

## **DIAGNOSTIC NEURORADIOLOGY FELLOWSHIP (MGH)**

Duration of training: 2 Year Diagnostic Neuroradiology Fellowship Program

Name of Program Director: Dr Raquel del Carpio-O'Donovan

Name of Fellowship Director: Dr. Carlos Torres

Number of positions: 1 per year

### Summary:

A Diagnostic Neuroradiology fellowship is offered at the MGH, providing training in Neuroimaging (CT MR XRAY ), including spine intervention.

The Department has an active service, which corresponds to the hospital's mission in Trauma and Oncology. A large volume of examinations of brains and spines are carried out with three state of the art multidetector CT scanners and a 1.5 T MR scanner.

Additionally, the fellow may elect to participate in diagnostic ENT imaging. The candidates should be certified general radiologists who wish to practice the specialty with a special interest in Neuroradiology.

### **1<sup>st</sup> year**

The candidate will spend his/her time exclusively in the department of Diagnostic Imaging at the MGH. During these 13 periods the candidate will gain expertise in the interpretation of imaging studies of the brain and spine, orbits, peripheral nerves and neurovasculature. As part of the daily responsibilities, diagnostic/therapeutic LPs will be performed as well as myelograms. As well, the fellow shall participate in the teaching of residents, students and observers as well as prepare weekly teaching rounds.

### **2<sup>nd</sup> year**

During the second year, the Fellow will continue gaining expertise in Diagnostic Neuroimaging but will also participate in the interpretation of ENT imaging cases from the MUHC network (MGH and RVH).

In addition the Fellow will participate in more complex spinal interventions such as nerve blocks, epidural blocks, transpedicular spine biopsies, CSF leak studies, blood patches and percutaneous vertebroplasties.

As the year progresses the expected volumes of cases to be read will be increased steadily.

### **Guidelines:**

The following guidelines are designed to clarify the fellow's job description. The duties described are geared towards enriching the fellow's own experience and achievement as well as optimizing the functioning of the neuroradiology section.

The first year of fellowship is identical to that described in the One Year fellowship program. The second year of Neuroradiology fellowship is dedicated to gaining even more expertise in

noninvasive imaging of the brain, spine, as well as introduction to Head & Neck Imaging (ENT). The additional responsibility of Interventional Spine procedures is added in the second year of fellowship. The candidate will acquire the judgement and technique necessary to provide proper pain control for patient suffering from cervical, thoracic and lumbar pain syndromes.

The fellow functions as a junior attending and as such must be integrated into the *teaching team*:: Teaching the residents basic spinal interventional procedures, teaching at the viewer in CT as well as in MRI, giving teaching rounds, presenting progress of research projects should occur regularly.

Academic work: Every fellow is given a *research project* by a staff supervisor. Protected academic time (a half day to one full day per week) may be granted to the fellows depending on the nature of the project. Outside the *protected academic time*, the fellow is expected to devote his/her endeavors to clinical activities during the day.

Relationships with staff in the section: There are 3 staff radiologists in the division of Neuroradiology at the MGH. The fellow should interact with all staff-members during the course of the fellowship.

Relation with resident staff: As stated above, 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 diagnostic spinal procedures, and as such has a supervisory role 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 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.*

#### ROTATIONS

The fellow rotates through CT, MR Neuroimaging with opportunities to spend time in ENT imaging and more advanced spinal procedures (epidurals, nerve blocks, spine biopsies, vertebroplasty). All training is at the MGH although cases originate from modalities based at the MGH and RVH.

#### Schedule

The fellow is to be present in the department from 8:00AM to approximately 5:00PM or slightly later, depending on the day's workflow and need for MRI supervision. The day's work ends when all cases are reported and all cases pending signature as signed.

#### ON CALL

The fellows rotate on the Neuroradiology on-call list as junior staff. They are on-call, at home with a pager, and are a resource person for the residents on-call. On weekends and holiday the fellow must come in for a block of hours each day to read out the cases performed during the on call period. Their expertise may be requested for spinal procedures. Whenever they are requested

to perform a procedure, they must contact one of the staff radiologists who routinely rotate in intervention prior to performing the procedure.

Expected call frequency : one week in four home call

#### 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 wished 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

#### 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)

CT: 25

MR: 15

Procedures: 5 spinal procedures every Wednesday morning plus emergencies (LPs)

#### 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

For further information, please contact:

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