

Minimally Invasive Bariatric Surgery Fellowship

Name of Institution

McGill University Health Centre (MUHC)

Locations

1. Montreal General Hospital (MGH) – Primary Site (Offices including multi-disciplinary team)
1650 Avenue Cedar, Montreal, Quebec, H3Y 1A4
2. Lachine General Hospital – Secondary Surgical Centre
650 16e Avenue, Lachine, Quebec, H8S 3N5

Duration

One year training in minimally invasive bariatric surgery

Number of Positions and Funding

Up to two fellows may be selected, with one fellow chosen annually through the Fellowship Council's official matching process, who will receive secured funding. Additionally, a second fellow may be selected each year outside of the Fellowship Council match, but they must secure their own funding, including university tuition fees, as this position is not funded by the fellowship program.

Office Space

The fellow(s) will be provided with a designated office space equipped with a computer.

Surgical Volume

350-500 surgeries per year including primary, planned 2nd stage, and revisional bariatric procedures.

Teaching Faculty

1. Dr. Amin Andalib (Fellowship Program Director)
2. Dr. Olivier Court (Bariatric Section Chief, Associate Fellowship Program Director)
3. Dr. Sebastian Demyttenaere
4. Dr. Phil Vourzoumis

Program Description

Mission

To train competent and independent surgeons who can practice in any setting (academic or community) immediately after fellowship and can perform all established metabolic and bariatric surgeries (MBS), including revisional procedures, and oversee and carry out the management of complications.

To train future leaders in the field of MBS, who have gained ample experience to be able to lead and liaise with a multi-disciplinary team including dedicated nurses, dietitians, psychologists, and other specialist including obesity medicine or endocrinologists.

Eligibility Requirements

The applicants should have successfully completed a surgical specialty program in General Surgery and have received a specialty certificate from the Royal College of Physician and Surgeons of Canada (or equivalent).

Overview

The MUHC has been performing bariatric surgery since 1963. We are one of the largest laparoscopic bariatric surgery programs in Canada offering all established types of MBS by the minimally invasive approach as well as open surgery when indicated. The bariatric program at MUHC is one of the 2 existing Centres of Excellence for bariatric surgery in the province of Quebec, Canada. Our bariatric fellowship is an established program recognized and accredited by the Fellowship Council since 2010.

The surgical case mix for the program is divided into laparoscopic sleeve gastrectomy (SG), laparoscopic Roux-en-Y gastric bypass (RYGB), laparoscopic biliopancreatic diversion with duodenal switch (BPD-DS), laparoscopic single anastomosis duodenoileal bypass or single anastomosis duodenal switch (SADI/SADS), and several revisional bariatric surgeries including major and complex revisions. Other minimally invasive approaches to MBS including robotic and endoscopic techniques are also being integrated in the bariatric program at MUHC in the coming years. Duodenal switch type procedures are performed in 2 stages when the initial Body Mass Index (BMI) is $>60 \text{ kg/m}^2$, which means the SG will be followed by the duodenal switch component after a weight nadir is reached. To date the BMI range varies from 30 to 105 kg/m^2 .

There is also a structured curriculum in place that will focus on cognitive skills, technical skills, education and research following the Royal College CanMEDS framework[®]. The progress of the fellow(s) is assessed regularly, and formal feedback is given on a quarterly basis throughout the academic year.

Our fellowship also includes an active research component, and fellows are expected to submit abstracts to major bariatric meetings both nationally and internationally. We expect that the research projects lead to publication(s) in peer-reviewed journals. The fellows will also gain experience teaching and supervising the rotating residents on the service both inside and outside the operating room in the role of a junior faculty.

Clinical Responsibilities

The bariatric fellow(s) is fully integrated into the multi-disciplinary bariatric team and is involved in the entire care trajectory of the patients referred to our bariatric centre along with the dedicated teaching faculty. All patients are entered into a prospective database and are tracked by the multi-disciplinary team of nurses, dietitians, and surgeons.

In the operating room, the participation of the fellow(s) is a gradual and progressive one based on the individual capabilities of the fellow(s), where they will begin gradually performing parts of each operation until they complete the respective procedures from skin to skin. The fellow(s) will not take operative cases away from the primary senior resident on the bariatric team and where appropriately deemed by the teaching faculty and the fellow(s) will function in a teaching role as junior faculty. The fellow(s) is responsible for rounding on the patients after surgery until discharge and then follow the patient in the weekly bariatric clinics along with the respective teaching faculty. While in the bariatric clinics they will have the chance to follow patients operated previously and gain experience with the long-term results and complications of bariatric surgery. In addition, they will care for patients that present to the Emergency Department (ED) after bariatric surgery or transferred for management of complex complications after MBS performed at outside institutions.

