

Radiology – ROTATION DESCRIPTION AND EXPECTATIONS (RDE)
Pediatric Emergency Medicine Subspecialty Residency - University of Calgary

ROTATION DESCRIPTION

Rotation Length

As of September 2023, the radiology rotation is comprised of 2-weeks of protected time to allow fellows to focus on the completion of ImageSim modules. While ImageSim access is given at the beginning of subspecialty residency, focused time is provided during this block to allow for more immersion. Vacation requests are allowed per the PEM Vacation and Education and Leave Policy

(https://docs.google.com/document/d/1pQddx9VLT74sny263koOMLAG_MWns9Au/edit?usp=sharing&oid=100114742872973660072&rtpof=true&sd=true).

Assessment

Residents must submit their ImageSim completion certificates to the program administrator and these will be reviewed by the program director at the end of the 2-year subspecialty residency. Residents are expected to complete all plain film modules except skull. Ultrasound modules are optional. After satisfactory completion of the ImageSim modules, an ITAR will be completed by the program director.

Rotation Structure

ImageSim access is given to residents at the beginning of their first year. They have 2 years to complete the program. The 2 weeks of protected time can be used to focus on ImageSim materials.

ROTATION EXPECTATIONS (PEM Competencies 2023)

At the completion of training, the resident will have acquired the following competencies and will function effectively as:

Medical Expert

1. Practise medicine within their defined scope of practice and expertise

1.3. Apply knowledge of the clinical and biomedical sciences relevant to Pediatric Emergency Medicine

1.3.2. Anatomy, physiology, and pathophysiology as related to clinical presentations in Pediatric Emergency Medicine

1.3.2.1. Anatomy of the internal organs and the musculoskeletal and neurologic systems, including surface anatomy and sonoanatomy, to guide diagnostic and therapeutic procedures

1.3.2.2. Physiology and pathophysiology as it applies to the cardiovascular, pulmonary, gastrointestinal and hepatobiliary, genitourinary, gynecologic, endocrine, neurological, musculoskeletal, hematologic, immunologic and integumentary systems, including pregnancy

- 1.3.6. Principles of investigation and testing
 - 1.3.6.1. Minimization of pain and distress
 - 1.3.6.2. Diagnostic imaging modalities and their indications, contraindications, and risks
 - 1.3.6.3. Cumulative radiation dose and the application of the ALARA (as low as reasonably achievable) principle

2. Perform a patient-centred clinical assessment and establish a management plan

- 2.2. Elicit a history, perform a physical exam, select appropriate investigations, and interpret their results for the purpose of diagnosis and management, disease prevention, and health promotion
 - 2.2.9. Select investigations with attention to diagnostic utility, safety, availability, and cost
 - 2.2.11. Interpret the following investigations
 - 2.2.11.2. Medical imaging, including
 - 2.2.11.2.1. Radiographs
 - 2.2.11.2.1.1. Abdominal
 - 2.2.11.2.1.2. Chest
 - 2.2.11.2.1.3. Skull
 - 2.2.11.2.1.4. Spine and extremity
 - 2.2.11.2.2. Critical findings of
 - 2.2.11.2.2.1. Abdominal/pelvic computed tomography (CT) and ultrasound
 - 2.2.11.2.2.2. Chest CT
 - 2.2.11.2.2.3. Cranial CT
 - 2.2.11.2.2.4. Imaging done as a part of a trauma protocol
 - 2.2.11.2.3. POCUS examinations
 - 2.2.12. Use sound clinical reasoning and judgment to guide diagnostic and management decisions, including in circumstances where complete clinical or diagnostic information is not immediately available
 - 2.2.13. Recognize and mitigate the risk of over-investigation and over-diagnosis

For Communicator, Collaborator, Leader, Health Advocate, Scholar, Professional competencies, please review the appropriate section of the Pediatric Emergency Medicine Competencies document at: <https://www.royalcollege.ca/content/dam/documents/ibd/pediatric-emergency-medicine/pem-competencies-e.pdf>