

CURRICULUM VITAE**Gabriel C. Tender, MD**

Current Title: Associate Professor of Clinical Neurosurgery

Business Address: Louisiana State University Health Sciences Center
Department of Neurosurgery
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Birthdate and Birthplace: 08/06/1968, Craiova, Romania

Spouse and Children: Spouse - Deborah; Children – Liliana, Gabriel, Nicholas

Citizenship: US Citizen

Education:
Undergraduate:
1983-1987 “Fratii Buzesti” Mathematics & Physics high-school, Craiova, Romania

Graduate/Medical:
1988-1994 Medical Doctorate (MD)
Craiova Medical School, Craiova, Romania

Residency:
1995-1998 Neurosurgical Residency
Department of Neurosurgery, Institute of Cerebrovascular Diseases, Bucharest, Romania

Internship:
1998-1999 Surgical Internship, University of Tennessee at Chattanooga, Chattanooga, TN

1999-2000 Surgical Internship, Louisiana State University, New Orleans, LA

Residency:
2000 – 2005 Neurosurgical Residency, Department of Neurosurgery, Louisiana State University, New Orleans, LA

Clinical Fellowships:
2003-2004 Fellow, Research in pain inhibition, National Institute of Health, Bethesda, MD

**Military Service:
1987-1988**

Infantry, Focsani, Romania

Certification: Diplomate of the American Board of Neurological Surgery

Licensure:

Louisiana, #14662R, 2002-Present

Academic, Professional, and Research Appointments:

Academic Appointments:

2005-2011

Assistant Professor of Neurosurgery, Louisiana State University Health Sciences Center, School of Medicine, New Orleans, Louisiana

2010-Present

Adjunct Professor, School of Nursing, Louisiana State University Health Sciences Center, New Orleans, Louisiana

2011- Present

Associate Professor of Neurosurgery, Louisiana State University Health Sciences Center, School of Medicine, New Orleans, Louisiana

Professional Appointments:

2005-Present

Staff Neurosurgeon, Touro Hospital
New Orleans, LA

2005 – 2012

Trauma Neurosurgery Liaison, University Hospital
Campus of Medical Center of Louisiana at New Orleans

2005-2015

Staff Neurosurgeon, Interim Public Hospital
New Orleans, LA

2007-Present

Staff Neurosurgeon, West Jefferson Medical Center
New Orleans, LA

2012-Present

Director, Trauma Neurosurgery Program, University Hospital Campus of Medical Center of Louisiana at New Orleans

2014-Present

Director, Minimally Invasive Spine Surgery Program, University Hospital Campus of Medical Center of Louisiana at New Orleans

2015-Present

Staff Neurosurgeon, University Medical Center
New Orleans, LA

Membership in Professional Organizations:

Member, Congress of Neurological Surgeons (CNS)

Fellow, American Association of Neurological Surgeons (AANS)

Member, North American Spine Society (NASS)

Member, Society of Lateral Access Surgeons (SOLAS)

Fellow, International College of Surgeons (ICS)

Fellow, American College of Surgeons (ACS)

Fellow, Louisiana Chapter American College of Surgeons (LA-ACS)

Member, American College of Spine Surgeons (ACSS)

Member, La Sociedad Interamericana de Cirugia de Columna Minimamente Invasiva (SICCOMI)

Member, Louisiana Neurosurgical Society (LANS)

Awards and Honors:

2004 The Singer Award for Outstanding Research for the paper “Neurosurgery for selective inhibition of neuropathic pain”, presented at The Neurosurgical Society of the Virginias Meeting, in White Sulphur Springs, WV

2004 The Crutchfield, Gage and Thomson Award for the Best Paper presented by a resident from a Medical School of the Virginias, for the paper “Neurosurgery for selective inhibition of neuropathic pain”, presented at The Neurosurgical Society of the Virginias Meeting, in White Sulphur Springs, WV

