

# National Institute of Neurological Disorders and Stroke

# National Institute of Neurological Disorders and Stroke NIH Neurological Surgery Residency Training Program





Figure 1: NIH Clinical Center and Research Facilities

### HIGHLIGHTS

- Program designed to be a model for training academic neurosurgical leaders
- Opportunity to perform word-class neuroscience research
- Develop skills as independent researchers
- Training that will lead to research funding success in a more competitive environment

### CORE FACILITIES

- National Institutes of Health Clinical Center Clinical Training
  - 240-bed hospital
  - Training and mentoring by 4 full-time clinical faculty
  - 1 ½ years of clinical experience

## Research Training

- 2 years of protected research time
- Receive NIH Intramural funding (No grants required)
- Training and mentoring by 3 full-time senior research faculty members
- Opportunity to collaborate with scientists throughout NINDS (200 neuroscience labs on NIH campus) and other NIH institutes
- MedStar Georgetown University Hospital
  - 609-bed hospital
  - Training and mentoring by 8 full-time senior faculty in all neurosurgical subspecialties
- MedStar Washington Hospital Center
  - 900-bed hospital
  - Training and mentoring by 4 full-time senior faculty with a broad range of expertise
- Children's National Medical Center
  - 323-bed hospital
  - Training and mentoring by 5 full-time pediatric neurosurgeon faculty members

