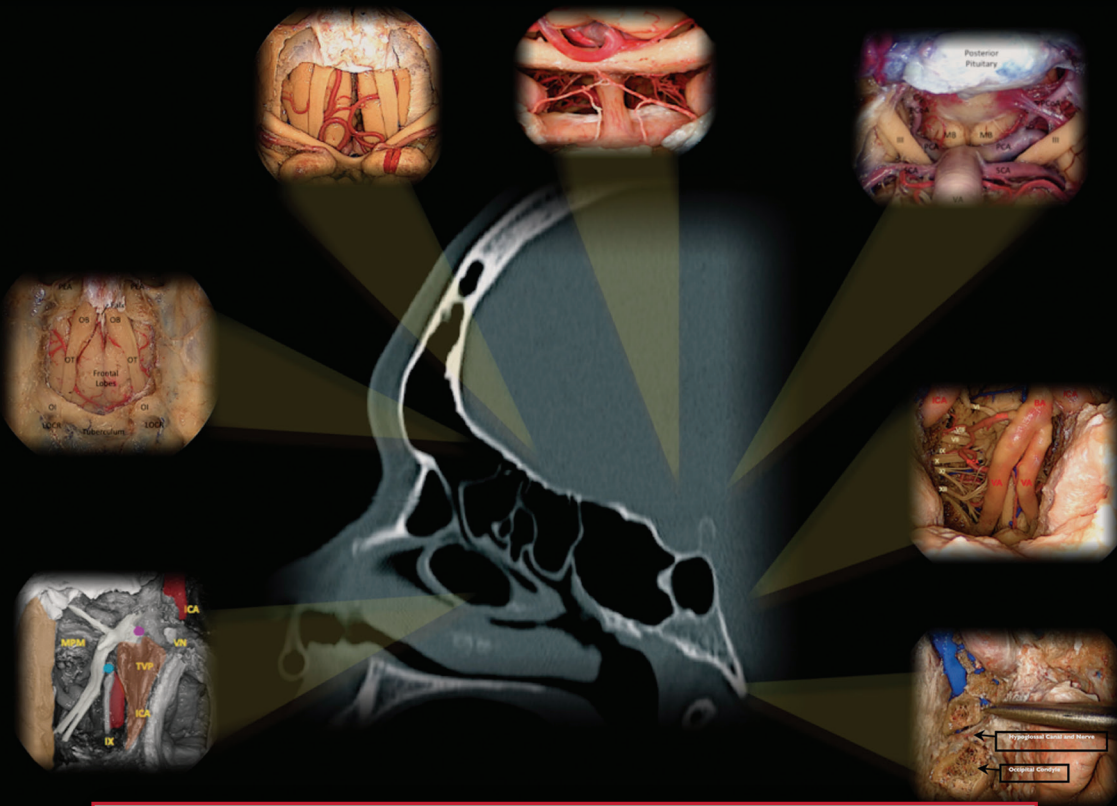


**November 1-3, 2019**  
**Columbus, Ohio**



# 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

**EXPANDED  
FORMAT**  
Including  
Pre-Course  
Video  
Lectures

## COURSE DIRECTORS

Ricardo L. Carrau, MD  
Alexander A. Farag, MD  
Douglas A. Hardesty, MD  
Bradley A. Otto, MD  
Daniel M. Prevedello, MD

SPONSORED BY

# The James



**THE OHIO STATE UNIVERSITY**  
WEXNER MEDICAL CENTER

## 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

**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**  
*Associate Professor*  
Department of Otolaryngology-Head and Neck Surgery\*

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

## THE OHIO STATE UNIVERSITY FACULTY

**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**  
*Associate 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, FACS**  
*Professor and 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\*

\*OSUCCC—James Columbus, Ohio

## ASSOCIATE FACULTY

### Clinical Fellows    Research Fellows

|                     |                                 |
|---------------------|---------------------------------|
| Abdulaziz Alrasheed | Moustafa Omar Mohamed Ali       |
| Gustavo Rangel      | Ahmed Gamal Sholkamy Diab       |
| Akina Tamaki        | Thiago Albonette-Felicio        |
| Marcus Zachariah    | Ruichun Li                      |
|                     | Mohammad Salah Mohammad Mahmoud |

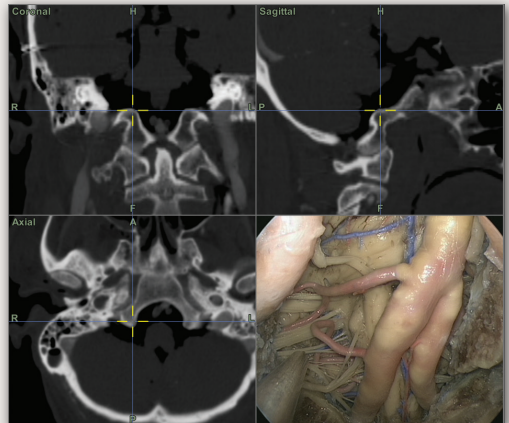
Rafael Martinez Perez  
Luis Carlos Requena  
Mostafa Shahein  
Giuliano Schmidt Bertazzo Silveira

