

Pacific Rim Master Class in Endoscopic Endonasal and Keyhole Surgery

FOR BRAIN, SKULL BASE AND PITUITARY TUMORS WITH HANDS-ON MICRODISSECTION

A collaboration between Pacific Neuroscience Institute & University of Colorado

March 15-17, 2024 | Santa Monica, CA USA

16 CME Hours

Location: Santa Monica, California

Course Directors

Garni Barkhoudarian, MD

Neurosurgery

Co-Director, Pituitary Disorders Center

Chief, Radiosurgery Program

Director, Adult Hydrocephalus Center & Facial Pain Center

Daniel F. Kelly, MD

Neurosurgery

PNI Director & Co-Founder

Director, Brain Tumor Center & Pituitary Disorders Center

Chester F. Griffiths, MD

ENT Surgery

PNI Co-Founder

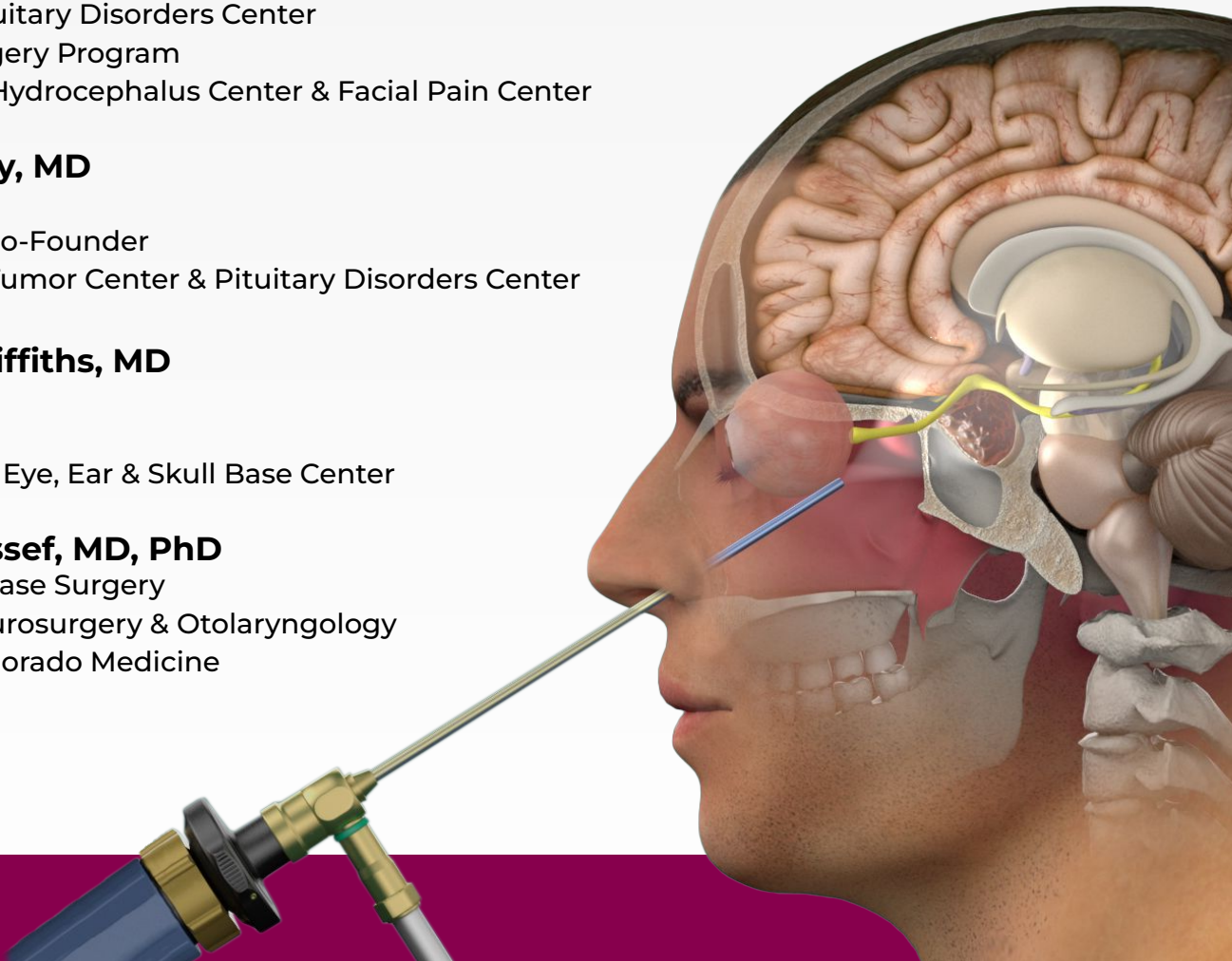
Director, Pacific Eye, Ear & Skull Base Center

