NEUROLOGICAL SURGERY

TRAINING PROGRAMS
Committed to Excellence in Education

Neurological Surgery

Jackson Memorial Hospital
Miracles made daily.
“I believe this is one of the best training programs. The journey from student to neurosurgeon, although at times seemingly eternal, was quite swift and steep. During training, a resident’s task is to absorb multiple small pieces of information from more experienced senior residents and attending mentors: their knowledge, techniques, management and demeanor. In turn, this year’s graduates are equipped to burn light hot as we have been taught by the country’s premiere collection of mentors and colleagues. I want to thank everyone who has taught, corrected or shown me the way by your example. These influences and teachings will always be a part of my fiber.”

-Jeremiah N. Johnson, M.D., Chief Resident Class of 2014

“I am grateful to the faculty, residents and staff for tolerating me and teaching me. You have become an extension of my family. I am lucky to have met so many people who are hard to say good bye to- I will always fondly remember my years in Miami.”

-Faiz Ahmad, M.D., Chief Resident Class of 2014

“I would like to thank my wife and family for their love and support, the faculty for their patience and teaching, the residents/fellows for their friendship and teamwork, and the administrative/clinical/hospital staff for their diligence and dedication to our training.

-Ramsey R. Ashour, M.D., Chief Resident Class of 2014
A COMPREHENSIVE TRAINING EXPERIENCE

Overview

The neurosurgical training programs at the University of Miami /Jackson Memorial Hospital provide 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 4.5 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.

Residency Program

Our program is designed to provide preparation for a career in academic neurosurgery. Our residency training emphasizes clinical and operative skills under the direction of experienced attending neurosurgeons. Frequent surgical training is essential to create skillful and knowledgeable neurosurgeons.

It is important that trainees are exposed in depth to various subspecialties during their time at the University of Miami-Jackson Memorial Hospital. Residency rotations offer the opportunity to become fully competent in a wide range of subspecialties including neurotrauma, neuroendovascular, functional, pediatric, skull-base and spine.

The program is structured into 3-month and 4-month blocks. The residency rotations are strategically organized to build crucial skills in preparation for the next stage of the program. The structured sequence allows residents to plan their time, studies, and research efforts in advance.

Residents attend daily case reviews taught by Roberto C. Heros, M.D., Department Co-Chairman and Program Director.
Rotations

PGY-1

The goal of year one as a neurosurgery resident at Jackson Memorial Hospital (JMH) is to gain an in-depth foundation in the principles and practice of general surgery and in the clinical neurosciences that are of fundamental importance to neurosurgery.

The PGY-1 year is comprised of three major blocks; 4 months in ICU with an emphasis on neurosurgical critical care, 4 months in neurology, consult, stroke service, and in cranial neurosurgery.

PGY-2

The PGY-2 year consists of three 4-month blocks at JMH in the following subspecialties: cranial, spine, neurotrauma; and one 4-month block at the Veterans Affairs Medical Center (VAMC).

Junior cranial residents will learn to deliver neurosurgical care in a tertiary care/university hospital setting. They will have daily exposure to the operating room and to a variety of neurosurgical specialties; including neurovascular neurosurgery, tumor surgery (acoustic neuroma, glioma, meningioma, and transphenoidal), and functional surgery including deep brain stimulation, stereotactic radiosurgery, stereotactic biopsy and adult epilepsy.

Junior spine residents will receive daily exposure to the operating room and to the surgical management of degenerative spine disease including minimally invasive techniques and spinal reconstruction. Residents will also be taught stabilization and the management of trauma to the spine, and spinal cord injury.

The junior trauma rotation teaches residents to function as part of the neurosurgical residency team with emphasis on: patient assessment in the ER and post-operative care in the ICU, inpatient service, consult service, outpatient clinics and exposure to trauma craniotomy while on call residents will also have exposure to ICU-related procedures, including ventriculostomies.