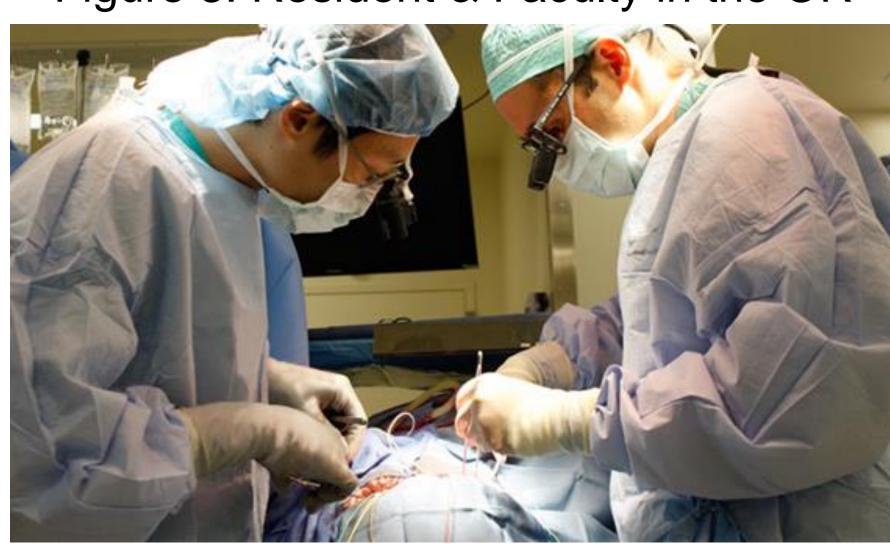
### PROGRAM OVERVIEW

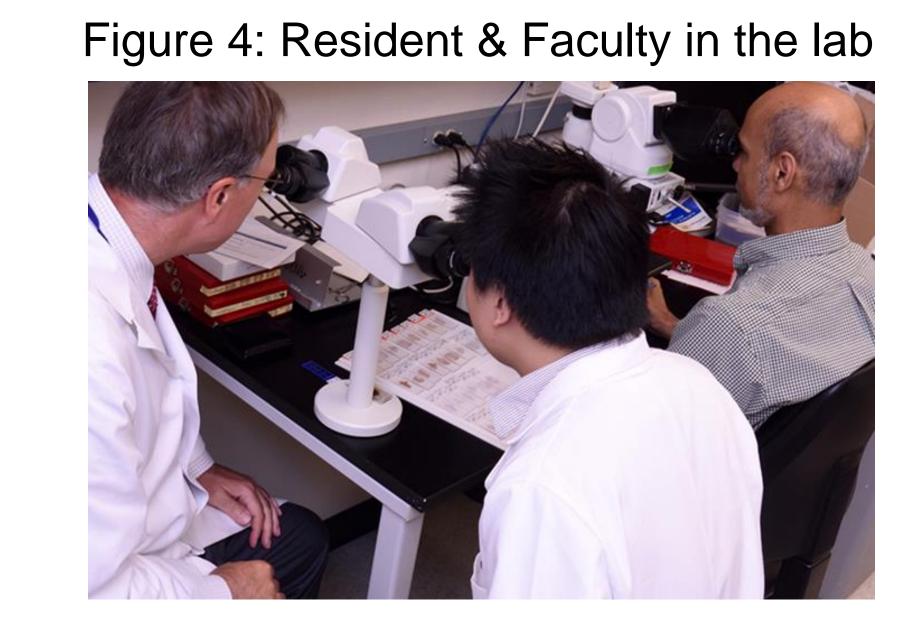
- The Surgical Neurology Branch of the National Institutes of Neurological Disorders and Stroke at the National Institutes of Health (NIH) offers an innovative 7-year, ACGME-accredited Neurological Surgery Residency Training Program in collaboration with the MedStar Georgetown University Hospital (GUH), MedStar Washington Hospital Center (WHC), and Children's National Medical Center (CNMC).
- This program is designed to foster the application of basic science research to clinical neurosurgical problems and is intended for those wishing to pursue careers as independent physician-scientists.

Figure 2: Program Block Schedule

Georgetown University Hospital (6 months)  NIH (1 month)  Neuro-Pathology  NIH (1 month)  Neuro-Oncology  NIH (1 month)  Neuro-Oncology  NIH (1 month)  Vascular Rotation  Georgetown University Hospital (6 months)  Pediatric Neurosurgery  Children's National Medical  Center (4 months)  PGY-3  PGY-4  PGY-5  PGY-5  PGY-5  Center (4 months)  Research Rotation  NIH (12 months)  Research Rotation  NIH (12 months)  Senior Clinical Rotation  NIH (12 months)  Chief Resident  Chief Resident	rigule 2. Program block Schedule					
PGY-1  PGY-1  General Neurosurgery & Neurotrauma Georgetown University Hospital (6 months)  PGY-2  Spinal Rotation Georgetown University Hospital (6 months)  PGY-3  Children's National Medical Center (4 months)  PGY-4  PGY-5  PGY-6  Chief Resident  Center (4 months)  Chief Resident  Georgetown University Hospital (8 months)  Chief Resident  Georgetown University Hospital  Chief Resident  Washington Hospital Center (2 months)  NIH (1 month)  Neuro-Pathology  NIH (1 month)  Neuro-Pathology  NIH (1 month)  Vascular Rotation  Washington Hospital Center (6 months)  Cranial Rotation  NIH (4 months)  Cranial Rotation  NIH (12 months)  Chief Resident  Washington Hospital  Chief Resident  Washington Hospital  Chief Resident  Washington Hospital  Chief Resident  Washington Hospital	Year	July-December		January-June		
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PGY-5  NIH (12 months)  Senior Clinical Rotation NIH (12 months)  Chief Resident Georgteown University Hospital (8 months)  NIH (12 months)  Chief Resident Washington Hospital		NIH (12 months)				
PGY-6  Senior Clinical Rotation NIH (12 months)  NIH (12 months)  Chief Resident Georgteown University Hospital (8 months)  NIH (12 months)  Chief Resident Washington Hospital	PGY-5	Research Rotation				
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PGY-7  Chief Resident Georgteown University Hospital (8 months)  NIH (12 months)  Chief Resident Washington Hospital	PGY-6	Senior Clinical Rotation				
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Center (4 months)				onthol	Washington Hospital	
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Figure 3: Resident & Faculty in the OR





### BENEFITS

- Residents enrolled in ACGME-accredited training programs at the NIH can apply to receive loan repayment (LRP):
  - Non-competitive program: receive \$20,000 per year, up to 3 years, of qualified educational debt
  - Competitive program: receive \$50,000 per year, up to 3 years, of qualified education debt

### PATIENT CARE

- The NIH Neurosurgery Clinic treats patients with tumors of the central and peripheral nervous system, Parkinson's Disease, Neurofibromatosis Type 2 (NF2), von Hippel Lindau (VHL), Syringomyelia/Chiari I Malformation and cancer pain.
- Residents at GUH, WHC, and CNMC participate in neurosurgery teams performing spine and cerebrovascular surgery, trauma care, functional neurosurgery, pituitary surgeries, gamma knife radiosurgery, and pediatric neurosurgery.

