

McGill Skull Base / Advanced Rhinology Fellowship

Directors

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Objective

To develop specialized knowledge of medical and surgical management of pathologies involving the skull base, nasal and paranasal sinus disease in individuals wishing to pursue a career in academic otolaryngology-head and neck surgery.

Justification:

The McGill Skull Base Program is an integrated interediplinary program based at the McGill University Health Center and the SMBD Jewish General Hospital. It serves as a superregional referral center for complex pathologies involving the Skull Base. The McGill University rhinology group is well known for its expertise in sino-nasal disorders. Rhinology at McGill offers a unique training opportunity for advanced training by its recognized experts, the variety and number of procedures performed yearly, structured teaching with dissection courses, as well as a year-round cadaver lab with endoscopic work station.

Eligibility:

Candidates will be individuals having successfully completed an accredited otolaryngology residency who are interested in pursuing a career in academia. Candidate selection will be via a process of application, with selection based on letters of recommendation, academic achievements, and personal interview.

Candidates will have to be eligible for a training card from the College des médecins.

Specific objectives:

At the end of training, the individual will have acquired skills and knowledge allowing him/her to develop and sustain an academic position in Skull Base Surgery and Rhinology. This will be via the following means:

Medical Exposure

Investigation and medical management of anterior and posterior fossa skull base pathologies as well as nasal and sinus disorders.

Teaching will be through exposure to common pathologies presenting for care in tertiary level clinics in the McGill University hospital network. Drs. Tewfik and Zeitouni will act as preceptors. Exposure to multiple preceptors will maximize exposure and allow the candidate to see different approaches.

The fellow will attend specialized rhinology clinics at least two-half days per week. As well, he/she will be expected to staff one-half day clinic him/herself, with attending supervision/consultation. This regular training will be complemented by exposures to

allergy, radiology, and migraine clinics over the course of the year. The fellow will also be required to attend Skull Base Clinic and Skull Base Tumor board.

Surgical Exposure

The candidate will participate in pre, per, and postoperative management of patients presenting for surgery. The candidate's exposure will be tailored to ensure exposure to a broad selection of cases, with a focus on tertiary procedures. Surgery will be performed at the MGH, JGH, and RVH sites. On occasion, the fellow will also participate in pediatric rhinology and skull base surgeries at the MCH site. It is understood that priority will be given to residents and that for uncomplicated cases the fellow will primarily assist and teach the residents, rather than perform the cases.

It is expected that the candidate will be exposed to sufficient volume of the following cases to develop a facility with them:

Approaches to the skull base:

- Endoscopic pituitary surgery, including transplanum approaches
- Clival resections and approaches to the posterior cranial fossa
- Transcribriform approach to the anterior cranial fossa resections
- Open skull base surgery of the anterior and posterior fossa
- Pterygopalatine and Infratemporal fossa approaches

Endoscopic sinus surgery (ESS)

- ESS for sino nasal polyposis
- Frontal recess surgery and trephination
- Sphenoid sinus surgery
- The modified endoscopic Lothrop (frontal drill out) procedure
- The canine fossa trephination
- Endoscopic excision of nasal and skull base tumors
- Mega-antrostomies and endoscopic medial maxillectomy
- Advanced revision and extended sinus surgery cases
- Mucoceles

Orbital procedures:

- Optic nerve decompression
- Orbital decompression
- Dacryocystorhinostomy (DCR)

Combined / Open approaches to the sinuses

- Osteoplastic flap
- Lateral rhinotomy
- External rhinoplasty
- Caldwell-Luc
- Mid facial degloving

Image guided surgery for ESS

Complementing the above will be:

Selected readings program:

The fellow will be furnished a list of selected readings. Additional resources and access to the medical literature is available via the internet from the McGill University libraries free of charge.

Attendance at an endoscopic skull base cadaver course

The rhinology group will arrange to send the fellow to at least one advanced rhinology/endoscopic skull base cadaver course during the fellowship year. It is also highly encouraged that the fellow attend a vascular injuries workshop. These courses may be held at McGill or elsewhere.

Attendance at a national meeting

The rhinology group will arrange to send the fellow to at least one major medical meeting during the fellowship year. This may be to present a paper or to attend a specialized conference.

Teaching:

The candidate will attend all normal activities of the Department, including evaluation/follow up of hospitalized patients as required. He/she will also:

- Supervise residents in the OR
- Participate in Skull Base Clinic
- Participate in Skull Base Tumor Board
- Organise and supervise Grand Rounds when the subject is rhinology.
- Prepare and deliver lectures for rhinology day
- Teach medical students/residents/community ENTs during organized teaching activities held by the department

Research:

While the primary objective of the experience is not to develop researchers, development of academic skills is important in this fellowship. To this end the fellow will:

- write a review paper (on a topic to be determined with the preceptors) early in the training period to develop research/writing skills
- undertake and complete one clinical research project, which he/she will present at a national meeting, and prepare the resulting article for publication

Participation in a collaborative project with a basic science effort will be according to the orientation of the Skull Base Surgery and Rhinology groups at that time.

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