The VAMC rotation emphasizes compassionate and empathetic care.
of the veteran patient. Residents are responsible for histories, physicals, admission and progress notes, operative notes, management plans for diagnostic workup and treatment while exhibiting thoroughness, accuracy, and timeliness throughout the hospitalization.

The core benefit to residents during their VAMC rotation is autonomy and the development of both bedside manners and operative skills.

Patient care at the hospital on the wards and in the clinic will be supervised by staff, and the rapid feedback experience will result in a culture benefiting not just in patient care, but ongoing learning and self-assessment.

**PGY-3**

The PGY-3 year consists of two 4-month blocks at JMH in cranial and spine and 4-month pediatric rotation at MCH and 4-month rotation at the VAMC.

The cranial mid-level resident makes rounds on the entire inpatient service and is expected to see consults on inpatients as requested by other departments. The resident will see the patient, obtain the appropriate clinical information, review the available data and then present a case summary to the faculty. The resident is expected to initiate a plan of care based on review of the literature and interaction with the faculty and see it through to completion. This involves communication with the other medical teams caring for the patient.

The mid-level spine resident develops mature clinical judgment related to the spectrum of problems encountered in spine pathology and injuries. Residents will also demonstrate a mature understanding of surgical strategies and approaches to common and unusual spinal pathology and injuries.

Residents are responsible to delegate appropriate responsibilities to medical students and interns and to ensure their implementation, and supervise junior and medical students in daily patient assessment and care. Spine residents must demonstrate the ability to function independently in all phases of management of patients with spinal disorders.

Residents will acquire a fundamental understanding of a wide range of neurosurgical disorders in children during their pediatric rotation.

Residents learn general principles of neurosurgical management of pediatric patients and become adept in interacting with pediatricians, pediatric specialists, and families; and become familiar and comfortable with pediatric neuroradiology. Residents serve as the primary surgeon under appropriate supervision for basic pediatric neurosurgery procedures.

**PGY-4**

The PGY-4 year consist of one 4-month(s) block in Neuroradiology/Neurointerventional rotation at JMH, and one 8 month research block or elective.

Eight months of dedicated, protected research time for a clinical or laboratory-based project will be used to: develop the study design, analytical, and manuscript preparation skills, create a poster presentation of research project at an appropriate national forum, and submit one or more manuscripts from laboratory-based research and/or clinical series for publication by a peer-reviewed journal.
PGY - 5

In the fifth year the resident has the option of continuing in an approved research project or achieving special clinical competence through a one-year in-residency “enfolded fellowship” in an area of the resident’s choosing such as spine, neuroendovascular, neurotrauma or functional.

Twelve months of research includes continuation of their PGY-4 clinical or laboratory-based research project. Residents will develop their study design, analytical, and manuscript preparation skills and will participate in Foundations of Translational Research – “Bootcamp”. This is a course given by the University of Miami for training in the areas of clinical study design, critical literature review, statistics, ethics in research, introduction to translational research, and IRB preparation.

Residents also have the option to participate in a structured year of enfolded fellowship such as spine, led by Dr. Allan D. Levi, endovascular, led by Drs. Samy Elhammady and Eric Peterson, neurotrauma led by Dr. M. Ross Bullock, functional neurosurgery led by Dr. Jonathan Jagid and surgical neuro-oncology under the direction of Drs. Ronald Benveniste and Ricardo Komotar.

PGY - 6

The PGY-6 year is spent completing 4-month blocks of cranial and spine at the senior level, at UMH and JMH.

The cranial senior resident develops skills to independently perform fundamental procedures in general neurosurgery. Basic principles are taught and significant portions of surgeries in subspecialty areas are performed, including vascular, epilepsy, functional, spine, and tumor neurosurgery.

The spine senior resident develops the knowledge to independently assess fundamental spine and peripheral nerve pathology and injury. The resident also learns to independently perform the following fundamental procedures in general neurosurgery; cervical and lumbar laminectomy, and peripheral nerve release procedures. It is also required to understand and be able to perform anterior and posterior approaches for cervical, thoracic, and lumbar spine. The resident should be able to perform with assistance procedures such as cervical and lumbar laminectomy, anterior and posterior fusion procedures for thoracic and lumbar spine and spinal reconstruction with full range of instrumentation.

