EDUCATIONAL GOALS:

1. Fellows will learn the basic approach to common pediatric radiographic interpretation including plain film, ultrasound, computed tomography, magnetic resonance imaging and special procedures (including use of contrast agents). Competencies: MK

2. Fellows will learn to identify the most appropriate study to answer specific clinical questions. Competencies: MK

3. Fellows will learn principles of and protection from radiation exposure to operators, staff and patients. Competencies: MK

4. Fellows will learn to support the pediatric patient in the radiology suite; understand appropriate preparation, foster a developmentally appropriate atmosphere for patient participation. Competencies: PC

5. Fellows will be prepared to support children in the radiology suite during unexpected clinical deterioration (ex. Contrast allergy) through understanding of policies, procedures activation of system support and management. Competencies: PC, SBP, MK

6. Fellows will communicate with radiology staff and patients in a clear, professional manner while maintaining respect for privacy during all activities associated with this rotation. Competencies: IC

7. Fellows will adhere to UMHS pediatric emergency medicine professionalism standards during this rotation and learn aspects of professionalism as they apply to pediatric radiology practice. Competencies: P

8. Fellows will learn and participate in pediatric radiology quality improvement methods. Competencies: PBLI, SBP

9. Fellows will participate in the Division of Pediatric Radiology conference series to learn, lead and discuss pediatric radiology topics of interest. Competencies: PBLI, IC

10. Fellows will read (and be able to appraise) assigned/available pediatric radiology literature, (including self study) to improve understanding and practice of pediatric radiology and emergency applications. Competencies: PBLI, SBP, MK

11. Fellows will learn & participate in patient/family education regarding indications, limitations, risk and benefit of various pediatric radiographic studies. Competencies: PBLI, SBP, PC, IC

12. Fellows will learn to work collaboratively with pediatric radiologists and staff to insure quality, efficiency and safe practice when ordering/carrying out radiographic procedures in children. Competencies: PBLI, SBP, P

EDUCATIONAL OBJECTIVES:

1. Fellows will learn the approach (by reviewing films with pediatric radiology staff and independent reading) to common pediatric radiographic review including plain films of the pediatric chest, abdomen and musculoskeletal system. Competencies: MK, PC

2. Fellows will learn basic pediatric ultrasound principles and the approach to common pediatric ultrasound interpretation (abdominal, pelvic, and soft tissues) by reviewing with pediatric
radiology staff and independent reading. **Competencies: MK, PC**

3. Fellows will learn the indications for and basics of computed tomography (CT) & Magnetic Resonance Imaging, including interpretation of common pediatric studies (head, chest, abdomen/pelvis) by reviewing studies with pediatric radiology staff and independent reading. **Competencies: MK, PC**

4. Fellows will learn the indications for and basic approach to interpretation of special radiographic procedures, including those requiring contrast (and associated risks). **Competencies: MK, PC, SBP**

5. Fellows will learn to identify appropriate radiographic studies to answer common pediatric emergency clinical questions. **Competencies: MK, PC**

6. Fellows will learn principles of patient preparation (contrast, fasting, pre study diagnostic studies) for radiographic study. **Competencies: MK, PC**

7. Fellows will learn sedation principles as they apply to children sedated for radiographic procedures. **Competencies: MK, PC**

8. Fellows will learn Mott Radiology procedures and equipment to monitor and manage patients with unexpected changes in clinical status during radiographic study. **Competencies: MK, PC**

9. Fellows will learn from pediatric staff how to support children during radiologic procedures to reduce fear and promote safe efficient care. **Competencies: MK, PC**

10. Fellows will learn to communicate clearly and effectively on the pediatric radiology team as they participate in the care delivery system interacting with other departments, faculty, staff, patients and families. **Competencies: PC, SBP, IC**

11. Fellows will be reliable and professional during all activities of this rotation including attendance, completion of assigned duties and tasks, professional communication style and reliable completion of the rotation. **Competencies: MK, PC**

12. Fellows will complete assigned reading of specific topics, and prepare an analysis of assigned topics/clinical radiographic dilemma for presentation at radiology conference (and later to PEM fellowship conference). **Competencies: PBLI, IC**

