



Neurosurgery **Residency Training** **Program**

LSU Health
SHREVEPORT

Department of
Neurosurgery

Meet the Faculty



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Program Overview

The Neurosurgery Residency Training Program at LSU Health Shreveport is a 7-year program that provides an academic environment that fosters excellence in both clinical neurosurgery and research. The primary site is the Ochsner LSU Health Shreveport, with affiliated sites at Willis Knighton Health System, Shriners Hospital for Children, and Overton Brooks VA Medical Center. Funding for resident education is provided by LSU Health and affiliated institutions. At the completion of the program, residents are expected to be outstanding clinicians, active investigators, and experienced educators.



Our program offers residents a wealth of clinical exposure with more than 3,600 surgical procedures performed annually. These cases include over 600 craniotomies, 70 skull base procedures, 1,000 spinal cases, and 60 aneurysms. The curriculum fosters an environment in which residents build upon skills that enable them to care for patients from evaluation to post-operative care.

Our institution is fully equipped with state-of-the-art facilities including Gamma Knife, the Skull Base Lab, the Interventional Neuroradiology Suite, Neuro ICU, and PET Scan facilities. Residents also present cases and instruct medical students, as well as publish papers and manuscripts in peer-reviewed journals such as *Neurosurgery*, *World Neurosurgery*, *Journal of Neurosurgery*, and *Journal of Clinical Neuroscience*.



Residents gain exposure to trauma, spinal instrumentation, skull base, peripheral nerve, vascular, oncology, pediatric, stereotactic, endoscopic, aneurysm, AVMs, and pain specialties.

In addition to the fundamentals of neurosurgical procedures, residents are taught the importance of patient care, professionalism, utilization of resources, and education of and communication with patients, families, clinical and support staff.



General Residency Requirements

One prospective research trial

Meeting and/or conference attendance as per abstract or paper accepted

Presentations at Case Conferences and with Visiting Professors

Highlights

Research Opportunities

The faculty of the Department of Neurosurgery guides residents through both the clinical and research experience. Independent research is encouraged and financial resources to fund such research will be made available to interested residents.

The Neurosurgery Basic Research Laboratory provides an excellent source for residents to learn biochemical and morphological issues concerning the physiological mechanisms of the brain. Residents are also given the opportunity to actively participate in clinical research through drug and device trials and national projects.

Educational Conferences

The Neurosurgery Residency program promotes active involvement in a wide range of conferences and events. Listed below are some of the standard weekly and monthly events available to neurosurgery residents at LSU.

Multidisciplinary Case Conference

The format is case presentations by neurosurgery residents followed by review of the pertinent studies with faculty input. Cases are chosen by involved residents to stimulate discussion and debate. Case Conference is every Wednesday at 4 pm. Attendees include medical students, allied health personnel, and multidisciplinary professors.

Tumor Board

This conference is joint with the Department of Oncology and is held every two weeks. All residents and faculty are expected to attend.

Pediatrics/Trauma/Spine/Orthopedics and Endocrine Joint Conference

All joint conferences are held quarterly. Each conference is planned by a junior resident. All residents and faculty are required to attend.

Morbidity and Mortality Conference

This conference is held once a month. Cases presented are from the previous month. All residents and faculty are expected to attend.

Facilities

LSU Health Shreveport is a Level-1 trauma center with a 26- bed surgical intensive care unit, Neuro ICU, and a dedicated neurosurgery ward.

Two CT scanners, an MRI scanner, an angiography suite, Gamma Knife, Interventional Radiology Suite, and a PET scan are on site. Clinic space includes LSU Health Shreveport and private hospital facilities. A total of five clinics are located throughout Shreveport-Bossier City.

Highlights

The Neurosurgery Clinic

The neurosurgery clinic moved into the 75,000 square-foot facility in May 2019. The neurosurgery clinic features 15 exam rooms, conference space, and patient waiting areas.

With the new clinic location, families in the Shreveport-Bossier area will have better access to more neurosurgical specialty clinicians and services.



Sub-Specialties

Faculty members typically confine their practice to a specific area of neurosurgery, enabling them to obtain a depth of clinical experience and expertise that results in superior patient care. During residency training, residents get full exposure to each of these sub-specialty areas including:

Pediatric Neurosurgery

Spine

Epilepsy

Endovascular

Skull Base Surgery

Neurosurgical Oncology



Surgical Skills Lab

The surgical skills laboratory serves as a teaching tool for medical students, residents, faculty, and practicing surgeons of all subspecialty fields. The lab provides a setting in which learners of all levels may practice and hone their surgical skills. Using cadaveric specimens allow participants a relaxed setting to strengthen their anatomic knowledge without putting actual patients at risk.



