

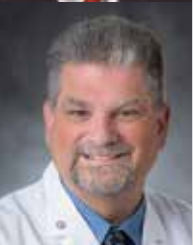


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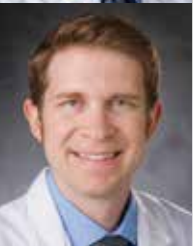
DUKE



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THIS IS RESIDENCY AT DUKE NEUROSURGERY

Duke Neurosurgery's residency program attracts some of the brightest minds in medicine. Known for its culture of innovation and a tradition of excellence, Duke Neurosurgery helps trainees become the thought leaders and practitioners who shape the future.

We have designed our program with exacting standards to ensure it is the best in the country. In short, the kind of program we would have chosen for ourselves as residents.

The program is designed to maximize academic and surgical potential through novel approaches to education. For example, the Surgical Autonomy Program permits all residents to advance through specific steps for every type of operation, culminating in their ability to perform all procedures. Meanwhile, features such as an elective Physician-Scientist Track, the Academic Day, a robust Global Neurosurgery Division and a NeuroInnovations Program offer one-of-a-kind opportunities for residents to foster the interests that will make them highly desirable in their field.


We enthusiastically look forward to working with our next class!

HOSPITALS

- Duke University Hospital
- Duke Raleigh Hospital
- Duke Regional Hospital
- Durham VA Medical Center

RELATED CENTERS, INSTITUTES, AND PROGRAMS

- Brain Imaging and Analysis Center
- Duke Center for Brain and Spine Metastasis
- Duke Global Neurosurgery and Neurology
- Duke Institute for Brain Sciences
- Duke Skull Base Center
- Duke Spine Center
- Duke Stroke Center
- Pediatric Brain Tumor Foundation Institute at Duke
- The Preston Robert Tisch Brain Tumor Center at Duke



Duke Neurosurgery is engaged in all clinical subspecialties of neurosurgery, providing not only outstanding clinical service, but exploration of innovative therapies for neurosurgical diseases.

BRAIN TUMOR

The nationally and internationally recognized Preston Robert Tisch Brain Tumor Center employs an integrative approach for the treatment of brain tumors.

BRAIN AND SPINE METASTASIS

Duke Neurosurgery is leading the multidisciplinary center that focuses on the management of metastatic brain and spine tumors, using advanced therapies to extend life for people who may have been told they are out of options.

CEREBROVASCULAR

Our cerebrovascular and stroke programs thrive in conjunction with the departments of Neurology and Radiology.

FUNCTIONAL NEUROSURGERY

Duke Neurosurgery's growing functional neurosurgery practice offers deep brain stimulation, epilepsy surgery, and surgery to treat chronic pain.

SPINE

The Combined Spine Division, a collaboration between the Departments of Neurosurgery and Orthopedics, is pioneering advanced surgical treatments for spinal tumors and deformities as well as minimally invasive surgery for more limited spinal disorders.

PEDIATRIC NEUROSURGERY

Our team treats all cranial and spinal disorders of childhood. Multidisciplinary programs care for children with brain tumors, intractable epilepsy, spasticity, congenital brachial plexopathies, Chiari 1 malformations, hydrocephalus, craniosynostosis, and spina bifida.

SKULL BASE SURGERY

The Duke Skull Base Surgery Center was formally established in 2011 as a collaborative effort between the Department of Neurosurgery and the Division of Otolaryngology, Head & Neck Surgery.

TRAUMA

Duke Neurosurgery provides Level 1 trauma coverage for Duke University Hospital.

RECENT HIGHLIGHTS

JANUARY 2019

With the addition of neuro-oncologist Carey Anders, MD, the core leadership of the Duke Center for Brain and Spine Metastasis is complete. Led by neurosurgeon Peter Fecci, MD, PhD, the center brings together a world-class team like no other in the country.



APRIL 2019

The American Association of Neurological Surgeons names Duke's spine chief Christopher Shaffrey, MD, FAANS, the organization's president.

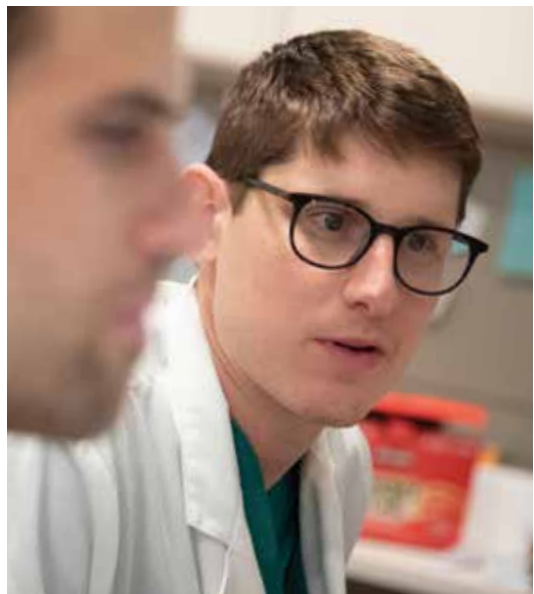
JULY 2019

Duke Neurosurgery and Duke Neurology are ranked #1 in the Southeast by US News & World Report.



AUGUST 2019

A Duke neurologist and neurosurgeon perform the first deep brain stimulation procedures for epilepsy in North Carolina.