PGY - 7

PGY-7 is the chief residency year. The chief residents organize the operating schedule and spend 4 months as Chief of the Cranial Surgery Service, 4 months as Chief of the Spinal Surgery Service and 4 months as Chief Resident at UMH.

Chief cranial residents are responsible for all aspects of service. This includes the teaching of junior residents and medical students at the appropriate level, gathering essential and accurate information about all neurosurgical patients, and understanding indications for and interpreting the meaning of all laboratory studies and imaging. A chief resident must also be able to devise patient care plans at the level of an independent neurosurgeon for medical and surgical management of traumatic brain injury, simple and complex brain tumors, aneurysms, AVMs, DAVFs and medical and operative complications.

Chief spine residents direct the operations of a university hospital neurosurgical service. This includes interfacing directly with faculty to formulate treatment plans, performing all major spine neurosurgical procedures at an independent level, under the supervision of an attending surgeon, working with other services to provide the optimal care of the patient, including various operative approaches.

Residents will also gain advanced experience working with the department chairmen on administrative and clinical duties of the entire department and the implementation of advanced neurosurgical problem management techniques.

Dr. Heros was awarded the Accreditation Council for Graduate Medical Education’s (ACGME’s), Parker J. Palmer Courage to Teach Award in 2006.
Neurosurgical Specialties

**Spine**

*Dr. Barth A. Green* is one of the most admired and respected leaders of the University of Miami. In addition to the acclaim he has gained as an extraordinarily busy clinical spine surgeon, Dr. Green has had a great impact in Miami as a humanitarian and as a visionary.

He has co-founded and directed through the years the Miami Project to Cure of Paralysis. Dr. Green directs the organization’s applied research programs; including clinical neurophysiology, bioengineering and reproductive physiology. In addition, he brought to Miami the Shake-A-Leg program for paraplegic patients and he co-founded the very active Project Medishare. Dr. Green was in Haiti the morning after the January 2010 earthquake and he organized and continues to direct the extraordinary medical relief efforts of the University of Miami in Port au Prince Haiti. He is currently the Director of the University of Miami Global Outreach Initiative. These humanitarian activities have gained Dr. Green innumerable local and national prizes, including the AANS’s Humanitarian Award in 2011.

*Dr. Allan D. Levi* is the Director of our Spine Service and the Spine Fellowship Program. He is an extraordinarily skilled surgeon and maintains a very active clinical research program in neuroprotection and neurotransplantation. Several of our residents have obtained their research training in the lab or as part of the clinical research program. In addition to his spine practice, Dr. Levi also maintains has special interest in complex peripheral nerve surgery; providing an excellent experience in this area of neurosurgery that is a requirement for board certification.

The Spine Group is also comprised of *Dr. Michael Y. Wang*, a nationally and internationally recognized leader and innovator in spine surgery and minimally invasive techniques. He plays a major role in organized neurosurgery, teaching and has mentored many of the trainees in recent publications.

*Dr. Steven Vanni* is a great teacher in the operating room and has developed instrumentation and tested novel techniques in deformity and revision surgery.

*Glen Manzano* and *Ryan S. Trombly* who are all highly skilled spine surgeons with a great commitment to resident education, and Dr. Howard B. Levene, who also co-directs our VA program.

The scope of practice ranges from minimally invasive spine surgery and spinal cord tumors to complex spinal instrumentation. These dedicated neurospine surgeons have one of the busiest spinal surgery practices in the United States.

**Cranial**

The cranial program is led by *Dr. Roberto C. Heros*, Department Co-Chairman and Director of the Residency Training Program. He has been very active in national leadership positions as past president of the American Association of Neurological Surgery (AANS), the Academy of Neurological Surgeons, and the World Congress of Neurological Surgery. In 2006, he was the Congress of Neurological Surgeons’ Honored Guest and he was the 2010 Harvey Cushing Medalist of the AANS.

