Advanced Drug Allergy Fellowship
at the McGill University

**Type of Fellowship:** Clinical and Clinical Research

**Number of Fellowship positions:** 1 position

**Length of Fellowship:** 1 and/or 2 years

**1 year program:**

*Overview of Program Information:*

The McGill Drug Allergy Fellowship offers a **one year** fellowship covering all aspects of drug hypersensitivity. The candidates will spend one year training with the allergists across the integrated Drug Hypersensitivity Program at McGill. Fellows will meet before the beginning of the fellowship with the fellowship director and tailor their clinical training program based on their expectation and needs. The subspecialty training consists of 1) A consultation service for drug allergy 2) Adult High Risk Graded Drug Provocation testing at the MGH and single dose preoperative drug provocation tests at the RVH 3) Paediatric Drug Allergy Clinic and Provocation testing at the Montreal Children’s Hospital 4) Drug Hypersensitivity in the Oncology centre.

The McGill Drug Allergy Fellowship also has the possibility of offering a **two year** fellowship. The first year will consist of the above clinical training program and the second year will be focused on the research, development and validation of *in vitro* diagnostic techniques.

**Training distribution for the one year fellowship is expected to be divided and carried out as listed below:**

- Montreal General Hospital (MGH) and Royal Victoria Hospital (RVH): 60%
- Montreal Children Hospital (MCH): 20%
- Jewish General Hospital (JGH)/St. Mary’s Hospital: 20%

Training for the second year will take place at the McGill University Health Centre Research Institute.

**2 years program:**

*Program Information:* The **global objective** of this fellowship is to provide training in clinical acumen, research and teaching, regarding drug allergy. The fellow will be a subspecialist in allergy that wishes to pursue an academic career on clinical care and research specifically in drug allergy.

*Supervision:* This program will be carried out under the direction of Dr. Joseph Shuster in the MUHC Division of Adult Allergy and Clinical Immunology in conjunction with other team members of the drug allergy program including Dr. Phil Gold, Dr. David Thomson, Dr. Peter Small, Dr. Jesse Schwartz as well as Dr. Moshe Ben-Shoshan, and Dr. Reza Alizadehfar.

The program will be specifically tailored to the trainee’s needs with the possibility of including the management of both pediatric and adult drug allergic patients in the context of clinical care and clinical research.

**The Fellow will participate in:**
1. The clinical evaluation and management of adverse drug reactions that have an immune aetiology, through involvement in the Adult and Paediatric Clinics. Here, advanced diagnostic testing will be learnt, so that the Fellow becomes comfortable with a variety of diagnostic modalities.

2. Current research projects on drug allergy.

3. The management of adults with drug allergy under the supervision of Drs. Joseph Shuster and Jesse Schwartz and the team.

4. The management of children with drug allergies under the supervision of Dr. Moshe Ben-Shoshan, Dr. Reza Alizadehfar the pediatric program director and the team.

5. Formal courses in immunology, pharmacology and statistics at McGill University.

**Academic affiliation:** Division of Clinical Immunology and Allergy, Department of Medicine, McGill University.

**Name of hospitals involved in training:** The Fellow is based at the MUHC (MGH, RVH, MCH), where most of his/her time will be spent. Formal classes could be held also at McGill University main campus or at another McGill affiliated teaching hospital including the Jewish General Hospital.

Weekly drug allergy rounds and Journal Club are held at the McGill University Health Center. The trainee may also be able to participate in weekly rounds in Clinical Epidemiology.

**Background:** The research in drug allergy has been funded by a Montreal General Hospital foundation grant by Anna Maria Solinas Laroche. Other public or private programs to which he/she will be invited to apply may support the candidate.

**Research activity:** The Fellow will work mostly but not exclusively under the supervision of Drs. Joseph Shuster and Moshe Ben-Shoshan. There are many active projects being performed within both the paediatric and adult allergy programs. The Fellow will be involved in data collection and laboratory analyses for the ongoing projects.

**Mission:** The goals of the Division of Clinical Immunology are to further research in complex care of allergies; specifically in drug allergy including the genetic basis, clinical phenotypes and clinical outcomes, to optimize care, and to develop new independent investigators.

**Outline how intended Fellowship will enhance residency training.** This clinical research training program is offered for trainees who have already completed their adult or paediatric Core Medicine Residency program and Core Training in a medical sub-specialty (Clinical Immunology).

**Name of the Fellowship Program Director:** Dr. Joseph Shuster

**Names of the Current Teaching Faculty:** Dr. Phil Gold, Dr. David Thomson, Dr. Peter Small, Dr. Jesse Schwartz, Dr. Moshe Ben-Shoshan, Dr. Reza Alizadehfar and Dr. Joseph Shuster.

**Roles:** Each of the faculty is involved in the clinical projects. The Fellow will work directly under the supervision of one or more of these mentors, depending on the project.

**Summary of clinical practice:** The Fellow will participate directly in the clinical evaluation of patients suspected of drug allergy, including a directed history and physical exam to record pertinent predetermined data. Approximately 1600 patient visits are seen per year in the combined clinics. This affords a sufficient number of
patients to ensure that Fellows receive appropriate experience in the management of complex problems without adversely affecting the experience of residents in the training program. In fact, learning will be enhanced because the Fellow will be able to help in the teaching process, to students at more junior levels, who participate in the clinic.

