

McGill University
Department of Ophthalmology and Visual Sciences

Ophthalmic Plastic and Reconstructive Surgery Fellowship
Training Program Description

Fellowship Program Director:	Dr. Bryan Arthurs Dr. Christian El-Hadad	
Preceptors:	Dr. Bryan Arthurs Dr. Christian El-Hadad Dr. Chantal Ares	
Training Sites:	McGill University Health Center Adult Sites Jewish General Hospital Montreal Children's Hospital	60 % 30 % 10 %
Number of trainees per year:	1	
Duration of the training program:	2 years	

Description of the fellowship program:

This oculoplastic surgery fellowship training program is set up to provide the necessary clinical and surgical education so as to acquire expertise in the diagnosis, treatment, and management of patients with different eyelids, lacrimal and orbital disorders. The fellowship's clinical care component will be coupled with participation in, and development of clinical research studies in patients with various ophthalmic and ocular adnexal diseases. The oculoplastic fellow will spend a minimum of 75 to 80 % of their time on clinically-related patient matters (surgical rounds, clinics, tumor board and operations). The remaining 20 – 25 % of their time will be dedicated to research and academic activities.

The fellow will be encouraged to interact with, and to initiate collaborative research involving the Henry C. Witelson Ocular Pathology Laboratory, the Departments of Neuroradiology, Neurosurgery, Neuropathology, Dermatopathology, Otolaryngology, Oncology and Radiation Oncology. In a competency based approach, the fellow will also be actively involved in teaching and supervising ophthalmology residents along with medical students, clinically and academically allowing them to develop their ophthalmic plastic knowledge and operative skills.

Source of funding for fellowship:

Please check acceptable sources of funding on the postgraduate medical education website:
<http://www.mcgill.ca/pgme/admissions/prospective-fellows>

Research Activity:

Research is mandatory. Half a day a week will be reserved for research activity. Under the direct supervision of the preceptors, fellows are encouraged and expected to actively

participate in research projects during the course of their fellowship. Guidance, allocated time, and funding for research projects will be available. The expectation is that each fellow will be the primary author on at least one original, prospectively conducted research project with completion. In addition, the research project should be written up in manuscript form for submission to a peer reviewed journal. Furthermore, the fellow will present the results of the study at the annual McGill Ophthalmology Research Day, regional meetings and possibly national conferences.

Length of Educational Program:

The length of the educational program must be 24 months of full-time education.

Fellow Duties and Responsibilities:

The fellow will be the primary contact for any oculoplastic related consults from the ophthalmology service. The fellows will review their consults with the oculoplastic staff covering the service. This exposure provides ample opportunity to triage, diagnose and initiate treatment in an independent yet supervised manner.

Fellow Teaching Responsibilities Towards Residents:

The oculoplastic fellows will provide teaching to the on-call ophthalmology residents with respect to patient examination, diagnosis, imaging and management decisions in ophthalmic plastics related pathologies. Assistance in oculoplastic related procedures is also expected. The teaching and guidance of residents extends into the daily clinics and operating room. Fellows will also participate in didactic teaching to residents during the oculoplastic section of ophthalmology residency teaching curriculum.

Faculty roles:

The fellow will be expected to interact on a regular basis with all the faculty in the Division of Ophthalmology and in particular with the teaching faculty of the oculoplastic service. This will offer the fellow the broadest exposure to the different areas of staff expertise, both in clinical care, clinical research and teaching.

Curriculum:

The fellow will be expected to spend the majority of the time in both clinical endeavors and the OR setting. This should still leave enough time however for academic pursuits. Different assigned readings, from staff (reflecting their areas of expertise), and organizing journal clubs along with academic half day seminars will constitute just some of the learning exercises expected of the fellow. Attendance at ophthalmology meetings offered at both the academic and clinical levels along with paper presentation at local and national conferences will be expected.

At the time of graduation, the trainee will have achieved the following competencies:

1) *Professionalism*

Fellows must demonstrate a commitment to professionalism and an adherence to ethical principles.

2) *Patient Care and Procedural Skills*

a) Fellows must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

i) Fellows must directly evaluate, and provide diagnosis and treatment plans, for a minimum of 1,200 patient encounters per year during the course of education. These patients must have ophthalmic plastic and reconstructive surgery related problems. The fellow must be able to demonstrate that the history and examination were accurate and appropriate, the use of laboratory and imaging tests was directed by the history and physical examination, and that the differential diagnosis and management were appropriate; and,

ii) Fellows must demonstrate competence in teaching ophthalmic plastic and reconstructive surgery to ophthalmology residents.

b) Fellows must be able to perform all medical, diagnostic, and surgical procedures considered essential for the area of practice

i) Fellows must demonstrate competence in the following procedures:

