will lead large and small group discussions and receive feedback on their performance from faculty preceptors. (MK, PBLI, ICS)
- 4. The resident will identify ways to actively role model appropriate professional behavior and clinical diagnostic reasoning for their learners. (ICS, P)
- 5. The resident will develop a teaching portfolio and CV to facilitate career development in an education track as an independent practitioner.

Requirements:

- 1. Complete 20 hours of precepted teaching by the end of training.
 - a. Varied educational opportunities listed below (see appendix a). The resident is responsible for contacting the preceptor within the designated time listed to ensure preparedness for the session.
 - b. The resident will receive direct feedback on the session with documentation via an evaluation form.
- 2. Complete 2 weeks of the Medical Education Elective by the end of training.
- 3. Biannual meeting with your assigned mentor in the Medical Education Pathway.

Appendix A: Educational Opportunities

<u>Teaching opportunities for $1^{st}/2^{nd}$ year students:</u>

- Facilitating a Case-Based Learning (CBL) session Second year medical students are given "complex cases" to work on together along with assigned faculty to help facilitate discussion as well as case evaluation and management. Residents interested in precepting this freeform style of self-guided learning will be paired with an assigned faculty facilitator. These cases are generally assigned in February, one new case per week. The sessions occur on Mondays and Wednesdays from 8-10AM and 10-12PM. Residents should notify Dr. Susan Truong, if interested (susan.truong@jefferson.edu).
- 2. Facilitating a Team-Based Learning (TBL) session Throughout both first and second year of medical school, various course directors will occasionally present either clinical or basic science case scenarios and ask the students to work out the problems amongst themselves in small groups. For these learning activities, the course director often requests the assistance of residents to circulate amongst the groups to answer questions and guide discussion. This occurs throughout the year with varied time commitments and topics. If interested, please contact Dr. Susan Truong (susan.truong@jefferson.edu) for more information on subject material and available times. As a reminder, as part of this experience, you will need to discuss with Dr. Truong or your mentor having a faculty member observe your participation for credit and formative feedback on your performance.

Teaching Opportunities with 3rd year students:

- Teaching rounds these are held 3 times per week, generally 4-5 PM on MWF for students on subspecialty services to gain added exposure to general internal medicine. Residents may request to participate in as many of these as they choose. These sessions will be supervised by assigned faculty. Not all faculty assigned to these sessions participate in the Med Ed pathway, however, so some sessions may be unavailable. Format is flexible, but the session must be interactive. The resident should touch base with the faculty member to see if they have a preference and should also consult the list of topics already covered during Academic Week and other TA rounds sessions. Residents should notify Dr. Rosenberg (Sarah.Rosenberg@jefferson.edu) at least 1 week in advance of the session. This is a small group activity.
- Academic Week this is an intensive 4-day block of all formal didactics in IM and neurology. There are three more Academic Weeks over the course of this academic year: 9/18/2018 – 9/21/2018, 11/27/2018 – 11/30/2018, 2/19/2019 – 2/22/2019. Educational offerings include lectures, small group sessions, and hands-on clinical skills workshops. Lectures are 30-45 minutes in length and cover the following topics: sepsis, GIBleed, ACS, CHF, pneumonia, VTE, HTN, COPD, acid-base disorders. Lectures should include some interactive component. Small group sessions require pre-work by

the students (resources will be posted to Blackboard) who then show up to the sessions ready to apply the knowledge they just reviewed. The sessions are 30-40 minutes each but are repeated sequentially for each of three groups of 25 students, such that the total time commitment is 1.5-2 hours at a time. The sessions cover the following topics: acute renal failure, anemia, respiratory failure, altered mental status, diabetes, electrolyte disturbances, hypotension, abdominal pain, LFT abnormalities. The clinical skills sessions include hands-on simulation for students in arterial puncture, EKG lead placement, glucose self-monitoring, and subcutaneous injections. Residents should notify Dr. Rosenberg (Sarah.Rosenberg@jefferson.edu) if interested in participating in any part of Academic Week.

 Shelf Review sessions - held once per three-week block, during 12-1 or 4-5 on a Thursday or Friday. Class size will be 25 students. Residents should notify Dr. Rosenberg (Sarah.Rosenberg@jefferson.edu) at least 1 week in advance of the session.

