Fellowship in Minimally Invasive Gynecologic Surgery
FELLOWSHIP PROGRAM

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1-year program: Clinical
2-Year program: Clinical Research.

Description:

The McGill fellowship program of Minimally Invasive Gynecologic Surgery (MIGS) is designed as a one year integrated education leading to expertise in Minimally Invasive Gynecologic Surgery. The program consists of clinical and research rotations. Fellows have also an option to do a two year fellowship where they can obtain a Master of Science degree in Experimental Medicine, Epidemiology or equivalent or a structured research in basic science division.

Historically, endoscopic surgery was a major part of the fellowship program in Reproductive Endocrinology and Infertility (REI), where fellows spent one year of surgical rotation. With the emphasis of assisted reproductive technology in the REI program, the rotation of REI fellows in surgery was reduced to 3 months. In addition, some advanced endoscopic operations such as laparoscopic hysterectomy is beyond the educational objectives of REI program. As of 2007, the fellowship program in MIGS stands as a separate entity under the direction of Dr. Tulandi. He is previously the President of the Fellowship Board of the American Association for Gynecologic Laparoscopists and the Society of Reproductive Surgeons.

Clinical
The program has a high volume of advanced laparoscopy and hysteroscopy surgery including urogynecologic surgery and vaginal surgery. There are more than enough materials including for both fellows and residents. Fellows will rotate through three McGill University teaching hospitals, including McGill University Health Center (MUHC), Jewish General Hospital and St. Mary’s Hospital. Fellow assist surgery in the operating room and gradually conduct advanced Minimally Invasive Gynecologic Surgery under supervision. They will increasingly accept full responsibility for any surgical or medical management. The fellows have a rather unique junior faculty like position, which will allow them to teach and augment residents and students experience.

A unique feature of our program is the incorporation of fertility preservation procedures to gynecologic endoscopy. These include laparoscopic ovarian suspension for young women undergoing pelvic radiation, and laparoscopic abdominal cerclage for women who have failed conventional vaginal cerclage. McGill University is one of a few institutions offering fertility preservation. Fellows will be involved and assist
these reproductive operations.

Fellows will become familiar with diagnosis and medical and surgical management of various gynaecologic and reproductive disorders including chronic pelvic pain, endometriosis, abnormal uterine bleeding, and pelvic mass. They will have an understanding of alternative non-surgical management, when and how to operate. They will learn how to prepare a patient before surgery, and to follow the patient post-operatively. They will learn how to avoid and manage complications and its medicolegal ramifications. Fellows will have the responsibility of seeing patients in the clinic and are required to keep a logbook of surgical cases and submit it every 3 months.

Fellows take part in teaching of residents, and act as a consultant in the evening or weekends. Although, the operating room provides the best teaching environment; if needed McGill University has a state of the art simulation center, where fellows could practice advanced technique such as laparoscopic suturing.

**Research**

This is an academic program where research is an integral part of the education. Under the supervision of the attending staff, fellow will design and execute a research protocol. Our institution allows many opportunities for clinical research projects. Besides clinical research, fellow could perform basic research in the Research Division of Ob/Gyn under the direction of Dr. Clarke, epidemiology research under the direction of Dr. Abenhaim or Dr. Larouche. Another possibility is research in simulation.

Clinical research will be done during the clinical rotation. Fellows in the 2-year program, should spend an equivalent of 12 months of research. A computer statistical program in the “fellow office” is available for residents to do statistical analysis. They have an access to on-line searches, UpToDate, Internet and e-mail access, and other electronic learning materials on-site. Fellows are required to use computer to write manuscript, research projects and other educational activities. For sophisticated analysis, the Department of Epidemiology and Biostatistics has consultants who are available for consultations of research designs or statistics.

**Statistics** is discussed at the journal club and on ad-hoc basis with the program director. Statistics is taught by the program director and at the Epidemiology course. Residents have to write a research protocol and execute it. They should be able to calculate sample size and propose statistical methods. In order to facilitate research projects, potential fellows should submit the research protocol to the Research and Ethics Board 6 months before starting the fellowship.

