State-of-the-Art Endoscopic Skull Base Surgery
A HANDS-ON COURSE

THE OHIO STATE UNIVERSITY COMPREHENSIVE CANCER CENTER – JAMES CANCER HOSPITAL AND SOLOVE RESEARCH INSTITUTE

COURSE DIRECTORS
Ricardo L. Carrau, MD
Alexander A. Farag, MD
Bradley A. Otto, MD
Daniel M. Prevedello, MD

EXPANDED FORMAT
Including Pre-Course Video Lectures

SPONSORED BY
The James
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.
# FACULTY

## Course Directors

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Department</th>
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<tbody>
<tr>
<td>Ricardo L. Carrau, MD</td>
<td>Professor</td>
<td>Department of Otolaryngology-Head and Neck Surgery*</td>
</tr>
<tr>
<td>Alexander A. Farag, MD</td>
<td>Assistant Professor</td>
<td>Department of Otolaryngology-Head and Neck Surgery*</td>
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<tr>
<td>Bradley A. Otto, MD</td>
<td>Associate Professor</td>
<td>Department of Otolaryngology-Head and Neck Surgery*</td>
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<tr>
<td>Daniel M. Prevedello, MD</td>
<td>Professor</td>
<td>Department of Neurological Surgery*</td>
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## The Ohio State University Faculty

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<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Sergio D. Bergese, MD</td>
<td>Professor</td>
<td>Clinical Anesthesiology*</td>
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<tr>
<td>Dukagijn Blakaj, MD, PhD</td>
<td>Assistant Professor</td>
<td>Department of Radiation Oncology*</td>
</tr>
<tr>
<td>Raymond I. Cho, MD, FACS</td>
<td>Clinical Associate Professor</td>
<td>Ophthalmology*</td>
</tr>
<tr>
<td>Luma Ghalib, MD</td>
<td>Assistant Professor</td>
<td>Clinical Endocrinology, Diabetes and Metabolism*</td>
</tr>
<tr>
<td>Russell R. Lonser, MD</td>
<td>Professor and Chair</td>
<td>Department of Neurological Surgery*</td>
</tr>
<tr>
<td>Matthew Old, MD</td>
<td>Assistant Professor</td>
<td>Department of Otolaryngology-Head and Neck Surgery*</td>
</tr>
<tr>
<td>Enver Ozer, MD</td>
<td>Professor</td>
<td>Department of Otolaryngology-Head and Neck Surgery*</td>
</tr>
<tr>
<td>Joshua Palmer, MD</td>
<td>Assistant Professor</td>
<td>Radiation Oncology*</td>
</tr>
<tr>
<td>Luciano M. Prevedello, MD</td>
<td>Assistant Professor</td>
<td>Neuroradiology*</td>
</tr>
<tr>
<td>James Rocco, MD, PhD</td>
<td>Professor and Interim Chair</td>
<td>Department of Otolaryngology – Head and Neck Surgery The John and Mary Alford Chair of Head and Neck Surgery*</td>
</tr>
<tr>
<td>Patrick C. Walz, MD</td>
<td>Assistant Professor</td>
<td>Pediatric Otolaryngology-Head and Neck Surgery*</td>
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<tr>
<td>Patrick Youssef, MD</td>
<td>Assistant Professor</td>
<td>Department of Neurological Surgery*</td>
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*OSUCCC–James Columbus, Ohio

## Associate Faculty

### Clinical Fellows

- Thomas Beaumont
- Devin Mistry
- Kyle VanKoevering

### Research Fellows

- Moustafa Omar Mohamed Ali
- Juan Revuelta Barbero
- Guillermo Maza
- Alaa Montaser
- Mostafa Shahein
- Juan Carlos Yáñez

