Message from the Program Director & Chairman

Thank you for your interest in the Neurosurgical Residency Program at the University of Miami. Our mission has always been to train neurosurgical leaders who are committed to academic excellence and passionate about the field of neurosurgery. Our program provides the tools necessary for long-term success and we take pride in each resident’s career.

Our faculty consists of over 20 internationally recognized surgeons spanning the entire spectrum of neurosurgical care and performing nearly 5,000 cases each year. Our trainees benefit from this high clinical volume and finish with the skills, knowledge, and confidence to meet every neurosurgical challenge. Moreover, the clinical service is supported by a robust research infrastructure, as the Department ranks in the top 5 neurosurgery programs in NIH funding supporting basic science, translational research, and clinical trials. The support for resident driven research is unparalleled and the opportunity to pursue their specific interests and be academically productive is of the utmost importance to our program. Most importantly, our residency is a family, with close bonds of friendship and an atmosphere conducive to education.

The University of Miami Neurosurgical Residency Program has a proud and distinguished tradition in academic neurosurgery. Our philosophy is focused on surgical skills, academic achievement, and leadership development, with our graduates ascending to become prominent members of academic departments and within national neurosurgical societies.

Come join us and become part of the next generation’s leaders in neurosurgery.
OVERVIEW
The neurosurgical training program at the University of Miami/Jackson Memorial Hospital provides an encompassing clinical experience, rich research opportunities, and the dedication of its faculty to the education of its residents and fellows. As the only university medical center in South Florida, we directly serve a three county referral area of

5.5 MILLION PEOPLE.

We also receive complex neurosurgical referrals from Latin America, the Caribbean, and Europe. Our greatest source of pride is the quality and contributions of our residents and fellows to our neurosurgical team.
The scope of practice ranges from minimally invasive spine surgery and spinal cord tumors to complex spinal instrumentation. A dedicated group of neurospine surgeons. This collectively our institution has one of the busiest spine practices in the United States.

Allan D. Levi, MD PhD
Professor and Chairman

Barth A. Green, MD
Professor, Chairman Emeritus

Glen R. Manzano, MD
Assistant Professor

Howard Levene, MD, PhD
Assistant Professor

Ian Côté, MD
Assistant Professor

Michael Y. Wang, MD
Professor, UMH Service Chief

Steven Vanni, DO
Associate Professor
From complex cerebrovascular surgery to translational neurosurgical oncology, our cranial practice remains unparalleled. We feature one of the busiest skullbase and neuro-oncology programs in the country with over 1000 brain tumors per year.
This year is dedicated to learning the foundations and principles of neurological surgery.

The PGY2 is the cornerstone of the neurosurgery services at Jackson Memorial Hospital as the Junior resident covering the Spine, Cranial, and Neurotrauma services.

Residents will enjoy heavy operative experiences as VA Chief, UMH Junior, and residents at Nicklaus Children’s hospital.
PGY 4

- **Neuroendovascular** – 4 months (UMH/JMH)
- **Research/Elective** – 8 months

PGY 5

- **Research/Enfolded Fellowship** – 12 months

PGY 6

- **Cranial** – 4 months (JMH)
- **Spine** – 4 months (JMH)
- **Cranial/Spine** – 4 months (UMH)

PGY 7

- **Chief Resident of Cranial** – 4 months (JMH)
- **Chief Resident of Spine** – 4 months (JMH)
- **Chief Resident** – 4 months (UMH)

PGY 4/PGY 5

Elective years. Choose an **enfolded fellowship in Spine, Neuro-oncology, Endovascular, Neurotrauma, or Functional Neurosurgery** or initiate a mentored laboratory-based research project. Four months of this time will be spent learning the basics of neurointerventional procedures.

PGY 6

The resident will serve as a lead resident surgeon on the UMH, JMH spine and JMH Cranial services.

PGY 7

Chief year. Residents will be responsible for all aspects of each neurosurgery service. They will spend four months on the JMH spine, JMH Cranial and UMH services performing complex microsurgery on a variety of pathologies.
The University of Miami Hospital is a 530 bed hospital with 6 DEDICATED NEUROSURGERY OPERATING ROOMS and full-service state-of-the-art 8 bed Neurosurgery ICU. Across the street from the Medical Campus, UMH is the second busiest arm of the neurosurgical program with over 1,000 cases performed each year.
Jackson Memorial Hospital service

Jackson Memorial Hospital (JMH) is the largest and busiest county hospital in the United States with over 1750 beds.

JMH serves as the only Level 1 Trauma Center for adults and children in South Florida.

With 7 dedicated neurosurgery operating rooms and a 24 bed complex neuro-intensive care unit, our neurosurgery service remains a pillar for the treatment of complex brain and spine disorders.
Nicklaus Children’s Hospital is a cornerstone pediatric hospital with over 289 hospital beds and complete sub-specialty training.

Our neurosurgery service performs over 700 pediatric neurosurgery cases/year. Complex childhood brain tumor and epilepsy surgery are facilitated with the installment of intraoperative magnetic resonance imaging system and large multi-disciplinary teams.
Veterans Affairs
Hospital service

The Bruce Carter Miami Veterans Affairs hospital features 372 hospital beds.

