RECALCITRANT CHRONIC RHINOSINUSITIS (CRS) and aggressive clinical variants of the disease such as nasal polyposis, Samter’s triad and eosinophilic mucus CRS are particularly challenging to manage, even in the hands of experienced otolaryngologists. Surgery is generally tailored to the severity of disease; however, advances in endoscopic sinus surgery technique and ancillary procedures, and our understanding of the disease process have lead to improved success rates for surgery in the management of severe disease. The aim of this course is to teach advanced techniques in endoscopic sinus surgery, including frontal recess dissection and drillout, medial maxillectomy, as well as common endoscopic skull base approaches to the pituitary region, clivus, anterior cranial and infratemporal fossae.

The session will consist of a full-day of lectures followed by two days of hands-on dissections. Twenty cadaveric heads with CT imaging as well as endoscopic surgical workstations will be provided, and the enrollment would be open to a total of 40 Otolaryngologists, including practicing surgeons, advanced trainees and fellows from the Canada, the US and Europe.

**LEARNING OBJECTIVES**

After attending this workshop, otolaryngologists will:

1. Recognize endoscopic and radiologic sino-nasal anatomy, as well as pathophysiologic concepts of various common nasal diseases;
2. Define the management of sino-nasal pathology, including the latest medical therapies as well as advanced ESS techniques, including the surgical steps of each technique;
3. Identify the indications and contraindications of advanced ESS techniques;
4. List the instrumentation required;
5. Define the postoperative management after ESS.

* EACH PRESENTATION WILL INCLUDE A MINIMUM OF 25% OF THE TIME SET ASIDE FOR QUESTIONS FROM THE AUDIENCE.
The frontal sinus anatomy is highly variable and often complex. As a result, it is often challenging for the sinus surgeon to master understanding of the frontal sinus. The Frontal Sinus Master’s Class aims to help participants systematically review a variety of CT scans, from simple to complex, in all 3 planes. After reviewing the CT, the participant uses the building block method to determine the anatomy and drainage pathway of the frontal sinus. The Course Faculty works with the participants to make and evaluate their own 3D conceptualization of the frontal sinus cells using tangible blocks, in a hands-on approach. The Course Faculty checks and provides feedback to help the participant improve their 3D Conceptualization. Participants then compare their own 3D interpretation of the CT scan with the intra-operative video of the surgery performed on this patient, with stepwise removal of frontal sinus cells. The comparison of the participant’s 3D interpretation and the actual surgery re-enforces their ability to use the triplanar CT images to create a 3D anatomical picture, and to formulate their own plan for surgery.

**LEARNING OBJECTIVES**

After attending this workshop, otolaryngologists will:

1. Name common cellular configurations of frontoethmoidal cells that are relevant to frontal sinus surgery.
2. Assemble these 3D configurations using the building blocks technique and understanding how this affects the frontal sinus drainage pathway.
3. Create a surgical plan for frontal recess dissection based on the elucidated frontoethmoidal cell anatomy.

**LOCATION: THE STEINBERG CENTRE FOR SIMULATION AND INTERACTIVE LEARNING AT MCGILL UNIVERSITY (3575, PARC AVENUE, SUITE 5640, MONTREAL, QC H2X 3P9)**

**FRONTAL SINUS MASTERCLASS WORKSHOP DESCRIPTION (INCLUDED FOR DISSECTORS)**

**LOCATION:    JEANNE TIMMINS AMPHITHEATRE, MONTREAL NEUROLOGIC INSTITUTE (3801, UNIVERSITY STREET, MONTREAL, QC H3A 2B4)**

**WEDNESDAY, SEPTEMBER 11**

8:00  Frontal Sinus Master’s Class
8:30  Model 1 Planning  
Dissector A does left side and B does right side
9:00  Model 1 Open master of planning  
Compare their plans to the master plan and correct any problems
9:15  Coffee
9:45  Model 1 Left side dissection  
Dissector A dissects and B watches
10:30  Model 1 Right side dissection  
Dissector B dissects and A watches
11:15  Model 1 Demonstration  
Dissection by faculty
11:55  Model 1 Video  
Discussion & Debriefing
12:00  Lunch
13:00  Anterior and Posterior Ethmoidectomy  
Sphenoidotomy Demonstration  
Dissection by faculty
13:20  Model 3 Planning  
Dissector A does right side and B does left side
13:50  Model 3 Open master of planning  
Compare their plans to the master plan and correct any problems
14:00  Model 3 Left side dissection  
Dissector B dissects and A watches
14:45  Model 3 Right side dissection  
Dissector A dissects and B watches
15:30  Model 3 Video  
Discussion & Debriefing
15:40  Coffee
16:10  Frontal Drillout Demonstration  
Dissection by faculty
16:40  Dacryocystorhinostomy Demonstration  
Dissection by faculty
17:00  Dacryocystorhinostomy  
Dissector A dissects and B watches
17:30  Dacryocystorhinostomy  
Dissector B dissects and A watches
18:00  Faculty Thanks You and Pictures

**THURSDAY, SEPTEMBER 12**

8:00  Model 4 Planning  
Dissector A does left side and B does right side
8:30  Model 4 Open master of planning
8:45  Model 4 Left side dissection
9:30  Model 4 Right side dissection
10:15  Model 4 Video
10:30  Coffee
11:00  CSF leak Closure (Bath Plug Technique)  
Demonstration: 20 min
11:55  Model 4 Video  
Discussion & Debriefing
12:00  Lunch
13:00  Model 2 Open master of planning  
Compare their plans to the master plan and correct any problems
13:45  Model 2 Left side dissection
14:30  Model 2 Right side dissection
15:15  Model 2 Video  
Discussion & Debriefing
15:30  Wrap up and Debriefing
16:00  Close of the course

**During model dissections: Professors Demonstrations**

- Sphenopalatine Artery Ligation  
Demonstration: 20 min
- Vidian Neurectomy  
Demonstration: 20 min
- Endoscopic Medial Maxillectomy  
Demonstration: 20 min
- Infratemporal Fossa Dissection  
Demonstration: 20 min
- Endoscopic Approach to Sellar Region  
Demonstration: 20 min
- Transclival Approach  
Demonstration: 20 min

**** EACH PRESENTATION WILL INCLUDE A MINIMUM OF 25% OF THE TIME SET ASIDE FOR QUESTIONS FROM THE AUDIENCE ****