*Dr. Jacques J. Morcos*, who is internationally recognized as a world-class expert in both complex cerebrovascular surgery and the management of skull-base tumors, directs the microsurgical and skull base laboratory. Dr. Morcos has developed one of the country’s busiest skull base surgical programs in collaboration with our nationally recognized ENT neurotologists and head and neck surgeons.

**Endovascular Neurosurgery**

*Drs. Samy A. Elhammady and Eric C. Peterson* are the Co-Directors of Endovascular Neurosurgery and perform all interventional and diagnostic neuroangiography, as well as open microvascular surgery. They lead the endovascular laboratory.

Dr. Elhammady did his neurosurgical training with us. He had a two year full training in neuro-endovascular surgery and has completed an open cerebrovascular and skull base fellowship.

Dr. Peterson trained in Seattle and completed a two-year endovascular fellowship with us.

**Neurooncology**

*Dr. Ronald J. Benveniste* joined our team in 2008 after his fellowship in surgical neuro-oncology at MD Anderson Center in Houston. He is Chief of Neurosurgery at the VA Medical Center and leads the Neuro-Oncology program at UMH-Sylvester and Jackson Memorial Hospital.

*Dr. Ricardo Komotar* leads our surgical neuro-oncology program at UMH. He trained at Columbia and then did a surgical neuro-oncology fellowship at Memorial Hospital in New York. He wrote over 150 papers during his training at Columbia.

**Radiosurgery**

*Dr. Howard J. Landy* and *Dr. Jonathan R. Jagid* direct the stereotactic radiosurgery program, which includes both Gamma Knife Perfexion and Cyberknife systems. Training in radiosurgery emphasizes understanding
of clinical radiobiology, and the radiosurgery program is closely associated with the department efforts in treatment of selected tumors, vascular disorders, and functional disorders. Spinal radiosurgery is performed with the Cyberknife system.

**Head Trauma**

*Dr. M. Ross Bullock, and Jonathan R. Jagid* are the Co-Directors of Neurotrauma Service at Ryder Trauma Center in collaboration with *Drs. Howard B. Levene, and Ryan S. Trombly.*

Residents learn through active involvement in our 24-bed neurosurgical intensive care unit and have the opportunity to perform both basic science and clinical research.

**Functional and Epilepsy Neurosurgery**

*Dr. Jonathan R. Jagid* directs the functional and adult epilepsy programs, including deep brain stimulation stereotactic surgery, and open as well as laser surgery for epilepsy. Residents gain exposure to an active clinical and research program in Parkinson’s disease, epilepsy and other movement disorders.

**Pediatric Neurosurgery**

Our pediatric neurosurgical group is led by *Dr. John J. Ragheb*, a nationally recognized expert in his field, with a particular interest in the surgical treatment of epilepsy. He and *Dr. Sanjiv Bhatia*, another highly skilled pediatric neurosurgeon, have one of the busiest pediatric epilepsy programs in the country. Their team is complimented by *Dr. Toba Niazi*, who completed her residency training at the University of Utah, and did a pediatric fellowship at the University of Washington in Seattle, and *Dr. Sarah Jernigan* who completed her neurosurgical residency at the Peter Bent Brigham Hospital and her fellowship at Boston Children’s Hospital, Harvard Medical School. They are all very committed to residency education.

**UMH Service**

The University of Miami Hospital is a 530 bed hospital with 20 operating rooms and full-service state of the art NICU (8 beds) and lies just across the street from our main campus. It is the second busiest arm of the neurosurgical program with a 1000 cases performed each year. *Dr. Allan Levi* is the chief of service and the majority of the adult neurosurgeons have a portion to all of their practice within the hospital. Areas of strength include neuro-oncology led by Dr. Ricardo Komotar, minimally invasive spine surgery led by Drs. Wang, Vanni and Levi, a collaborative practice with ENT focusing on skull base pathology and hydrocephalus and general spine with Dr. Ryan Trombly. Dr Manzano is building a busy spine neuro-oncology practice and Dr Jagid focuses on neurostimulation and epilepsy surgery at UMH. They are all extremely busy and skilled neurosurgeons with expertise both in spinal and cranial surgery and a major commitment to resident education.

