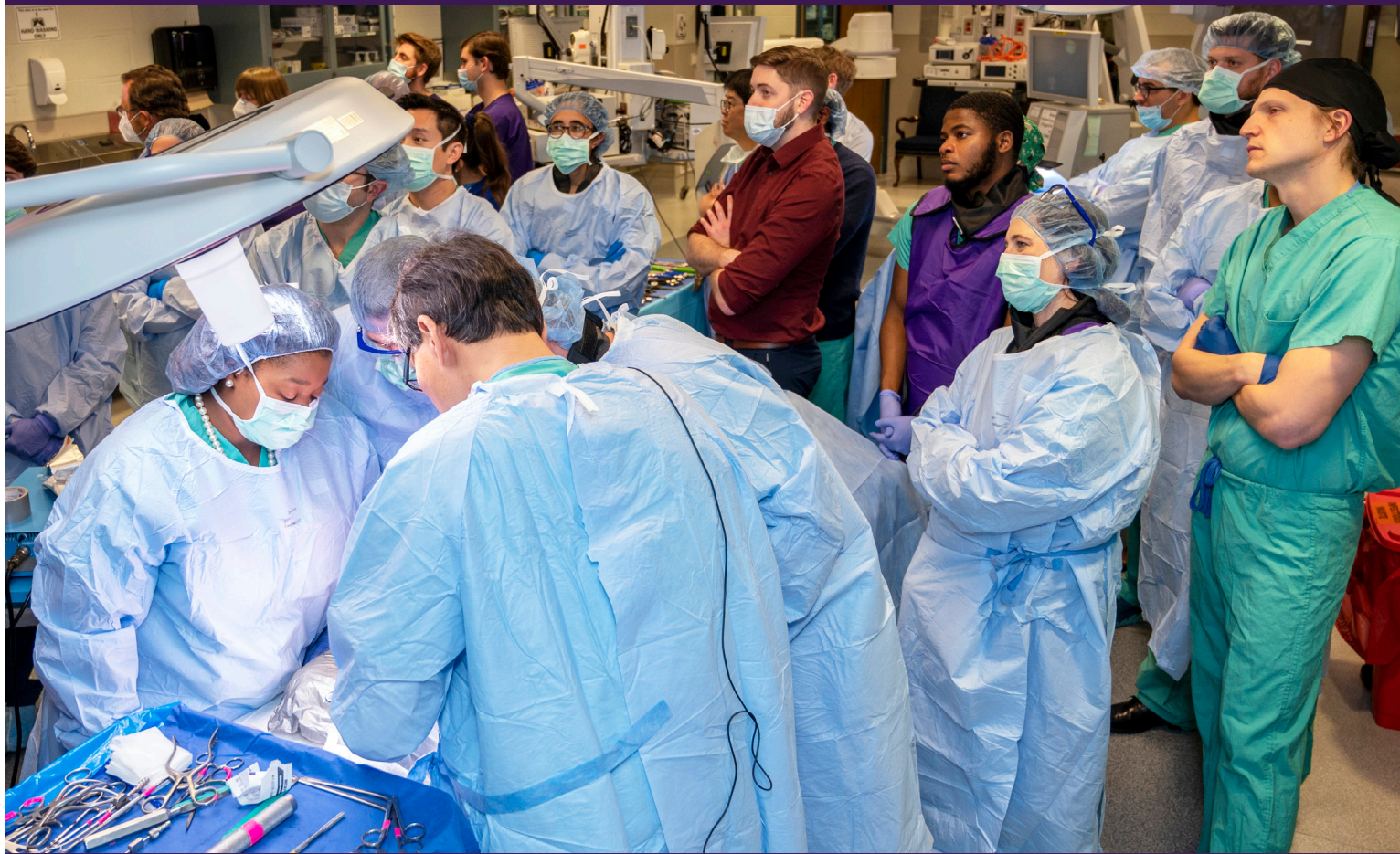


SHREVEPORT NEUROSURGERY RESIDENCY



Department of Neurosurgery

LSU HEALTH SHREVEPORT

LSU Health
SHREVEPORT®

Join us as we

TEACH ■ HEAL ■ DISCOVER

CLINICAL TRAINING

Our neurosurgical residents are exposed to high clinical volume, direct patient care, and are expected to gain mastery of clinical and operative skills under the guidance of experienced attending neurosurgeons. It is essential that our residents are exposed to each subspecialty in sufficient depth and breadth to become fully competent. Every trainee receives a focused experience in each of the main subspecialties, working in close conjunction with an expert senior attending physician who is a leader focused in such areas as neurovascular, functional neurosurgery, pediatric neurosurgery, skull base neurosurgery, spine, and epilepsy.

