INTRODUCTION

Welcome to your Radiology Elective at St Joseph’s Healthcare, Hamilton, Department of Diagnostic Imaging. We are located on Level 0 of the Juravinski Tower at the Charlton Campus. I look forward to meeting with you and I hope that you find the next two weeks enjoyable, motivating and educational.

ELECTIVE OBJECTIVES

It is the objective of this elective to provide a comprehensive and insightful experience of a busy teaching hospital radiology department. Students will rotate through different subspecialist areas of the department and will be afforded the opportunity to observe procedures and examinations being performed. Students are encouraged to consider the patient experience of each examination and to question if there would be alternative imaging that may equally or better answer the clinical question. Students will spend time going through cases with residents and then ‘reading out’ these cases with the supervising staff Radiologist.

The elective is designed to be equally as valuable for those hoping to enter a career in Diagnostic/Interventional Radiology as those pursuing other career paths both in hospital practice or Family Medicine.

The following objectives should be considered:
- An awareness and understanding of all provided imaging modalities.
- A knowledge of indications, contraindications, risks and costs of common examinations.
- A working knowledge of radiation safety.
- Understanding of basic cross sectional anatomy.
- An appreciation of normal and pathological conditions demonstrated on imaging.
- Basic imaging interpretation skills focusing on plain films but also including cross sectional imaging techniques.

EXPECTATIONS

Students are expected to arrive punctually and appropriately dressed. A professional manner in all interactions with all staff and patients is expected. Normal working hours are 0800 to 1700hrs. You will be assigned a resident to work alongside from 0800 to 1200hrs. The afternoon schedule is made up of rounds and self-directed study including CORA participation.
As with everything communication is paramount and I ask that you introduce yourself to those that you meet within the department, including the radiologists that you are to be working with that day. Use common sense, courtesy, and discretion in dealing with patients. Be politely forthcoming if you feel that you are being ignored. Medical Students are important to me and to everyone in the department. Please let either myself or Terri know promptly if you encounter any problems.

**WEEKLY TIMETABLE**

<table>
<thead>
<tr>
<th>WEEK ONE</th>
<th>MODALITY</th>
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<tbody>
<tr>
<td>MONDAY</td>
<td>General Radiology/ Ultrasound</td>
</tr>
<tr>
<td>TUESDAY</td>
<td>Fluoroscopy / Mammography</td>
</tr>
<tr>
<td>WEDNESDAY</td>
<td>Computerized Tomography (CT)</td>
</tr>
<tr>
<td>THURSDAY</td>
<td>Magnetic Resonance Imaging (MRI)</td>
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<tr>
<td>FRIDAY</td>
<td>Angiography / Interventional</td>
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The second week the student will rotate to different subspecialties.

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<tr>
<th>WEEK TWO</th>
<th>MODALITY</th>
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<tbody>
<tr>
<td>MONDAY</td>
<td>Respiratory Imaging – Centre of Radiological Anatomy</td>
</tr>
<tr>
<td>TUESDAY</td>
<td>GI / GU Imaging</td>
</tr>
<tr>
<td>WEDNESDAY</td>
<td>Musculoskeletal Imaging / Angio-Interventional</td>
</tr>
<tr>
<td>THURSDAY</td>
<td>Neuro Imaging</td>
</tr>
<tr>
<td>FRIDAY</td>
<td>Emergency Radiology</td>
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Note: Please obtain scrubs the day prior to your IR day and come dressed in scrubs for 8am in the IR suite. It is also a good idea to check the list of procedures scheduled for that day so you can read around the anatomy/procedure the night before.
 Rounds occur throughout the week and are normally held in the John Fortino Conference room (near the main radiology reception desk). Radiology resident HOT SEAT rounds are daily at 1pm with the exception of Wednesdays when Resident Half day rounds take place. You should prioritise attendance at these teaching rounds as much as possible and are encouraged to attend the Radiology Resident Half Day Sessions. Our weekly rounds calendar is included below. It is the understanding that students should attend as many of the clinical rounds as possible. This will provide an understanding of the role of the radiologist in the multidisciplinary team setting and allow observation and learning from complex case discussion.

