Allegheny Health Network’s Neuroscience Institute Presents

Microscopic / Endoscopic Skull Base Surgery and Vascular Bypass Course

February 4-6, 2021
Center for Surgical Arts
and
Magovern Conference Center
Allegheny General Hospital
Pittsburgh, Pennsylvania
Course Director
Alexander Yu, MD, MSBE, MS
Director, Surgical Neuro-Oncology, Skull Base Surgery
Director, Minimally Invasive Spine Neurosurgery
Associate Residency Program Director
Assistant Director, Cerebrovascular Neurosurgery
Surgical Director Neurologic Intensive Care Unit

Faculty

Kaith Almefty, MD
Assistant Professor of Neurosurgery
Barrow Neurological Institute
Phoenix, Arizona

Norberto Andaluz, MD
Professor of Neurosurgery
University of Louisville
Louisville, Kentucky

Mohamed Arnaout, MD, PhD
Lecturer of Neurosurgery
Zagazig University
Cairo, Egypt

Michael Chicoine, MD
Professor of Neurosurgery
Washington University School of Medicine
St. Louis, Missouri

Ondrej Choutka, MD
Cerebrovascular & Skull Base Neurosurgery
Saint Alphonsus Neuroscience Institute
Boise, Idaho

Amir Dehdashti, MD
Department of Neurosurgery
Director, Cerebrovascular Neurosurgery Research
Northwell University
Manhattan, New York

James Evans, MD
Professor of Neurological Surgery and Otolaryngology
Thomas Jefferson University Philadelphia, Pennsylvania

Mohamed Elnokaly, MD, PhD
Lecturer of Neurosurgery
Helwan University
Cairo, Egypt

Erik Happ, MD
Chairman
Department of Ophthalmology Allegheny General Hospital
Pittsburgh, Pennsylvania

Walter Jean, MD
Professor of Neurosurgery
George Washington University Hospital
Washington, DC

Diana Jho, MD
Hershey Medical Center
Hershey, Pennsylvania

Hae-Dong Jho, MD, PhD
Professor and Chairman
Department of Neuroendoscopy
Jho Institute for Minimally Invasive Surgery
Pittsburgh, Pennsylvania
Faculty Disclosure

As a provider accredited by ACCME, Allegheny General Hospital must ensure balance, independence, objectivity and scientific rigor in its educational activities. Course director(s), planning committee, faculty, and all others who are in a position to control the content of this educational activity are required to disclose all relevant financial relationships with any commercial interest related to the subject matter of the educational activity. Safeguards against commercial bias have been put in place. Faculty also will disclose any off-label and/or investigational use of pharmaceuticals or instruments discussed in their presentation. Disclosure of this information will be published in course materials so those participants in the activity may formulate their own judgments regarding the presentation.

Note: CME credit is not provided for industry-sponsored workshop.

Faculty (continued)

Jeffrey Keller, PhD
Research Professor of Neurosurgery
University of Cincinnati
Cincinnati, Ohio

Jody Leonardo, MD
Assistant Professor of Neurosurgery
Allegheny General Hospital
Pittsburgh, Pennsylvania

James K. Liu, MD, FACS
Professor of Neurosurgery
Rutgers New Jersey Medical School
Neurological Institute of New Jersey
Newark, New Jersey

Gurston Nyquist, MD
Professor of Otolaryngology-HNS and Neurological Surgery
Thomas Jefferson University Hospital
Philadelphia, Pennsylvania

Richard Williamson, MD
Director, Endovascular Services
Allegheny General Hospital
Pittsburgh, Pennsylvania

A. Samy Youssef, MD, PhD
Professor of Neurosurgery University of Colorado Hospital
Aurora, Colorado
Course Overview and Intended Audience
This workshop is intended for mid-level or senior residents from across the country to learn and practice the technical skills needed to perform this specialized surgery. It is structured to provide both didactic and intensive hands-on cadaver dissection sessions covering microscopic techniques and approaches for skull based tumors, cranial nerve microvascular decompressions, endoscopic approaches for the third lateral ventricles, endoscopic approaches for pituitary tumors, cerebral aneurysms and cerebrovascular bypass. The residents will work together as teams in the lab under the direction of distinguished leaders in these disciplines.

Laboratory Sessions
Laboratory sessions will give attendees sufficient time to satisfactorily complete the course objectives. However, as sponsor of the course, Allegheny General Hospital does not certify the competency of any individual.
### Thursday, February 4