EDUCATIONAL OPPORTUNITIES

Residents contribute to lectures, group discussions, and symposiums with leading national and international researchers and clinicians. Additionally, residents present at neurosurgery didactics, the Levy Lecture, the Woodard Symposium, the Smith Spine Symposium, and the Louisiana Neurosurgical Society Annual Meeting. Our residents frequently present at the American Association of Neurological Surgeons, the Society of Neurological Surgeons, the Congress of Neurological Surgeons, subspecialty section meetings, and at local and regional meetings.

OVERVIEW

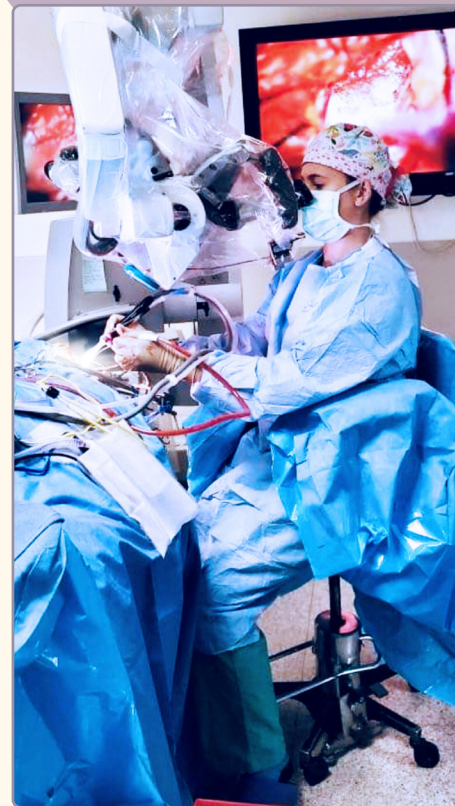
The LSU Health Shreveport Neurosurgery Residency Training Program is a 7-year program that provides an academic environment that fosters excellence in both clinical neurosurgery and research. The primary site is the Ochsner LSU health Shreveport campus with affiliated sites at Ochsner St. Mary Medical Center, Willis-Knighton Health System, Shriners Hospital for Children, and Overton Brooks VA Medical Center. 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 3,000 surgical procedures performed annually. The curriculum cultivates 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, Skull Base Lab, Interventional Neuroradiology Suite, and Neuro ICU. 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, endoscopy, aneurysms, 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 staff, and support staff.



“The attendings gave us solid instruction and appropriate autonomy in the operating room that prepares us for the rigors of real world practice. This residency program provided me with the strong foundation needed to be accepted into a world-class fellowship in minimally invasive spine surgery. I would put my training at LSU Health Shreveport up against any other program in the world.”