2004 The American Academy of Neurological Surgery Honorable Mention Award for the paper “Selective ablation of vanilloid receptor 1 positive nociceptive neurons for elimination of hyperalgesia and neuropathic pain”, presented at The Annual Meeting of the American Academy of Neurological Surgery, in Dresden, Germany

2004 The Congress of Neurological Surgeons Resident Award for the paper “Selective ablation of vanilloid receptor 1 positive nociceptive neurons for elimination of hyperalgesia and neuropathic pain”, presented at The Congress of Neurological Surgeons 54th Annual Meeting, in San Francisco, CA

2015 The Faculty Teaching Award in recognition of innovative teaching and many contributions to residents and medical student learning, presented by the LSUHSC Department of Neurosurgery.

TEACHING EXPERIENCE AND RESPONSIBILITIES

Course/Clerkship/Residency or Fellowship/CME Directorships

International Visiting Surgeon Fellowship Program, Faculty (May 2009 – June 2014): The physicians in this position are responsible for selecting two neurosurgeons from foreign countries who are invited to observe and learn from US neurosurgery programs. This fellowship program is sponsored by the American Association of Neurological Surgeons, and one of the two fellows in 2009, Dr. Emam Saleh from France, was appointed to the LSU Neurosurgery program.

Goodman Oral Board Preparation Course, Faculty (Nov. 8-10, 2009 and Nov. 7, 2015): The person in this position is responsible for the training and cross-examination of neurosurgeons preparing to take the Oral Board Examination. This course is provided by the American Association of Neurological Surgeons, and takes place bi-annually in Houston, TX.

Student Clerkship Program, Director (2011 – Present): The physician in this position is responsible for coordinating and evaluating the performance of LSU medical students rotating on the neurosurgery service.

Promotions Committee, Member (2011-Present): The physicians in this position are responsible for critically evaluating the promotion applications of LSU academic physicians and making the appropriate recommendations.

Student CSI 101 Program, Audubon House, Faculty (2011 – Present): The physician in this position is responsible for coordinating and evaluating the ethics and disease template training of LSU first year medical students.

Peer Evaluation Committee, Member (2011-Present): The physicians in this position are responsible for evaluating the performance of LSU academic physicians and taking the appropriate actions if the standard of care is not fulfilled.

Director, Trauma Neurosurgery Program, University Hospital Campus of Medical Center of Louisiana at New Orleans (05/12 – Present): The physician in this position coordinates neurotrauma patient care with the other trauma team members and educates students, residents, and other trauma faculty members in the specific neurosurgical needs of trauma patients.

Director, Minimally Invasive Spine Surgery Program, University Hospital Campus of Medical Center of Louisiana at New Orleans (07/14 – Present): The physician in this position is responsible for performing minimally invasive spinal surgery and educating the neurosurgery residents in this field.

Curriculum Development/Implementation

Clinical Competency Committee (CCC) Chairman: This committee develops outcomes based milestones for resident performance with the six domains of clinical competence and provides 360 evaluations of the residents twice a year. The CCC uses data from existing resident's assessment data, faculty observations, and data from milestone

assessments to assess each resident's progress and competency toward achieving the milestones. The CCC makes a consensus decision on the progress of each resident in the program and provide a recommendation to the program director.

Neurosurgery Residency Curriculum: In conjunction with the Chairman / Program Director and the other Faculty, a one year rotating curriculum has been created for the education of the neurosurgery residents. This involves the coordination of a clinical conference, basic science conference, and extra teaching materials.

Resident Mentoring: Dr. Esmiralda Yeremeyeva was guided in her efforts to improve her basic science knowledge and clinical skills.

Creation of Enduring Teaching Materials

Department of Neurosurgery House Officer Manual: This publication is written by key departmental members and is the source reference for the residents on the day to day workings of the department. It includes the departmental policies/procedures, scheduling procedures, leave policies, resident responsibilities, goals and objectives and evaluation procedures.

"Welcome to LSU Neurosurgery" Brochure: This publication was created to serve as a guide for the neurosurgery applicants. It includes the neurosurgery faculty and residents' information, the main hospitals maps and location, the type of pathology treated in our practice, and other information of potential interest for the applicant.