**Competencies covered:**

- Compassionate patient care, appropriate and effective treatment
- Ability to independently develop and execute patient care plans.
- Demonstrate appropriate knowledge in laboratory testing and genetics for their training level.
- Show knowledge about established and evolving issues within their field and apply to patient care (implementing evidence-based practice).
- Practice-based learning and self-evaluation and critique personal practice outcomes.
- Demonstrate effective documentation of practice activities in medical records.
- Demonstrate effective interpersonal and communication skills with the medical team, patients and families.
- Demonstrate professionalism, responsibility, adherence to ethical principles, and sensitivity towards a diverse patient population.
- Practice high-quality, cost-effective patient care.
- Demonstrate knowledge of risk-benefit analysis.
- Demonstrate an understanding of the role of different specialists and other health care professionals in overall patient management.

**Major Strengths:** This is a multi-site, multi-disciplinary clinical and research program with a large population of confirmed drug allergic patients followed and enrolled in a research database. This allows for the development and testing of novel diagnostic assays. Our team collaborates with several other basic and clinical researchers.

**Academic Facilities**

- **Outline facilities for clinical and academic pursuit:** Office space and computer equipment are provided to the Fellow at the MGH in the Division of Clinical Immunology.
- **Library** access and materials relevant to Fellowship training is available from McGill University libraries and all libraries of its Network of Teaching Hospitals, including that of the MGH.
- **Laboratories:** Availability of multiple wet laboratories within the Division of Clinical Immunology, and also the MUHC-RI immunophenotyping platform directed by Dr. Ciro Piccirillo, a member of the clinical division.

**Fellow Duties and Responsibilities**

- **On Call responsibilities:** None
- **Acting as Senior Supervisor to residents:** No
- **Fixed rotations** at various institutions: No
- **Outpatient clinic responsibilities:** Candidates will have the opportunity to attend both Paediatric and Adult drug allergy clinics.
- **Teaching responsibilities:** The Fellow will have specific teaching responsibilities particularly related to clinical competence and research methodology. There will be close interaction between the Fellowship Program and the Residency Program. The Fellow may serve as teaching assistants for residents when appropriate.
Outline participation in academic activities involving the residents:

- Seminars, weekly division journal club, immunology courses, weekly case review and academic rounds.
- **Support staff** available to the Fellow: research coordinator and laboratory assistants, clinical and research nurses, secretarial and other support (IT, biostatistician).

**Proposed meetings** to be attended by the Fellow: Yearly scientific meeting on drug allergy (of the EEACI or the AAAAI). The Division of Clinical Immunology will fund these activities.

**Research productivity** and publications expected by the Fellow: The Fellow will be expected to present at a major scientific meeting. By the end of one year he/she should have participated in the writing of at least one scientific paper. It is understood that it may require more time to complete such a paper and some of this work could take place after one year.

**The salary for the Fellow** will vary according to the candidate's qualifications and will come from private and public granting agencies or international sources to which the candidate will be asked to apply. It is understood that the Fellow is not an employee of McGill University or the MUHC and that the Academic Division of Allergy and Clinical Immunology and Department of Medicine have no financial responsibility in providing for the establishment and maintenance of the Fellowship.

**Evaluation:** The Fellow will receive a written evaluation of his/her performance every 3 months, which will be submitted through One45. A written final evaluation at the completion of the Fellowship will be submitted to the Program Director and will be placed in the Fellow’s completion file. The McGill Evaluation and Promotion in Postgraduate Training Program Guidelines will be applied and respected. The Residency Training Committee and Program Director will evaluate the Fellowship Program annually with respect to teaching, scholarly research activity and feedback by residents and current Fellows.

The Fellow will evaluate his/her supervisors, and annually the assessments of the teaching faculty will be updated on file and available for review. The Program Director and its Residency Training Committee will assess the quality of the curriculum and the extent to which the Fellowship has met its educational goals regularly. The approval of a Fellowship will be subject to a 1-year probationary period and once approved, be reviewed as stated every 2 years.

**Curriculum:** The Fellow will be provided with the opportunity of taking one summer epidemiology and one summer biostatistics course at McGill University.

The schedule of academic conferences is as follows. The Fellow will have active participation in the planning and production of these activities:

**Monday**
- 8:00 - 12:00 PM Adult pre-operative drug allergy evaluation clinic
- 1:00 - 3:00 PM Adult drug allergy case rounds
- 4:00 - 5:00 PM Department of Epidemiology and Biostatistics Seminars

**Tuesday**
- 8:00 - 12:00 PM Adult drug allergy evaluation clinic
- 1:00 - 3:00 PM Laboratory Training or Clinical research program

**Wednesday**
- 8:00 - 12:00 PM Adult drug allergy evaluation clinic

**Thursday**
- 8:00 - 5:00 PM Laboratory Training or Clinical research program
Other aspects of training:
The Fellow will also be trained in managerial aspects of a large research team. Also, the Fellow will have access to the help of summer research students who are hired by our team and will learn the skills of supervising a student. The Fellow will also participate in the grant writing process for any research grant applications generated during the training period.

Completion of the Fellowship
- Fellows must provide the Fellowship Program Director and the Program Director of the Residency Training Program with their clinical case log (if applicable), research activity and publication list, and CV. These documents will be collected in a completion file and stored in the Office of the Residency Training Program.

On successful completion of the Fellowship, Fellows will receive a certificate signed by the Fellowship Director and the Dean of the Faculty of Medic