**Board Examination Requirements**

All PGY 2-6 residents are required to take the American Board of Neurological Surgery written examination annually. Satisfactory progress must be shown before the resident advances to the next level of training. The examination must be passed for credit prior to the chief residency year. Wednesday afternoon teaching is led by the residents and faculty to prepare for the exam. The Faculty holds a “mock” oral boards to assist in examination preparation for our residents.
Cerebrovascular & Skull Base Surgery
This fellowship program, under the direction of Dr. Jacques J. Morcos, provides exposure to an aggressive surgical service, treating the entire gamut of cerebrovascular disease and a wide spectrum of skull base tumors. The fellow works mainly with Drs. Roberto C. Heros, Jacques J. Morcos, Samy A. Elhammady & Eric C. Peterson, but also has regular interaction with the rest of the attending staff. The skull base anatomy and the microsurgical laboratories are available to the fellows. Clinical research initiatives are encouraged.

Neuroendovascular
The goal of the neuroendovascular fellowship is to ensure neurosurgeons, neurologists and radiologists become experts in neurointerventional procedures over a period of two years. Approximately 900 cases per year are performed at Jackson Memorial Hospital out of which, 350 are major interventional procedures. The fellow works primarily with Drs. Samy A. Elhammady & Eric C. Peterson and also have regular interactions with other members of the neurosurgery, neurology and radiology faculty. Extensive research opportunities are available.

Neurooncology
The fellowship in surgical neurooncology is led by Dr. Ron Benveniste at Jackson Memorial Hospital and Sylvester Cancer Center and Dr. Ricardo Komotar at University of Miami Hospital. This is a very active and growing multidisciplinary program that includes close collaboration with medical neurooncology, neuropathology and radiation oncology. It includes experience with the gamma knife and cyber knife for brain tumors.

Neurotrauma
Drs. M. Ross Bullock and Jonathan R. Jagid Co-Directors, who direct a 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 which is co-managed by Dr. Bullock and a group of neurointensivists based in the neurology department. During this year, the fellow is exposed to extensive neurotrauma clinical work and also to Dr. Bullock's cutting edge neurotrauma research at the Miami Project and in collaboration with several of the institute’s research faculty.

Pediatric Neurosurgery
This is a one year clinical fellowship that is available only to neurosurgeons who have completed general neurosurgery training. The fellow trains as part of the Division of Pediatric Neurosurgery, in affiliation with Miami Children’s Hospital. The fellow will work with the five full-time pediatric neurosurgery faculty and typically completes over 700 pediatric surgical cases annually. There are opportunities for basic and clinical research during the fellowship as well as an extensive conference schedule.

Spine Surgery
Fellowship positions are available which provide extensive exposure to all facets of modern spinal surgery. Dr. Allan D. Levi directs the Spine Fellowship. Experience is gained in trauma, degenerative and vascular disease, and tumor surgery utilizing state-of-the-art techniques in instrumentation, microsurgery, and neurophysiologic monitoring. Extensive research opportunities are available in this area. Our spine neurosurgery faculty includes Drs. Barth A. Green, Allan D. Levi, Michael Y. Wang, Steven Vanni, Howard B. Levene, Ryan S. Trombly, and Glen Manzano.

Research
The Miami Project is a comprehensive scientific research program focused on spinal cord injury, co-founded by Dr. Barth A. Green. 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.

A multidisciplinary team of basic scientists and clinicians work together in a unique, integrated environment under the auspices of the Department of Neurological Surgery. 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.

An internationally recognized neuroscientist and Vice-Chairman of Research, Dr. Dalton Dietrich serves as a liaison between the clinical and research faculty of the department, assisting each fellow in planning and implementing their one or two year research program.

