

McGill University
Dept. of Diagnostic Radiology
Montreal Neurological Hospital and Institute

Clinical & Research Fellowship in Interventional Neuroradiology

*****This position is for third party funded candidates.**

Duration of training: 1 Year Fellowship Program

Name of Fellowship Director: Dr. Carlos Torres

Name of Residency Program Director: Dr. Jana Taylor

The Neuroradiology Department at the Montreal Neurological Hospital and Institute offers a 1-year Clinical & Research fellowship in Interventional Neuroradiology, intended for the more mature candidate who already has fellowship training in diagnostic neuroradiology as well as training or clinical experience in Interventional Neuroradiology. The fellowship program offers exposure to all vascular and non-vascular diagnostic and interventional percutaneous and endovascular procedures. The fellowship provides an integrated experience of clinical care, teaching and research.

The Department is equipped with two 1.5 Tesla Units and one 3 Tesla Unit MRIs (two of these units are largely used for research), a bi-plane neuroangiographic room with Rotational 3D capability, one multipurpose room, one multislice CT scanner, a portable multislice CT scanner, a Color Doppler unit and CR unit.

The MNH site is equipped with a 1.5 Tesla MRI , a bi-plane neuro-angiographic room with Rotational 3D capability, one multipurpose fluoroscopy room, a 320 slice CT scan, a portable CT scan, two Color Doppler units and plain film unit.

The MNH site of the MUHC is a major tertiary and quaternary referral center for brain tumors, epilepsy, vascular lesions and degenerative diseases. The program benefits from the close collaboration with 13 neurosurgeons and over 20 neurologists.

The Interventional Neuroradiology service covers many endovascular procedures (coiling of aneurysms, embolization of AVM and tumors, carotid and intracranial stenting, intra-arterial thrombectomy therapy) and percutaneous spinal procedures (vertebroplasty, biopsy, nerves blocks) The Interventional Neuroradiology service has admitting privileges for elective procedures and it is fully integrated with the Neuro-Vascular service.

Candidates must have completed their specialty training in Diagnostic Radiology. A solid background in Diagnostic Neuroradiology is an asset.

This combined Clinical and Research fellowship is intended for the more mature candidate, who has already completed specialty training in Diagnostic Radiology, already completed fellowship in Diagnostic Neuroradiology and must have at least 6 months experience (either as a fellow or as attending staff) in Interventional Neuroradiology.

Objectives

The clinical component of this combined fellowship is dedicated to the endovascular and percutaneous treatment of central nervous system vascular lesions and tumors, to the percutaneous treatment of spine conditions including vertebroplasty, nerve blocks, epidural blocks and biopsy. Naturally the interventional fellowship also includes interpretation of brain and spine imaging.

At the conclusion of the training the fellow should be able to function autonomously in the performance of diagnostic angiography and spine procedures. S/He should know the indications and the technical management in the treatment of vascular lesions and tumors and should be able to perform under supervision endovascular procedures, lumbar puncture and myelography.

By the end of the fellowship the candidate should be familiar with the materials and devices available and used in the interventional procedures. Furthermore the candidate should be aware of the possible complications of the different endovascular procedures and of their management. The fellow must also become familiar with the most common medications used while the patients are admitted under the White Service care, their dosage and their side effects. The fellow must participate in the Cerebro-vascular clinic with the attending staff which takes place once/ week.

On Call

The fellow is on call 9 days per month. The fellow is on call as 1st call, supported by the attending staff.

Teaching and academic activities

The fellow participates actively in the teaching of other trainees and actively participates in the other academic activities in the department. Neurosurgery Rounds, Cerebrovascular Rounds and Thursday Neuroradiology Rounds are required activities.

The fellow is encouraged to participate in research activities. Protected time may be granted depending on the nature of the project. The project must be discussed and approved in advance by the fellowship director.

Work Schedule

Daily working hours are from 8:00 am to 6:00 PM.

Feedback and evaluation

The fellow is evaluated on a daily bases by the attending staff. A formal verbal and written evaluation is given to the fellow every 6 months.

Research

During this Clinical and Research fellowship 20-40% of training time will be dedicated to research activities. The fellow, under the supervsion of one of the attending in INR, will be participating actively in a research project with mandatory completion of a manuscript for publication. The completion of a project is considered a formative educational moment during the fellowship year . The completed paper will also be presented at national or international meetings as it is deemed fit depending on the time of the year.

Expected daily case load (Interventional Neuroradiology)

CT: 5 cases

MRI: 5 cases

Diagnostic angiogram and Interventional Procedure 3 cases

Spine procedures 4 cases daily

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.