Division of Allergy-Immunology
Reproductive Immunology Fellowship
at McGill University

Name of Institution: McGill University Health Centre
Location: A5-140; 1650 Cedar Avenue
Type of Fellowship: Clinical and Clinical Research

Program Information:

The global objective of this fellowship is to provide training in clinical acumen, research and teaching, regarding reproductive and women’s immunology. The fellow will be an adult Allergy-Immunology subspecialist who wishes to pursue an academic career focusing on clinical care and research applied to reproductive immunology.

Supervision: This program will be carried out under the direction of Dr. Geneviève Genest (MUHC Reproductive Immunology Clinic).

The program will be specifically tailored to the trainee’s needs with the possibility of focusing on clinical care or on clinical research.

The Fellow will participate in:

1. The clinical evaluation and management of immune diseases in pregnancy, though involvement in the Women’s immunology Clinic, the Rheumatic diseases in Pregnancy Clinic as well as selected clinics at the MUHC Reproduction Center and the Royal Victoria Maternal fetal Medicine and Obstetric Medicine Centers. Here, fellows will learn fundamentals in the evaluation, treatment and management of patients with infertility, recurrent miscarriages and placental-related pregnancy complications as well as the management of patients with autoimmune/immune diseases contemplating pregnancy and during pregnancy. Evaluation and treatment of selected drug allergies which relate to reproduction will also be explored (seminal fluid hypersensitivity, hypersensitivity to medications used in assisted reproductive technologies (ART) and during pregnancy/delivery).
2. Research projects being performed within the Clinics and other collaborative projects taking place across Canada.
3. The pre-conceptual counselling and management of women with idiopathic recurrent implantation failure (RPL)/recurrent pregnancy loss (RIF) and immune disorders during pregnancy; the management of drug/vaccine hypersensitivities pre-conception and during pregnancy and the management of women displaying fetal alloimmunity under the supervision of Dr. Geneviève Genest.
4. The management of women with autoimmune disorders contemplating a pregnancy and during pregnancy with a special focus on anti-phospholipid syndrome under the supervision of Dr. Evelyne Vinet.
5. The diagnosis, treatment and management of women with recurrent pregnancy loss and recurrent implantation failure under the supervision of Dr. William Buckett.
6. The management of women with placenta-related disorders (Preeclampsia, hypertensive disorders of pregnancy, intra-uterine growth restriction) under the supervision of Dr. Richard Brown and Dr. Natalie Dayan.
7. Formal courses in immunology, obstetrics, reproductive endocrinology and infertility and statistics at McGill University if choosing the clinical research focus.

• Number of Fellowship positions: 1 position per year.

• Eligibility: Eligibility criteria can be found on the following link: http://www.mcgill.ca/pgme/admissions/prospective-fellows .

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

• Length of Fellowship: 1 year.

• Name of hospitals involved in training: The Fellow is based at the MUHC 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.

Weekly Obstetric rounds and Clinical Immunology Journal Club are held at the McGill University Health Center Royal Victoria Hospital and Research Institute respectively; the trainee will also be able to participate in weekly rounds in Clinical Epidemiology or Reproductive endocrinology and Infertility rounds at the McGill reproductive center.

• Background: The candidate will be invited to apply to public or private programs for additional funding. Applicants are however encouraged to seek all forms of funding from their local government or health care institution to help subsidize their studies. For information regarding salary amount and acceptable sources of funding please visit the link at: http://www.mcgill.ca/pgme/admissions/prospective-fellows

• Research activity: The Fellow will work mostly but not exclusively under the supervision of Dr. Geneviève Genest. There are many active projects in the field of reproductive immunology. The Fellow will be involved in data collection and laboratory analyses for the ongoing projects he or she chooses to participate in. The fellow must participate in at least one research project.
• **Mission:** The goals of the Division of Clinical Immunology are to further research in immune disorders, including those pertaining to reproduction and to characterize clinical phenotypes and clinical outcomes, to optimize patient 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 Core Medicine and Core Training in Allergy and Immunology.

**Name of the Fellowship Program Director:** Dr. Geneviève Genest

**Names of the Current Teaching Faculty:** Dr. Evelyne Vinet, Dr. William Buckett, Dr. Richard Brown, Dr. Natalie Dayan

**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:** Patients, referred for the evaluation of immune disorders pre-conceptually or during pregnancy will be seen by the fellow. The Fellow will participate directly in the clinical evaluation of these patients including a directed history and physical exam to record pertinent predetermined data. Approximately 1000 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 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, 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 patients with immune disorders during pregnancy. 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 Flowcytometry core facility directed by Dr. Cirriaco 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 Adult reproductive immunology, rheumatic diseases in pregnancy, maternal fetal medicine, obstetric medicine and fertility clinics.
- **Teaching responsibilities:** The Fellow will have specific teaching responsibilities particularly related to clinical immune 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 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 of the American Society for Reproductive Immunology, the annual meeting of the Canadian Society of Fertility and Andrology or the yearly World congress for recurrent pregnancy loss.

**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**
For information regarding salary and acceptable sources of funding, please visit: http://www.mcgill.ca/pgme/admissions/prospective-fellows

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 Program Director will evaluate the Fellowship Program Director 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
8:00AM - 12:00 PM Rheumatic Diseases in Pregnancy Clinic
1:00 - 3:00 PM Adult Immune Deficiency Clinical Rounds
4:00 - 5:00 PM Department of Epidemiology and Biostatistics Seminars

Tuesday
8:00AM – 5:00 PM McGill Reproductive Center Clinic

Wednesday
8:00AM-12PM: Maternal Fetal Medicine Clinic
12:00-1:00 PM: Obstetric Medicine Journal Club (once a month)
1:00-5:00 PM Obstetric Medicine Clinic

Thursday
7:30 - 8:30 AM Obstetric Rounds
8:30AM-5:00 PM Laboratory Training or Clinical research program

Friday
8:00 - 9:00 AM Clinical Immunology Journal Club, MUHC or
7:30-8:30 AM Weekly Rheumatology Rounds
9:00 - 10:00 AM (Once a month) Basic Immunology Course
10:00 - 5:00 PM Reproductive Immunology Clinic

Other aspects of training:

The Fellow will also be trained in managerial aspects of a large research team. The Fellow will participate in the grant writing process for any research grant applications generated during the training period. Since many complex obstetric cases involve multiple medical and paramedical subspecialties, the Fellow will also learn how to coordinate, lead and follow up on multidisciplinary meetings.
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, 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 Medicine.