



LSU Health
SHREVEPORT

NEUROSURGERY



WHO WE ARE

The Ochsner LSU Health Shreveport Neurosurgery Department is a group of exceptionally talented experts that uses the most innovative surgical approaches and embraces a level of care that prioritizes our patient's long-term quality of life. Working collaboratively with other medical specialists in disease-specific centers, patients are allowed better access to a greater level of comprehensive care for the treatment of a broad spectrum of neurological diseases in adult and pediatric patients.

Our team of world-renowned neurosurgeons provide first-rate facilities and highly acclaimed services including:

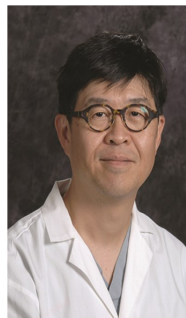
- + Robotic Spine Surgery**
- + Gamma Knife Radiosurgery**
- + The only Endoscopic Pituitary and Skull Base Surgery Service in the area**
- + The only Stroke Center in the area, offering 24-hour stroke care**
- + The only accredited Level 4 Epilepsy Center in the region**
- + A Specialized Pediatric Concussion Clinic**



YOUR NEUROSURGERY TEAM



**Bharat Guthikonda,
MD, MBA, FAANS, FACS**
Specialties: Skull Base
Surgery, Endoscopic Pituitary
Surgery, Cerebral Aneurysms,
Brain Tumors



**Anthony Sin,
MD, FAANS**
Specialties: Robotic Spinal
Surgery, Complex Spinal
Disorders, Scoliosis,
Spinal Cord Injuries



**Christina Notarianni,
MD, FAANS**
Specialties: Chiari
Malformation, Spina
Bifida, Hydrocephalus,
Pediatric Brain Tumors,
Concussion



**Hugo Cuellar,
MD, PhD, MBA, DABR**
Specialties: Stroke,
Neurointerventional
Surgery, Brain Aneurysms



**Donald Smith,
MD, FAANS**
Specialties: Spinal
Disorders, Peripheral
Nerves, Gamma Knife



**Brian Willis,
MD, FAANS, FACS**
Specialties: Neuro Trauma,
Spine, General
Neurosurgery



**Jennifer Kosty
MD**
Specialties: Endoscopic
Skull Base Surgery,
General Neurosurgery
Epilepsy



**Stanley Hoang,
MD, MS**
Specialties: Complex Spinal
Surgery, Spinal
Diseases and Deformities



**W. Christopher Newman
MD**
Specialties: Neurosurgical
Oncology, Radiosurgery



SERVICES

Our team of neurosurgeons provides state-of-the-art medicine in the treatment and management of neurological disorders, including brain and spinal tumors, degenerative spinal conditions, epilepsy, movement disorders, cerebrovascular disorders such as stroke and aneurysm, and pain.

Procedures we offer include the latest minimally invasive surgical techniques for brain and spin, awake craniotomy techniques for mapping brain function, radiosurgery (stereotactic approaches and whole brain), carotid artery stenting, and minimal invasive treatment of brain aneurysm (coiling).



Stroke

We offer one of the select few stroke programs which offers both open surgical and endovascular treatment. Surgeons in the program have been nationally recognized for their expertise in endovascular and open surgical approaches to stroke care, receiving the American Heart Association/American Stroke Association's Get With the Guidelines Stroke Silver Quality Achievement Award.



Epilepsy

The Regional Epilepsy Center at Ochsner LSU Health Shreveport is the only facility in North Louisiana with Level 4 NAEC accreditation and the resources to care for epilepsy patients in need of more specialized care.



Pediatric Neurosurgery

Our Pediatric Neurosurgery service offers comprehensive care and multi-disciplinary approach for the full range of brain, spine, peripheral nerve, and craniofacial disorders in children and adolescents. Common conditions treated are brain tumors, cerebral palsy, Chiari malformation, congenital malformations of the brain and spine, hydrocephalus, and traumatic brain and spinal injuries.

SERVICES

3,600+
neurosurgical
procedures
performed
each year

1,000+
Gamma Knife
procedures
performed

10,000+
spine
surgeries
performed

55,000+
total
operations
performed



Spine

Our Spine Team strive to provide state-of-the-art management and an individualized treatment strategy for every patient incorporating a multi-disciplinary approach that includes physical medicine and rehabilitation, pain management, physical therapy and neurologists.



