

December 6, 2017

LONGITUDINAL RADIOLOGY RESIDENT EDUCATORS TRACK

1. PURPOSE

To develop & refine teaching skills for residents with a strong interest in medical education and potential interest in an academic career. To provide them with the tools and experiences that will prepare them for teaching students, residents and associate providers. This longitudinal track may be broadened by the addition of the 4th year Clinician-Educator elective, but does not have to be.

A. Intended areas of development

- A. Instructional design & delivery
- B. Application of interactive technologies
- C. Small group & case based teaching
- D. Developing assessments
- E. Giving & receiving feedback
- F. Teaching portfolio and advancement in education
- G. Mentoring

2. ELIGIBILITY & SELECTION

Any PGY 2 or 3 resident in good standing may apply for this track after the first 6m of residency.

Resident must be progressing in the core competencies appropriate to level of training in order to be eligible. There is no limit on the number of residents who may participate.

Applications DUE December 30th

Application to include one-page personal statement:

- 1. Residents past experiences as teacher or learner that influence their desire to do this track.
- 2. Statement of commitment to carrying out the duties of the track.
- 3. Career goals

3. GOALS & OBJECTIVES

- A. Over the course of 3 years, the resident will design and develop at least 3 teaching sessions that will involve both learning about and applying the following basic educational principles. One of these may serve as the resident's 2nd/4th year annual presentation. Sessions can involve student education, radiology resident education or clinical (non-radiology) resident education.

Considerations:

- a. Instructional design & delivery
 - i. Draft the learning objectives using Bloom's taxonomy
 - ii. Create learning session based on the objectives using the tenets of brain friendly learning
 - iii. Present using optimal presentation skills
 - b. Application of interactive technologies
 - i. In at least one of the sessions, employ an audience response system
 - ii. In at least one of the sessions, develop and deploy live annotation (i.e. white board, mirroring iPad, etc.)
 - iii. Other – we are open to new ideas!
 - c. Small group & case based teaching
 - i. Conduct small group teaching sessions on a focused topic. This may involve teaching in the student anatomy labs and neurosciences course, radiology interest groups or student electives
 - ii. Do a case-based conference as a 4th year for 3rd year residents studying for boards.
 - iii. Apply tenets of one-on-one instruction to medical student teaching during electives
 - d. Developing assessments
 - i. Learn the basic rules that apply to developing psychometrically sound multiple choice questions.
 - ii. Draft both formative and summative assessment for each of your teaching sessions. This can be incorporated into the audience response system.
- B. Giving & receiving feedback
- a. Deliver feedback to medical students under observation
 - b. Receive and respond to feedback from track directors
- C. Mentoring
- a. Mentor a specific medical student
 - i. As resident leader of the Radiology Interest Group –mentor the medical student leaders
 - ii. As for students names from Faculty Advisors

4. STRUCTURE

Track Faculty Directors: Nancy J McNulty MD, Petra J. Lewis MBBS

Resident selection committee: Nancy McNulty, Petra Lewis, Stephanie Yen, Tim Rooney, Jill Rosenthal, Robert Percarpio

Track Design

Group learning:

Quarterly sessions to develop teaching skills to include:

- A. Brain friendly learning
- B. Instructional design
- C. Presentation skills
- D. Active learning and assessment
- E. Item writing workshop
- F. Effective use of audience response
- G. Feedback and evaluation

Most of these will be a flipped class format, with pre-assignments like videos followed by live sessions to apply the skill. These will occur at the end of the work day and are required.

Individual learning

When beginning the track, each resident will need to formulate their personal learning plan to achieve the goals above in conjunction with one of the 2 directors. This will include scheduling & topic selection for didactic sessions, scheduling timeframe for meetings for mentoring and assessment of progress, selection of small group teaching sessions, etc.

Some learning materials may be provided on line for self-study.

5. EXPECTATIONS

Resident will:

- Achieve the above goals and objectives over a ~ 3 year period, completing them by resident graduation. Upon completion, they will receive a certificate.
- Be responsible for arranging their schedule to ensure their availability for the teaching sessions they commit to. This includes getting permission for time away from rotations.
- Be responsible for interacting & negotiating with faculty on clinical services which may be impacted by their absences, providing advance notification, and being willing to arrive early or stay late to complete any work missed.
- Receive formal evaluations from their teaching sessions both from learners and faculty, which can be added to their teaching portfolio.

Faculty will:

- With advance notice, enable resident to leave clinical service to fulfill obligations of the education track.
- Be available for feedback, mentoring, assistance and guidance throughout this process
- Provide feedback to residents q3m for first year and q6m thereafter
- Construct and deliver the formal educational group learning sessions.

6. ASSESSMENT

- A. Formal evaluation by Dr. Lewis/McNulty or Yen of each teaching session using the standardized evaluation form.
- B. End of track evaluation recognizing completion of all required components.
- C. Attendance and participation at group sessions.
- D. Feedback from student mentees.
- E. Student evaluations from teaching sessions.