St-Mary's Hospital

Department of Diagnostic Radiology

Community Radiology Fellowship Program

FELLOWSHIP DIRECTOR: DR. ELENA OXENGENDLER

PROGRAM ADMINISTRATOR: CATHY TORCHIA

General Overview

St- Mary's Hospital is a McGill-University affiliated Teaching Hospital and is a community-based hospital located in Montreal, Québec, part of the CIUSSS ODIM. It has one of the busiest emergency departments, with about 34,000 visits per year. The SMH comprises over 255 inpatient beds. Medical Students, Residents and Fellows routinely rotate through most specialties at SMH. Among many specialties, the hospital is particularly highly regarded for its Gynecology/Obstetrics, orthopedics, oncology and Family Medicine Departments. The Radiology Department performs over 85,000 radiologic examinations per year. As well, the department of Radiology performs over 1800 vascular and non-vascular image guided interventional procedures per year.

Fellows will be exposed to a high volume of diverse cases and will be supervised by a dynamic and dedicated group of subspecialty fellowship-trained, board-certified radiologists with hybrid practices.

The faculty includes dedicated radiologists with subspecialty training in abdominal, neuroradiology, musculoskeletal and interventional radiology. This will include a wide exposure to musculoskeletal examinations with a variety of pathologies, including sports injuries, trauma, arthropathy and tumors with excellent collaboration with the Department of Orthopedic Surgery, Rheumatology and Plastic Surgery. Interventional procedure training for fellows includes imaging-guided soft tissue and bone biopsy, image-guided pain management, joint aspiration/injection including arthrography, and spinal injections.

Duration: 1 Year

Number of Fellows per year : 1

Objectives/Guidelines

At the end of the fellowship, the fellow will be able to:

1. **Detect any abnormality on ultrasound, CT and MRI, give a pertinent differential diagnosis and propose appropriate management.**
2. **Perform ultrasound and CT-guided procedures.**
3. **To serve as the first line consultant to referring clinicians, including participation at tumor board**
4. **Participate in the teaching of medical students and residents.**
5. **Participate in research as per the fellow interest, with staff supervision and guidance. Protected time would be available, to be discussed at the beginning of the year.**

At the end of the fellowship, the fellow will be able to, as per the CanMEDS roles:

Medical Expert :
Detects any abnormality on ultrasound, CT and MRI, gives a pertinent differential diagnosis and proposes appropriate management.

Performs ultrasound and CT-guided procedures.

Communicator:
First line consultant to referring clinicians, including participation at tumor boards.

Communicates efficiently with physicians and other health professionals.

Provides well organized, structured and succinct reports.

Collaborator :

Establishes respectful relationships with peers, other health care

professionals, and recognizes their expertise.

Collaborates effectively with other team members.

Leader:

Is efficient and able to prioritize, maintains workflow under control

Makes appropriate decisions to optimize patient management

Health Advocate:

Understands Radiation Protection.

Understands and is able to explain the principle of screening examinations.

Is able to explain and counsel regarding the potential risks of over investigations.

Scholar:

Participates in the teaching of medical students and residents.

Is up to date with medical literature.

Is motivated to continuously learn through reading, conferences, etc.

Professional

Is able to recognize its own limitations, and asks for help when needed.

Applies principles of ethics.

Integrity and honesty.

Compassion and empathy.

Structure

Clinical activities take place at St-Mary's Hospital. The fellowship includes access to advanced, state-of-the art imaging equipment: 1.5T MRI system, a CT scanner and ultrasound units.

The fellow will have daily assignments in US, CT or MRI as well as procedures. He or she will progressively assume the role of junior-staff and will be supervised by staff radiologists. The fellow will benefit from progressive autonomy during the academic year and will be able to further develop their leadership skills.