Teaching Opportunities with 4th year students:

- Subintern Reports These are one-hour sessions with the sub-interns 3 times a month during their sub-internship. The topics tend to focus on practical skills and knowledge that the students should be able to use during their sub-intern rotation. Previous topics include writing a better H&P, signing out to nightfloat, how to handle various pages/calls, choosing appropriate antibiotics, and working up a complicated case. The size of the group varies depending on the number of students in the course for any given month. The day/time of the lectures also varies each month but is usually Tuesday or Wednesday at 11am or 1pm. Interested residents should notify Dr. Valentine (Jennifer.Valentine@jefferson.edu) a week in advance.
- 2. Senior Medicine Lectures These lectures are part of a mandatory curriculum for all 4th year students. As they prepare for different residencies, we want to continue to strengthen their Medicine foundation. From creating a differential, interpreting admission testing and applying Bayesian theorem for further diagnostic tests, we emphasized clinical reasoning with high value care in mind. To keep the class interactive, case scenarios with clinical applications and media (audio visual response and Nearpod) are used. The size of each class varies depending on the number of enrolled students for the block. The current core topics for each week are Cardiology, Pulmonary, Renal and Infectious Disease. These sessions meet Thursdays at 1pm. Interested residents should notify Dr. Lim Wong (Lim.Wong@jefferson.edu) 2 weeks in advance (earlier if you are interested in a specific core topic).
- 3. Gateway to Internship Gateway to Internship is a required course for all 4th year medical students in March. The course goal is to provide fourth year medical students with the tools necessary to successfully transition from medical student to intern/resident regardless of specialty choice. The areas covered during the course include: clinical reasoning in acute care situations, advanced communications skills, advanced diagnostic skills, procedural skills, end of life care, and maintaining health and personal well-being.

These areas are addressed through a variety of settings such as large group didactics, small group sessions, simulation sessions, procedural training, and standardized patient encounters.

- a. Small Group Precepting The small group sessions include up to 16 learners and meet for six 2-hour sessions throughout the course. During these sessions, the aim is to address the differential diagnosis and initial management of the six most common complaints an intern encounters. These topics include: hypotension, shortness of breath, tachycardia, agitation, fever, and pain. The session is intended to be similar to an intake case with student interaction playing a significant role. There is a provided facilitator guide that includes the cases with potential teaching points as well as review articles to supplement your clinical knowledge. The resident will be observed by the faculty member assigned to that group and will provide feedback following the session. Interested residents should notify Dr. Kouvatsos (Tasha.Kouvatsos@jefferson.edu) in January.
- b. Simulation The resident will meet with Dr. Kouvatsos prior to the session to review a pre-planned case and the accompanying learning objectives. The resident will have the opportunity to assist during simulation and lead the postsimulation debriefing session as well as review the learning objectives associated with the case. Interested residents should notify Dr. Kouvatsos (Tasha.Kouvatsos@jefferson.edu) in January.
- c. Procedure Training The resident will teach invasive bedside procedures (CVC placement, arterial line placement) to Gateway Students. PGY3s Only. Interested residents should notify Dr. Kouvatsos (<u>Tasha.Kouvatsos@jefferson.edu</u>) in January.

Teaching Opportunities with Residents:

- 1. Intern Report
 - a. Precepting intern report The resident will provide pre-conference feedback to the presenting intern on their teaching objectives and help with identifying the most effective delivery method (chalk talk vs. Powerpoint). The resident will then have the opportunity to organize a discussion of a differential diagnosis and management in a large group setting. Interested residents please contact the conference chief 1 week in advance.
 - b. Presenting intern report The resident will identify a PGY-1 level learning objective and present a 45 minute conference on this subject. Interested residents please contact the conference chief to schedule.
- 2. Intern Simulation
 - a. Introduction to simulation The resident will meet with the chief residents prior to a PGY-1 simulation session to review a pre-planned case and the

accompanying learning objectives. The resident will then assist the chief residents during simulation. The resident will lead the post-simulation debriefing session with the PGY-1 learners, focusing on group dynamics feedback and a review of the learning objectives associated with the case.