The Miami Project is a center of neuroscience excellence and an important resource for the neurosurgical fellows and residents.
Facilities

Jackson Memorial Hospital (JMH) is one of the largest and busiest hospitals in the United States. It serves as the only Level I Trauma Center in South Florida. The adult neurosurgical service at Jackson Memorial Hospital is situated on the seventh, eighth and ninth floors of the West Wing of the hospital. The seventh and ninth floors are each 36-bed patient care units. The eighth floor is the 24-bed Neurosurgical Intensive Care Unit, which provides all aspects of critical care management. Several rotations also take place at the Veterans Affair Medical Center (VAMC) and University of Miami Hospital (UMH). UMH is a newly acquired facility with a dedicated neuro-intensive care unit located across the street from our main campus.

Pediatric patients are housed at Miami Children’s Hospital and Holtz Childrens Hospital at the Jackson Memorial Campus. There are more than 3,800 major neurosurgical procedures performed by this service each year.

The Ryder Trauma Center contains separate dedicated operating rooms used for acute head injuries. Surgical procedures are also conducted in a state-of-the-art micro-surgical skull base laboratory that is shared with the Department of Otolaryngology. Led by Dr. Jacques J. Morcos, the presence of the neurosurgery laboratory creates an opportunity for residents and fellows to practice micro-surgical techniques, such as micro-aneurysm, on experimental animals.

Jackson Memorial Hospital, Veterans Administration Hospital, and University of Miami Hospital and Clinics are located on the UHealth campus, a five-block area in the city center of Miami. The Miami Children’s Hospital is located 20 minutes south and is easily accessible via highway or metrorail.

Conferences

Grand Rounds

Neurological Surgery Grand Rounds are held weekly and include topics in the fields of neurology, neuro-oncology, epilepsy, neuro-ophthalmology, neuroradiology, neuro-otology, neuro-endocrinology and neuropathology. Morbidity & Mortality Conference is incorporated into the Grand Rounds schedule.

We also invite nationally and internationally distinguished visiting professors to speak in their specific area of expertise. Dr. Heros conducts a service report and teaching conference three times a week and Dr. Levi conducts a weekly joint spine conference with the orthopedic spine service. Chief residents hold a weekly resident conference in preparation for the written boards.

Rosomoff Research Day

This annual event includes presentations of original research by the residents, fellows, clinical faculty, and visiting professors. The day is named in honor of the long career in clinical research of the late Dr. Hubert Rosomoff, the department’s former Chairman Emeritus.
Neurosurgery Sports Day

Each year neurosurgery residents, fellows and clinical faculty participate in the Neurosurgery “Sports Day”. The department competes against residents and fellows in other specialty areas for bragging rights. We also compete in the annual neurosurgery softball championship in New York hosted by Columbia University, to help benefit the Brain Tumor Foundation. We won the Championship Trophy in 2012. These events promote fitness and comradery.

Living in Miami

Miami is an energetic global center with one of the world’s busiest airports and the largest cruise port on the planet. Miami is home to more than 1,500 multinational companies and the only community outside of Switzerland to annually host the world’s premiere art fair, Art Basel. Residents of Miami also experience a wide array of talent at one of the world’s finest venues, the new Adrienne Arsht Center for the Performing Arts, as well as the nation’s orchestral academy, The New World Symphony and one of the top ballet companies in America, Miami City Ballet. Miami also boasts professional NFL, NBA and NHL teams.

Area Miami 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 urban living in the new downtown Miami or Brickell, the beachfront of Miami Beach or Key Biscayne, or the suburbs, there are options for everyone.

How to Apply

Residents

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

Application Requirements:
• USMLE Step 1 and 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.

Fellows

If you are interested in applying for a Fellowship, you must have completed an accredited Residency Program in Neurological Surgery to qualify.