- (1) enucleation, evisceration, exenteration, and secondary implants of the orbit;
- (2) orbitotomy for exploration, biopsy, and tumor removal; anterior, lateral, medial and superior and orbital reconstruction for periorbital anomalies, including trauma;
- (3) eyelid retraction repair;
- (4) blepharoptosis repair;
- (5) ectropion and entropion repair;
- (6) blepharoplasty (upper and lower eyelids, functional and aesthetic);
- (7) eye lid reconstruction (following congenital defects, trauma or tumor excision);
- (8) repair or treatment of trichiasis (lid split, mucous membrane graft);
- (9) conjunctivoplasty;
- (10) trauma and laceration repairs;
- (11) rhytidectomy related to periorbital processes;
- (12) dacryocystorhinostomy and other lacrimal procedures;
- (13) excision of tumors involving the periorbital and adjacent regions-benign and malignant;
- (14) facial flaps and grafts related to the management of periorbital processes;
- (15) management of upper face and brow conditions (e.g. brow ptosis repair);
- (16) nasal and sinus endoscopy, partial inferior turbinectomy, and procedures related to the management of lacrimal and periorbital processes; and,
- (17) use of neuromodulators (botulinum toxin), dermal fillers, other technologies (e.g. laser) and chemical/pharmaceutical agents for the

management of contour and skin quality abnormalities (functional and aesthetic).

3) *Medical Knowledge:*

- a) Fellows must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care.
- b) Fellows must demonstrate knowledge of:
 - i) anatomy and physiology of the orbit, eyelids, lacrimal system, nose, sinuses, and head and neck as it relates to the orbits and adnexa;
 - ii) orbit;
 - (1) common orbital problems of children, including: congenital anomalies, cellulitis, benign and malignant tumors, and orbital inflammations;
 - (2) common orbital disorders of adults including orbital cellulitis, thyroid orbitopathy, and pseudotumor, vasculitis, congenital tumors, vascular tumors, neural tumors, lacrimal gland tumors, fibro-osseous tumors, histiocytic diseases, lymphoid tumors, metastatic tumors, trauma, anophthalmic socket problems, and skull base disease;
 - iii) eyelid, including congenital syndromes, inflammation, trauma, ectropion, entropion, trichiasis, blepharoptosis, eyelid retraction, dermatochalasis, blepharochalasis, eyelid tumors, blepharospasm, facial nerve palsy, eyebrow, midface and lower face function, and aesthetics;
 - iv) lacrimal system, including congenital tearing, acquired tearing, and trauma;
 - v) ocular surface pathology, including cicatricial processes affecting the bulbar and palpebral conjunctiva, management of corneal and conjunctival exposure, and relationship of the lids, mid-face and brow to ocular exposure;
 - vi) regional anatomy, including graft sites frequently used such as cranial bone, ear, nose, temporal area, mouth and neck, abdomen, buttocks, legs, supraclavicular area, and arm;
 - vii) fundamentals of ocular and orbital anatomy, chemistry, physiology, microbiology, immunology, and wound healing;
 - viii) histology and pathology to interpret ocular, cutaneous, and periocular pathology and dermatopathology. This should include ten hours of pathology slide review with clinical correlation;
 - ix) diagnostic and therapeutic procedures with comprehensive examination of the eyelids and periorbital region;
 - x) examination of the lacrimal system, and nasal exam with speculum and endoscope;
 - xi) examination of the eyebrow and face, including assessment of the eyebrow position for brow ptosis, paralysis, and its relation to upper eyelid dermatochalasis, for facial paralysis and evaluation of the effects of mid-face cicatricial, paralytic and involuntional changes on lower eyelid position. Also an assessment of the face for the harmonious aesthetic units and evaluation of the inter-relationships of each;
 - xii) examination and measurement of orbital structures and functions; and,
 - xiii) the principles of plain films, CT, MRI, and ultrasound imaging relating to the head and neck with particular emphasis on the orbit.

4) *Practice-based Learning and Improvement:*

Fellows must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning.

5) *Interpersonal and Communication Skills:*

Fellows must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

6) *Systems-based Practice:*

Fellows must demonstrate an awareness of and responsiveness to the larger context and system of health care, including the social determinants of health, as well as the ability to call effectively on other resources to provide optimal health care.

Evaluation:

The clinical fellow will receive an evaluation every three months by the fellowship director, after receiving input from the attending staff, and who will then submit this evaluation to the residency program director and the residency committee for review. The fellow will have the opportunity to offer formal feedback to the fellowship director and staff every 3 months. Any fellowship concerns will be promptly addressed by the residency program director.

Summary of Clinical Practice:

The Oculoplastic program is based primarily at the McGill University Health Center and the Jewish General Hospital and in collaboration with the Montreal Children's Hospital annually treats over 1200 patients and 350 surgical oculoplastic pathologies. Two or three operative days per week are devoted to oculoplastic surgery. The oculoplastic service follows, studies and treats a large outpatient clinical cohort encompassing the spectrum of ocular adnexal disorders. The oculoplastic fellow will be exposed to the full gamut of ocular adnexal pathologies including those surgical disorders requiring multidisciplinary approaches. The oculoplastic service is a dynamic clinical service which works closely with the radiology, radiation-oncology, neurosurgery, pathology and otolaryngology programs. The fellow's participation in this multidisciplinary dialogue will be encouraged.

Contact information:

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