Skull Base Lab

The Department of Neurosurgery has pioneered a skull base surgical skills laboratory for teaching and simulation of operative cases. Medical students and residents are taught the nuances of surgical approaches, technique, and microsurgical skills necessary to be successful in practice.

Program

PGY-1

Successfully complete rotations in general surgery, neurology, neuropathology, neurosurgery, and neuro-radiology. Coordinate with faculty mentor to formulate a research project. Become knowledgeable in the physiology of pre and post operative care and develop a knowledge base in surgical disease pertaining to various organ systems. On-call as required by the rotations in compliance with regulations. Show evidence of learning and undertaking progressively responsible patient management. Will take the ABNS written boards for practice.

PGY-2

Become comfortable with minor neurosurgical procedures, specifically lumbar puncture, external ventricular drain placement, and burr hole placement. Develop a knowledge base in basic and clinical neurosurgery, including a thorough understanding of basic neurological examinations for spinal cord injury, the criteria for brain death determination, the anatomy of the cranial vault, leptomeninges, subarachnoid space, and major cerebral blood vessels, and the anatomy, physiology, and pathology of cranial nerves and spinal cord. Learn fundamentals of head trauma, spinal cord injury, and critical care management. Become proficient in basic radiosurgery planning. Learn management of critical care patients. Discuss a preliminary individual learning plan with the Chairman. Publish two papers. Teach medical students in lecture and daily rounds. Take the ABNS written boards for practice. Show evidence of learning and undertake progressively responsible patient management.

PGY-3

Become comfortable with basic cranial and spine surgery in both adult and pediatric patients, assuming a more active role in the OR. Further develop knowledge base in clinical neurosurgery and critical care. Augment skills in managing complex neurosurgical conditions such as head and spinal cord trauma, aneurysms and other neurovascular disorders, and skull base tumors. Become comfortable with simple and complex planning for stereotactic radiosurgery procedures. Continue building on critical patient management skills. on-call opportunities include 6 months at University Health Hospital and 6 months at the VA Hospital. Discuss and revise (as necessary) an individual learning plan with the Chairman. Publish two papers. Teach medical students in lecture and on daily rounds. Take the ABNS written board for practice. Show evidence of learning and undertake progressively responsible patient management.

Program

PGY-4

Become comfortable with most neurosurgical cases and perform surgery with moderate supervision. Develop a deeper understanding of the differences in treating pediatric patients, learn modes of seizure localization, understand the principles involved in management of movement disorders. Become proficient in the comprehensive management of all categories of neurosurgical patients, including those with cerebro-vascular disorders. Continue building on critical care patient management skills. On-call opportunities include 6 months at Willis Knighton Hospital and 6 months at Ochsner LSU Health Shreveport Hospital. Discuss and revise (as necessary) the individual learning plan with the Chairman. Publish two papers. Teach medical students in lecture and on daily rounds. Develop an organized plan for the research year. Take and pass the ABNS written boards for credit. Show evidence of learning and undertake progressively responsible patient management.

PGY-5

Complete research project. Be involved in basic science neuro lab and complete an anatomical project in skull base lab and a spine project in the biomechanics lab. Discuss and revise the individual learning plan with the Chairman, and take the ABNS written boards for credit if not passed in the PGY-4 year. Publish two papers. Teach medical students in lecture.

PGY-6

Perform most neurosurgical cases with minimal supervision. Develop knowledge base concerning more complex neurosurgical procedures, focusing attention on sub-specialties. Show thorough knowledge of the management of trauma, spine, and complex cerebrovascular patients. Have an appropriate understanding of advanced neuro-critical care, and knowledge of the bio-mechanics of the spine, cranial base anatomy, management of all tumors encountered in neurosurgical practice. Demonstrate proficiency in stereotactic radiosurgery planning and treatment. Continue building on critical care patient management skills. Formulate evidence-based treatment plans. Publish research project and at least one additional paper. Teach medical students in lecture and on daily rounds. Show evidence of learning and understanding progressively responsible patient management.

PGY-7

Perform all neurosurgical approaches with minimal supervision; perform independently with attending physicians acting as consultants. Demonstrate independent proficiency in stereotactic radiosurgery planning and treatment and critical care patient management. Adequately function as chief resident, showing mastery of administrative duties. Responsible for call and leave schedules. Teach medical students in lecture and on daily rounds.

Compensation and Benefits

Salaries

House Officers salaries are reviewed on an annual basis. Salaries are listed below.

Level	Annual
PGY-1	\$51,769.09
PGY-2	\$53,504.48
PGY-3	\$55,335.20
PGY-4	\$57,469.08
PGY-5	\$59,899.69
PGY-6	\$62,496.34
PGY-7	\$62,496.34

Malpractice Insurance

The State of Louisiana provides professional liability coverage pursuant to LSA-R.S. 40:129939 et. seq. to House Officers when acting within the course and scope of their training or staff which they are assigned as part of their prescribed training, regardless of where the services are performed. However, House Officers assigned to a healthcare facility outside of the State of Louisiana may be required to provide additional professional liability coverage with indemnity limits set by the House Officer Program Director.