A. Samy Youssef, MD, PhD

Director, Skull Base Surgery

Professor of Neurosurgery & Otolaryngology

University of Colorado Medicine



Course Objectives

This 3-day course experience will provide an extensive immersion in advanced endonasal and transcranial keyhole surgical techniques using didactic and anatomical lectures, cadaveric dissections, and live surgery on Day 1. The course faculty are highly experienced and recognized world-experts in minimally invasive endoscopic and keyhole surgery.

The course emphasis will be on patient and approach selection, surgical judgment, anatomical awareness, technical nuances, complication avoidance, maintaining quality of life, and optimizing clinical outcomes.

Specific approaches discussed and performed in the lab will be on:

- Endoscopic endonasal route, including extended approach variations.
- Supraorbital eyebrow craniotomy.
- Mini-pterional craniotomy.
- Gravity-assisted transfalciine and transtentorial endoscopic approaches and the retromastroid route.

A team approach involving neurosurgery, otolaryngology, and neuro-ophthalmology will be stressed, as well as collaboration with neuro-oncology, endocrinology, and radiation oncology.

The course will have sessions on keyhole surgery for neurosurgeons, and endonasal approaches for ENT/ophthalmologists.

Faculty

In alphabetical order by last name

PNI Faculty

Garni Barkhoudarian, MD

Co-Director, Pituitary Disorders Center
Director, Adult Hydrocephalus Center
Director, Facial Pain Center
Director, SJCI/PNI Neuroanatomy Lab
Pacific Neuroscience Institute

Chester F. Griffiths, MD, FACS

Otolaryngology - Head & Neck Surgery
Endoscopic Skull Base Surgery
Director, Pacific Eye, Ear, & Skull Base Center
Co-Founder, Pacific Neuroscience Institute

Adi Iyer, MD, MS

Neurosurgery & Neurointerventional Surgery
Director, Stroke & Neurovascular Center
Pacific Neuroscience Institute

Daniel F. Kelly, MD

Director, Brain Tumor Center
Director, Pituitary Disorders Center
Director & Co-Founder
Pacific Neuroscience Institute

Usman Khan, MD

Fellow 2023-2024
Pacific Neuroscience Institute

Amit Kochhar, MD

Director, Facial Nerve Disorders Program
Pacific Neuroscience Institute

Howard R. Krauss, MD

Director, Eye, Ear, & Skull Base Center
Co-Founder, Pacific Neuroscience Institute

Walavan Sivakumar, MD

Director, Neurovascular Surgery
Director, Neurosurgery PNI South Bay
Pacific Neuroscience Institute

Noa Tal, MD

Endocrinology
Pacific Neuroscience Institute

Michael Yong, MD, MPH, MBA

Otolaryngology - Head & Neck Surgery;
Neurorhinology - Advanced Sinus & Skull
Base Surgery
Pacific Neuroscience Institute

Lab Manager: Josh Emerson, BS, MFA

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Faculty

In alphabetical order by last name

CU Faculty

Ash Khanwalkar, MD

Otolaryngology
Head & Neck Surgery
University of Colorado Medicine

A. Samy Youssef, MD, PhD

Director, Skull Base Surgery
Professor of Neurosurgery & Otolaryngology
University of Colorado Medicine

Visiting Faculty

Zachary Litvack, MD

Director of Minimally Invasive & Skull Base Surgery
Department of Neurosurgery
Swedish Medical Center
Seattle, WA

Teddy Totimeh, MD

Consultant Neurosurgeon
Accra, Greater Accra Region
Ghana, West Africa

Zara Patel, MD

Professor of Otolaryngology
Director, Endoscopic Skull Base Surgery
Head and Neck Surgery (OHNS)
Stanford Health Care
Palo Alto, CA