Frank Farokhi, MD

Class of 2020 Resident

*Neurosurgeon,
Spine Specialist at
Ascension Medical Group
in Pensacola, FL*

NEUROSURGERY FACULTY



Bharat Guthikonda
MD, MBA, FAANS, FACS

Professor and Chairman



Anthony Sin
MD, FAANS

Professor and Vice-Chairman
Director of Complex Spinal Disorders



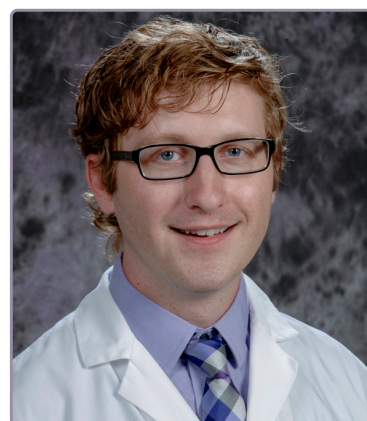
Christina Notarianni
MD, FAANS

Professor
Director of Pediatric Neurosurgery
Residency Program Director



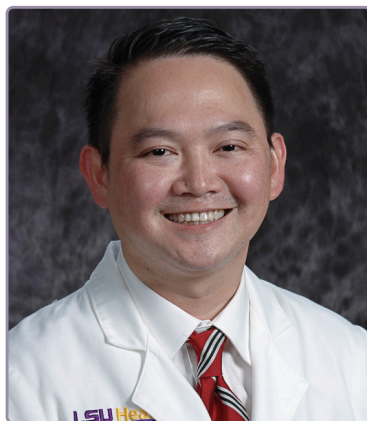
Brian Willis
MD, FAANS, FACS

Professor



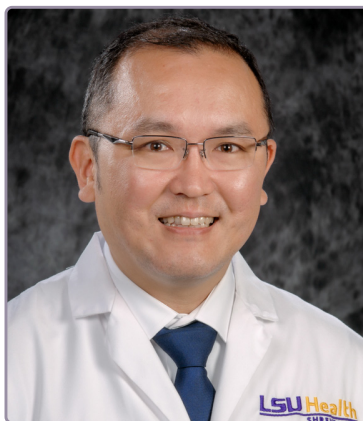
Jamie Toms
MD

Assistant Professor,
Director of Functional & Epilepsy Surgery
Associate Residency Program Director



Stanley Hoang
MD, FAANS

Assistant Professor
Director of Spine Research



Sungho Lee
MD, PhD

Assistant Professor



Amey Savardekar
MD

Assistant Professor

PGY-7



Nimer Adeeb, MD, MBA
An-Najah National University
School of Medicine



Edward Burkhardt, MD
LSU Health Shreveport

NEUROSURGERY RESIDENTS

PGY-6



Danielle Terrell, MD, MPH
Loyola University
of Chicago's Stritch School
of Medicine

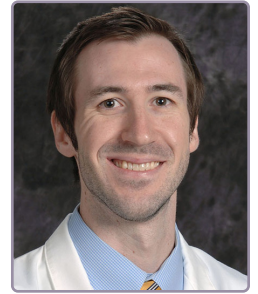


Garrett Whipple, MD
LSU Health New Orleans

PGY-5



Ryan Diaz, MD
Florida State University
College of Medicine



Lane Fontenot, MD
LSU Health Shreveport

PGY-4



Alexander Oderhowho, MD
The University of Texas
Health Sciences Center
at San Antonio



Caleb Stewart, MD
University of Queensland
School of Medicine Australia

PGY-3

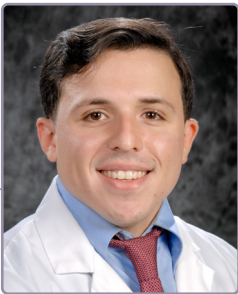


Joseph Camarano, MD
University of Texas Medical
Branch School of Medicine



Carlie Proctor, DO
A.T. Still University of Health
Sciences Kirksville College of
Osteopathic Medicine

PGY-2



Javier Brunet, MD
University of Puerto Rico
School of Medicine



Charles Ronkon, MD
University of Nevada Reno
School of Medicine

PGY-1



Bryce Bonin, MD
LSU Health Shreveport



Elizabeth Jee, MD
LSU Health Shreveport



PGY-1

CRITICAL CARE (3 MONTHS)

Residents spend 3 months rotating in MICU, SICU, and Neuro ICU. These 3 months include comprehensive training in general and surgical critical care, airway management, EEG, and multi-modal neuromonitoring.

NEUROLOGY (1 MONTH)

Residents develop expertise in the neurological exam and diagnostic workup of neurological disease. Rotation on inpatient and out-patient neurological services include stroke, epilepsy, movement disorders, and pediatric neurology.

NEUROPATHOLOGY (1 MONTH)

Residents spend 1 month learning general diagnostic training in neuropathology. Diagnostic activities include surgical neuropathology of adult and pediatric CNS/PNS tumors, inflammatory processes involving the nervous system; and post-mortem examinations of neurovascular, neurodegenerative, neuro-inflammatory, neoplastic diseases.