For additional information, please contact the Neurological Surgery Education Office via email at nrstraining@med.miami.edu and specify your preferred academic year and fellowship subspecialty.
About Us
Serving more than five million people as the only academic medical center in South Florida, UHealth – University of Miami Health System/ Miller School of Medicine has earned international acclaim for research, clinical care, and biomedical innovations. Founded in 1952 as Florida’s first accredited medical school, the University of Miami Leonard M. Miller School of Medicine provides medical staff for the nationally renowned University of Miami/Jackson Memorial Medical Center and University of Miami Hospital. University of Miami Hospital is the flagship facility of UHealth, which also includes two additional University-owned hospitals: Sylvester Comprehensive Cancer Center and Anne Bates Leach Eye Hospital, home to the top-ranked Bascom Palmer Eye Institute. Our affiliated hospitals on the medical campus include Jackson Memorial Hospital, Holtz Children’s Hospital, and the Miami Veteran’s Administration Medical Center.

Our centers of excellence are continually ranked among the nation’s best, including Bascom Palmer Eye Institute, The Miami Project to Cure Paralysis, and the Diabetes Research Institute.

Neurosurgery Accreditation & NIH Ranking
The Department of Neurosurgery has again been granted the maximum 5 year accreditation by the ACGME – RCC, a level which is only awarded to 20% of neurosurgery departments nationally. The Department of Neurosurgery at the University of Miami Miller School of Medicine received its original accreditation in 1965. The department ranks 3rd in the country in 2010 NIH research funding and number 38 in the last U.S. News & World Report.
Our new institutes such as Interdisciplinary Stem Cell Institute, Miami Institute for Human Genomics, and the Center for Computational Sciences will further enhance research. The research conducted here continues to enrich the quality of life for people worldwide.

Statistics & Rankings

Each year the medical school’s more than 1,200 faculty physicians have more than a million patient encounters in primary care and more than 100 medical specialties and sub-specialties. UHealth also has more than 8,000 employees.

In 2014, U.S. News & World Report listed Bascom Palmer Eye Institute as the number one hospital in the country for ophthalmology for the seventh year in a row. Three other UM Miller School of Medicine specialties were also listed among the nation’s best: neurosurgery, ear, nose and throat and geriatrics.

Research is a top priority, with more than 1,500 ongoing projects funded by more than $200 million in external grants and contracts to UM faculty.

The medical campus consists of nearly 68 acres within the 153-acre complex of the University of Miami/Jackson Memorial Medical Center, including more than 500,000 square feet of research space with the recently completed UM Life Science Park, which has added an additional two million square feet of space to the medical campus.

The UM Life Science Park brings together academia and industry for collaboration in bioscience research innovation.
Full Time Clinical Faculty

Barth A. Green, M.D.
Professor & Chairman of Neurological Surgery
Chief of Neurosurgery, Jackson Memorial Hospital
Professor of Neurology/Orthopaedics/Rehabilitation Medicine

Roberto C. Heros, M.D.
Professor, Co-Chairman & Program Director of Neurological Surgery

Sanjiv Bhatia, M.D.
Associate Professor of Clinical Neurosurgery Pediatric Neurosurgeon, Miami Children's Hospital

Ronald J. Benveniste, M.D., Ph.D.
Assistant Professor of Clinical Neurological Surgery
Chief of Neurosurgery, VAMC Director of Surgical Neurooncology, UMHC/SCCC

M. Ross Bullock, M.D., Ph.D.
Clinical Director Neurotrauma Program
Professor of Neurological Surgery

Samy A. Elhammady, M.D.
Assistant Professor of Neurological Surgery
Co-Director of Cerebrovascular and Skull Base surgery
Co-Director of Neuroendovascular Surgery
Co-Program Director of Neuroendovascular Fellowship
Director of Minimally Invasive Cranial Neurosurgery

Jonathan R. Jagid, M.D.
Associate Professor of Neurological Surgery, Neurology, Orthopaedics & Rehabilitation

Sarah C. Jernigan, M.D.
Assistant Professor of Clinical Neurological Surgery
Pediatric Neurosurgery

Ricardo J. Komotar, M.D.
Assistant Professor of Clinical Neurological Surgery
Co-Director of Surgical Neuro-Oncology at SCCC/UMHC
Director of Surgical Neuro-Oncology at UMH