Gabriel Zada, MD

Director, USC Brain Tumor Center
Professor of Neurological Surgery (Clinical School)
Otolaryngology and Internal Medicine at the Keck
School of Medicine of USC
Co-Director, USC Pituitary Center
Los Angeles, CA





Day 1

Friday, March 15th, 2024

Noon – 5pm

Location: Pacific Neuroscience Institute
2125 Arizona Ave, Santa Monica, CA 90404

● **11:00am-Noon**

Registration & Lunch

● **Noon**

Welcome

Course Overview

[Daniel F. Kelly, MD](#)

[Garni Barkhoudarian, MD](#)

[A. Samy Youssef, MD, PhD](#)

● **12:10pm**

Live Surgery

Case Introduction

[Usman Khan, MD – PNI Fellow](#)

● **12:30pm**

Approach Lecture

Keyhole or Endonasal -

Case Dependent

[Garni Barkhoudarian, MD](#)

[Daniel F. Kelly, MD](#)

● **1:00pm**

Invited Guest Lecture

Building an Endoscopic and Keyhole
Surgery Program in Ghana

[Teddy Totimeh, MD](#)

● **1:30pm-3:30pm**

Case Discussion/ Live Commentary

[Garni Barkhoudarian, MD](#)

● **4:00pm**

Tubular Trans-sulcal approaches:
Surgical Nuances and considerations

[Zachary Litvack, MD](#)

● **4:30pm-5:00pm**

Reconstruction options in endonasal
skull-base surgery

[Zara Patel, MD](#)

● **5:00pm**

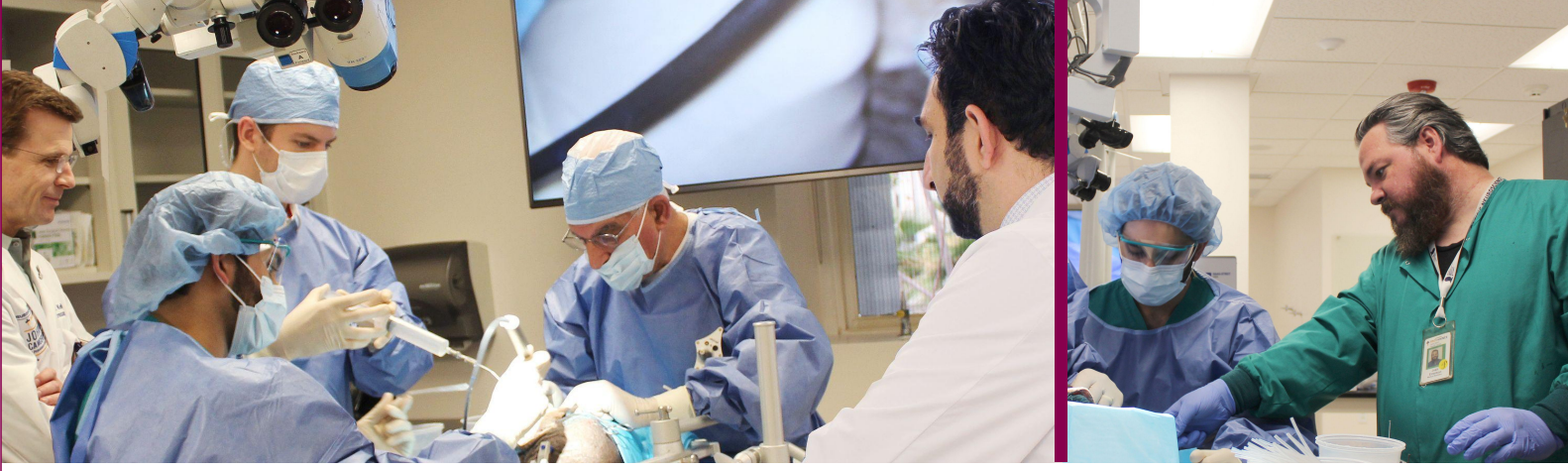
Welcome Reception

[Earth, Wind, & Flour](#)

● **7:00pm**

Faculty Dinner

[La Puglia](#)



Day 2

Saturday, March 16th, 2024

All Day

Location: Saint John's Cancer Institute
2121 Santa Monica Blvd, Santa Monica, CA 90404