13. Fellows will participate and engage in discussion of mechanisms to improve quality of service to children in the process of radiographic ordering/procedural testing. **Competencies: PBLI, IC**

14. Fellows will identify at least 1-2 cases seen during the month where the process of radiographic testing/ordering/procedural completion could have been improved and offer solutions for improvement. **Competencies: PBLI, IC**

15. Fellows will gain understanding of the risks & benefits of various radiographic studies and associated cost. **Competencies: SBP, PBLI, IC**

16. Fellows will assist in coordination of pediatric care in the radiology suite, adhering to patient safety principles, quality standards and acting as a patient advocate **Competencies: SBP, PBLI, IC, P**

17. Fellows will learn and participate in the Division of Pediatric Radiology error reduction and reporting activities. **Competencies: SBP, PBLI, IC**
DESCRIPTION OF CLINICAL EXPERIENCE:

Hours of Service: 8 a.m. – 5 p.m. M-F, Mott Radiology Dept. 3rd Floor Mott Hospital

Work Assignment: Daily work assignment will be directed by Radiology Attending staff; fellows will rotate between work/service areas to review/read radiology studies. Priority will be placed on morning reading of overnight studies (1700 & 1800 radiology resident preliminary work) daily. After this, fellows will be directed to pediatric radiology service areas (plain, ultrasound, etc) as directed. Fellows will be responsible to insure experiential time in all areas.

Fellows will be expected to identify 3-4 cases/week of radiologic studies originating in the CES for discussion of/topic review with faculty (examples: CXR’s, elbow films, hip ultrasounds).

Fellows are supervised in compliance with UMHS/GME/Fellowship Program Supervision policies while on this rotation. Fellows are required to be in compliance with UMHS/GME/Fellowship Program Duty Hour Reporting policies while on this rotation

DESCRIPTION OF DIDACTIC EXPERIENCE:

Fellows will attend all Mott radiology interesting case conferences 8-9 a.m. daily Tuesday - Friday (except on Wed during PEM fellowship conference time); fellows should also attend pediatric radiology interdepartmental conferences (schedules posted in the reading rooms).

Fellows will prepare one formal lecture/conference on a topic approved by Mott Radiology Faculty for presentation at the morning interesting case conference during the final week of rotation. Fellows will work with a Pediatric Radiology faculty or fellow in preparing their presentation.

Fellows are required to access MOTT PAC’s system (work lists) for self-directed study of topic specific content daily. Specifically, fellows may access the 96-hour Pediatric ER work list for a comprehensive review of radiology studies done on Pediatric ER patients within the preceding 4 days.

EVALUATION PROCESS:

Fellows are evaluated using tools based on the six core competencies completed in writing by pediatric radiology faculty after rotation via the UMHS MedHub online evaluation system. Fellows likewise evaluate their experiences after each rotation as well. Evaluations are forwarded to the Program Director and made available in aggregate to individual fellows via the MedHub system at all times. Formal review of fellow’s evaluations occurs at quarterly PD/Fellow meetings.

FEEDBACK MECHANISMS:

Specific problems or notations of excellence identified through verbal or written communication to the Program Director regarding the fellow are immediately brought to the attention of the involved fellow. Fellows receiving an overall poor performance grade (less than satisfactory evaluation for rotation) are notified immediately and meet with the PD. Fellows who do not pass the overall rotation will meet with
Rotation: Pediatric Radiology (ELECTIVE)
Institution: Mott Children’s Hospital/University of Michigan Health System
Duration: One (1) Month; (Available as Two week elective w PD/Svc approval)
Fellow Training Year: EM and or PD trainee (Year 1, 2, or 3)
Supervising Faculty: Maria F. Ladino-Torres, MD; Peter J. Strouse, MD

Accreditation Council for Graduate Medical Education (ACGME) Core Competency Key:
PC = Patient Care; MK = Medical Knowledge; PBLI = Practice-Based Learning and Improvement; IC = Interpersonal and Communication Skills; P = Professionalism; SBP = Systems-Based Practice