

## Resident Core Curriculum 1590 Weekend Call

The 1590 weekend call resident is responsible for modalities while on call that include Body CT, nuclear medicine, and ultrasound examinations. Over time, the resident will become progressively more knowledgeable about normal radiographic anatomy and the radiological appearances of diseases. In addition, the resident will demonstrate a progressive increasing understanding of disease entities, their clinical presentations, and current modes of treatment.

**General Goals:** The 1590 resident is in-house on the weekend, 08:00 – 20:00. The mid-level resident reads Body CT, ultrasound and nuclear medicine examinations

### Resident Work Responsibilities (OVERALL BENCHMARKS/OBJECTIVES for Self-Evaluation)

1. Residents assigned to 1590 will be available for consultations by 1404 residents, technologists, clinicians, and other health care providers.
2. Resident questions will be referred to the supervising faculty covering the on call division of radiology that is in question.
3. Resident review of cases with the supervising faculty will be conducted as many times in the day as necessary to keep an efficient workflow.
4. All resident examinations will be dictated by the end of every working day.
5. Residents will check and sign his/her reports prior to final verification by supervising faculty.
6. Residents must be familiar with the operation of all imaging equipment.
7. Residents must acquire knowledge of radiation protection and ways to reduce radiation exposure to both patients and hospital personnel. The resident will be supervised to assure that safe practices are followed.
8. Residents will check examinations before the patient leaves the department if requested to do so by the supervising faculty.
9. Residents must become proficient at detecting abnormalities demonstrated by cross-sectional (both with and without contrast) examinations. They must become proficient with generating meaningful differential diagnoses.
10. Residents will become knowledgeable about the use of different radiographic contrast agents (including their indications, contraindications, dosages, and side effects).
11. Residents will acquire an understanding of the proper preparation of patients for examinations and procedures and, appropriate follow-up afterward. Inappropriate requests, including those with insufficient clinical information, will be clarified and discussed with the referring physician.
12. Residents will do in-depth reading and study, along with a review of teaching file cases, to become knowledgeable about normal anatomy and physiology, the radiologic appearances of diseases, and gain a general understanding of the disease entities, their clinical presentations, and certain modes of treatment.
13. Residents will serve as a consultant to referring physicians regarding imaging.

### **Supervising Faculty Responsibilities:**

1. Supervising faculty will be available at all times by phone, for any questions, or consultations needed by the resident.
2. Supervising faculty will provide the resident with constructive feedback in any problem areas encountered.
3. Supervising faculty will verify resident-generated reports in a timely manner and inform the resident of any major changes made.

### **Patient Care and Technical Skills:**

#### **PCTS1: Consultant**

- Communicate verbally with referring physicians and house staff about radiographic findings

### **Medical Knowledge:**

#### **MK1: Protocol Selection and Optimization of Images**

- Knowledge and competency in protocoling and interpreting CT of the chest, abdomen, and pelvis, nuclear medicine examinations and ultrasound examinations
- Determine the need for repeat or additional radiologic examinations/studies.

#### **MK2: Interpretation of Examinations**

- **Body CT:** Identify any intra-thoracic, intra-abdominal or intra-pelvic abnormality that results from trauma, inflammation, surgical intervention or from a congenital or acquired condition. Identify neoplastic processes. This applies to both the pediatric and adult population.
- **Ultrasound:** Studies that are most often encountered are venous Doppler, pelvic, renal and abdominal ultrasounds. The resident needs to be able to identify abnormalities that arise from trauma, inflammation and congenital or acquired conditions. In addition, ectopic pregnancies and other abnormalities of the first trimester of pregnancy need to be identified. The resident also needs to be able to evaluate renal, hepatic, and pancreatic transplants, TIPS and the abdominal aorta for aneurysm. This applies to both the pediatric and adult population.

**Nuclear Medicine:** Correctly protocol and interpret all types of emergent nuclear medicine examinations, including but not limited to, HIDA scans, V/Q Scans, tagged red blood cell scans, etc. Determine if study is appropriate and if clinically feasible. Determine urgency of study and call in nuclear medicine tech for examination to be performed as appropriate.

### **Practice-Based Learning and Improvement:**

#### **PBLI2: Self-Directed Learning**

- Recognize limitations and ask for help when needed

### **Interpersonal and Communication Skills:**

#### **ICS2: Effective Communication with Members of the Health Care Team**

- Make decisions when to alert house staff to the immediacy of a condition that is apparent on the radiograph

- Provide preliminary reading on nuclear medicine examinations such as ventilation/perfusion scans, etc. and confer with the attending on call, as appropriate.
- Assist the junior call resident (1404) with challenging cases in emergency radiography, neuroradiology, fluoroscopy/gastrointestinal radiography, and musculoskeletal radiology.
- Proper report generation.