## Guest Faculty

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Leo Ditzel Filho, MD</td>
<td>Neurosurgeon</td>
<td>Vita Medical Group Curitiba, Brazil</td>
</tr>
<tr>
<td>Douglas A. Hardesty, MD</td>
<td>Chief Resident, Neurosurgery</td>
<td>Barrow Neurological Institute Phoenix, Arizona</td>
</tr>
<tr>
<td>Amin B. Kassam, MD</td>
<td>Vice President, Neurosciences</td>
<td>Medical Director, Neurosurgery Aurora St. Luke's Medical Center Milwaukee, Wisconsin</td>
</tr>
<tr>
<td>Chandranath Sen, MD</td>
<td>Professor, Vice-Chairman</td>
<td>Department of Neurosurgery NYU Langone Medical Center New York, New York</td>
</tr>
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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, deep... trouble)
Pre-course Sagittal Plane Modules II: Trans-clival, Trans-odontoid
Pre-course Trans-orbital Endonasal Approaches
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, OCTOBER 20, 2017 – DAY 1

6:45 am Registration and Continental Breakfast – Woody Hayes Grand Ballroom
7:15 Welcome – Russell Lonser, James Rocco
Course Overview – Ricardo Carrau, Bradley Otto, Daniel Prevedello, Alexander Farag
7:30 Round Table: Preoperative Planning: Diagnostic and Interventional Imaging
Patrick Youssef, Luciano Prevedello
9:00 Round Table: Optimizing the Surgical Corridors and Adjunctive Technology
Sergio Bergese, Alexander Farag, Patrick Walz
Interactive Panel All Faculty & Attendees
10:00 Break
10:30 Round Table: Sellar Lesions - Cysts and Intrasellar Adenomas, Extended Approaches, Endocrine for Surgeons
Luma Ghalib, Amin Kassam, Douglas Hardesty
Interactive Panel All Faculty & Attendees
11:30 360-Degree Minimally Invasive Skull Base and Brain Surgery: Current Concepts & Future Advances
Amin Kassam
12:15 pm Lunch
12:45 Presentation of the Case – Bradley Otto & Luciano Prevedello
1:00 Live Surgery – Ricardo Carrau, Daniel Prevedello
Commentary: Bradley Otto, Amin Kassam, Chandranath Sen, Douglas Hardesty, Alexander Farag, Leo Ditzel
4:00 Anatomical Dissection-Lab 1
Anatomical Prosection: The Sagittal Plane: The Nasoseptal Flap and Trans-sellar Approach
Ricardo Carrau, Bradley Otto, Daniel Prevedello, Alexander Farag
(Optional recommended for those attending lectures only)
6:30 End of Day 1
7:00-8:30 Welcome Reception-Latitude 41 located in the Renaissance Hotel Lobby
**SATURDAY, OCTOBER 21, 2017 – DAY 2**

7:00 am  Continental Breakfast – Woody Hayes Grand 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, Matthew Old, Patrick Walz

Interactive Panel All Faculty & Attendees

9:30  **Round Table: Endoscopic Resection of Craniopharyngiomas: Ophthalmological and Endocrinological Considerations** – Raymond Cho, 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  **Panel: Dilemmas with Meningiomas of the Anterior Cranial Base: Endonasal or Transcranial** – Moderator: Daniel Prevedello

Interactive Panel All Faculty & Attendees

1:00  **Anatomical Dissection-Lab 2**

Anatomical Prosection: Sagittal Plane II – Trans-planum, Trans-cribiform

Ricardo Carrau, Bradley Otto, Daniel Prevedello, Alexander Farag

(Optional recommended for those attending lectures only)

6:15  **End of Day 2**

7:00-10:00  **Course Dinner** – Hofbräuhaus Columbus-800 Goodale Blvd., Columbus, OH

**SUNDAY, OCTOBER 22, 2017 – DAY 3**

7:00 am  Continental Breakfast – Woody Hayes Grand 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**