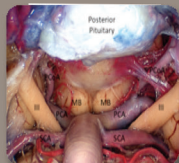
## GUEST FACULTY

**Leo Ditzel Filho, MD**  
*Neurosurgeon*  
Vita Medical Group • Curitiba, Brazil

**Amin B. Kassam, MD**  
*Chief Scientific Strategist, AdvocateAurora Health*  
*Vice President, Neurosciences*  
*Chairman, Department of Neurological Surgery*  
AdvocateAurora Health Care • Milwaukee, Wisconsin

**Kyle VanKoevering, MD**  
*Assistant Professor*  
Department of Otolaryngology-Head & Neck Surgery  
University of Michigan • Ann Arbor, Michigan





## 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, NOVEMBER 1, 2019 – DAY 1

6:45 am **Registration and Continental Breakfast** – Polaris Ballroom

7:15 **Welcome** – *Russell Lonser, James Rocco*

**Course Overview** – *Ricardo Carrau, Bradley Otto, Daniel Prevedello, Alexander Farag, Douglas Hardesty*

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**

*Demicha Rankin, Alexander Farag, Patrick Walz*

*Interactive Panel All Faculty & Attendees*

10:00 **Break**

10:30 **Round Table: Sellar Lesions - Cysts and Intracellular 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** – *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, Douglas Hardesty, Alexander Farag,*

*Leo Ditzel, Kyle VanKoeveering*

4:00 **Anatomical Dissection-Lab 1**

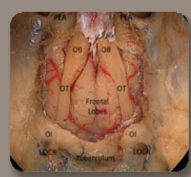
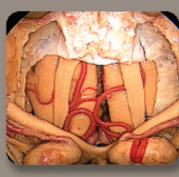
*Ricardo Carrau, Bradley Otto, Daniel Prevedello, Alexander Farag, Douglas Hardesty*

**Surgical Simulation Models for ICA Injury, CSF Leaks, Pediatric/Non-pneumatized Sphenoid** – *Kyle VanKoeveering, Patrick Walz, Fellows*

**Anatomical Prosection: The Sagittal Plane: The Nasoseptal Flap and Trans-sellar Approach** (Optional recommended for those attending lectures only)

6:30 **End of Day 1**

7:00-8:30 **Welcome Reception**



## 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, Matthew Old*  
*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

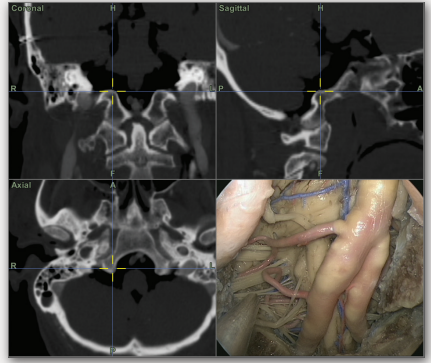
- 7:00 am **Continental Breakfast** – Polaris Ballroom
- 7:30 **3-D Endoscopic Skull Base Anatomy: Coronal Plane** – *Daniel Prevedello*
- 8:15 **Round Table: When the First Chance is the Best and Maybe the Only Chance: Endoscopic Treatment of Malignancies and Complex Lesions**  
*Raymond Cho, Ricardo Carrau, Matthew Old*  
*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 **New Technologies: Robotic Applications in Skull Base Surgery** – *Enver Ozer*
- 12:30 **Panel: Dilemmas with Meningiomas of the Anterior Cranial Base: Endonasal or Transcranial**  
Moderator: *Daniel Prevedello*  
*Interactive Panel All Faculty & Attendees*
- 1:15 **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 September 30, 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.

# REGISTRATION

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

**NOVEMBER 1-3, 2019**

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

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

**EXPANDED  
FORMAT**  
Including  
Pre-Course  
Video  
Lectures

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

## PAYMENT

Check enclosed payable to: Academic Event Management

Visa  MasterCard  Discover  American Express

Card Number

Expiration

Signature

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### Pre-course Video-Lectures

Day 1-Principles of Expanded Endoscopic Endonasal Approaches

Day 1-The Sinonasal Corridor

Day 1-Anatomy of the Sinonasal Tract & Skull Base (Extradural)

Day 1-Anatomy of the Cranial Nerves and Cerebral Circulation (Extradural)

Day 1-Reconstruction of the Skull Base: From Free Grafting to Vascularized Flaps

Day 1-Sagittal Plane EEA Modules I: Trans-sellar, Trans-planum, and Trans-cribiform

Day 1-Practical Approach to Imaging of the Cranial Base

Day 1-Endovascular Approach: How I Can Get You Out of Trouble (even deep, deep, deep... trouble)

Day 2-Sagittal Plane Modules II: Trans-clival, Trans-odontoid

Day 3-Trans-orbital Endonasal Approaches

Day 3-Endoscopic Anterior Skull Base Resection for Sinonasal Malignancy: Principles and Outcomes

Day 3-Anatomical Basis for the Transpterygoid Approaches

Day 3-Coronal Plane Modules

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## 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.

Send completed enrollment form to: **Academic Event Management**

**ONLINE**

[www.academiceventmanagement.com](http://www.academiceventmanagement.com)

**FAX**

805.494.1103

**PHONE**

805.300.9154

**MAIL**

1396 Ranc ho Lane  
Thousand Oaks, CA 91362