## **Monitoring and Assessment of Resident Performance**

The resident's progress will be monitored by the faculty on the service. Any deficiencies or substandard performance will be discussed privately with the resident by the Program Director. Residents are evaluated after each rotation by faculty. Resident performance is also evaluated through direct observation, case logs, multi-source professional evaluations, structured case discussion, review of patient outcomes, and other performance evaluation methods as determined.

## Resident Core Curriculum 1590 Night Float

The 1590 night float resident is responsible for modalities while on call that include Body CT, Neck CT, Ultrasound consultation. There are two concurrent rotations with similar responsibilities.

### First 6 Months:

#### Patient Care and Technical Skills:

##### PCTS1: Consultant

- Communicate verbally with referring physicians and house staff about radiographic findings

#### Medical Knowledge:

##### MK1: Protocol Selection and Optimization of Images

- Knowledge and competency in protocoling and interpreting CT of the chest, abdomen, and pelvis, neck CT, and Ultrasound examinations
- Determine the need for repeat or additional radiologic examinations/studies.

##### MK2: Interpretation of Examinations

- **Body CT:** Identify any intra-thoracic, intra-abdominal or intra-pelvic abnormality that results from trauma, inflammation, surgical intervention or from a congenital or acquired condition. Identify neoplastic processes. This applies to both the pediatric and adult population.
- **CT Pulmonary Angiography:** Identify abnormalities and normal variants in pulmonary arterial anatomy. Identify inflammatory and neoplastic processes. Identify pulmonary embolism on CT pulmonary angiograms this applies to both the pediatric and adult population.
- **Ultrasound:** Studies that are most often encountered are venous Doppler, pelvic, renal and abdominal ultrasounds. The resident needs to be able to identify abnormalities that arise from trauma, inflammation and congenital or acquired conditions. In addition, ectopic pregnancies and other abnormalities of the first trimester of pregnancy need to be identified. The resident also needs to be able to evaluate renal, hepatic, and pancreatic transplants, TIPS and the abdominal aorta for aneurysm. If time allows, the resident may be able to assist clinical services performing thoracenteses or paracenteses. This applies to both the pediatric and adult population.

#### Practice-Based Learning and Improvement:

##### PBLI2: Self-Directed Learning

- Recognize limitations and ask for help when needed

**Interpersonal and Communication Skills:**

**ICS2: Effective Communication with Members of the Health Care Team**

- Make decisions when to alert house staff to the immediacy of a condition that is apparent on the radiograph
- **Nuclear Medicine:** Provide preliminary reading on ventilation/perfusion scans and confer with the attending on call
- Assist the junior call resident (1404 night float) with challenging cases in emergency radiography, neuroradiology, fluoroscopy/gastrointestinal radiography, musculoskeletal radiology, and urgent nuclear medicine studies.
- Proper report generation.

**Second 6 Months:**

**Patient Care and Technical Skills:**

**PCTS1: Consultant**

- Communicate verbally with referring physicians and house staff about radiographic findings

**Medical Knowledge:**

**MK1: Protocol Selection and Optimization of Images**

- Determine the need for repeat or additional radiologic examinations/studies

**MK2: Interpretation of Examinations**

- **Body CT:** As above and be able to provide a differential diagnosis for the abnormalities encountered
- **CT pulmonary angiography:** As above and be able to provide a differential diagnosis for the abnormalities encountered
- **Ultrasound:** As above and be able to provide a differential diagnosis for the abnormalities encountered
- **Nuclear Medicine:** Provide preliminary reading on ventilation/perfusion scans and confer with the attending on call. Identify acute renal failure, renal tubular acidosis, urine leak following renal transplantation, acute cholecystitis, and GI bleeding
- Knowledge and competency in performing and interpreting Body CT, Neck CT, and ultrasound examinations

**Practice-Based Learning and Improvement:**

**PBLI2: Self-Directed Learning**

- Recognize limitations and ask for help when needed

**Interpersonal and Communication Skills:**

**ICS2: Effective Communication with Members of the Health Care Team**

- Assist the junior call resident (1404 night float) with challenging cases in emergency radiography, neuroradiology, fluoroscopy/gastrointestinal radiography, musculoskeletal radiology, and urgent nuclear medicine studies

- Make decisions when to alert house staff to the immediacy of a condition that is apparent on the radiograph
- Proper report generation

## **Monitoring and Assessment of Resident Performance**

The resident's progress will be monitored by the faculty on the service. Any deficiencies or substandard performance will be discussed privately with the resident by the Program Director. Residents are evaluated after each rotation by faculty. Resident performance is also evaluated through direct observation, case logs, multi-source professional evaluations, structured case discussion, review of patient outcomes, and other performance evaluation methods as determined.