University Neurosurgery hosted the fifth annual Woodard Symposium on September 22, 2016 at LSU Health Shreveport. Three international neurosurgeons delivered updates in neurosurgery, representing three different continents.

Dr. Ying Mao, Vice President at Hua Shan Hospital of Fudan University, discussed “Precise Surgical Strategy for the Bypass Application in Complicated Cerebrovascular Diseases.” Dr. Franco Servadei, Director of Neurosurgery and Neurotraumatology at Parma University Hospital in Italy, presented “Surgical Management of Traumatic Brain Injuries: A Worldwide Perspective.”

Dr. Edgardo Spagnuolo, Chairman of the Neurosurgical Department at Republic University in Uruguay, lectured on “Subarachnoid Hemorrhage.”

The Woodard Symposium is made possible by the Scotty and Larene Woodard Visiting Professorship. Eight years ago, an aneurysm threatened Larene Woodard’s life. A coiling operation at LSU Health Shreveport kept the aneurysm from bursting. Thanks to the Woodards, the physicians and staff at LSU Health Shreveport, as well as community members and other health professionals, have access to visiting lecturers’ knowledge and expertise.
Greetings from University Neurosurgery! We extend congratulations to Dr. Hugo Cuellar on his recent certification in neuroendovascular surgery by the Society of Neurological Surgeons and the Committee on Advanced Subspecialty Training. Dr. Cuellar was a key factor in helping University Health become a Level 1 stroke center.

We’re delighted to work with our new residents, who officially joined our team July 1: Racheal Wolfson from the University of Miami, Jared Brougham from Oakland University, Devon LeFever from the University of Toledo, and Ban Lee from the University of Chicago.

I am happy with the success of our Levy conference in April and our Woodard Symposium in September. For Levy, Dr. William T. Couldwell, a nationally recognized neurosurgeon from the University of Utah, visited and educated our faculty, residents and medical students on the ever-developing field of skull base surgery. Woodard brought together three neurosurgeons representing Europe, Asia, and South America, allowing LSU Health Shreveport to serve as a global intersection in education.

With these additions and updates, we continue to provide neurosurgical care to the entire state and the Ark-La-Tex region. If you have any questions, kindly feel free to contact me. Thank you.

Anil Nanda, MD, MPH, FACS

Recent Publications

Meet the Speakers
Woodard Symposium 2016

Ying Mao, MD, PhD
Vice President, Hua Shan Hospital

Dr. Ying Mao has made striking achievements in both cerebral vascular diseases and brain tumors through more than 20 years’ work in neurosurgery. Leading the National Key Technology Support Program of China, he put forward the standard treatment for intracranial aneurysms and created a novel bypass procedure to improve blood flow. As a result, morbidity of ruptured aneurysms has decreased in China and some refractory ones now become curable. Up to now, Dr. Mao has published more than 200 articles and edited 5 books. He was conferred the titles of Outstanding Scientific and Technological Worker throughout the country, Young Expert with Outstanding Contribution to the Ministry of Health, Excellent Academic Leader in Shanghai, and Yangtse River Scholar.

Franco Servadei, MD
Director of Neurosurgery and Neurotraumatology, Parma University Hospital

Dr. Franco Servadei graduated in Medicine and Surgery with honors from the University of Bologna, where he obtained a specialization in Neurology and Neurosurgery. He has published over 180 printed works (34 being within the past 5 years) and continues to do research focusing on trauma and tumors. Dr. Servadei is responsible for various multi-center clinical research facilities throughout Italy and was one of the six European consultants in the formation of the American guidelines on concussion. He has been the director of Neurosurgery at Parma University Hospital since 2007 and has previously held the Presidential position at the Italian Society of Neurosurgery. Dr. Servadei is a member of the Board of Governors of the International Brain Injury Foundation and a member representing Italy on the World Organization of Neurotrauma Health Committee.

Edgardo Spagnuolo, MD
President Elect of Latin American Federation of Neurosurgical Societies, Republic University

Dr. Edgardo Spagnuolo began his medical training at the School of Medicine in Montevideo, Uruguay. He received his fellowship training at Instituto de Neurologia at Beneficencia Portuguesa Hospital in San Pablo, Brazil. Dr. Spagnuolo has since been a member of the Vascular Section of the Latin American Neurosurgical Societies, the President of the Vascular Section of FLANC, and a member of the Administrative Committee of FLANC. He is currently a member of the World Academy of Neurosurgery, the President of Latin American Federation of Neurosurgical Societies, and the chairman and professor of the Neurosurgical Department of Maciel Hospital in Montevideo.
DEPARTMENT NEWS

The Department of Neurosurgery at LSU Health and Sciences Center in Shreveport, Louisiana has seen many events worth celebrating throughout the past several months:

All neurosurgery residents who appeared in their tests passed their boards this year.

PGY-7 resident, Dr. Marc Manix, married his wife, Leah Romero, in June.

PGY-6 resident, Dr. Chris Storey, and his wife, Noor, welcomed a baby boy, Milo, into their family in October.

PGY-6 resident, Dr. Richard Menger, and his wife, Beth Ann, welcomed a baby girl, Cecily, into their family in February.

Professor and Chairman, Dr. Anil Nanda, was the honored guest at the 2016 International Congress of the World Federation of Skull Base Meeting in Osaka, Japan. He lectured on: “Struggles in the anatomical jewel box: Cavernous sinus meningiomas.”

Associate Professor and Residency Program Director, Dr. Christina Notarianni, was featured on KSLA News 12 Sports for her incredible diagnoses on Karsten Brogan. Karsten is preparing for the 2020 Paralympics in Tokyo, Japan.