Howard J. Landy, M.D.,
Professor of Neurological Surgery and Radiation Oncology

Howard B. Levene, M.D., Ph.D.
Assistant Professor of Clinical Neurological Surgery

Allan D. Levi, M.D., Ph.D., F.A.C.S.
Chief, Neurospinal Services, Jackson Memorial Hospital
Professor of Neurological Surgery/Orthopaedics/Rehabilitation
Chief of Neurosurgery – University of Miami Hospital

Glen Manzano, M.D.
Assistant Professor of Clinical Neurological Surgery

Jacques J. Morcos, M.D., F.A.C.S.
Co-Director, Microsurgery Training Center, University of Miami
Director of Cerebrovascular Surgery
Director of Skull Base and Endoscopic Surgery
Professor of Clinical Neurological Surgery and Otolaryngology

Toba Niazi, M.D
Assistant Professor of Clinical Neurological Surgery
Pediatric Neurosurgery Department, Miami Children's Hospital

John Ragheb, M.D.
Professor of Clinical Neurosurgery
Director of the Pediatric Neurosurgery Department, Miami Children's Hospital

Eric C. Peterson, M.D.
Assistant Professor of Clinical Neurological Surgery
Co-Director of Endovascular Neurosurgery, University of Miami Hospital
Co-Director of Endovascular Neurosurgery, Jackson Memorial Hospital
Co-Director of Endovascular Fellowship, University of Miami

Ryan S. Trombly, M.D.
Assistant Professor of Clinical Neurological Surgery

Steven Vanni, D.O., D.C.
Associate Professor of Clinical Neurological Surgery, Orthopaedics and Rehabilitation

Michael Y. Wang, M.D., F.A.C.S.
Professor Neurological Surgery & Rehabilitation Medicine
OUR MISSION

Serve our patients to the best of our ability by providing them with excellent neurosurgical care.

Advance the field of neurosurgery through our clinical and research training programs.

Develop new progressive treatments for neurological disorders.

2014-2015 Residents

M. Faraz Khan, M.D.
Chief

Michael Thambuswamy, M.D.
Chief

Gabriel Widi, M.D.
Chief

Brandon Gaynor, M.D.
PGY NS-6

Seth Hayes, M.D.
PGY NS-6

John Serak, M.D.
PGY NS-5

Giancarlo Perez, M.D.
PGY NS-5

Andrew L. Middleton, M.D.
PGY NS-5

Nicholas Ferraro, M.D.
PGY NS-4

Brian Snelling, M.D.
PGY NS-4

Joanna Gernsback, M.D.
PGY NS-4

Walter J. Jermakowicz, M.D., Ph.D
PGY NS-3

Samir Sur, M.D.
PGY NS-3

Timur Urakov, M.D.
PGY NS-3

Simon Buttrick, MD
PGY NS-2

Karthik Madhavan, MD
PGY NS-2

Angela Richardson, MD, Ph.D.
PGY NS-2

Stephen “Shelby” Burks, MD.
PGY NS-1

Iahn Cajigas, MD, Ph.D.
PGY NS-1

Ashish Shah, MD.
PGY NS-1

Fellows

Anthony Wang, M.D.
CRANIAL

Zachary Hickman, M.D.
TRAUMA

Sudheer Ambekar, M.D.
ENDOVASCULAR

Ian Cote, M.D.
SPINE

Michael Thomas, D.O.
SPINE

Luis Romero, M.D.
SPINE

Michael Ivan, M.D.
NEURO-ONCOLOGY

Aria Fallah, M.D.
PEDIATRIC
Mission Statement

Our mission is to serve our patients to the best of our ability by providing them with the best neurosurgical care available in the world and by advancing the field of neurosurgery through our clinical and research training programs by which we hope to develop new and better treatment for neurological disorders.

We are equally committed to the training of resident and fellow physicians, and to the continuing medical education of practicing physicians in the art and science of neurosurgery.