Matthew Old, Ricardo Carrau

Interactive Panel All Faculty & Attendees

9:15  **Round Table: Chordomas and Chondrosarcomas**

Daniel Prevedello, Chandranath Sen

Interactive Panel All Faculty & Attendees

9:45 Break

10:00  **Round Table: Adjuvant Radiation Therapy**

Dukagjin Blakaj, Joshua Palmer

10:45  **Prevention and Management of Complications Optimizing QOL**

Ricardo Carrau

Interactive Panel All Faculty & Attendees

11:30 Lunch

12:00 pm  **New Technologies: Robotic Applications in Skull Base Surgery** – Enver Ozer

1:00  **Anatomical Dissection-Lab 3**

Anatomical Prosection: Trans-clival, Trans-nasal Odontoidectomy

Ricardo Carrau, Bradley Otto, Daniel Prevedello, Alexander Farag

(Optional recommended for those attending lectures only)

Anatomical Prosection: Trans-orbital Approaches

Ricardo Carrau, Bradley Otto, Daniel Prevedello, Alexander Farag

(Optional recommended for those attending lectures only)

Anatomical Prosection: Transpetrous Approaches & Infratemporal Fossa and Extranasal Reconstructive Flaps

Ricardo Carrau, Bradley Otto, Daniel Prevedello, Alexander Farag

(Optional recommended for those attending lectures only)

7:30  **Course Adjourns**
COURSE LOCATION AND HOTEL ACCOMMODATIONS

Renaissance Columbus Downtown Hotel
50 North Third Street • Columbus, OH 43215
614-228-5050

For hotel accommodations, call 1-877-901-6632.

Mention “OSU Skull Base Surgery Course-Ref# M-9S921W1” to get a special rate of $129 per night plus taxes. (Currently taxes are 17.5%) Cutoff date to get the special rate is September 28, 2017. The hotel offers valet parking to all registered guests and guests attending the event. The current parking cost is $26 per day with unlimited in and out privileges. The day rate is $22 per vehicle for those guests not staying at the hotel.

Hotel directions from the airport: Take the ramp to I-670 W/US-62 W. Take exit 5 to merge onto I-71 S. Take exit 108B for US-40/Broad St. Turn right onto US-40 W/E Broad St. Turn right onto N 4th St. Turn left onto E Gay St. Turn left onto N 3rd St. Destination will be on the left.

AIRPORT TRANSPORT OPTIONS

The Renaissance Hotel does not provide airport shuttle service.

Estimated taxi fare from airport: $18 USD (one way).

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 31 AMA PRA Category 1 Credit(s)™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

ACKNOWLEDGEMENT
This course is supported in part by educational grants from the following companies: Hyperbranch Medical Technology Inc., KARL STORZ Endoscopy-America, KLS Martin Group, Medtronic, NICO Corporation, Olympus America, Inc., Stryker and Surgical One.

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, 2017 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

Card Number                Expiration

Submit completed enrollment form to: Academic Event Management

**ONLINE**

www.academiceventmanagement.com

**PHONE**

805.300.9154

**FAX**

805.494.1103

**MAIL**

1396 Rancho Lane

Thousand Oaks, CA 91362

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**REGISTRATION**

*State-of-the-Art Endoscopic Skull Base Surgery*

**A HANDS-ON COURSE**

**OCTOBER 20-22, 2017**

**TUITION:** $3,000 Lectures and Lab  •  $5,000 Team of 2  •  $1,500 Didactic Only

**SPACE IS LIMITED!** Please print clearly.

**SPECIALTY**

**HOSPITAL**

**NAME (FIRST, MIDDLE, LAST)**

**DEGREE**

**ADDRESS**

**CITY**

**PROVINCE/STATE**

**POSTAL/ZIP CODE**

**(AREA CODE) BUSINESS PHONE**

**(AREA CODE) BUSINESS FAX**

**EMAIL**

**DIETARY RESTRICTIONS**

**Check enclosed payable to: Academic Event Management**

Visa    [ ] MasterCard    [ ] Discover    [ ] American Express

Card Number                Expiration

Signature

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- Day 2-Sagittal Plane Modules II: Trans-clival, Trans-odontoid
- Day 3-Trans-orbital Endonasal Approaches
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