



## **PEDIATRIC RADIOLOGY**

*All Children's Hospital*

**Rotation Director:** Richard Benator, M.D.

**General Goals:** On this four week rotation, the resident will learn to interpret radiographic, ultrasound, CT, and MRI examinations of infants and children.

### **Daily Work:**

The daily work begins after arrival from morning conference. Since these studies are read early in the morning, lower level residents (RAD 1 and RAD 2) should plan to arrive early at least one week during the rotation to read out the NICU studies. Your absence from conferences will be excused during this time. Lower level residents should focus on reviewing ER, NICU, and ICU radiographic examinations during their first two rotations with introductory exposure to pediatric ultrasound, nuclear medicine, CT, and MR examinations obtained during this time. Upper level residents (RAD 3 and RAD 4) should focus on reviewing pediatric CT and MR examinations as well as ultrasound and nuclear medicine studies. As time permits, upper level residents should also spend some time reviewing radiographs from the ER, NICU, and ICU. Each resident rotating at All Children's Hospital will also spend two Saturdays per month reading imaging examinations from 8 a.m. to 3 p.m. Once the examinations have been previewed, the resident then reads out with one of the pediatric radiology attending radiologists present on any given day. Presently, Tampa General Hospital is the primary site for pediatric fluoroscopy experience. Residents may observe clinical work rounds in the section during the day.

### **Educational Goals and Objectives:**

#### ***First and Second Year Residents***

##### **Patient Care:**

- Begin to develop understanding of appropriate pediatric imaging protocols for common pediatric problems. Observe pediatric ultrasound examinations
- Observe neonatal imaging in the intensive care unit setting
- Interpret basic pediatric cranial and body CT examinations

##### **Medical Knowledge:**

- Understand common clinical pediatric entities and their imaging characteristics in chest, GI, GU, Musculoskeletal

- Focus on radiographic interpretation, particularly emergency, NICU, and ICU cases  
Demonstrate knowledge of common pediatric entities and competence in providing imaging interpretation of plain films studies, especially emergency cases
- Understand anatomy and common pathologic entities necessary for interpretation of pediatric GI/GU cross sectional imaging
- Demonstrate knowledge of anatomy and common pathologic entities necessary for interpretation in neonatal cranial ultrasound and cranial CT examinations

#### Interpersonal and Communication Skills:

- Learn to work and interact appropriately with infants and children at all developmental stages.
- Learn to work with and communicate with parents effectively
- Work effectively with pediatric imaging technologists, ancillary staff
- Communicate radiologic findings and their significance to clinicians in a timely and effective fashion
- Produce concise, accurate, and grammatically correct radiologic reports

#### Practice-Based Learning and Improvement:

- Identify, rectify, and learn from personal errors
- Incorporate feedback into improved performance
- Efficiently use electronic and print resources to access information

#### Professionalism:

- Demonstrate respect for patients and all members of the health care team
- Respect patient confidentiality
- Present oneself in a professional manner
- Demonstrate a responsible work ethic

#### System-based Practice:

- Understand how radiologic information is integrated with other parts of the health care system
- Demonstrate knowledge of ACR standards and appropriateness criteria
- Demonstrate knowledge of cost-effective imaging practices
- Demonstrate knowledge of pediatric radiation safety issues in imaging

### ***Third and Fourth Year Residents***

#### Patient Care:

- Participate in and interpret pediatric ultrasound examinations, including evaluation of the hips and spine
- Participate in neonatal imaging in the intensive care unit setting
- Interpret pediatric cranial and body CT examinations

#### Medical Knowledge:

- In addition to knowledge of common pediatric entities:
  - Understand anatomy and physiology of Congenital Heart Disease

- Become familiar with Pediatric CNS abnormalities
- Understand anatomy and pathology related to musculoskeletal imaging of pediatric hip and spine
- Knowledge of pediatric oncological entities and imaging

#### Interpersonal Skills:

- In addition to competence in communication skills listed for junior residents:
- Effectively teach junior radiology residents, pediatric residents, medical students

#### Practice-Based Learning and Improvement:

- Identify, rectify, and learn from personal errors
- Efficiently use electronic and print resources to access information
- Incorporate feedback into improved performance

#### Professionalism:

- Demonstrate respect for patients and all members of the health care team
- Respect patient confidentiality
- Present oneself in a professional manner
- Demonstrate a responsible work ethic

#### Systems-Based Practice:

- Understand how radiologic information is integrated with other parts of the health care system
- Demonstrate knowledge of ACR standards and appropriateness criteria
- Demonstrate knowledge of cost-effective imaging practices
- Demonstrate knowledge of pediatric radiation safety issues

### **Evaluation:**

At the completion of each rotation month the residents will be evaluated by the pediatric radiology attending radiologists by means of the monthly global evaluation form. In addition, the residents may also be evaluated by the technology and other support staff using the 360° professionalism survey on the USF GME homepage. The ACR in-service examination and mock oral board examinations will also provide evaluation of medical knowledge in pediatric radiology.