

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 28-30, 2025 | 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

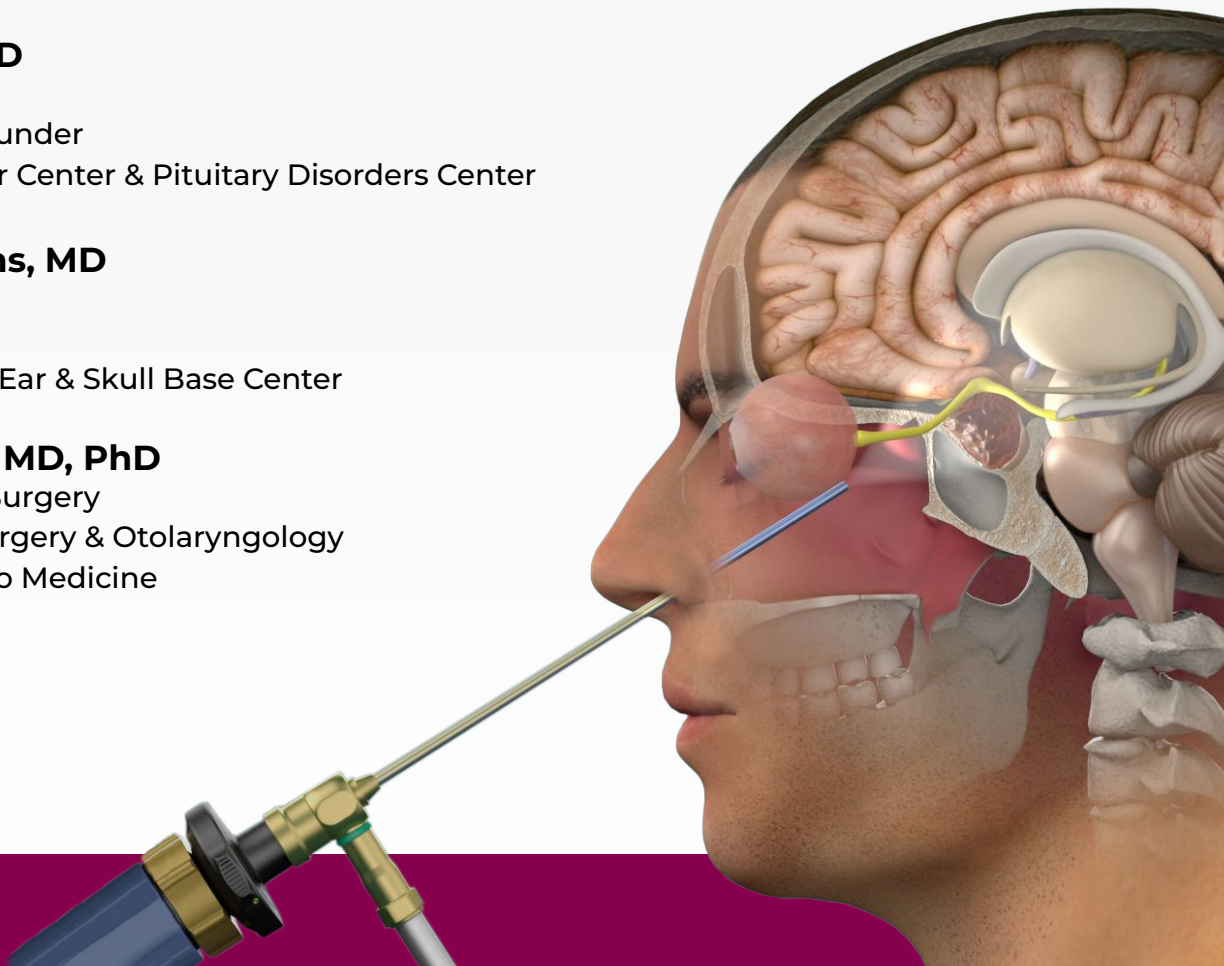
Neurosurgery
PNI Director & Co-Founder
Director, Brain Tumor Center & Pituitary Disorders Center

Chester F. Griffiths, MD

Otolaryngology
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





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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.

THANK YOU TO OUR EXHIBITORS!

Dear Exhibitors,

We extend our heartfelt gratitude for your generous support of the 2024 Pacific Rim Master Class. Your commitment has played a vital role in making this event a resounding success. Thank you for contributing to the advancement of knowledge and collaboration within the minimally invasive endoscopic and keyhole surgery arena. Your dedication to the field is truly appreciated.

Sincerely,
Pacific Neuroscience Institute



Advanced
Endoscopy
Devices



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 transfalci 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.