Neurosurgical Oncology

Our Neurosurgery Team includes board certified specialists who have expertise in the specific needs of patients with tumors of the brain and spinal column.

We consult with other medical specialties to customize treatment plans for each patient's individual needs, in coordination with the patient's referring physician.



Skull Base Surgery

The removal of tumors and the treatment of vascular lesions that occur at the base of the skull can be some of the most technically challenging surgeries performed by neurosurgery. We offer the most advanced techniques in surgical approaches such as cranial nerve monitoring, endoscopic visualization intraoperative imaging and navigation, neuroendovascular techniques, as well as stereotactic radiation that dramatically improve patient outcomes and quality of life.

Providing Expert Care

Our superior care is made possible by a renowned team of neurosurgeons and staff that are dedicated to helping patients and finding better ways to treat disease. Our specialty clinics focus on providing expert care by board-certified specialists for each patient.



Pediatric Concussion Clinic

Neurosurgery's Pediatric Concussion Clinic, led by Dr. Christina Notarianni, is working closely with local coaches and athletic trainers to address sports-related concussions with early intervention and administration of effective monitoring and treatment protocols.

Through the use of a computerized cognitive assessment for pediatric concussions, the child's performance can be compared to normative data to further assist the clinician in determining a need for a more comprehensive evaluation and whether the athlete may safely return to activity.

NAEC Accredited Epilepsy Center

The Regional Epilepsy Center at Ochsner LSU Health Shreveport Academic Medical Center is the only facility in North Louisiana with Level 4 NAEC accreditation and the resources to care for epilepsy patients in need of more specialized care. Epilepsy is a neurological disorder that causes seizures and affects approximately 10,000 people in the region. The Centers for Disease Control and Prevention (CDC) reports that there are about 3.4 million people in the U.S. with epilepsy.

A Level 4 center provides offer the most complex forms of intensive neurodiagnostic monitoring available, as well as extensive medical, neuropsychological, and psychosocial treatment. Level 4 centers also offer complete evaluations for epilepsy surgery and perform more complex epilepsy surgeries.



Nationally Recognized Stroke Care

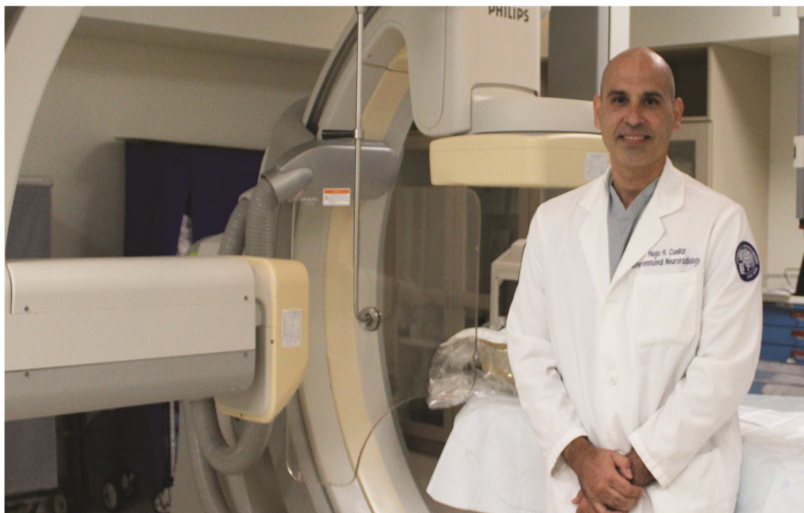
Our Stroke team, led by Dr. Hugo Cuellar, is a collaborative effort between the departments of neurosurgery and neurology and includes board-certified physicians, nurses, therapists and social workers, offer an integrated approach to diagnosis, treatment and prevention of stroke, as well as stroke education. We are the only Stroke Center in the Ark-La-Tex to provide 24/7 stroke treatment.

We have been nationally recognized for expertise in endovascular and open surgical approaches to neurovascular disease, most recently receiving the American Heart Association/American Stroke Association's Get With The Guidelines® Stroke Gold Plus with Target Stroke Honor Roll Quality Achievement Award. We care for patients who have suffered ischemic strokes and hemorrhagic strokes.