Malpractice insurance is provided through the State of Louisiana self-insurance plan at no cost to the House Officer, and covers in-house duties only. Moonlighting is not covered. Any questions regarding any malpractice claims or legal inquiry should be reported to the Office of Legal Affairs (318.675.5406).

Deferred Compensation

House Officers have the option of participating in the State Deferred Compensation Program instead of contributing to FICA/Social Security.

A representative from the State Office assists the House Officer with their enrollment and assists when the House Officer is no longer in a training program and must determine how the accumulated dollars will be managed or withdrawn.

Compensation and Benefits

Disability Insurance

House Officers receive, without charge, a basic group disability insurance benefit. Additional coverage may be purchased by the House Officer.

Any questions concerning the Disability Program and its benefits should be directed to the Medical Education Office. The Medical Education Office then will refer the House Officer to the current representative of the benefit.

Health Insurance

It is required that proof of healthcare insurance be presented at the beginning of each contract year. The institution does not offer free healthcare to House Officers.

The institution offers a variety of healthcare insurance coverage benefit options for its employees. House Officers may purchase healthcare insurance as part of the benefits package. Questions should be directed to the Benefits Section of Human Resources.

Meal Program

The LSU Health Shreveport Meal Card for House Staff participating in the Meal Program is valid throughout one's residency/fellowship training at LSU Health Shreveport. One of three food plan options may be selected; the plan will be in effect for one contract year. Plans cannot be changed until the time of contract renewal. Deductions will be taken from the House Officer's check each pay period and the corresponding amount credited to the meal plan per month. House Officers may also choose to opt out and not receive the discounted meal plan.

The cafeteria is located on the ground floor of the hospital.

Vending machines are located throughout the medical school and adjoining hospital for easy access to snack food.



Compensation and Benefits

Medical Library and Departmental References Resources

Louisiana State University Health in Shreveport has an excellent medical library located in the school adjacent to the hospital. The library is staffed with qualified medical library professionals who are available to assist House Staff with any query they may have. In addition, there are many online journals and other periodicals available to the House Staff and/or their clinical departments. The library also houses the computer lab and several copy machines. Each clinical department has a designated "reference" area in their department that is readily available for the House Staff and faculty.

Library Hours

Monday - Friday	7:30 a.m. - 11:00 p.m.
Saturday	9:00 a.m. - 11:00 p.m.
Sunday	1:00 p.m. - 11:00 p.m.

On-Call Quarters

Services requiring overnight coverage have designated call rooms on the ninth (9th) floor of the hospital. Clean linens are provided on a daily basis. Each room has a telephone for call-back and a computer for general use. Do not use any room not assigned to your service.

The call room should only be utilized by on-call House Staff. The House Staff Lounge is also located on the ninth floor. The lounge has a sofa, microwave, TV, telephone, and refrigerator stocked with food and beverages.

If your room requires additional cleaning on the weekends, please notify the Environmental Services Office.

Medical records, radiology films, and other patient documents should not be left in the on-call rooms. Periodic room inspections are conducted and items may be removed and returned to their appropriate locations.

Hospital owned scrub suits should be returned to the appropriate designated area.

House Staff have a responsibility of removing their personal items as deemed appropriate to allow proper cleaning of the on-call room.

Any problems with the on-call rooms should be reported to the Office of Medical Education for follow-up. On weekends, if a problem occurs, the House Manager should be contacted.

Compensation and Benefits

Parking

House Staff are currently assigned to a parking lot at no charge, but must register to park with the Office of Auxiliary Enterprises.

Applications for parking are obtained from the Office of Auxiliary Enterprises, G-22. The registration record of your vehicle must be presented at the time of completing the parking application.

Emergency (call-back) parking should not be in designated fire lanes. If you require an escort after hours, please notify University Police.

Adherence to the University Parking Rules and Regulations is expected. Violations may result in fines and/or towing of your vehicle.

