Fellowship Director: Dr. David Valenti  
Residency Program Director: Dr. Jana Taylor  
Program Administrator: Cathy Torchia

General Overview

The Department of Radiology of the MUHC offers a 1 OR 2 year fellowship in Interventional Radiology. The fellowship program offers exposure to all areas of vascular and non-vascular diagnostic and interventional image-guided procedures. The fellowship provides an integrated experience of clinical care, research, and teaching.

Vascular, hepatic and transplant procedures are mostly performed at the Royal Victoria Hospital, while the Montreal General Hospital is a Level I Trauma Centre with a large oncology practice. Both hospitals are dialysis centers. There are 4 IR suites in total, 2 at each site, each with state-of-the-art equipment.

Fellows rotate at the RVH, MGH, MCH and JGH sites.

There are 6 IR attending staff. The fellowship program allows up to 5 fellows simultaneously.

Duration: 1 Year OR 2 Years

Objectives/Guidelines

- Obtain the clinical and practical knowledge for an appropriate case management and follow up
- Obtain the skill to perform vascular and non-vascular procedures
- Get involved on a multidisciplinary team for the management of oncologic patients
- Perform IR procedures independently
- Get the ability to prioritize cases and protect/advocate for patients

Structure

To learn the principles and practice of Interventional Radiology.

These include: general topics in IR such as:

Patient care, awareness of occupational hazards and radiation safety, learning a team approach to building an IR practice, and clinical aspects of IR. There is a monthly morbidity and mortality review.
Specific objectives are to provide deep exposure in the following areas:

**Diagnostic vascular IR** comprises traditional angiography of the aorta, its branches, the upper and lower extremities, the cervical and intra-cranial circulation, as well as non-invasive vascular imaging, such as CTA and MRA, and CT cardiac imaging.

**Vascular Interventions** include treatment of ischemic and aneurysmal disease of the peripheral and visceral arteries. There is a strong focus on embolotherapy, from trauma to uterine fibroids, to oncology, to post-op hemorrhage. There is a large volume of venous interventions, from simple to complex venous access, dialysis work, IVC filters, trans-venous hepatic and renal biopsies, TIPS, and pulmonary AVMs

**Non Vascular Interventions** include percutaneous biopsy, with CT and US guidance, percutaneous and intra-operative radio-frequency ablation, abscess drainage, fluoro-guided biliary and renal interventions, including in the transplant setting, chest tube placement, percutaneous gastrostomy and enterostomy placement, and spinal procedures such as vertebroplasty, facet and nerve root blocks.

**Research:** All fellows are encouraged to participate in at least one research project, with the goal of publishing in a major peer-reviewed journal. Fellows are also encouraged to take advantage of the many opportunities to contribute to multi-disciplinary research projects ongoing with other departments.

**Teaching:** Fellows are expected to teach resident rounds whenever appropriate. This could include general teaching rounds with all the residents, typically one hour per month, and case based teaching in the IR suite. Relation with resident staff: The fellow functions as a junior attending, and as such is incorporated within the teaching team. With respect to procedures, the fellow is primarily responsible for all interventional procedures, and as such has a supervisory over the residents to perform the cases. The residents, however are required to learn basic interventional techniques during their residency training, and the fellow is expected to assist the residents in acquiring the necessary experience in these techniques

**The 2-year Fellowship** program encompasses all the training objectives of the 1-year Interventional Radiology Fellowship Program, but also includes additional exposure to advanced vascular and non-vascular procedures, (including but not limited to TIPS, RFA, microwave ablation, pediatric and neo-natal interventions). The second year Fellows are given increased responsibility, not only in terms of performing procedures, but also in terms of patient selection, patient preparation, pre-procedure work-up and post-procedure care as well as device selection and inventory management. The second year Fellow is also expected to make more substantial contributions to academics, both research and teaching.

**Schedule:** Procedures begin at 08:00 hrs and continue to 17:00 hrs.
On-Call: Fellows are on call via pager, approximately one week in four. There is attending staff back up at all times. The resident covers all the major centers while on call. Whenever they are requested to perform a procedure, they must contact the staff radiologist on call to discuss the case.

The Residency Program Director may, in times of extreme need, require a Diagnostic Radiology Fellow to perform an evening / night / weekend General Radiology resident level call. Although this is very rare, the possibility does exist and is included in the Fellow's call responsibilities.

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 director of his section for direct feedback