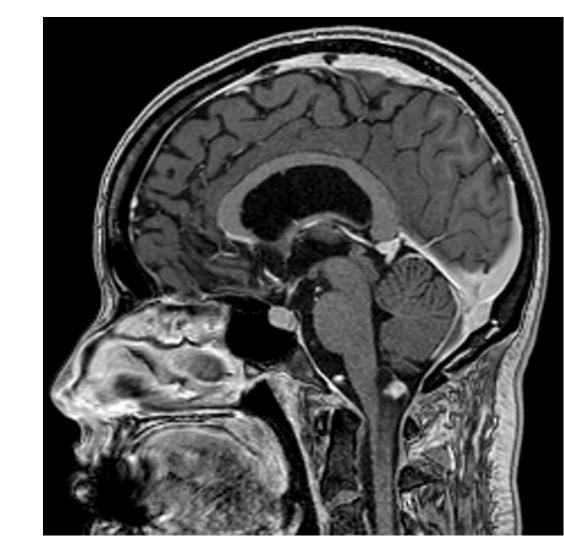
### RESEARCH

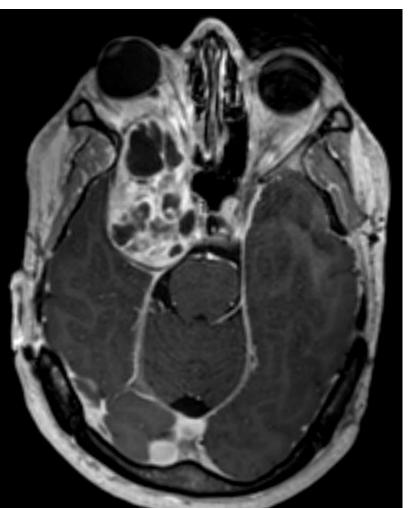
- Resident chooses laboratory of interest in Surgical Neurology
   Branch, another NINDS branch, or other NIH institutes.
- All patients are admitted to the NIH on research protocols
- Program Residents take the Introduction to the Principles and Practice of Clinic Research and grant writing courses

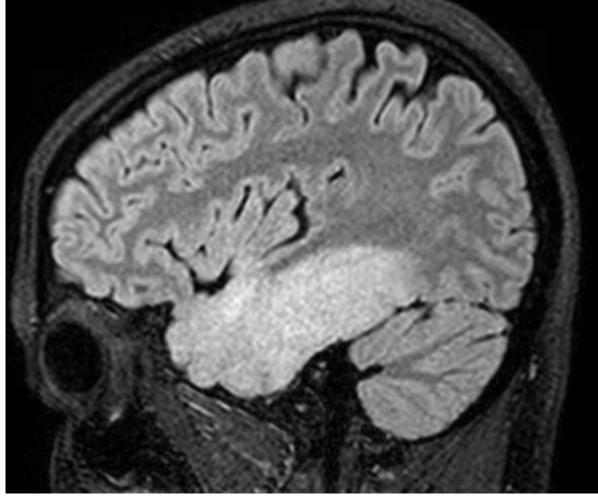
# APPLICATION INFORMATION

- The NIH residency program participates in the National Residency Match Program (NRMP) and receives applications through the Electronic Residency Application Service (ERAS).
- Applicants apply to both the NIH and GUH residency programs.
- The NIH Program interviews applicants with demonstrated interest in and aptitude for careers in academic neurosurgery.
- The NIH program enrolls one PGY1 candidate each year.

Figure 5: MRI images of tumors seen at the NIH







For more information, please visit: <a href="https://research.ninds.nih.gov/surgical-neurology-branch">https://research.ninds.nih.gov/surgical-neurology-branch</a>