**COURSE DESCRIPTION**

Responding to the increased familiarity with endonasal endoscopic skull base surgery, we have modified the program to start at a higher level of expertise, and to promote discussions related to treatment algorithms of specific diseases. However, we recognize the value of refreshing basic concepts; and that our course caters to participants with a variety of levels of training and experience. Therefore, we will provide the participants with a series of video-lectures and video-prosections to fulfill these needs. This video-lecture series will allow the participants to enjoy the benefits of both a traditional lecture-style course based on anatomic and technical concepts, and a course with a new interactive format emphasizing decision-making and disease-oriented discussions. Participants will in fact enroll in two courses, a home study course and the hands-on course without additional costs.

The course comprises:

1. Pre-course video-lectures addressing the basic principles of endoscopic skull base surgery, anatomy of the sinonasal tract and skull base, and basic surgical technique and instrumentation. These will be provided to registered participants one month prior to the course, as the program will start at a level that presumes familiarity with these principles.

2. Anatomical prosections (videos will be provided one month prior to the course).

3. Laminated dissection manual (a digital version will be provided one month prior to the course).

4. Sequence of complementary didactic lectures, round tables and panel discussions (open format with audience participation), 3-D anatomical reviews and hands-on cadaveric dissection.

5. Live surgery will be transmitted directly to the auditorium where the participants may interact with the surgeons and other members of the faculty.

**COURSE OBJECTIVES**

At the conclusion of this activity, learners should be able to:

1. Describe the anatomic relationships of the sinonasal tract, orbit and ventral skull base from the endoscopic perspective.

2. Discuss the indications and limitations of endoscopic endonasal surgery of the skull base, pituitary fossa, orbit and craniocervical junction.

3. Identify how to avoid and treat complications of endoscopic endonasal surgery of the skull base, pituitary fossa, orbit and craniocervical junction.

4. Describe the anatomic relationships and surgical exposure afforded by the transpterygoid approach.

5. Describe the relative anatomical exposures of the endonasal versus the open traditional approaches.

6. Identify how to avoid and treat complications of endoscopic skull base surgery.

**TARGET AUDIENCE**

Neurosurgeons, otolaryngologists-head and neck surgeons and other skull base surgeons who are interested in learning endoscopic endonasal surgery of the skull base, pituitary fossa, orbit and craniocervical junction.
Ricardo L. Carrau, MD  Professor  
Department of Otolaryngology-Head and Neck Surgery*

Alexander A. Farag, MD  Assistant Professor  
Department of Otolaryngology-Head and Neck Surgery*

Douglas A. Hardesty, MD  Assistant Professor  
Department of Neurological Surgery*

Bradley A. Otto, MD  Assistant Professor  
Department of Otolaryngology-Head and Neck Surgery*

Daniel M. Prevedello, MD  Professor  
Department of Neurological Surgery*

Sergio D. Bergese, MD  Professor  
Clinical Anesthesiology*

Dukagjin Blakaj, MD, PhD  Assistant Professor  
Department of Radiation Oncology*

Raymond I. Cho, MD, FACS  Clinical Associate Professor  
Ophthalmology*

Luma Ghalib, MD  Assistant Professor  
Clinical Endocrinology, Diabetes and Metabolism*

Russell R. Lonser, MD  Professor and Chair  
Department of Neurological Surgery*

Matthew Old, MD  Assistant Professor  
Department of Otolaryngology-Head and Neck Surgery*

Enver Ozer, MD  Professor  
Department of Otolaryngology-Head and Neck Surgery*

Joshua Palmer, MD  Assistant Professor  
Radiation Oncology*

Luciano M. Prevedello, MD, MPH  Associate Professor  
Neuroradiology*

Demicha Rankin, MD  Associate Professor-Clinical  
Department of Anesthesiology*

James Rocco, MD, PhD  Professor and Interim Chair  
Department of Otolaryngology – Head and Neck Surgery  
The John and Mary Alford Chair of Head and Neck Surgery*

Patrick C. Walz, MD  Assistant Professor  
Department of Otolaryngology-Head and Neck Surgery*

Patrick Youssef, MD  Assistant Professor  
Department of Neurological Surgery*

GUEST FACULTY  
TBD
AGENDA

One month before the course, we will provide all registered participants with the following lectures in a video format. Participants will be responsible to watch these videos and be familiar with the material. The course will start at a level that assumes familiarity with the concepts exposed in the videos.