As for on-call duties, the fellow(s) is expected to provide coverage as first call for the in-patients at both surgical sites (MGH and Lachine Hospital) including rounding on the weekends and the consults from the ED at the primary site at MGH. The on-call shifts are not in-house, and the call roster is shared among both fellows (if applicable) and the senior resident rotating on the bariatric service. There is always a teaching faculty on call.

Academic Responsibilities

There is a structured curriculum in place that follows the guidelines set by the American Society for Metabolic and Bariatric Surgery (ASMBS) involving weekly topics related to the management of obesity and related conditions that will position the fellow(s) for a successful certification from the important bariatric societies such as ASMBS upon completion of the fellowship. In addition, the protected weekly rounds are attended by the entire multi-disciplinary team and will include periodic journal clubs as well as structured morbidity and mortality rounds. The fellow(s) will be directly in charge of organization of all weekly teaching and academic activities and will assign/integrate the rotating senior resident(s) in these teaching activities while on the bariatric service.

The fellow(s) may also be required to participate in the teaching of undergraduate McGill surgery students as well as general surgery residents to be outlined by the Undergraduate Surgical Education Director and the General Surgery Program Office at McGill university. This will usually translate into a few dedicated hours scheduled well in advance throughout the academic year. The fellow(s) will also gain experience teaching and supervising residents in the operating room, in the clinics and on the wards in the role of a junior faculty. Finally, the fellow(s) is expected to give a one-hour Grand Round presentation at the Division of General Surgery throughout the academic year.

Research Responsibilities

The fellow(s) is expected to participate in research activities throughout the academic year with the expectation to submit at least 1 abstract to major national or international bariatric meetings. The expenses for conferences will be covered by the bariatric department up to a pre-set maximum amount should they be presenting. We expect that the research project(s) should lead to at least 1 publication in a peer-reviewed journals. The research will be guided and supervised by a dedicated

bariatric faculty member. There are regular recurring research meetings to plan and monitor the progress of active projects throughout the academic year.

Curriculum

The bariatric surgery fellowship is a comprehensive 1-year program designed to provide in-depth training in advanced surgical techniques for the treatment of obesity and related metabolic disorders. The curriculum emphasizes the development of cognitive skills, technical proficiency, education, and research, all framed within the Royal College CanMEDS framework©. Fellows' progress is regularly assessed, with feedback provided every 3 months. At the completion of the fellowship, the trainee will have acquired the following competencies:

Cognitive Skills

Cognitive skills are developed through clinical care experiences in the wards, clinics, and operating rooms, as well as through structured instruction during rounds and other educational sessions. Fellows will enhance these skills through discussions with staff and colleagues, and by presenting at rounds. Engagement in a structured research project will foster the ability to critically appraise scientific evidence that informs clinical guidelines and decision-making.

Medical Expert: Bariatric surgery fellows will be able to...

- Function effectively as consultants, integrating all CanMEDS roles to deliver optimal, ethical, and patient-centered surgical care
 - Demonstrate advanced problem-solving and clinical decision-making abilities, including the capacity to evaluate, prioritize, and synthesize information obtained from clinical assessments, imaging, and laboratory results; develop and implement diagnostic and therapeutic plans based on evidence-based guidelines.
 - Demonstrate CanMEDS competencies relevant to bariatric surgery.
 - Identify and appropriately respond to ethical issues arising in patients undergoing bariatric procedures.
 - Prioritize professional duties effectively when managing multiple patients and complex clinical problems.
 - Provide compassionate, patient-centered care throughout the surgical journey.
 - Recognize and address the ethical dimensions of decision-making in bariatric surgery.
 - Perform complex bariatric and metabolic surgical procedures safely and accurately.
- Establish and maintain clinical knowledge, skills, and attitudes appropriate to bariatric surgery, including:
 - Laparoscopic Bariatric Surgery:
 - Indications, contraindications, and patient selection criteria for bariatric procedures.
 - Mastery of technical aspects, including port placement, tissue dissection, and anastomosis.