We provide rapid diagnosis using the treatment guidelines developed by the American Heart Association/American Stroke Association Get With the Guidelines-Stroke program to treat stroke patients. Our rapid response stroke team includes specially trained physicians and nurses to administer immediate stroke care using clot-busting medications and/or mechanical clot removal therapy when appropriate. With the help of A.I technology and state of the art radiology imaging, our team can review and readily identify any stroke patient that comes through our doors, providing the fastest care possible.

Our team provides brain-imaging scans 24 hours a day, seven days a week. We have an advanced Neurointerventional Biplane Angiography Suite and the latest thrombectomy devices, both of which allow physicians to perform the most complex endovascular interventions.

**The ONLY Joint
Commission
Certified
Comprehensive
Stroke Center in
the Ark-La-Tex**



Clinical Care

World-Class Technical Skill and Cutting-Edge Technology

Building upon a legacy of excellence, the neurosurgery case volume has steadily increased over the past twenty years. Our service has recorded some impressive numbers including thousands of procedures to remove benign and metastatic brain tumors, more than 10,000 spine procedures, thousands of trans-nasal endoscopic surgeries, and thousands more brain tumor patients treated with Gamma Knife radiosurgery. The Neurosurgery Department's cases are amongst the most complex neurosurgical cases in the Ark-La-Tex.



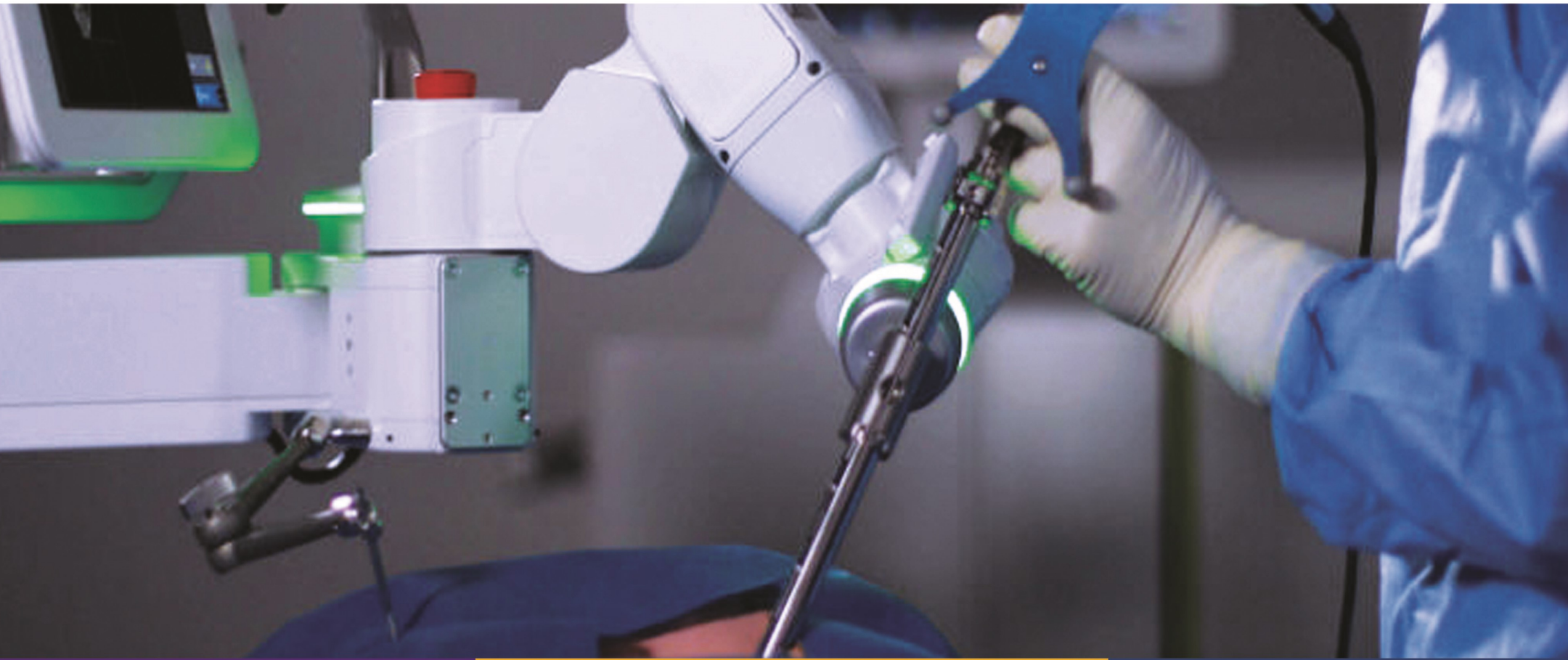
- + **Internationally recognized** specialists in minimally invasive skull base surgery
- + Named among the **Top Doctors** by *SB Magazine* for Shreveport-Bossier
- + The **ONLY pediatric neurosurgery service** in northern Louisiana
- + **COMPLEX robotic-assisted spine surgery** offered in the Ark-La-Tex

