

Department of Neurology and Neurosurgery Clinical and Clinical Research Fellowship Application Form

Type of Fellowship

Clinical Research Fellowship:

Name of Fellowship

Neuroplasticity in Movement Disorders

Name of Fellowship Supervisor

Dr. Calvin Melmed

Dr. Anne-Louise Lafontaine

Dr. Alexander Thiel

Fellowship Information

- Number of fellowship positions requested = 1
- Duration of Fellowship- 2 years
- Name of hospitals involved in training
 - Montreal Neurological Hospital
 - Montreal General Hospital
 - Jewish General Hospital
- Description of Fellowship
This fellowship is a clinical-research fellowship in movement disorders neurology. Combining a foundation in clinical approach and management of specialized movement disorder care with a focused research project aimed particularly in the sphere of movement disorders.
- Research activity and publications related to fellowship
 - The fellow will be collaborating with the neuroplasticity laboratory of Dr. Alexander Thiel with the purpose of designing and supervising a project related to neuroimaging of maladaptive neuroplasticity in movement disorders as well as therapeutic non-invasive brain stimulation.
- Mission statement for fellowship
 - This fellowship is designed to foster the development of a clinician-scientist with an expertise in movement disorder neurology at a clinical level in addition to a strong basis in neuroscience research focused on neuroimaging and non-invasive brain stimulation. This fellowship will focus on imaging and mechanisms of neuroplasticity that underlie movement disorders neurology. The goal will be to develop work at the interface between clinical practice and translational research.
- Source of funding for fellowship
 - With the assistance of the supervisors, peer-reviewed funding from outside sources will be sought (e.g. Parkinson Society). Supervisors may be able to provide partial funding.

Names of Teaching Faculty

- Dr. Calvin Melmed

- Dr. Anne-Louise Lafontaine
Dr. Lafontaine and Dr. Melmed would oversee the training and clinical application in the context of the existing movement disorder clinics.
- Dr. Alexander Thiel
Research component would be supervised by Dr. Thiel utilizing the resources of the neuroplasticity program.

Our clinics have been recognized by the Parkinson's Society of Canada and the Physician's
Dedicated clinical nurse specialists involved in the treatment and consultation of patients
Movement disorder patients treated in one year: 600

Additional staff involved in the consultation with movement disorder patients:

Dr. A. Dagher
Dr. E. Fon
Dr. D. Rabinovitch
Dr. R. Postuma

Academic Facilities

1. Imaging access at MNI (3T and high resolution PET scanner)
2. Access to state-of-the-art TMS lab and clinical PET scanner and radiochemistry department with the potential for tracer development.
3. Clinical movement disorder clinics at the Jewish General Hospital and Montreal Neurological Hospital

Fellow Duties and Responsibilities

- Call responsibilities to cover service
 - Fellows may be on-call along with one of their supervisors for acute movement disorder related issues (acute emergencies and in-patients).
- Will the Fellow be supervising residents?
 - In the context of the movement disorders clinic
- Are there fixed rotations at various institutions
 - Time will be divided throughout the course of the fellowship according to the percentages specified above
- What are the outpatient clinic responsibilities?
 - To attend the movement disorder clinics twice per week.
 - To participate in the in-patient management of movement disorder related patients
- What are the teaching responsibilities towards residents
 - Responsible for weekly resident teaching sessions
 - Responsible for biannual service rounds
- Describe any support staff available to the fellow:
 - Dedicated clinical nurse specialist for movement disorders
 - Support staff of neuroplasticity program for research component
- Proposed meetings to be attended by the fellow
 - Movement Disorders Society
 - American Academy of Neurology
 - Organization for Human Brain Mapping

- What is the research productivity/publications expected by the Fellow
 - Expected to complete original research for publication in peer reviewed journals.
 - To attract external funding research

Curriculum

- What is the Intended case load for the Fellow
 - The fellow will be expected to see and follow 2-3 new patients per clinic per week and to follow them longitudinally over the course of the fellowship
- What are the intended percentages of the varieties of cases
 - Parkinsonism – majority seen in clinical
 - Dystonia – neuroplasticity program will put emphasis on this group of patients.
- What regular reading materials are to be provided (if any)
 - Usual journals
- Outline the weekly conference schedule
 - Departmental rounds, grand rounds
 - Weekly movement disorder seminar to residents

Evaluation

- What is the frequency of evaluations?
 - Every 6 month by a panel of research and clinical supervisors
- Are there any objective evaluations, e.g., OSCE, written exams, etc?
 - No