- **7:00am**
Continental Breakfast
- **7:30am**
Keyhole surgery:
Supraorbital Eyebrow Approach
Daniel F. Kelly, MD
- **7:50am**
Endoscope-assisted
posterior fossa surgery
Garni Barkhoudarian, MD
- **8:10am**
Keyhole approaches for
Aneurysm surgery
Adi Iyer, MD, MS
- **8:30am**
Combined open and
endoscopic approaches –
parasellar / cavernous sinus
A. Samy Youssef, MD, PhD
- **8:50am**
Management of complex wounds
& skull base reconstruction
Amit Kochhar, MD
- **9:10am**
Transfalcine approach
Walavan Sivakumar, MD
- **9:30am**
Olfaction preservation in
anterior skull base meningiomas
A. Samy Youssef, MD, PhD
- **10:00am**
Anatomical Dissection
Eyebrow craniotomy,
minipterional, transfalcine
- **12:00pm**
Lunch



Day 2

Saturday, March 16th, 2024

All Day

Location: Saint John's Cancer Institute

2121 Santa Monica Blvd, Santa Monica, CA 90404

● **12:15pm**

Scary Cases Discussion

All faculty

● **1:00pm**

Skull-base complication management in Ghana

Teddy Totimeh, MD

● **1:20pm**

Endoscope assisted Keyhole surgery

Gabriel Zada, MD

● **1:50pm**

Tuberculum Sella Meningioma management

Garni Barkhoudarian, MD

● **2:10pm**

Keyhole Approaches to intra-orbital pathology

Howard R. Krauss, MD

● **2:30pm**

Craniopharyngioma-multimodal management

Zachary Litvack, MD

● **3:00pm-6:00pm**

Anatomical Dissection

Eyebrow keyhole supraorbital craniotomy

- Supracerebellar
- Infratentorial
- Transtentorial sitting position
- Mini pterional craniotomy
- Transorbital (eyelid)
- Transfalcine

● **6:00pm**

Adjourn

● **7:00pm**

Course Dinner

SoCaLo

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Day 3

Sunday, March 17th, 2024

All Day

Location: Saint John's Cancer Institute
2121 Santa Monica Blvd, Santa Monica, CA 90404

● 7:30am

Continental Breakfast

● 8:00am

Endoscopic Endonasal Surgery: Overview
[Daniel F. Kelly, MD](#)

● 8:20am

Flap reconstruction and CSF leak management
[Chester F. Griffiths, MD, FACS](#)

● 8:50am

Coronal plane approaches: anterior (transorbital) and infrapetrous coronal approaches (medial petrous apex and petroclival)
[Ash Khanwalkar, MD](#)

● 9:10am

Neuro-ophthalmic evaluation and management in association with multidisciplinary care of parasellar tumors
[Howard R. Krauss, MD](#)

● 9:30am

Approaching the Skull Base to Preserve Sinonasal Quality of Life
[Zara Patel, MD](#)

● 10:00am

Anatomical Dissection
Transorbital approaches

● 12:00pm

Lunch
Scary cases
[All faculty](#)

● 1:00pm

Mucosal repurposing and turbinate preservation in endoscopic skull base surgery
[Chester F. Griffiths, MD, FACS](#)

● 1:20pm

Sinonasal malignancies
[Anne Getz, MD](#)

● 1:50pm

Sinonasal complications in endonasal surgery
[Michael Yong, MD, MPH, MBA](#)

● 2:10pm

Endocrine considerations in endonasal surgery
[Noa Tal, MD](#)

● 2:30pm

Carotid injury prevention and model demonstration
[Gabriel Zada, MD](#)

● 3:00pm

Anatomical Dissection
Endonasal approaches:
Sagittal Plane – Transtubercular
Sagittal Plane – Transclival
Sagittal Plane – Odontoid approach
Coronal plane – Meckel's Cave approach

● 6:00pm

Adjourn



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Accreditation Statement

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Armenian American Medical Society (AAMS) and Pacific Neuroscience Institute. The AAMS is accredited by the ACCME to provide continuing medical education for physicians. The AAMS designates this educational activity for a maximum of 16 hour(s) AMA PRA Category 1 Credit(s)™. Physicians should only claim credit commensurate with the extent of their participation in this live activity. These credits may also be applied to the CMA Certification in Continuing Medical Education.

For more information, please contact:

Jenna Banaag, MHA at jenna.banaag@providence.org

PacificNeuro.org