ROBOT-ASSISTED SPINAL SURGERY

Our Complex Spinal team, led by Dr. Anthony Sin, now offers the latest in robotic spinal surgery technology to patients utilizing the Mazor X Stealth Edition™ robotic guidance system.

The Mazor X Stealth Edition™ uses 3D planning technology to develop the optimal surgical procedure in a CT-based 3D simulation of the patient's spine before even entering the operating room.

- + **Pre-operative data** provided for procedure planning.
- + **Intraoperative guidance** allows for superior precision through micro incisions.
- + Cameras map the surgical site to create **optimal robotic movement**.
- + Results show **improved patient outcomes** compared to traditional surgery.
- + Patients have **shorter hospital stays** with less post-operative pain.
- + Robot-assisted technology delivers **exceptional precision** while the surgeon remains in full control of the procedure.



Gamma Knife Surgery

Expanding the Benefits of Advanced Radiosurgery

The Department of Neurosurgery's neurosurgical oncology team is among the most experienced at using the Leksell Gamma Knife® Icon — the most advanced radiosurgery technology available. Since 2000, our team has performed almost 2,000 Gamma Knife procedures to treat patients suffering from conditions such as brain tumors, arteriovenous malformations, and trigeminal neuralgia. In October 2020, we upgraded our equipment to the newest Leksell Gamma Knife® Icon™ which allows the option to fixate the patient during treatment with a non-invasive mask, enabling physicians to treat larger tumors or greater number of metastatic brain tumors in separate “fractionated” sessions. Delivering a fraction of the total radiation dose over a period of days allows normal cells time to repair themselves between treatments.

Gamma Knife radiosurgery makes it possible for physicians to reach even the deepest recesses of the brain. As a result, the Gamma Knife procedure is an extremely precise, virtually painless, and highly effective treatment.



State-of-the-Art Neuro ICU

Our Level I Trauma Center - the only health system in northern Louisiana to earn this distinction – offers the highest level of critical care and intensive monitoring for the most severe types of neurotrauma and complex intracranial surgery. The center features a dedicated Neurosurgical Intensive Care Unit with 15 beds.

With a specially-trained physician team and a 15-bed unit supervised by an attending physician around the clock, our Neuro ICU has quickly established itself as the leading neurosurgery facility in the region. In addition to a full array of state-of-the-art technology— including intracranial pressure monitoring, 24/7 EEG brain monitoring capability, and transcranial Doppler ultrasound—the staff also employs innovative, proactive protocols to optimize patient safety and quality of care.

The Neuro ICU's physicians are complemented by a excellent nursing team and staff that have extensive experience in providing critically ill patients with personalized care. We seek to provide balanced, integrated care that considers the patient as a whole.

Patients receive care from board-certified neurosurgeons, endovascular neurosurgeons, neuro-intensivists, neuroradiologists, and neurocritical care nurses.

Includes access to a

15-bed

Neurosurgical Intensive Care Unit, full-time neurosurgeons on duty, a round-the-clock attending physician, and multi-disciplinary critical care





NEUROSURGERY

St. Mary's Place Clinic

1 St. Mary Place
Suite 100
Shreveport, Louisiana 71101

Fairfield Clinic

1801 Fairfield Avenue
Suite 306
Shreveport, Louisiana 71101

For consultations or referrals,
contact us at **318.626.0203.**

Office Hours

Monday-Friday
8:30 a.m. - 5:00 p.m.



www.ochsnerlsuhs.org/services-departments/neurosurgery