- b. Simulation curriculum development The resident will create a simulation session (clinical vignette accompanied by PGY-1 learning objectives) and review the case with the chief residents. Following chief resident feedback, the resident will run the simulation session (with chief resident assistance) and provide feedback/review learning objectives with PGY-1 learners.
- Procedure Training for PGY2s The resident will teach invasive bedside procedures (CVC placement, arterial line placement, thoracentesis, lumbar puncture) to small groups comprised of 4-6 rising PGY-1 learners. PGY 3 year only. Interested residents please contact the rising chiefs in April to schedule for May.
- 4. Outpatient precepting in JIMA These 2.5 hour precepting sessions can be arranged for various times throughout the year but the resident should be in at least the second half of his/her PGY-2 year. During these sessions you will act as the preceptor for interns presenting their continuity clinic patients. You will assist in the development of a differential diagnosis, a strategy for outpatient workup, and a therapeutic plan. Additionally, you will identify areas for further knowledge acquisition for the learner. Interested residents should notify Dr. Ojeda (Jason.Ojeda@jefferson.edu) 1 month in advance.
- 5. Outpatient precepting in JHAP These 2.5 hour precepting sessions can be arranged for various times throughout the year but the resident should be in their PGY3 year. During these sessions you will act as the preceptor for interns presenting their continuity clinic patients. You will assist in the development of a differential diagnosis, a strategy for outpatient workup, and a therapeutic plan. Additionally, you will identify areas for further knowledge acquisition for the learner. Interested residents should notify Dr. Lee (Albert.Lee@jefferson.edu) 1 month in advance.
- 6. Intern Patient Safety & Quality Improvement Didactics These sessions occur weekly during the ambulatory blocks of cycles 3 and 4. The interns complete pre-work assignments and come to class ready to apply concepts learned during interactive classroom sessions. The lecturer will facilitate the workshop based on a lesson plan, manage time, teach quality improvement and patient safety terminology and concepts, and facilitate small group discussion. Interested residents should notify Dr. Wickersham (Alexis.Wickersham@jefferson.edu) or the QI chief one month in advance.
- Intern Ambulatory Lectures These hour-long sessions happen every Friday morning for all the interns on ambulatory block. Potential topics include hypertension, hyperlipidemia, outpatient stress testing, anxiety/depression, joint exam, and cancer screenings, etc. Interested residents should contact Deb Richards

(<u>deborah.richards@jefferson.edu</u>) as well as the ambulatory chief resident for available dates as well as the full curriculum of teaching topic options.

- 8. Resident Ambulatory Lectures These hour-long sessions happen every Friday afternoon for all residents on ambulatory block. There is a two-year rotating curriculum scheduled by Deb Richards. Interested residents can obtain the list of potential teaching topics as well as available times from Deb Richards (deborah.richards@jefferson.edu), but the ambulatory chief resident should also be notified. Please note that these talks are scheduled fairly early, so if you would like to participate it is best to schedule early.
- Primary care lectures These hour-long sessions happen on some Wednesday afternoons and Thursday mornings. Interested residents should contact Jason Ojeda (Jason.Ojeda@jefferson.edu) for the full list of curricular topics and for availability. These lectures often are a mix of both resident and intern learners.
- 10. AM Report
 - a. Precepting AM report The resident will provide pre-conference feedback to the presenting PGY-2 or -3 on their teaching objectives and help with identifying the most effective delivery method (chalk-talk vs. Powerpoint). The resident will assist with developing a differential diagnosis and discussion of initial work-up in a small group setting. Interested residents should contact the conference chief 1 week in advance.
 - b. Presenting at AM report The resident will develop a case presentation and/or chalk-talk to teach during AM report. The resident should decide on 3-5 teaching points ahead of time to teach to the other residents during this time. The exact format will be up to the resident to decide the most effective way of delivering the teaching points (e.g., buzz groups for differential diagnosis vs. large group discussion vs. lecture style). Interested residents should contact the conference chief for scheduling availability.
- 11. Board Review These will be 1-hour sessions during 11AM or Noon Conference. The resident will decide a topic ahead of time and prepare a structured review of the topic, focusing specifically on high-yield information for the ABIM board exam. The resident may include practice questions to highlight key points, but this should make up at most 1/3 of the hour-long review. Interested residents should contact the conference chief for scheduling availability.
- 12. Intern orientation opportunities
 - a. Handoff simulation precepting this will generally occur from 10:30-12PM on a date in late June. Interns will practice handoffs and multiple trained observers are needed to give feedback. There will be a brief training session beforehand.
 - Escape the Room this occurs an afternoon in late June. Preceptors are needed for a patient safety simulation wherein a team of interns investigate a room with a number of patient safety hazards. Residents will give feedback on teamwork as well as help teach patient safety concepts.