RADIOLOGY
CanMEDS roles and responsibilities

Specific Objectives
At the completion of the rotation the learner will have acquired the following competencies and will function effectively as:

1. MEDICAL EXPERT
During this rotation the junior learner will gain exposure and become proficient at interpreting the following

1. Plain radiography of skeleton including reviewing normal variants as well as common pathology
2. Special radiography tests including scanograms, dynamic tests, stress views etc.
3. Computed Tomography of areas pertinent to orthopedics such as
   a. Pelvic CT in trauma
   b. Comminuted fractures with complex patterns difficult to interpret on plain radiography
   c. Intra-articular fractures requiring CT analysis for pre-operative planning
   d. Pre-operative workup for both benign and malignant tumors including chest CT scan
   e. Spine CT in spinal stenosis, disc herniation and spinal infections etc.
4. MRI scan in areas pertinent to orthopedics
   a. Soft tissue injuries at any of the joints
   b. Shoulder instability and pre-operative workup to rule out Bankart lesions, SLAP lesions, rotator cuff injuries
      i. Understanding the role of MRI arthrogram and its interpretation for these problems
   c. Knee injuries including cruciate ligament injuries (both anterior and posterior), meniscal tears and different types, collateral ligament injury, osteochondral fractures/ lesions
   d. Ankle instability looking for ligament tears
   e. Osteochondritis Dissecans looking for signs of stability/healing including interpretation of MRarthrogram.
   f. Pre/post-operative work up for tumor including benign features as well as malignant features and the role of MRI during medical treatment
   g. MRI spine being able to identify disc herniations, ligament injury post trauma, canal stenosis intra spinal pathology.
5. Ultrasonography areas pertinent to orthopedics
   a. Hip ultrasound in the new born to rule out DDH
   b. US soft tissue lesions etc.
   c. US shoulder for rotator cuff tear

Learners should understand some basic science as to how the radiological tests work including MRI, CT scan and ultrasound and which tests are appropriate for certain orthopedic problems and when it is appropriate to order multiple tests.

II. COMMUNICATOR
1. Establish a relationship with the radiologists as well as technologists to better understand their role in orthopedics and the purpose of open communication with them to ensure timely and effective feedback for the patients

III. COLLABORATOR

1. Consult effectively with radiologist as well as radiology technologists
2. Effectively complete radiology requests writing pertinent information that can help the radiologist with interpretation
3. Understand the role of radiology in the health care team

IV. LEADER

1. Utilize resources effectively to optimize patient care
2. Allocate health care resources wisely
3. Works effectively in the health care team

V. HEALTH ADVOCATE

1. Recognize the need for timely access to resources and to advocate for these when appropriate
2. Recognize and respond to those issues where advocacy is appropriate

VI. SCHOLAR

1. Critically appraise sources of medical information
2. Contribute to development of new knowledge

VII. PROFESSIONAL

1. Deliver the highest quality of care with honesty, integrity and compassion
2. Exhibit appropriate personal and interpersonal professional behavior
3. Recognize the importance of patient confidentiality