NEURORADIOLOGY (1 MONTH)

Residents spend 1 month gaining hands-on experience in all aspects of neuroradiology including advanced MRI applications, head and neck imaging, pediatric neuroradiology, spine imaging, neuroangiography, and image-guided procedures.

ANESTHESIA (1 MONTH)

Residents spend 1 month gaining education and experience in neuro-anesthesia. Residents are exposed to a busy caseload that includes neuro-oncology, neurovascular, major spine, and functional neurosurgery.

RADIATION ONCOLOGY (1 MONTH)

Residents become highly trained in modern radiotherapy techniques, including Gamma Knife and Proton Beam Therapy.

NEUROSURGERY (4 MONTHS)

Residents become familiar with the day-to-day operations of the neurosurgical service. Focus is given to all aspects of management of neurological and neurosurgical patients with emphasis on basic management of acute neurological, cardiac, and pulmonary issues in neurosurgical patients.



PGY-2

CLINICAL NEUROSURGERY AT OCHSNER LSU HEALTH SHREVEPORT (12 MONTHS)

Residents spend 12 months at Ochsner LSU Health Shreveport (OLHS). With attending supervision, residents are introduced to basic ward and operative procedures including cerebrospinal fluid diversion, lumbar punctures, traction placement, simple spine procedures, peripheral nerve procedures, angiography, and intra-cranial pressure monitoring.

ADDITIONAL PGY-2 REQUIREMENTS

- Publish 1 paper
- Take the ABNS written board for practice
- Teach medical students in lecture and on daily rounds



PGY-3

CLINICAL NEUROSURGERY AT THE VA MEDICAL CENTER (6 MONTHS) AND ST. MARY MEDICAL CENTER (6 MONTHS)



The PGY-3 year is divided between 6 months at Overton Brooks VA Medical Center and 6 months at Ochsner LSU Health Shreveport's St. Mary Medical Center. At the VA, the resident develops skills in neoplastic and degenerative spine surgery and peripheral neurosurgery. The resident evaluates all inpatient and outpatient consults, works up all new cases for admissions, participates in all operations with one-on-one attending supervision and directs postoperative care. At St. Mary's the resident participates in general neurosurgery including spine, peripheral nerve, and pain procedures, as well as a wide range of pediatric neurosurgery cases.

ADDITIONAL PGY-3 REQUIREMENTS

- Publish 1 paper
- Take the ABNS written board for practice
- Teach medical students in lecture and on daily rounds
- Take home call for VA/SMMC

PGY-4

CLINICAL NEUROSURGERY AT OCHSNER LSU HEALTH (6 MONTHS) AND WILLIS-KNIGHTON HEALTH SYSTEM (6 MONTHS)

The PGY-4 year is divided between 6 months at Ochsner LSU Health Shreveport and 6 months at hospitals within the Willis-Knighton Health System. Consolidation of medical knowledge, enhanced patient care skills and intense practice-based learning occur in the PGY-4 year and residents spend a significant portion of their time in the operating room. While rotating at OLHS, residents will also spend time focusing on endovascular neurosurgery. Residents rotating at Willis-Knighton, which is a private hospital system, will gain experience through a variety of neurosurgery cases.

ADDITIONAL PGY-4 REQUIREMENTS

- Publish 1 paper
- Develop an organized plan for the PGY-5 research year
- Teach medical students in lecture and on daily rounds
- Take and pass the ABNS written boards for credit