- **Pre-course** Principles of Expanded Endoscopic Endonasal Approaches
- **Pre-course** The Sinonasal Corridor
- **Pre-course** Anatomy of the Sinonasal Tract & Skull Base (Extradural)
- **Pre-course** Anatomy of the Cranial Nerves and Cerebral Circulation (Extradural)
- **Pre-course** Reconstruction of the Skull Base: From Free Grafting to Vascularized Flaps
- **Pre-course** Sagittal Plane EEA Modules I: Trans-sellar, Trans-planum, and Trans-cribiform
- **Pre-course** Practical Approach to Imaging of the Cranial Base
- **Pre-course** Endovascular Approach: How I Can Get You Out of Trouble (even deep, deep... trouble)
- **Pre-course** Sagittal Plane Modules II: Trans-clival, Trans-odontoid
- **Pre-course** Endoscopic Anterior Skull Base Resection for Sinonasal Malignancy: Principles and Outcomes
- **Pre-course** Anatomical Basis for the Transpterygoid Approaches
- **Pre-course** Coronal Plane Modules

In addition, we will provide copies of the prosection videos, a dissection manual in PDF format, and references. Although not critical, we encourage the participants to go over this material before the course.

FRIDAY, NOVEMBER 1, 2019 – DAY 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>6:45 am</td>
<td>Registration and Continental Breakfast – Polaris Ballroom</td>
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<tr>
<td>7:15</td>
<td>Welcome – Russell Lonser, James Rocco</td>
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<tr>
<td>Course Overview – Ricardo Carrau, Bradley Otto, Daniel Prevedello, Alexander Farag, Douglas Hardesty</td>
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<tr>
<td>7:30</td>
<td>Round Table: Preoperative Planning: Diagnostic and Interventional Imaging</td>
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<tr>
<td>9:00</td>
<td>Round Table: Optimizing the Surgical Corridors and Adjunctive Technology</td>
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<tr>
<td>10:00</td>
<td>Break</td>
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<tr>
<td>10:30</td>
<td>Round Table: Sellar Lesions - Cysts and Intrasellar Adenomas, Extended Approaches, Endocrine for Surgeons</td>
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<tr>
<td>11:30</td>
<td>360-Degree Minimally Invasive Skull Base and Brain Surgery – Amin Kassam</td>
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<tr>
<td>12:15 pm</td>
<td>Lunch</td>
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<tr>
<td>12:45</td>
<td>Presentation of the Case – Bradley Otto &amp; Luciano Prevedello</td>
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<td>1:00</td>
<td>Live Surgery – Ricardo Carrau, Daniel Prevedello</td>
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<tr>
<td>Commentary: Bradley Otto, Amin Kassam, Douglas Hardesty, Alexander Farag, Leo Ditzel, Kyle VanKoevering</td>
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<tr>
<td>4:00</td>
<td>Anatomical Dissection-Lab 1</td>
</tr>
<tr>
<td>Ricardo Carrau, Bradley Otto, Daniel Prevedello, Alexander Farag, Douglas Hardesty</td>
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<tr>
<td>Surgical Simulation Models for ICA Injury, CSF Leaks, Pediatric/Non-pneumatized Sphenoid – Kyle VanKoevering, Patrick Walz, Fellows</td>
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<tr>
<td>Anatomical Prosection: The Sagittal Plane: The Nasoseptal Flap and Trans-sellar Approach (Optional recommended for those attending lectures only)</td>
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<tr>
<td>6:30</td>
<td>End of Day 1</td>
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<tr>
<td>7:00-8:30</td>
<td>Welcome Reception</td>
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</tbody>
</table>
SATURDAY, NOVEMBER 2, 2019 – DAY 2

7:00 am     Continental Breakfast – Polaris Ballroom

7:45          3-D Endoscopic Skull Base Anatomy: The Sagittal Plane I – Daniel Prevedello
8:30          Challenges in Reconstruction of the Skull Base – Bradley Otto, Patrick Walz
           Interactive Panel All Faculty & Attendees

9:30          Round Table: Endoscopic Resection of Craniopharyngiomas: Ophthalmological and Endocrinological Considerations – Raymond Cho, Amin Kassam, Leo Ditzel, Douglas Hardesty
           Interactive Panel All Faculty & Attendees

11:00        3-D Endoscopic Skull Base Anatomy: The Sagittal Plane II – Daniel Prevedello
11:45 Lunch

12:15 pm Future Advances in Skull Base Surgery – Amin Kassam

1:00 Anatomical Dissection-Lab 2
       Ricardo Carrau, Bradley Otto, Daniel Prevedello, Alexander Farag, Douglas Hardesty
       Surgical Simulation Models for ICA Injury, CSF Leaks, Pediatric/Non-pneumatized Sphenoid
       Kyle VanKoeveering, Patrick Walz, Fellows
       Anatomical Prosection: Sagittal Plane II – Trans-planum, Trans-cribiform
       (Optional recommended for those attending lectures only)

6:15       End of Day 2

7:00-10:00 Course Dinner-Cantina Laredo-8791 Lyra Dr. (within walking distance from the Hilton)

SUNDAY, NOVEMBER 3, 2019 – DAY 3

7:00 am     Continental Breakfast – Polaris Ballroom

7:30          3-D Endoscopic Skull Base Anatomy: Coronal Plane – Daniel Prevedello