As the only neurosurgery referral center for veterans in South Florida area, the VA service provides essential care for those who have served our country.
“Tell me and I forget. Teach me and I remember. Involve me and I learn.”

~ Benjamin Franklin
Conferences

Monday
Neurosurgical Oncology Case Teaching Conference

Tuesday
Cerebrovascular Case Teaching Conference Multidisciplinary of the Base of the Skull Conference - Tuesday PM

Wednesday
Anatomy Review/Case Teaching Conference Neurooncology Tumor Board Resident Teaching Tumor Board Conference - Wednesday PM

Thursday
Grand Rounds/Morbidity and Mortality Conference

Friday
Spine Case Teaching Conference
FELLOWSHIPS

Pediatrics
A one year clinical fellowship is available only to neurosurgeons who have completed general neurosurgery training. The fellow trains as part of the Neurosurgery’s pediatric division and in affiliation with Nicklaus Children’s Hospital. This fellow works with the full-time pediatric neurosurgery faculty who typically complete over 700 pediatric surgical cases annually.

Spine
The spine service at UM/JMH is one of the busiest in the country. Residents and fellows are exposed to a wide breadth of experience in degenerative spine disease, spine trauma, vascular disease and spinal tumors. Trainees are exposed to state-of-the-art techniques in instrumentation, microsurgery, and neurophysiological monitoring.

Cerebrovascular and Skull Base Surgery
Our program provides exposure to a comprehensive surgical service, treating the entire gamut of cerebrovascular disease and a wide spectrum of skull base tumors. The fellow works mainly with Drs. Morcos, Heros, Peterson, Starke, and Ivan, but also has regular interactions with the rest of the attendings. A state-of-the-art micro-surgical laboratory is available to fellows to increase their experience in skull base anatomy. Clinical research initiatives are strongly encouraged.

Neuroendovascular
The goal of the neuroendovascular fellowship is to ensure neurosurgeons, neurologists, and radiologists become experts in neurointerventional procedures. Approximately 900 cases per year are performed at Jackson Memorial Hospital. The fellow works primarily with Drs. Peterson and Starke but also has regular interactions with other members of the neurosurgery, neurology and radiology faculty. Extensive research opportunities are available.
Neuro-oncology

Approximately 1000 brain tumors/year treated at UM

The fellowship in surgical neuro-oncology is led by Dr. Komotar and Dr. Ivan at University of Miami Hospital and Jackson Memorial Hospital. As one of the largest tumor programs in the country, our multidisciplinary team closely collaborates with medical neuro-oncology, neuropathology and radiation oncology. The University of Miami Brain Tumor Initiative provides ample opportunities for clinical and basic science research.

Neurotrauma

Dr. Jagid are Directors of the combined clinical/research neurotrauma fellowship. Much of the clinical as well as the research activities during this fellowship are centered in our 24 bed neurological intensive care unit and the Ryder Trauma Center ICU. Trainees are exposed to all aspects of clinical neurotrauma and cutting edge neurotrauma research at The Miami Project to Cure Paralysis.

Functional

The functional fellowship, led by Dr. Jagid, focuses on treatment of movement disorders and epilepsy. The fellow in an integral port of all functional procedures and aids in expanding indications through clinical trials and research.

Research

The Miami Project to Cure Paralysis is a comprehensive scientific research program originally focused on spinal cord injury and co-founded by Dr. Green. The Miami Project to Cure Paralysis has since expanded to all aspects of neurotrauma, neurodegenerative disease, stem cell therapy, and an array of other basic translational research focuses. The cutting-edge research conducted at the Lois Pope Life Center encompasses every aspect of neuroscience (molecular and cellular biology, tissue transplantation and regeneration, and physiology and functional studies) which are translated into the clinical arena. For Federal Fiscal Year 2010, the Department of Neurological Surgery at the University of Miami, Miller School of Medicine was ranked #3 in the nation based on NIH Funding. The Miami Project is a center of neuroscience excellence and an important resource for the neurosurgical fellows and residents.
Miami is an energetic global center with one of the world’s busiest airports and the largest cruise port on the planet. Residents of Miami also experience a wide array of talent at the Adrienne Arsht Center for the Performing Arts, the New World Symphony, and the Miami City Ballet. Miami also boasts professional NFL, NBA, NHL, and MLB teams.
Beaches

Area beaches have been recognized as top picks for recreation and families, and have been ranked among the best beaches by USA Today and the Travel Channel. Whether you prefer the urban lifestyle of downtown Miami or Brickell, the beachfront of Miami Beach or Key Biscayne, or the suburbs, there are options for everyone.
How to Apply

To apply for a Residency Position please use the ERAS Matching Service.

Application Requirements:

• USMLE Step 1 with a minimum passing score of 230.
• 3 letters of recommendation (preferable from other academic neurosurgeons).
• Research experience is preferred, but not required.

Our deadline for application is September 30th of each year.

We accept International Medical Graduates (IMG) who meet the qualifications listed and those who have a valid ECFMG Certificate and have completed USMLE Steps 1, 2 and 3, all with a minimum score of 230, and who meet immigration requirements for a J1 Clinical Visa. Previous clinical and research experience in the U.S. is preferred but not required for IMG’s to apply for residency.