

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

This is a 2-year clinical fellowship that is intended for fully qualified orthopaedic surgeons. 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. It is restricted to surgeons heading back to their country after training. 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.

Two fellowship trained orthopaedic surgeons comprise the orthopaedic Oncology team. Dr Robert Turcotte specializes in orthopaedic oncology and osseointegration (OI). 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. Dr Adam Hart is specialized in lower limb complex arthroplasty. The fellow will be exposed to hip preservation, primary, complex primary, and revision hip and knee surgeries. Emphasis will be placed on complex reconstructions involving extensive bone deficits, extensor mechanism disruptions and infections.

Orthopaedic oncology clinics are held twice a week at the Cedars Cancer Center at the Glen site and at the Montreal General Hospital (MGH). Weekly tumour multidisciplinary rounds are held every week to plan and discuss newly diagnosed cases. Osseointegration clinics are held once a month at the Lindsay-Gingras Montreal Rehabilitation Institute in a multidisciplinary environment. The Arthroplasty clinics are held twice a week at the MGH. Surgical procedures are performed at the MGH (2/week for oncology, 1-2/week for complex arthroplasty and 1-2/month for OI). A 3 months rotation at St-Mary hospital under the supervision of Dr Anthony Albers is also possible upon request and contingent on accommodation.

Fellow will participate to formal and informal resident and student hospital teaching including lectures and dedicated half-day teaching on every Thursday mornings. Fellows will also participate in data collection for multiple research trials and is expected to complete at least one clinical or basic science research project per year and to submit the manuscript for publication before completion of the fellowship. Fellow's performance written evaluation is done formally every 3 months. Both teaching and research activities are included for the evaluation of the fellow's performance.

Registration and travel expenses for presentation of a completed paper at an orthopaedic meeting will be covered. The fellowship includes 4 weeks of vacation and 10 meeting days per year.

After completion of a 24 months rotation, the fellow will be able to:

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. Evaluate a patient with a painful total hip or knee arthroplasty, derive a pertinent differential diagnosis, and order appropriate investigations accordingly.
8. Become familiar with the tools used to evaluate QOL and function of amputees and recognized indications and limitation for osseointegration.
9. Evaluate a young patient with a structural abnormality of the hip including dysplasia, femoroacetabular impingement, and common childhood disorders.
10. 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.
11. Communicate professionally with patients and their families and with the collaborating teams within or outside of the institution.
12. Become proficient in the posterior, trans-gluteal, and direct anterior approaches for total hip replacement and appropriate handling of soft tissue, bone, vessels and nerve with amputation/osseointegration.
13. Become proficient in performing complex primary hip and knee and revision arthroplasty as well as osseointegration of lower and upper extremity.
14. Understand the rehabilitation protocols following osseointegration.
15. Become familiar with hip preservation surgery; indications and techniques.

During this rotation, Oncology, Adult Lower Extremity Reconstruction and Osseointegration fellow will be expected to:

1. Attends and participates in clinics and ORs.
2. Participates in patient care on the ward and rounds with residents.
3. Gets involved in preoperative planning and templating.
4. Helps supervise and teach residents and students on the service.
5. 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).
6. Participates actively to the many clinical and basic research projects.
7. Conducts a significant research project yearly and submits results to national or international meetings and submits manuscripts for publication.
8. 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.
9. Provide feedback of his rotation to the orthopedic residency program director yearly.

Evaluation of performance

The fellow will receive formal evaluations according to McGill policies. These will be based on the CanMeds. These evaluations will be forwarded to the Program director after it has been discussed with the fellow. The fellow will also have opportunities to evaluate his fellowship with the Orthopaedic Residency Program Director.