**MICROSCOPIC / ENDOSCOPIC SKULL BASE SURGERY AND VASCULAR BYPASS COURSE**  
**Anterior/Middle Fossa**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>6:45 AM</td>
<td>Shuttle Bus Pick Up at Residence Inn Pittsburgh North Shore</td>
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<tr>
<td>7:00 AM</td>
<td>Registration and Breakfast, <em>Magovern Exhibit Area, 1st Floor</em></td>
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<tr>
<td>7:45 AM</td>
<td>Opening Remarks</td>
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<tr>
<td></td>
<td>Donald Whiting, MD</td>
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<tr>
<td>8:00 AM</td>
<td>Decision Making Choosing the Skull Base Approach</td>
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<td>Walter Jean, MD</td>
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<tr>
<td>8:30 AM</td>
<td>The Internal Carotid Artery</td>
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<td></td>
<td>Jeffrey Keller, PhD</td>
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<tr>
<td>9:00 AM</td>
<td>Orbitozygomatic Approach, Mobilizing Lateral Wall of Cavernous Sinus, Anterior Clinoidectomy</td>
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<td>James Liu, MD</td>
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<tr>
<td>9:30 AM</td>
<td>Minimally Invasive Eyelid Approach to the Anterior Cranial Fossa</td>
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<td>Erik Happ, MD /Alexander Yu, MD</td>
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<tr>
<td>10:00 AM</td>
<td>Low Subfrontal Dural opening Variations for Frontotemporal Approaches</td>
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<td></td>
<td>Michael Chicoine, MD</td>
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<tr>
<td>10:30 AM</td>
<td>Break</td>
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<td>11:00 AM</td>
<td>Petrosectomy</td>
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<td>Amir Dehdashti, MD</td>
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<tr>
<td>11:30 AM</td>
<td>Vestibular Schwannoma Surgery: Functional Preservation Strategies</td>
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<td>A. Samy Youssef, MD</td>
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<td>12:00 PM</td>
<td>Supraorbital Keyhole Approach: Pure Endoscopic and Endoscope-Assisted Perspectives</td>
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<td></td>
<td>Mohamed Arnaout, MD, PhD</td>
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<tr>
<td>12:30 PM</td>
<td>Lunch, <em>Magovern Conference Center, 2nd Floor, Ambrose/Berg Room</em></td>
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<tr>
<td>1:30 PM</td>
<td>Laboratory Dissection and Hands on Lab, Anterior/Middle Fossa</td>
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<td>CSA, South Tower, 4th Floor</td>
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<tr>
<td>6:00 PM</td>
<td>Cocktail and hors d’oeuvres reception, <em>Magovern Exhibit Area, 1st Floor</em></td>
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<tr>
<td>8:00 PM</td>
<td>Shuttle to Residence Inn Pittsburgh North Shore</td>
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**Friday, February 5**

**MICROSCOPIC / ENDOSCOPIC SKULL BASE SURGERY AND VASCULAR BYPASS COURSE**  
*Posterior Fossa / Vascular Bypass / Introduction to Endoscopy*

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<tr>
<td>7:00 AM</td>
<td>Registration and Breakfast, <em>Magovern Exhibit Area, 1st Floor</em></td>
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</table>
| 7:30 AM | Jugular Foramen Tumors/Combined Petrosal Approaches  
Kaith Almefty, MD |
| 8:00 AM | Approaches to the Fourth Ventricle  
Richard Williamson, MD |
| 8:30 AM | Posterior Transcondylar Approach: Step by Step  
Kaith Almefty, MD |
| 9:00 AM | The Role of Bypass and Its Techniques in Modern Neurosurgery  
Norberto Andaluz, MD |
| 9:30 AM | Break                                                                 |
| 10:00 AM | Bypass Techniques  
Amir Dehdashti, MD |
| 10:30 AM | Cerebral Revascularization and Cerebral Blood Flow: Lab to OR  
Ondrej Choutka, MD |
| 11:00 AM | Sinonasal Anatomy  
Gurston Nyquist, MD |
| 11:30 AM | Endoscopic Anatomy  
Jody Leonardo, MD |
| 12:00 PM | Lunch,  
*Magovern Conference Center, 2nd Floor, Ambrose/Berg Room* |
| 1:00 PM | Laboratory and Hands on Dissection Class,  
Posterior Fossa, Introduction to Endoscopy, CSA, 4th Floor, South Tower  
Vascular Bypass, Animal Lab, 8th Floor, South Tower |
| 5:30 PM | Shuttle to Residence Inn Pittsburgh North Shore                        |
| 6:30 PM | Cocktails and Hors d’oeuvres  
*Location TBD* |
| 7:00 PM | Dinner,  
*Location TBD* |
## Saturday, February 6

**MICROSCOPIC / ENDO SCOPI C SKULL BASE SURGERY AND VASCULAR BYPASS COURSE**  
*Vascular Bypass / Expanded Endoscopy*

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<td>Registration and Breakfast, <em>Magovern Exhibit Area, 1st Floor</em></td>
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| 7:30 AM | Endoscopic Endonasal Approach: What’s beyond?  
**Mohamed Arnaout, MD, PhD** |
| 8:00 AM | Management of ICA Injuries  
**Michael Chicoine, MD** |
| 8:30 AM | Endoscopic Procedures/Management of CSF Leak  
**Gurston Nyquist, MD** |
| 9:00 AM | Endonasal Approach to the Clivus and Cranio-Cervical Junction  
**James Evans, MD** |
| 9:30 AM | Break                                                                 |
| 10:00 AM | Endonasal Management of Craniopharyngiomas  
**James Evans, MD** |
| 10:30 AM | Applicability of Conventional Sub-Occipital Approach for Resection Of Foramen Magnum Meningiomas: Early Experience  
**Mohamed Elnokaly, MD, PhD** |
| 11:00 AM | Endonasal Management of Meningiomas  
**James Evans, MD** |
| 11:30 AM | Minimally Invasive Brain and Spine Surgery Under Image  
**Hae-Dong Jho, MD, PhD / Diana Jho, MD** |
| 12:00 PM | Lunch,  
*Magovern Conference Center, 2nd Floor, Ambrose/Berg Room* |
| 1:00 PM | Laboratory: Hands-on Dissection Classes, CSA, South Tower, 4th Floor Expanded Endoscopy and Vascular Bypass, Animal Lab, 8th Floor, South Tower |
| 6:00 PM | Conclusion of Course, Shuttle to Residence Inn Pittsburgh North Shore |