Prescription Pads

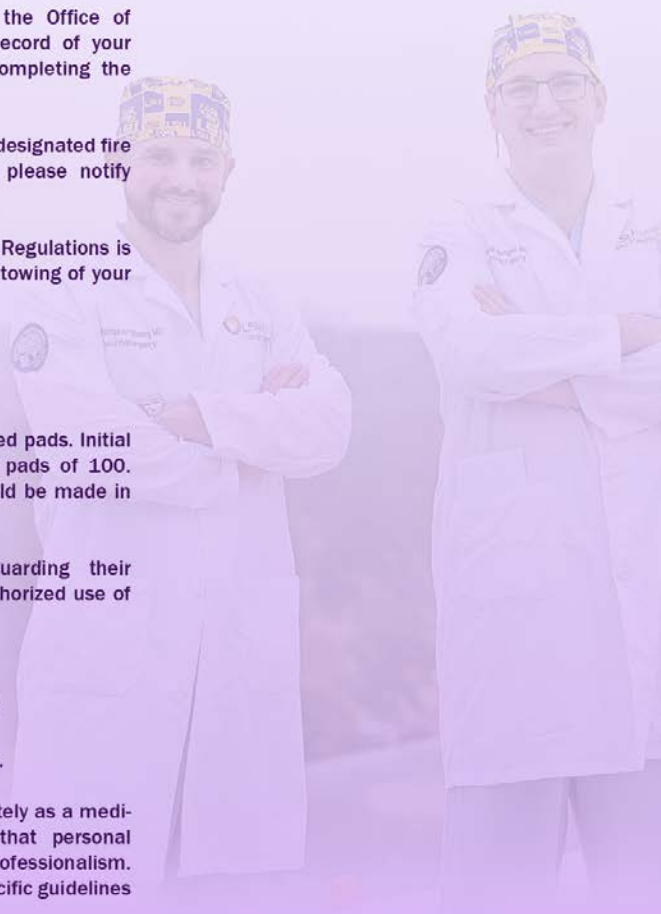
All House Officers are required to use pre-printed pads. Initial issue of pre-printed prescription pads is four pads of 100. Requests for additional prescription pads should be made in the Graduate Medical Education Office.

House Officers are responsible for safeguarding their prescription pads at all times to prevent unauthorized use of them.

White Coats/Dress Code

Initial issue of white coats is three (interns only).

House Staff are encouraged to dress appropriately as a medical professional. Individuals are reminded that personal hygiene is also an aspect of a physician's professionalism. Individual departments may establish more specific guidelines for dress.



Top 5 Reasons to Move to Shreveport-Bossier



1. Diverse Cultures: Shreveport-Bossier has a hint of East Texas mixed with Louisiana flair. This is seen in our food, events, and culture.



2. Big City Appeal with a Small Town Feel: Shreveport-Bossier offers big city services and attractions with a hometown feel. It's not unusual to have strangers strike up a conversation while waiting in line at a diner or in the produce section of the grocery store.



3. Location: Shreveport-Bossier is strategically located in the northwest corner of the state with easy access to Dallas, Oklahoma, and Arkansas.



4. Cost of Living: With the average cost of a home in Shreveport-Bossie being only \$140,000, the cost of living is very affordable for new homebuyers and residents.



5. Climate: Shreveport-Bossier, on average, has very mild winters, rarely snowing and not frequently dropping below freezing temperatures. This area has longer springs and summers than many areas of the country.



Things to Do in Shreveport-Bossier

Although a river separates the cities of Shreveport and Bossier, the community as a whole is considered Shreveport-Bossier, and both sides of the river offer a wide variety of local panache to offer new residents including more than 3 dozen attractions, 7 casinos, 500 local restaurants and more than 55 festivals and annual events year-round.

Even though Shreveport-Bossier is located in the northern part of the state, you will still be immersed in the Louisianan culture. Here in the northwestern corner of the state, we are a melting pot of Cajun, Texan, and a hint of Arkansan. People here are warm and inviting, showing southern hospitality at its finest.

You will experience the full effect of Mardi Gras with several krewes (Mardi Gras groups are called krewes) to choose from that include the Krewe of Centaur, Krewe of Gemini, Krewe of Highland, Krewe of Harambee, and the Krewe of Barkus and Meoux. Soon you will find yourself shouting local phrases like, "Laissez les bons temps rouler" and asking for some crawfish cornbread with your gumbo.

As if Mardi Gras wasn't enough, Shreveport-Bossier is also called, "Sportsman's Paradise," and is home to several lakes, bayous, a river, and parks offering a chance to soak up the natural beauty, fish, and if you're really daring, you can even zipline over alligators at Gators and Friends Alligator Park and Exotic Zoo.

And if you're looking for indoor activities, Shreveport-Bossier has a multitude of performing arts, museums, art galleries, and historic places to choose from. Whether you want to explore the latest art exhibit at Artspace in downtown Shreveport or tour the more than 20 unique dioramas depicting Depression-era southern life and view Caddo Indian artifacts at the Louisiana State Exhibit Museum, there is something for every history buff and art enthusiast.

Conveniently located in the northwest corner of Louisiana where I-20 and I-49 converge along with a regional airport that offers service on most major carriers, Shreveport-Bossier is a central point of travel for visiting family or weekend getaways to Dallas, Texas or Hot Springs, Arkansas.





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