PGY-5

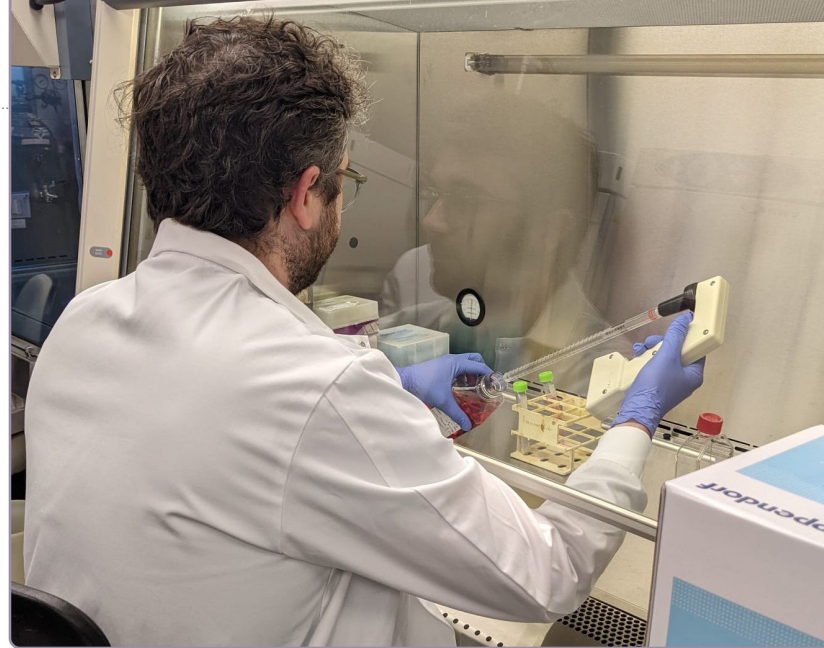
RESEARCH YEAR (12 MONTHS)

The entirety of the PGY-5 year is dedicated to research, during which the resident pursues a project in an area of academic interest. This project can range from basic neuroscience to clinical research.

Neurosurgery research residents may have the opportunity to participate in enfolded fellowships in the following subspecialties: skull base surgery, cerebrovascular neurosurgery, spinal neurosurgery, and neurosurgical oncology.

ADDITIONAL PGY-5 REQUIREMENTS

- Publish 1 paper
- Teach medical students in lecture
- Take and pass the ABNS written boards for credit if not passed in the PGY4 year



PGY-6

SENIOR RESIDENT AT OCHSNER LSU HEALTH SHREVEPORT (12 MONTHS)

Once residents have gained operative independence in general neurosurgical areas, the PGY-6 year offers them the capacity to expand that independence into sub-specialty areas. Residents spend 12 months at Ochsner LSU Health Shreveport focusing on their area of subspecialty interest and will include operative and clinical outpatient experience.

The senior residents begin taking on responsibility for supervising all aspects of care of the neurosurgical inpatients alongside the chief residents and at-home Chief Resident call is shared with the PGY7 residents.

ADDITIONAL PGY-6 REQUIREMENTS

- Publish 1 paper
- Teach medical students in lecture and on daily rounds



PGY-7

CHIEF RESIDENT AT OCHSNER LSU HEALTH SHREVEPORT (12 MONTHS)

The entire final year is spent as Chief Resident of the neurosurgery service at Ochsner LSU Health Shreveport. Chief Residents plan and carry out all surgical procedures in cranial, spinal, and peripheral neurosurgery, including micro-dissection techniques and the use of surgical navigation systems, endoscopic techniques, intraoperative MRI, electrocorticography, and cortical motor and speech mapping, sensory- and motor-evoked potentials, and spinal instrumentation.

Since the operative volume is large, the surgical experience is extensive. The Chief Resident guides junior residents through simpler cases, while perfecting skills in more complex cases.

ADDITIONAL PGY-7 REQUIREMENTS

- Create call and leave schedules
- Teach medical students in lecture and on daily rounds
- Publish 1 paper

ENFOLDED FELLOWSHIPS

SKULL BASE

The 12-month CAST accredited Skull Base Fellowship at LSU Health Shreveport is dedicated to providing exceptional training and experience in the performance of complex intracranial neurosurgery with an emphasis upon the application of skull base surgical techniques for tumors and vascular lesions.

During the fellowship year, the fellow also actively participates in ongoing clinical research in skull base neurosurgery and is required to publish at least one paper.

NEUROENDOVASCULAR SURGERY

This is a 12-month fellowship that offers advanced clinical training in neuroendovascular intervention and care, as well as advanced research opportunities with specialty-trained, board-certified faculty members. The fellow will be exposed to a large number of cerebrovascular pathologies including embolization, extra-cranial and intracranial stents, thrombectomies, intracranial infusions, and angiography.

This fellowship is based at the only Joint Commission Certified Comprehensive and Primary Stroke Center in the tri-state area. The fellow will be fully integrated into the clinical neuroendovascular service and participate in inpatient and outpatient care in addition to performing a variety of neuroendovascular procedures.