Pacific Rim Master Class in Endoscopic Endonasal and Keyhole Surgery

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



Alex Solomon, MD

Neuro Ophthalmology



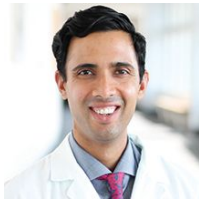
Chester F. Griffiths, MD, FACS

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



Noa Tal, MD

Endocrinology



Adi Iyer, MD, MS

Neurosurgery & Neurointerventional Surgery
Director, Stroke & Neurovascular Center



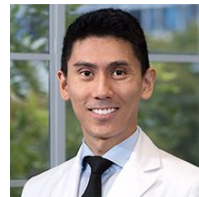
Andrew Wong, MD

Clinical Fellow
PNI Neurosurgery



Daniel F. Kelly, MD

Director, Brain Tumor Center
Director, Pituitary Disorders Center
Director & Co-Founder



Michael Yong, MD, MPH, MBA

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



Howard R. Krauss, MD

Director, Eye, Ear, & Skull Base Center, Co-Founder, PNI



Walavan Sivakumar, MD

Director, Neurovascular Surgery
Director, Neurosurgery PNI South Bay



Josh Emerson, BS, MFA

Lab Manager

Pacific Rim Master Class in Endoscopic Endonasal and Keyhole Surgery

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



Prem Subramanian, MD, PhD

Chief, Neuro-ophthalmology
UCHealth Sue Anschutz-Rodgers
Eye Center

Visiting Faculty



Doo Sik Kong, MD

Samsung Medical Center
Seoul, South Korea



Jai Thakur, MD

Assistant Professor of Neurosurgery,
Director of Minimally Invasive Cranial
& Skull Base Neurosurgery, Director
of Neurosurgery Education,
University of South Alabama



Peter Nakaji, MD

Founder and Director
Scottsdale Neurosurgery Specialist
Scottsdale, Arizona



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

Participating Centers

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삼성서울병원
SAMSUNG MEDICAL CENTER

SCOTTSDALE NEUROSURGERY SPECIALISTS

Keck Medicine
of **USC**

Lab Rules

1. Please respect the specimens, Absolutely no photography inside the lab.
2. Absolutely no food or beverages are allowed inside the lab.
3. Please wear gowns, gloves, bouffant and shoe covers **BEFORE** touching any specimens and remove them before leaving the lab for any reason (including using the restroom).
4. Please keep the surgical instruments at their respective stations. If you move to another station to observe or perform a dissection please use the instruments at that station only.



Day 1

Friday, March 28th, 2025

Noon – 5pm

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

● 11:00am-Noon

Registration & Lunch

● Noon

Welcome

Overview

[Daniel F. Kelly, MD](#)

[Garni Barkhoudarian, MD](#)

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

● 12:10pm

Live Surgery

Introduction

[Andrew Wong, MD-PNI Fellow](#)

● 12:30pm

Invited Guest Lecture

Building an endoscopic and keyhole surgery program from scratch-lessons learned

[Jai Thakur, MD](#)

● 1:00pm

Transorbital Approaches

Pushing the envelope in keyhole surgery

[Doo Sik Kong, MD](#)

● 1:30pm-3:30pm

Case Discussion/ Live Commentary

[Garni Barkhoudarian, MD](#)

[Daniel F. Kelly, MD](#)

● 4:00pm

Neuro Ophthalmological workup for parasellar tumors

[Alex Solomon, MD](#)

● 4:15pm

Neuroendocrinological work-up for pituitary tumors

[Noa Tal, MD](#)

● 4:30pm

Functional outcomes in endonasal skull-base surgery- sinonasal perspective

[Chester Griffiths, MD](#)