- Proficiency in common bariatric procedures, including SG, RYGB, BPD-DS, SADI/SADS, and revisional surgeries.
- Understanding and management of perioperative care, including preoperative evaluation, postoperative monitoring, and long-term follow-up.
- Management of Obesity-related Comorbidities:
 - Comprehensive understanding of metabolic disorders, such as type 2 diabetes, hypertension, dyslipidemia, and metabolic dysfunction-associated steatotic liver disease fatty liver disease, and their management in the context of bariatric surgery.
 - Integration of pharmacological, lifestyle, and surgical interventions to optimize patient outcomes.
 - Knowledge of the long-term management of patients after bariatric surgery, including nutritional supplementation, management of micronutrient deficiencies, and monitoring for surgical complications.
- Complications and Reoperations:
 - Risk factors for and management of common and rare complications of bariatric surgery, including leaks, strictures, internal hernias, and nutritional deficiencies.
 - Expertise in performing revisional bariatric surgeries, with a thorough understanding of the indications, techniques, and potential complications.

Technical Skills: Bariatric surgery fellows will develop a thorough understanding of the indications, contraindications, complications, and interpretation of the following, achieving expertise and technical competence in the performance of the following procedures via laparoscopy:

- Sleeve gastrectomy
- Roux-en-Y gastric bypass
- Biliopancreatic diversion with duodenal switch
- Single anastomosis duodenoileal bypass or single anastomosis duodenal switch
- Revisional bariatric surgeries
- Management of surgical complications: Including leak management, internal hernia repair, marginal ulcers, and treatment of strictures.

Communicator

- Effectively describe bariatric procedures, including risks, benefits, and rationale, to patients.
- Obtain informed consent in a manner that is clear and appropriate.
- Complete comprehensive and accurate surgical reports, including findings and management plans.

- Provide clear and supportive postoperative instructions and management plans to patients and their families.
- Participate actively in educational sessions, teaching peers and junior colleagues.
- Prepare and present cases, journal clubs, and surgical rounds.

Collaborator

- Work collaboratively with the multi-disciplinary team, including dietitians, psychologists, anesthesiologists, and other indicated specialists to provide comprehensive care to bariatric patients.
- Participate in the planning and execution of complex surgical procedures alongside senior surgeons.
- Understand and support the roles of allied health professionals, including surgical nurses and operating room staff.
- Collaborate with endocrinologists and other specialists to manage obesity-related comorbidities.
- Respect and address differences in opinion among the surgical team and contribute to a positive inter-professional environment.

Scholar

- Conduct or contribute to research projects focused on bariatric surgery or related fields, aiming to advance the field through innovation and evidence-based practices.
- Access, interpret, and apply the latest evidence relevant to bariatric surgery in clinical practice.
- Critically review and present relevant literature in journal clubs.
- Educate other physicians, healthcare professionals, and the public about the benefits and risks of bariatric surgery.
- Identify gaps in knowledge and seek to address them through continuous learning and collaboration.

Professional

- Adhere to the principles of safe surgical practice, including the responsible use of surgical equipment.
- Deliver care with integrity, honesty, and compassion, upholding the highest professional, legal, and ethical standards.

Evaluation and Feedback

Fellows will be evaluated at regular intervals on their performance in all areas of clinical, academic, and research responsibilities. The evaluations and feedback will be provided by any members of the teaching faculty, both informally during and after each clinic or surgery and formally by the fellowship Program Director at 3-month intervals documented via the university's designated platform. For the funded fellow matched through the Fellowship Council there are also routine quarterly formal evaluations to be submitted to the Fellowship Council platform which will be carried out by the Program Director. The entire members of the teaching faculty also participate

as members of the Promotion Committee that formally assess on a quarterly basis the progress of the fellow(s).

The fellow(s) also are required to formally evaluate and provide feedback to any teaching faculty involved in their fellowship training. The formal feedback/evaluation of faculty by fellow(s) is tracked by the respective university-specific and the Fellowship Council platforms.

Application Process

For the funded fellowship position, the applications for the bariatric fellowship at MUHC are submitted through the Fellowship Council Match, accessible at <http://fellowshipcouncil.org/>. The link to the Fellowship Council website will also provide additional information including the important match dates and deadlines. Applicants must also ensure that they meet the eligibility criteria for postgraduate training in the province of Quebec prior to application (<https://www.mcgill.ca/pgme/admissions/prospective-fellows>).

The eligibility criteria used to choose the outside-match non-funded fellow is also similar to the description provided in the above links.

Contact Information

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Revised Aug 2024

Approved by RPC Aug 7, 2024