The procedures performed include: US guided thyroid/breast/abdominal biopsies, paracentesis, thoracentesis and abscess drainages as well as various musculoskeletal procedures such CT/MR arthrograms, bone biopsies, facet blocks. Procedures under CT guidance (drainages and biopsies) are also frequently performed. The Department also performs various vascular procedures such as PICC line insertion, angiograms, IVC filter insertion.

The fellow will always be supervised by the attending staff.

Strong MSK emphasis

The MSK component constitutes approximately 30% of the entire department's activities. As the sole fellow in the department, the fellow gains diverse and sustained exposure to a wide range of MSK cases, which aligns well with the hospital's community-oriented approach. The program's dedication to comprehensive care for patients with musculoskeletal conditions ensures the fellow's preparation for future roles in MSK imaging within the community setting. This setting provides an ideal environment for fellows to further enhance their skills and knowledge in the field of MSK imaging, making it a suitable option for a community-based practice.

Key highlights of the program concerning the MSK activity:

- Progressive Learning Approach
- Individualized mentoring from the beginning of the fellowship.
- Gradual exposure to MSK cases for building confidence and precision.
- Regular feedback on performance to adjust the training.

MSK Activity in the Department:

MSK activity is a core component of the hospital's services, encompassing approximately 30% of the entire department's workload.

- 90 scans per week, including emergency, spinal, and trauma cases.
- 20 ultrasounds per week (shoulder, wrist, surface, knee, ankle …)
- 80 MRIs per week.
- 8-10 interventional procedures per week.

Practice of Interventional Procedures:

- Bone biopsies.
- Ultrasound or fluoroscopy-guided infiltrations (peripheral and spinal interventions).
- ArthroMRI/Arthro CT.

Diversity of MSK Cases:

- Exposure to a variety of musculoskeletal pathologies.
- Rapid management of emergency and trauma cases.
- Oncological recruitment: primary and metastatic tumors.
- Rheumatic diseases, sports injuries, degenerative conditions, etc.

Versatile Training for Career:

- Preparation for independent practice on common MSK pathologies.
- Ability to tackle specific diagnostic and interventional challenges.
- Monthly Continuous Evaluation

- Regular monitoring of fellows' progress throughout the program.
- Assessment of skill acquisition and MSK case mastery.
- Adjustment of training plan based on individual needs.

Research Opportunities:

Prospects for research and multidisciplinary collaboration in the field of MSK imaging.

Fellow's responsibilities & Schedule

- Learn to function autonomously as a radiology consultant in US, CT and MR interpretation
- Perform and manage non-vascular interventional procedures safely.
- Learn how to manage the workload and prioritize cases on a daily basis
- Teach residents and organize teaching rounds.
- Learn how to manage on-call workload and identify/manage urgent cases
- Participate in Tumor Board
- Possibility to attend MUHC lectures
- Additional Training at MUHC TBD

EXPECTED CASE LOAD (daily)

CT rotation: 25-30

MR rotation: 10-15.

US rotation: 40-50

Procedures : 6-8

Evaluation

The fellow is evaluated on a daily basis by the attending staff

A formal written evaluation is completed every 3 months, using the CanMEDS roles scheme. The fellow will meet the fellowship supervisor for direct feedback.

Compensation: Commensurate to a PGY-6 resident salary in the province of Quebec

On-Call frequency: Equivalent of one weeknight per week, and two weekend days per month (total of six calls per month).

Schedule :

Monday : CT

Tuesday : MR

Wednesday : US

Thursday : Procedures/MR

Friday : X-Rays/TB/teaching

Faculty

Fadi Habbab, MD, MHM, FRCPC, DABR – NeuroRadiology/Abdominal Imaging and Intervention

Vitaly Sygal, MD, FRCPC – Neuroradiolgy

Sagi Kaduri, MD**,** FRCPC– Musculoskeletal and Interventional Radiology

David Tobaly, MD, FRCPC– Musculoskeletal (MSK) Imaging and Intervention

Elena Oxengendler, MD, FRCPC – Body Imaging and Intervention

Jack Glay, MD, Faculty Lecturer