<table>
<thead>
<tr>
<th>TIME</th>
<th>DAY</th>
<th>MODALITY</th>
<th>LOCATION</th>
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<tbody>
<tr>
<td>1-2pm</td>
<td>M/T/Th/F</td>
<td>Radiology Resident Hot Seat Teaching Rounds</td>
<td>DJ John Fortino Conference Room T0102</td>
</tr>
<tr>
<td>12-1 pm</td>
<td>T</td>
<td>Interesting Cases</td>
<td>DJ John Fortino Conference Rm T0102</td>
</tr>
<tr>
<td>12-1pm</td>
<td>W</td>
<td>Musculoskeletal/Vasculitis</td>
<td>DJ John Fortino Conference Rm T0102</td>
</tr>
<tr>
<td>1-5pm</td>
<td>W</td>
<td>Resident Half-Day</td>
<td>Rotates – (SJHH/MUMC/JCC/HGH)</td>
</tr>
<tr>
<td>8-9 am</td>
<td>Th</td>
<td>Breast/Pathology</td>
<td>DJ John Fortino Conference Rm T0102</td>
</tr>
<tr>
<td>12-1 pm</td>
<td>F</td>
<td>Lung DST Rounds</td>
<td>DJ John Fortino Conference Rm T0102</td>
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Additionally colorectal and ENT rounds occur on a biweekly/monthly basis. Please see weekly schedule during elective for additional rounds.

CORA – Centre Of Radiology Anatomy

The Centre of Radiology Anatomy (CORA) lab is located on Level 3 of the Juravinski Innovation Tower. It is the expectation that students will work through this excellent chest x-ray interpretation course during their 2 weeks. Separate handouts will be given to you at the start of your elective.
Medical Student Case library

We have a growing case library of interesting cases for elective students to work through. This list is continuously updated and cases can be worked through during any down time and subsequently discussed with residents and/or ‘read out’ with me. You will require PACS access for this and will be provided with this at the start of your elective.

EVALUATION

Students will be assigned a Staff mentor for the duration of their elective. Student evaluation will be based upon attendance, clinical / radiological contribution to discussions and professional attitude.

This will also encompass the student’s understanding of the physics, radiation exposure, patient perspective, role of the technologist and supporting staff as detailed in the McMaster Medical Student Radiology Curriculum.

Students are asked to present 3 interesting/educational cases that you have been involved in during your elective. This will include the Radiology accession number, brief clinical indication and relevant imaging findings with diagnosis or differential diagnosis.

We look forward to meeting with you and hope that you enjoy your time with us.

Dr Euan Stubbs
Coordinator of Elective Medical Students in Radiology
Assistant Professor McMaster University

ONLINE RESOURCES & RADIOLOGY APPS

FREE ONLINE WEBSITES

The Radiology Assistant - very readable and concise

Radiopaedia - The Wikipedia of Radiology

University of Virginia’s Introduction to Radiology online tutorial series is one of the best and even covers some more esoteric modalities (like Cardiac MRI).

Learning Radiology is a massive resource with lots of cases.

Lieberman’s eRadiology is another nice, big, well-organized resource, including a lot of lectures, powerpoints, cases, imaging workup algorithms, etc.

HeadNeckBrainSpine is easily the best resource for learning neuroanatomy.
**APPS**
Radiology 2.0 One night in ED
Radiopaedia app
Surgical Radiology app
Essential Imaging in Rheumatology: Uncovering the Hand Radiograph
Essential Imaging in Rheumatology: Clinical Case Challenge
Essential Imaging in Rheumatology: Unraveling Spondyloarthropathy

**CONTACTS**

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