The Department of Neurosurgery hired three new staff members:

Emily Morris - Coordinator of Information and Publications
Tiffany Adams - Academic Coordinator
Julie Hedgepeth - Editorial Consultant

Professor and Chairman, Dr. Anil Nanda, was the honored speaker at the sixty-second annual Charles A. Elsberg Lecture held in New York City. He lectured on: “Dharma, Dixie, and Debacles in Skull Base.”
CONDITIONS TREATED

AVM
Aneurysm
Brain Tumor
Cervical Stenosis
Degenerative Disc
Epilepsy
Herniated Disc
Scoliosis
Spinal Stenosis
Spine Trauma
Traumatic Brain Injury
Trigeminal Neuralgia

For a complete list of treatment conditions, please visit our website or speak with our clinical staff.
BOSSIER PARALYMPIAN GETS TREATMENT FROM DR. CHRISTINA NOTARIANNI

LSU Health Shreveport’s very own pediatric neurosurgeon, Dr. Christina Notarianni, performed surgery on 21-year-old Karsten Brogan earlier this year. Karsten was born with two-thirds of his brain missing. He had a condition called hydrocephalus macrocephaly, which is when too much cerebrospinal fluid builds up on the brain. Karsten’s brain made a miraculous recovery, and he was able to compete in the Junior Worlds Competition, bringing home 4 medals. However, while Karsten was competing in France, he suffered from severe headaches and constant vomiting. Dr. Christina Notarianni discovered that his brain was now draining too much spinal fluid, causing him to feel ill. She performed a surgery she had never done before - implanting a device that would help Karsten regulate the amount of spinal fluid flowing from the brain. The procedure was successful, and Karsten is now training to compete in the 2020 Paralympics in Tokyo, Japan.

Epilepsy Surgery: A story of SUCCESS

Epilepsy is one of the most common neurological disorders, affecting 1% of the population by age 20 and 3% of the population by age 75. It is caused by genetic, congenital, or developmental conditions that are more common in younger people like LaCameron Gant, a 16-year-old boy with a tumor in his brain. This tumor had been a problem for nearly 5 years, triggering his epileptic seizures and causing him to miss out on much of his adolescent childhood. “I couldn’t do a lot of contact sports or go to strobe light parties,” says Gant. “Now I can do things that I wasn’t able to do in the past few years.” Dr. Hai Sun and his colleagues performed surgery on LaCameron and removed the pesky tumor that was given him so much trouble. “Our goal was to remove this area that was causing the seizures and at the same time preserve his brain function. We don’t want to give him any neurological deficits as a result of surgery,” says Dr. Sun. The surgery lasted roughly seven hours with Dr. Hai Sun removing the tumor with a computer guided system.

LaCameron’s surgery was performed on December 18, and he was home by Christmas.
A 44-year-old female patient with vomiting and syncopal episodes was presented to the ER. She had a history of headache and vertigo, lasting for a duration of 8 months. She also experienced a tingling sensation over the right side of her face. She has had no history of diplopia, seizure, or stroke like episodes. Her neurological examination was normal. The cranial MRI showed a lesion predominantly in the right cerebellopontine angle (CPA). In the longitudinal axis, it extended from the upper part of the midbrain to the level of craniovertebral junction and in the transverse axis, to the contralateral CPA. Overall, it was occupying interpeduncular, B/L crural, preptpine, B/L CPA, and premedullary cisterns. The lesion was hypointense on T1, hyper-intense on T2 and was not enhancing with contrast (Figure 1). It was bright on diffusion weighted images (DWI), dark on apparent diffusion coefficient (ADC) images and was suggestive of an epidermoid tumor. The tumor was approached through a retrosigmoid-suboccipital craniotomy. After gentle retraction of the cerebellum, the pearly white tumor was evident in the cerebellopontine angle (Figure 2A). It was intermingled in between the nerve rootlets of lower cranial nerve, 7th and 8th nerve complex and was extending high up to the Meckel's cave. The tumor was gently removed through the narrow corridors between the nerve rootlets, initially between the 5th and 7th-8th complex and then from the lower cranial nerves (Figure 2B). Great caution was taken not to damage the nerve fibers or adherent small perforator vessels. After successful removal from the premedullary cistern, the opposite CPA cistern could be targeted. The tumor that was around both the vertebral arteries and across the basilar artery was removed (Figure 2C). The surgery was technically demanding, but a gross total excision was achieved (Figure 2D). The cranial nerves from 5 to 12, bilateral vertebral artery and their confluence with basilar artery could be exposed and preserved. The post-operative course of the patient was good and was without any neurological deficits. Post-operative MRI showed a gross total excision (Figure 2 E &F). The patient is asymptomatic in the follow up.

Epidermoid tumors are benign lesions and are mostly asymptomatic. Most of the symptoms are due to the irritation of the nerves by the chemical nature of the epidermoid tissue. They usually grow along the cisterns and can involve multiple cisterns at a time. A total excision is always the goal of surgery to prevent recurrence. Surgery is not as straightforward as it seems because the tumor encompasses the nerves and vessels within it. At times, an adherent capsule poses a problem and thus it is wise to leave behind a part of capsule to avoid unnecessary post-operative deficits. Gross total excision of multicompartmental epidermoid tumors is possible through a single approach by working along the cisterns between the nerve rootlets.

**Figure Legend:**

**Figure 1:** Preoperative MRI showing T1 (A), T2 (B), post contrast (C&D), DWI (E) and ADC (F) images

**Figure 2:** A. Exposed pearly white tumor with overlying nerve rootlets (dashed arrows); B. Tumor removed between 5th CN (white arrow) and the 7th-8th nerve complex (black arrow); C. Vertebral arteries (black arrow) and basilar artery (white arrow) have been exposed; D. Cavity after gross total excision; E&F. post-operative image showing complete excision
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