The program expects fellows to conduct at least one research project, present the results in a national or international meeting, and publish the results in peer-reviewed journals. Our fellowship program has been very successful in this aspect.

**Terms of reference:**

Develop and monitor a program in Minimally Invasive Gynecologic Surgery for subspecialty training of residents that meet the requirements of the Fellowship program of the Society of Reproductive Surgeons and the American Association for Gynecologic Laparoscopists, the educational needs of the candidate and educational standards of the University.

**Program Committee review:**
i) the overall program - The overall program is evaluated by internal and external reviewers

**Internal Review:** Once per year, the teaching staff meets to review the performance of the program and to make recommendation if required. Special meeting will be held if needed.

**External Review:** Our program was previously accredited by the Fellowship board of the Society of Reproductive Surgeons and the American Association for Gynecologic Laparoscopists. Due to changes in the curriculum, we have to reapply to the Board. The program will be site-visited and reviewed every 2-3 years.

ii) individual rotations - Fellows are requested to evaluate the rotation as to the achievement objectives, quality of teaching and service. Formal evaluation of the fellows is conducted every 3 months. Suggestions and criticisms are encouraged.

iii) individual teachers: The rotation and the individual teacher’s performances are evaluated using a written evaluation form.

Type and number of cases during fellowship

Fellows will assist a variety of hysteroscopic operations including outpatient hysteroscopy and all types of hysteroscopic procedures, laparoscopic procedures including ovarian cystectomy, myomectomy, supracervical and total hysterectomy, tubal anastomosis, endometriosis, laparoscopic abdominal cerclage, ovarian suspension, and a variety of urogynecologic procedures. Between the three hospitals and eight faculty members, the fellows will be exposed to almost 1000 cases of Minimally Invasive Gynecologic Surgery annually.

Didactic teaching

Fellow will receive didactic teaching in conjunction with resident teaching as well as teaching of the fellows in Gynecologic Reproductive Endocrinology and Infertility (GREI). In addition, they are expected to participate in the journal clubs, grand rounds, and mortality and morbidity rounds. McGill has a centre for medical education. There are workshops by consultants in this area to improve teaching skills of fellows.

Courses

Fellows are encouraged to take a course of their interest. There are postgraduate courses that are available for fellows and residents.

1. *Epidemiology: Principles and Methods.* This course focuses on the development skills required for appropriate research translation to clinical practice in the individual patient setting. Basic concepts in epidemiology and biostatistics are applied to the design and development of a research study selected by each participant.

2. *Principles of Inferential Statistics.* This course provides an introduction to the basic principles of statistical inference used in clinical and epidemiologic research. Topics will include variability; methods of processing and describing data; sampling and sampling distributions; inferences regarding means, proportions; correlation, regression and analysis of variance.

3. *Course on Ethics:* Under the direction of Dr. Eugene Bereza, a medical ethicist, residents will be
taught ethics in medicine. The duration of the seminar is 4 weeks.

**Night and weekend coverage**
Fellows are required to be on-call from home and act as a consultant for the gynecology resident. They will be first called before the consultant. Fellows make rounds on patients admitted to the hospital. We routinely admit patients after hysterectomy overnight.

**Contract(s)**
The Postgraduate Medical Education Office of McGill University acts as a governing body for all fellowship programs in the University. Fellows are considered students and will be treated as a postgraduate student. Besides contractual agreements between the Postgraduate Office and the sponsoring country, there is no contract for those who are not sponsored.

**Fellow’s benefit packages**
Currently, we accept only applicants who are sponsored. For information about acceptable sources of funding please check the following link: [http://www.mcgill.ca/pgme/admissions/prospective-fellows](http://www.mcgill.ca/pgme/admissions/prospective-fellows)

**Licensing**
The Postgraduate Medical Education Office of McGill University will help potential fellows obtaining a training card (except for pure Research Fellows). Fellow should apply to the Collège des médecins du Québec. The deadline for fellowship application is September 1 for a position July 1 the following year.

**Housing**
Similar to university students, fellow should look after their own housing. There are many affordable housing around the university campus and hospitals.

**Meeting**
Fellows are encouraged to attend and present at the annual meeting of ASRM and AAGL.