OCTOBER 2019

Duke Neurosurgery is awarded an R25 grant, "NINDS Research Education Programs for Residents and Fellows in Neurosurgery" by the National Institutes of Health.

NOVEMBER 2019

Muhammad Abd-El-Barr, MD, PhD, becomes the first neurosurgeon at Duke – and one of only a handful in the country – to perform an awake spinal fusion surgery.



JANUARY 2020

Neurosurgeons Allan Friedman, MD, and Christopher Shaffrey, MD, are named among NC's Best Doctors.

FEBRUARY 2020

Duke Neurosurgery's John H. Sampson, MD, PhD, is once again the top-funded neurosurgeon researcher by the NIH.

AUGUST 2020

Duke Neurosurgery's residency program is recognized by Doximity as being #1 in NC and #13 nationwide for both reputation and scholarly output.



- 7-Year Program;
7th year enfolded fellowship
- Three residents per year
- Research/academic 4th year
- Mentorship
- Academic Day (time to pursue individual interests)
- Surgical autonomy training model
- NeuroInnovations, an incubator for bringing devices and pharmacotherapies to market
- Duke Global Neurosurgery and Neurology with humanitarian trips to Uganda to establish and maintain neurosurgery programs and perform research on traumatic brain injury, epilepsy, and predictive modeling treat patients
- Guest speaker series
- Residency Improvement Process



THE DUKE NEUROSURGERY RESIDENCY PROGRAM HAS LONG BEEN RECOGNIZED FOR CLINICAL EXCELLENCE AND AN ENVIRONMENT THAT EXPOSES TRAINEES TO A WIDE ARRAY OF DISORDERS, LEADING TO A BROAD PROFICIENCY ACROSS NEUROSURGICAL PROCEDURES.

Yet we believe that technical and clinical skills alone are not sufficient training for a resident poised to enter the profession today.

New technologies, an expanding range of therapies, a mandate for fewer hours in which to train, an evolving practice environment, and a growing demand for coaching and wellness constitute a potent mix of challenges and opportunities. We address these challenges through an innovative curriculum which allows trainees to learn and produce according to their individual interests.

“Of all the programs I interviewed at, Duke was the best combination of academic medicine and surgical training. I chose Duke because of this and the people. The people trusted me, empowered me, and gave me the opportunity to maximize my potential. ”

TIMOTHY Y. WANG, MD, NEUROLOGICAL SURGERY, PGY4

THE DUKE

DIFFERENCE



ACADEMIC DAY

Each Wednesday, a block of time is devoted to scholarly activity. Academic Day exists to help ensure that each resident becomes a well-rounded neurosurgeon who is also an expert in an area of neurosurgery of their interest.

The day's schedule is 6:30 a.m. to 6:30 p.m., with more than six hours free for development of individual interests.

Working with their mentors, residents can choose to work in a research laboratory, develop surgical skill in the cadaver lab, develop new surgical technologies through industry collaboration, or devise another

type of project that will give them an edge in the marketplace.

The structured time in the morning and evening exposes residents to things they might not otherwise encounter, such as guest lectures by researchers, clinicians with a particular expertise, or inventors.



SURGICAL AUTONOMY

The Surgical Autonomy Program offers an innovative approach to resident education that utilizes a model of collaborative mentorship rather than a traditional master-apprentice model.

The Surgical Autonomy Program grew in part to answer residents' desire for increased autonomy in the OR. Modern learning theories are applied specifically to neurosurgical education.

“Our goal is to train neurosurgeons who are clinically outstanding physicians with excellent technical skills in all foundational areas of core neurosurgery with the opportunity to dive deep in their chosen area of interest, whether clinical and/or research in tumor, vascular, spine, pediatrics, functional or any area of interest.”

MICHAEL M. HAGLUND, MD, PhD, PROGRAM DIRECTOR

MENTORSHIP

Duke Neurosurgery has developed a mentorship program that is aimed at developing the educational, career, and academic goals of each of our residents.



Each resident will choose two mentors to work with and to guide them along their career path. The first is their primary mentor, and together they develop a plan which includes measurable metrics such as national networking, research projects, and anything that will advance their careers. They meet every six weeks. The secondary mentor is from the education faculty including the chair, program director, associate and assistant program directors, and the physician in charge of clerkships. The secondary mentor provides additional mentorship and oversees the primary mentor. They meet every eight weeks.



RESIDENCY IMPROVEMENT PROCESS

Duke Neurosurgery residents have a big say in their own life and education. We believe that education that is collaborative is the best model. Therefore, a Residency Improvement Process meeting is held on the first Wednesday of each month at 5:00 p.m.

During this time, the residents meet by themselves to determine three to five things that need to be improved or changed. Afterwards, the Executive Resident Leadership Program including the Program Director, the Vice Chair of Education, the Associate Program Director, and the PhD Educator join the meeting and work with the residents to solve the issues identified by the residents. This process means the residents have a tremendous amount of input into the educational design of the residency, how rotations work, how research is accomplished, and overall resident wellness.



Duke Neurosurgery

Neurosurgery.duke.edu
919-684-3271

4th

Highest Funded Neurosurgery Program
in the Country (*National Institutes of Health, 2018*)

5,543

SURGICAL CASES IN FY 2019

55

TOTAL FACULTY

24%

of residents are women, with
0% attrition in the past 15 years

#ThisPlace