

Clinical & Research Fellowship in Breast Imaging

The Department of Radiology at McGill University offers a one year clinical and research fellowship of Breast Imaging at the Cedars Breast Clinic of the Royal Victoria Hospital. Breast imaging at McGill is incorporated into a multidisciplinary approach to breast disease.

Duration: 1 year

Fellowship Director: Dr. B. Mesurole, Dr. Reinhold

Program Director: Dr. Jana Taylor

Attending Staff: Dr. Aldis, Kao

Breast Imaging

General Guidelines:

The breast imaging section is integrated to the Cedars Breast Clinic which offers to its patients a “one stop shop” whereby in the same visit, the patient consults her breast surgeon, has her screening or diagnostic mammogram performed as well as any additional work up including, additional mammographic views, sonographic examination and imaging guided biopsies as needed. These are performed by four faculty members (Drs A Aldis, E. Kao, B. Mesurole and S. Petitclerc). One fellow and one resident rotate respectively on a 6 months and one month basis.

The Breast imaging section performs over 8,000 mammograms, 3,000 breast ultrasounds, 500 stereotactic and ultrasound guided core biopsies, and 150 localizations per year. In addition, the MR division performs approximately 15-20 breast MRIs per week. MR-guided biopsies are also performed.

The fellow will work as a junior staff in the breast center. She or he, will read mammograms, interpret breast MR studies, perform sonographic examinations as well as imaging guided biopsies, Fine Needle Aspirations and needle localizations prior to surgery. She or he, initially and through the whole learning process, will be guided by the staff radiologist while gaining more experience and becoming more autonomous with time. She or he will interact with the surgeon on site, discussing management of difficult cases.

The fellow will attend once a week, a tumor board meeting (every Thursday noon) during which the therapeutic management of the breast cancer patients is discussed between a multidisciplinary team. Breast rounds are also held in the breast center once every two months during which latest advances or guidelines are presented and discussed between, surgeons, radiologists, oncologists and pathologists. The fellow participates in preparing and presenting subjects.

With gaining experience, the fellows will participate in the teaching process of the residents during their rotation in the breast center and if they wish, in any research project. They will also be responsible for the post-biopsy reading of all the interventional procedures they performed during their rotation, so they will be able to assess the pathologic-radiologic concordance of all the lesions biopsied.

State-of-the-art equipment includes:

- 3 CAR accredited mammography units
- 10 state of the art US machines with the highest resolution transducers and Doppler capabilities.
- 1 prone digital biopsy table with vacuum assisted core biopsy capabilities
- Two high field MRI systems with a dedicated Sentinelle breast coil and the integrated interventional CAD
- Three multi-slice CT scanners
- Interventional procedures in breast include
 - Stereotactic,ultrasound and MR guided core biopsies
 - Fine needle aspirations
 - Needle localizations using ultrasound, digital and conventional mammography and if necessary MR guidance
 - En Bloc biopsy procedure

Research fellowship

Protected research time (3 to 4 days) is provided for the candidate to be involved in research projects.

Projects are carried out in collaboration with the surgical team, the oncology department and pathology department of MUHC, focused on breast cancer detection, diagnosis and care.

We encourage completion and publication of research projects, presentation of results at national and international meetings and published in leading peer-reviewed journals

This will be performed under the supervision of dedicated breast radiologists, surgeons and pathologists.

Breast Imaging Fellow's responsibilities:

1. Assume the role of primary imager with the faculty person as a supervisor.
2. Participate in "on- line" interpretation of the daily studies.
3. The Fellow will assume responsibility for performing ultrasound procedures with the faculty person supervising.

4. The Fellow will be responsible for running the MR service
5. Participate in the performance of procedures, including image-guided biopsies.
6. Participate in academic projects.
7. Participate in multidisciplinary rounds.

On-Call Responsibilities

The Fellow is responsible for taking call at a frequency not to exceed 1 week in 4. The fellow will be assessed in his/her first few months to determine what type of call will be assigned, as formal Breast-Imaging call does not exist at the MUHC. The Residency Program Director, in consultation with the Breast Imaging Fellowship Director, shall decide on an appropriate call duty for the fellow.

At the end of their fellowship,

The fellow has become a fulfilled breast imager able to:

1. **Diagnose breast cancers at their very early stage**
2. **Use the BIRADS lexicon, while describing an anomaly in the report and deciding for the subsequent management.**
3. **Perform easily and safely, imaging guided biopsies (stereotactic, US and MRI guided)**
4. **Perform pre-operative needle localizations**
5. **Manage properly any anomaly noted on a mammogram, US or MRI**

FELLOW EVALUATION:

The fellow is evaluated on a daily basis by the attending staff and will meet regularly with the fellowship supervisor for face-to-face feedback. A formal written evaluation is completed every six months, using the CanMEDS roles scheme.

EXPECTED CASE LOAD (daily unless specified)

Mammograms: 40

Ultrasounds: 15

Biopsies: 10, US guided and 4 stereotactic per week

MRI (weekly): 10

Needle localization: 4

ACADEMIC FACILITIES

Internet access from all workstations and from fellow's office

Access to libraries at MGH, RVH and McGill

Multimedia learning materials available
Free online journal access via McGill portal

VACATION/CONFERENCES

The fellow is granted 4 weeks of vacation plus an additional week during either the Christmas or New Year's holidays. The fellow is also granted one week to attend a conference if he/she wishes to do so. If he/she presents a paper at a major conference, the time of the conference is not counted against his/her conference or vacation time. In addition, he/she may request funding for expenses incurred to attend the meeting where he/she presents, provided that the research was done in the department of Radiology at McGill University

The fellow's responsibilities are separate from those of the residents, and the fellows positively impact residency training. There is no negative impact of the fellowship on residency training.

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