Formal Course Responsibilities

Undergraduate, Graduate, Resident, Fellow, Post-doctoral Instruction:

Comprehensive Pain Management, Lecturer (01/06-07/14): This is a formal course for the Dental residents and Pain fellows given yearly and addressing the neurosurgical aspects of pain treatment.

Spinal surgery cadaver lab, Chairman (07/07-Present): This is a formal didactic and cadaver lab dedicated exclusively to the neurosurgery residents and given 2 times yearly. During this course, the residents are trained in the most advanced spinal surgery techniques, including minimally invasive and complex spinal operations.

Spinal cord injuries, Lecturer (08/08-Present): This is a formal lecture given to the first year medical students and describing the neurosurgical aspects of spinal cord injury patient management.

"Common degenerative spine syndromes" and "Cranial and Spinal Trauma," Lecturer (10/08-10/14): These are two formal lectures to the Physical Medicine and Rehabilitation residents given yearly and describing the most frequent clinical neurosurgical scenarios requiring subsequent rehabilitation.

Neurosurgery for the Operative Room Technician, Lecturer (01/09-Present): These are bi-annual courses for the scrub technicians at LSU.

Family Nurse Practitioner Program, Lecturer (01/09-Present): These are formal courses for the LSU family nurse practitioners addressing the neurosurgical aspects of patient care, including neurotrauma and spinal disorders.

Postoperative management of elective spine patients, Lecturer (07/09-07/14): This is a formal lecture to the Touro nurses given 2 times yearly and describing the specific postoperative needs of spinal surgery patients.

Cranial and Spinal Trauma, Lecturer (07/09-Present): This is a formal lecture to the Neurology residents given yearly and addressing the neurosurgical treatment of head and spinal cord injury patients.

Advanced Health Assessment, Lecturer (10/09-Present): This is a formal lecture to the nursing students given 2 times yearly and emphasizing the neurosurgical aspects of patient care in the clinic setting at a nursing level.

New Orleans Peripheral Nerve Dissection Course – The Kline Legacy, Director (3/14 – Present): This CME course provides a review of the peripheral nerve dissection techniques and addresses senior residents and neurosurgeons in practice.

Departmental/Interdisciplinary Teaching Conferences

Grand Rounds, Moderator (08/05-Present): Approximately 10 times yearly facilitate a weekly discussion at a department level about a variety of topics in the realm of neurosurgery. Otherwise, attend and contribute to this weekly conference.

Mortality & Morbidity Conference, Moderator (08/05-Present): Approximately 15 times yearly moderate this department wide conference, which addresses unfavorable outcomes in neurosurgical patients. Otherwise, attend and contribute to this weekly conference.

Journal Club, Moderator (08/05-Present): Approximately 2 times yearly, run a monthly meeting which reviews recent clinical and scientific literature focusing on a topic in spinal surgery. Usually asked to moderate and choose articles for the neurotrauma and spinal surgery topics. Otherwise, attend and contribute to this monthly conference.

Undergraduate, Medical, or Graduate Students Trained:

Common spine and spinal cord syndromes. Touro Seminars for patients with spine problems, May 17, 2006.

Neurotrauma. LSU General Surgery Grand Rounds for the LSU and Tulane general surgery residents, Jul 7, 2008.

Spinal cord injuries and syndromes. Orthopedic Surgery Grand Rounds for the LSU orthopedic surgery residents, Aug 8, 2008.

Axialif – the minimally invasive L5-S1 fusion. Clinical course for the LSU neurosurgery residents and selected spine surgeons from United States, Dec 12, 2008.

Low back and neck pain – surgical treatment. Touro Seminars for patients with spine problems, Jan 20, 2009.

Lumbar spine – anatomy and principles of treatment. Principles of Spinal Disorders for Operating Room Personnel. Clinical course for the operating room personnel, May 17, 2009.