Given the nature of neuroendovascular work, this fellowship offers unique opportunities for interdisciplinary collaborations. Time throughout the fellowship will be allocated for participation in, or initiation of, clinical research projects (related to neuroimaging and endovascular surgery).

SPINAL NEUROSURGERY

This is a 12-month fellowship that offers fellows advanced training and education in the neurosurgical management of diseases and deformities of the spine, including prevention, evaluation, diagnosis, and treatment (both medical and surgical) of the spine, spinal cord, surrounding soft tissues, nerves, and vascular structures. Fellows are offered a broad range of education and training in complex minimally invasive and robotic spine cases.



With thousands of spine surgeries annually, fellows are afforded a wide variety and breadth of surgical training. As the leading tertiary spinal neurosurgery referral center in the area, fellows will treat the most complex spinal pathology, including revision surgery, spinal deformity, spinal cord tumors, and spinal infections. The Spine Fellow is directly mentored by Director of Complex Spinal Disorders and Vice-Chairman, Dr. Anthony Sin, in both inpatient and outpatient settings.

Time throughout the fellowship will also be allocated for clinical and/or basic scientific research related to spinal neurosurgery. Fellows should produce at least one manuscript accepted for publication in a peer-reviewed journal.



COMPENSATION AND BENEFITS

MEDICAL LIBRARY AND DEPARTMENTAL RESOURCES

LSU Health 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. In addition, there are many online journals and other periodicals available to the House Staff and/or their clinical departments.

ON-CALL QUARTERS

Services requiring overnight coverage have designated call rooms on the 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. The Resident Lounge has a sofa, microwave, TV, telephone, and refrigerator stocked with food and beverages.

PARKING

House Staff are currently assigned to a parking lot on campus. Police escort is available after hours.

SALARIES

House Officer salaries are reviewed on an annual basis. Salaries are:

LEVEL	ANNUAL
PGY1	\$55,972.50
PGY2	\$57,849.30
PGY3	\$59,828.10
PGY4	\$62,135.34
PGY5	\$64,763.88
PGY6	\$65,570.92
PGY7	\$80,000.00

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.

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.

DEFERRED COMPENSATION

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

HEALTH INSURANCE

It is required that proof of Health Care Insurance be presented at the beginning of each contract year. Free health care is not provided to House Officers, but LSU Health Shreveport does offer a variety of healthcare insurance coverage options that may be purchased as part of the benefits package.

DISABILITY INSURANCE

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

MEAL PROGRAM

LSU Health Shreveport offers three food plan options to House Staff. House Staff may choose one of the three plans that will be in effect on a yearly basis. 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.



TOP 5 REASON TO MOVE TO *Shreveport-Bossier*

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

BIG CITY APPEAL WITH SMALL TOWN FEEL: Shreveport-Bossier offers big city services and attractions with a hometown feel. It is 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.

LOCATION: Conveniently located in the northwest corner of the state where 1-20 and 1-49 converge and with a regional airport, Shreveport-Bossier enjoys easy access to Texas, Oklahoma, and Arkansas.

COST OF LIVING: With the average cost of a home in Shreveport-Bossier being only \$185,000, the cost of living is very affordable for new homebuyers and residents.

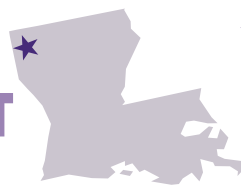
CLIMATE: Shreveport-Bossier, on average, has very mild winters, rarely snowing and not frequently dropping below freezing temperatures. This area has longer springs and summers than many areas of the country.

WHY TRAIN IN SHREVEPORT-BOSSIER?

\$185 K
MEDIAN HOUSING
COST OF LIVING
91.9%
OF THE NATIONAL AVERAGE



SHREVEPORT, LA
**THIRD
LARGEST
CITY**



184,021
POPULATION



2
LOCAL
AIRPORTS



5 HOURS to
NEW ORLEANS
3 HOURS to
DALLAS, TEXAS






32
MUSEUMS &
ART GALLERIES



**YEAR
ROUND
FESTIVALS**



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