

McGill Orthopaedic Oncology, Complex Lower Limb Reconstruction and Osseointegration Fellowship Program

This 2-year clinical fellowship is intended for fully qualified orthopaedic surgeons. One year is devoted to arthroplasty and the other to orthopedic oncology and osseointegration. It begins July 1st and ends June 30th of the second year. Preference is given to surgeons planning to work in an academic environment with or without a confirmed position. Only applicants with their files completed and validated by the McGill Post-Graduate Office prior to the deadline will be considered. Interviews may be done virtually.

Fellows will participate in data collection for multiple research trials and is expected to complete at least one clinical or basic science research project and to submit the manuscript for publication before completion of the fellowship. Registration and travel expenses for presentation of a completed paper at orthopaedic meeting will be covered.

The fellowship includes 4 weeks of vacation and 10 meeting days per year.

Following completion of this 2-year fellowship, formal fellowship certificates will be issued by McGill University for each component of training.

Orthopedic Oncology and Osseointegration fellowship description

Two fellowships trained orthopaedic surgeons comprise the orthopaedic team. Dr Anthony Bozzo (joined in July 2023) specialize in orthopaedic oncology and Dr. Aoude who specializes in orthopaedic and spine oncology. The fellow will be involved in the management of patients presenting to the musculoskeletal tumour service through all phases of investigation and treatment. This is a multi-disciplinary facility involving surgical oncology, orthopaedic surgery, cancer medicine, radiotherapy and anatomical pathology. Duties entail monitoring and supervision of individual patients' progress through treatment of primary soft tissue and bone tumours, and metastatic bone disease.

Orthopaedic oncology clinics are held twice a week at the Cedars Cancer Center at the Glen site (Mondays all day and Thursday morning) and once a month at the Montreal Children Hospital (MCH) (Thursday afternoon). Tumour multidisciplinary tumor board runs every Friday morning to plan and discuss newly diagnosed patient, post-operative management and complex cases. The multidisciplinary OI clinic runs on Friday afternoon once a month at the Lindsay-Gingras Montreal Rehabilitation Institute.

Orthopedic Oncology and Osseointegration fellowship objectives:

After completion of a 12 months rotation

1. Master the knowledge relating to most bone and soft tissue tumors including tumor classification, staging and prognosis.
2. Recognize the common symptoms and physical anomalies related to oncology patients
3. Describe the radiographic features characteristic of benign and malignant bone and soft tissue tumors
4. Outline a comprehensive differential diagnosis relating to bone and soft tissue tumors
5. Order the appropriate investigation and interpret the results
6. Master the principles of tumor biopsy and their applications
7. Become familiar with the tools used to evaluate QOL and function of amputees and recognized indications and limitation for osseointegration.
8. Evaluate a young patient with a structural abnormality of the hip including dysplasia, femoroacetabular impingement, and common childhood disorders.
9. Master the preoperative planning process including patient optimization, implant selection and templating. This includes active participation into the design of custom implants and the preparation of submissions to Health Canada for approval.
10. Communicate professionally with patients and their families and with the collaborating teams within or outside of the institution.
11. Be knowledgeable about OI patient selection, the different types of procedures, the surgical risks and complications and their management and the long term outcomes.
12. Understand the rehabilitation protocols following osseointegration.

During his rotation in orthopedic oncology and osseointegration the fellow is expected to:

1. Attends and participates in all clinics and ORs pertinent to the field of fellowship. This includes activities at the Montreal General Hospital, the Royal Victoria hospital, the Montreal Children hospital and the Gingras-Lindsay Montreal Rehabilitation Center. Additional site for surgeries can be added based on the availabilities provided by the Ministry of Health.
2. Based on his availability the fellow may be ask to help mentor staffs into their general orthopedic clinic.
3. Covers with residents on service dedicated consultation coming from ward or emergency room.
4. Participates closely and regularly in patient care on the ward and rounds with residents and nurse practitioner.
5. Participates into supervision and teaching of residents and students on service.
6. Helps organize and participate in the journal club and other formal resident teaching such as seminars, hospital rounds and M&M rounds pertaining to the current area of the fellowship (Oncology vs Arthroplasty).
7. Will cover the trauma call schedule in line of his current staff mentors (including weekends) in a frequency of one in 5
8. Participates actively to the many clinical and basic ongoing research projects.
9. Leads one significant research project yearly that can be submitted to national or international meetings and leading to manuscript for publication. Protected time up to one half day/wk is available for such activities.
10. Agrees that acquisition of knowledge and skills for residents will have priority over the fellow in accordance of the level and capacities of the residents.
11. Provide feedback of his rotation to the orthopedic residency program director yearly.

Adult lower extremity reconstruction fellowship description

Description:

The fellow will spend one year at the Montreal General Hospital under a mentorship-based program with emphasis on complex and revision arthroplasty. The fellow will be exposed to a large volume and variety of reconstructive surgical problems involving the hip and knee, as well as teaching, research, and leadership opportunities.

The fellow will perform preoperative consultations, take a leadership role in preoperative planning, participate actively in surgical procedures, and will be directly involved in postoperative patient care. Furthermore, the fellow will be active in specialty-specific educational conferences and clinical or basic science research projects.

Faculty:

Ahmed Aoude, MD, Assistant Professor, McGill University (fellowship director)

Adam Hart, MD, Assistant Professor, McGill University (fellowship director)

Michael Tanzer, MD, Professor, McGill University

Adult lower extremity reconstruction fellowship Objectives

1. Understand the pathophysiology of common conditions leading to hip and knee arthritis (post-traumatic, osteonecrosis, inflammatory, structural, etc).
2. Perform a comprehensive evaluation including focused history and physical examination, interpretation of imaging, and ordering of pertinent investigations.
3. Become competent and fascicle with primary hip and knee arthroplasty.
4. Become proficient in the posterior, trans-gluteal, and direct anterior approaches for total hip replacement.
5. Have a sound exposure and understanding of different types of knee balancing, alignment, navigation, and partial replacements.

6. Evaluate a patient with a painful total hip or knee arthroplasty, derive a pertinent differential diagnosis, and order appropriate investigations accordingly.
7. Have an extensive exposure to complex and revision arthroplasty and develop the approach/skills to manage these cases.
8. Master the preoperative planning process including patient optimization, implant selection and templating. This includes active participation into the design of custom implants and necessary submissions for Health Canada approval.
9. Evaluate a young patient with a structural abnormality of the hip including dysplasia, femoroacetabular impingement, and common childhood disorders.
10. Become familiar with hip preservation surgery; indications and techniques.
11. Work effectively alongside medical students and residents with capacity to teach.
12. Communicate professionally with patients and their families and with the collaborating teams within or outside of the institution.

Expectations & Workload:

1. Attend and participate in clinics and ORs.
2. Participate in patient care on the ward and rounding.
3. Involvement in preoperative planning and templating.
4. Help supervise and teach residents and students on the service.
5. Help organize and participate in the journal club, arthroplasty rounds and other formal resident teaching such as seminars, hospital rounds and M&M rounds.
6. Participate actively to the many clinical and basic research projects.
7. Conduct a significant research project, presents results at national or international meetings, and submit his work for publication.
8. Agree that acquisition of knowledge and skills for residents will have priority over the fellow. This is in accordance of the level and capacities of the residents.
9. Provide feedback of his rotation to the orthopaedic residency program director.

Evaluation of performance

The fellow will receive formal evaluations according to McGill policies (One45) 4 times per year. Evaluations are sent to the Program director and McGill after they have been discussed with the fellow. The fellow will also have opportunities to evaluate his fellowship with the Orthopaedic Residency Program Director and his mentors as well.