8:15          Round Table: When the First Chance is the Best and Maybe the Only Chance: Endoscopic Treatment of Malignancies and Complex Lesions
              Raymond Cho, Ricardo Carrau
              Interactive Panel All Faculty & Attendees

9:15          Round Table: Chordomas and Chondrosarcomas
              Daniel Prevedello
              Interactive Panel All Faculty & Attendees

10:00 Break

10:20 Round Table: Adjuvant Radiation Therapy
       Dukagjin Blakaj, Joshua Palmer

11:00 Prevention and Management of Complications Optimizing QOL
       Ricardo Carrau
       Interactive Panel All Faculty & Attendees

11:30 Lunch

12:00 pm Panel: Dilemmas with Meningiomas of the Anterior Cranial Base: Endonasal or Transcranial
         Moderator: Daniel Prevedello
         Interactive Panel All Faculty & Attendees

12:45 Anatomical Dissection-Lab 3
       Ricardo Carrau, Bradley Otto, Daniel Prevedello, Alexander Farag, Douglas Hardesty
       Surgical Simulation Models for ICA Injury, CSF Leaks, Pediatric/Non-pneumatized Sphenoid
       Kyle VanKoeveering, Patrick Walz, Fellows
       Anatomical Prosection: Trans-clival, Trans-nasal Odontoidectomy
       Anatomical Prosection: Trans-orbital Approaches
       Anatomical Prosection: Transpetrous Approaches & Infratemporal Fossa and Extranasal Reconstructive Flaps
       (Optional recommended for those attending lectures only)

7:00 Course Adjourns
COURSE LOCATION AND HOTEL ACCOMMODATIONS

Hilton Columbus/Polaris
8700 Lyra Drive • Columbus, Ohio 43240 • Polaris Ballroom
For hotel accommodations, call 1-614-885-1600 or 1-888-864-8055.

Mention “Endoscopic Skull Base Surgery Course” (Group Code: ENDOSK) to get a special rate of $152 per night plus taxes. Cutoff date to get the special rate is August 1, 2019. Self-Parking at the Hilton Columbus/Polaris is complimentary.

DIRECTIONS FROM PORT COLUMBUS INT’L AIRPORT TO HILTON COLUMBUS/POLARIS:
From Port Columbus International Airport (CMH) slight left at International Gateway, merge I 670 East to Cleveland/Wheeling. Merge I-270 North, Merge I-71 North to Cleveland. Exit 121 to Polaris Pkwy. Turn left off exit. Right at Lyra Dr.

Distance from Hotel: 15 miles Drive Time: 30 min.

AIRPORT TRANSPORT OPTIONS
Taxi: 40.00 USD approx.

AIRPORT SHUTTLE: Hilton’s complimentary airport shuttle service is available from 6:00 am to 10:00 pm Monday through Friday. Weekend shuttle hour availability varies. To serve you best, we ask that you call the hotel at (614) 885-1600 and indicate your flight number, arrival time and cell phone number 24 hours in advance of your estimated time of arrival to schedule your pick up. Please call the hotel once you land at the airport. Pick up is at the designated shuttle area, located outside of Baggage Claim. The hotel is located about 30 minutes from the airport.

ATTIRE
Business Casual. You are welcome to bring your own scrubs. We will provide disposable gowns for the lab portion. Dress warmly, as rooms must be kept at 60°F.

LOCAL AIRPORT
John Glenn Columbus International Airport-CMH

ACCREDITATION STATEMENT
The Ohio State University Center for Continuing Medical Education (CCME) is accredited by the Accreditation Council for Continuing Medical Education (ACCME®) to provide continuing medical education for physicians.

AMA CREDIT DESIGNATION STATEMENT
The Ohio State University Center for Continuing Medical Education designates this live activity for a maximum of 30.75 AMA PRA Category 1 Credit(s)™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

In accordance with the Americans with Disabilities Act, The Ohio State University seeks to make sure this conference is accessible to all. If you have a disability that might require special accommodations, please contact Pat Fitzwater at 805-300-9154.
CANCELLATIONS
Cancellations must be received in writing by August 1, 2019 and will be subject to a $500 processing fee. No refunds will be given after that date. Academic Event Management reserves the right to cancel, discontinue or reschedule this program at any time and will assume no financial obligation to the registrants in the event of a cancellation. In case of cancellation, registration fees will be refunded in full.

PAYMENT
Check enclosed payable to: Academic Event Management
Visa □ MasterCard □ Discover □ American Express

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Day 1-Principles of Expanded Endoscopic Endonasal Approaches
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Send completed enrollment form to: Academic Event Management
ONLINE
www.academiceventmanagement.com
PHONE
805.300.9154
FAX
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Thousand Oaks, CA 91362