● 5:00pm

Welcome Reception

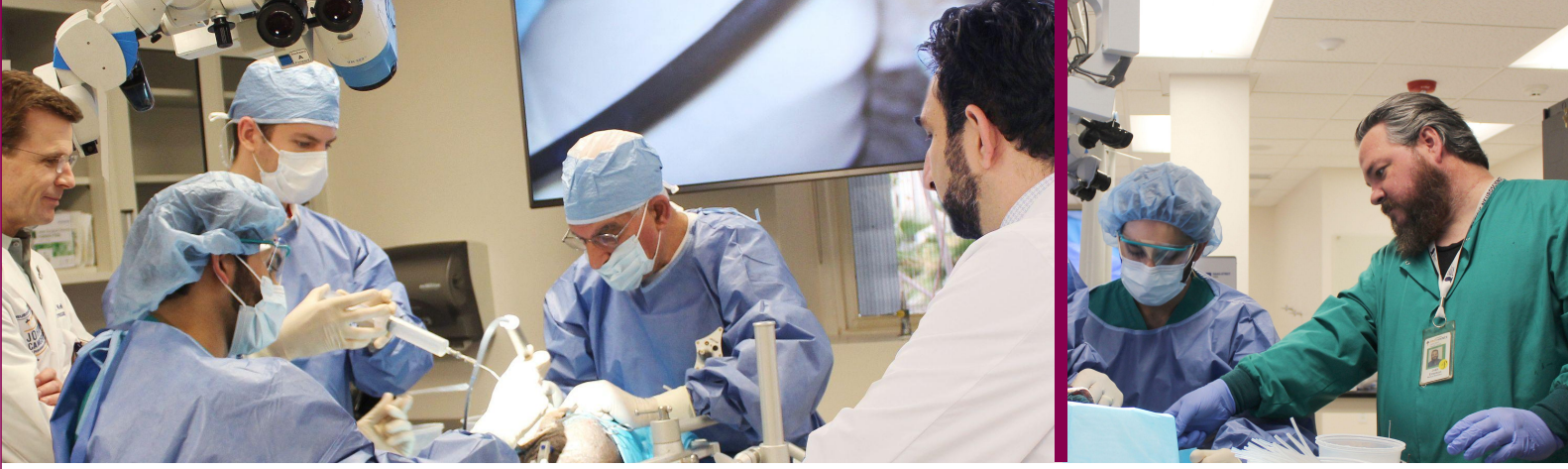
[Pacific Neuroscience Institute](#)

● 7:00pm

Faculty Dinner

[Elephante](#)

We thank Surgical West, Inc. for sponsoring this event



Day 2

Saturday, March 29th, 2025

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 CPA
supracerebellar infratentorial
approach
[Garni Barkhoudarian, MD](#)
- **8:10am**
Keyhole approaches for
aneurysm surgery
[Adi Iyer, MD, MS](#)
- **8:30am**
Keyhole variants of pterional
operations
[Peter Nakaji, MD](#)
- **8:50am**
Transfalcine approach
[Walavan Sivakumar, MD](#)
- **9:10am**
Tuberculum sella meningioma
management
[Garni Barkhoudarian, MD](#)
- **9:30am**
Olfaction preservation in
anterior skull base meningiomas
[A. Samy Youssef, MD, PhD](#)
- **10:00am**
Anatomical Dissection
Eyebrow craniotomy,
minipterional, transfalcine
[Peter Nakaji, MD](#)
[Gabriel Zada, MD](#)
- **12:00pm**
Lunch



Day 2

Saturday, March 29th, 2025

All Day

Location: Saint John's Cancer Institute

2121 Santa Monica Blvd, Santa Monica, CA 90404

● **12:15pm**

Operative nuances in Vestibular Schwannoma Surgery

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

● **1:00pm**

Keyhole approaches to intra-orbital pathology

[Howard R. Krauss, MD](#)

● **1:20pm**

Outcomes of multimodal approaches for sheno-orbital meningiomas

[Prem Subramanian, MD, PhD](#)

● **1:50pm**

Cavernoma resection

[Peter Nakaji, MD](#)

● **2:00pm**

Transorbital complication managements

[Doo Sik Kong, MD](#)

● **2:20pm**

Staged approaches for skull-base tumors

[Jai Thakur, MD](#)

● **2:40pm**

Technological advancements in Tumor Surgery

[Gabriel Zada, MD](#)

● **3:00pm-6:00pm**

Anatomical Dissection

Eyebrow keyhole supraorbital craniotomy

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

● **6:00pm**

Adjourn

● **7:00pm**

Course Dinner

[La Puglia](#)

We thank Meta for sponsoring this event

Day 3

Sunday, March 30th, 2025

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
Prem Subramanian, MD, PhD
- **9:20am**
Approaching the skull-base to preserve sinonasal quality of life
Michael Yong, MD
- **9:40am**
Combined transorbital and endonasal approaches
A. Samy Youssef, MD, PhD
- **10:00am**
Anatomical Dissection
Sagittal Plane – Transtubercular
Sagittal Plane – Transclival
Sagittal Plane – Odontoid approach
- **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
Ash Khanwalkar, MD

Day 3

Sunday, March 30th, 2025

All Day

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

● **1:50pm**

Endonasal approach to the
cervicovertebral junction

Jai Thakur, MD

● **2:10pm**

Comprehensive craniopharyngioma
management

Garni Barkhoudarian, MD

● **2:30pm**

Carotid injury prevention and
model demonstration

Gabriel Zada, MD

● **3:00pm**

Anatomical Dissection

Coronal plane – Meckel's cave approach

● **4:30pm**

Carotid Injury management
hands on model

Gabriel Zada, MD

● **6:00pm**

Adjourn