Arthritis Management for Primary Care – Non-Operative Management of Back Arthritis and Pain. Clinical course for Primary Care physicians, Dec 11, 2010.

Spinal Cord Injuries – LSUSOM-NO CME Activity, LSU School of Medicine Department of Surgery Grand Rounds, 2012 - 2014.

A Neurosurgeon's Perspective of the Operating Room. Clinical course for OR nurses and scrub technicians. LSUHSC, Jun 9, 2014.

RESEARCH AND SCHOLARSHIP

Grants and Contracts:

Funded

The Role of VR1-positive Dorsal Horn Neurons in Central Sensitization: Neuropathic Pain Management.

Renewal of Translational Research Initiative Awards provided by Louisiana State University

01/09-12/10

Co-Principal investigator

\$60,000

The Role of VR1-positive Dorsal Horn Neurons in Central Sensitization: Neuropathic Pain Management.

Translational Research Initiative Awards provided by Louisiana State University

01/07-12/08

Co-Principal investigator

\$67,245

Resiniferatoxin Infusion in the Dorsal Root Ganglia Following Spinal Nerve Ligation: Development of Novel Therapies for Neuropathic Pain,

#010337

Research Award provided by the North American Spine Society

Co-Principal investigator

\$50,000

Biomechanical Evaluation of the Lumbar Spine Following Long Segment Fusion: A Comparison of Multilevel and One Level Posterior Interbody Fusion and Supplemental Pedicle Screw Fixation to Pedicle Screw Fixation Alone.

Grant provided by Synthes Spine, Inc.

01/04-12/04

Co-Principal investigator

\$14,456

Parsectomy: a Biomechanical Study.

Grant provided by Synthes Spine, Inc.

01/04-12/04

Co-Principal investigator

\$19,175

IRB Approved Studies:

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| 2015 | Clinical Outcome After Lumbar Fusion for the Treatment of Chronic Low Back Pain, Site Principal Investigator (LSU IRB 7270) |
| 2015 | CSM-Protect: Efficacy of Riluzole in Patients with Cervical Spondylotic Myelopathy Undergoing Surgical Treatment, Site Co-Investigator (LSU IRB 8877) |
| 2015 | Surgical treatment for symptomatic L5-S1 degenerative disc disease, Site Principal Investigator (LSU IRB 9184) |
| 2015 | Surgical treatment for symptomatic L3-4 and/or L5 degenerative disc disease, Site Principal Investigator (LSU IRB 9186) |
| 2015 | DTRAX: Evaluation of Cervical Fusion with DTRAX Cervical Cage-B with DTRAX Bone Screw in Patients with Cervical Radiculopathy, Site Principal Investigator (LSU IRB 9180) |
| 2016 | RISCIS: Riluzole in Spinal Cord Injury Study, Site Co-Investigator (LSU IRB 9253) |
| 2016 | NuVasive: A Prospective Multicenter Study Evaluating the Clinical and Radiographic Outcomes of Thoracolumbar Spine Surgery When Comprehensive Sagittal Alignment Surgical Planning is Used, Site Principal Investigator (LSU IRB 9276) |

IRB Pending Studies

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| 2016 | Primary pain generator identification by CT-SPECT in patients with degenerative spinal disease. |
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Reviewer:

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| 3/11-Present | Journal of Clinical Medicine and Research |
| 5/11-Present | Journal of Neurosurgical Review |
| 8/12-Present | International Scholarly Research Network Anatomy |
| 10/13-Present | Cancer Control |
| 11/13-Present | Journal of Clinical and Experimental Neurology |

12/13-Present	SciTechnol
9/13-Present	Ochsner Journal
10/13-Present	Journal of Neurosurgical Sciences
8/12-Present	BMC Neurology
2/14-Present	BMC Musculoskeletal
01/15-Present	iMedPub
04/15-Present	Journal of Neurological Surgery Reports
04/15-Present	Journal of Neurosurgical Sciences
05/15-Present	World Neurosurgery
10/15-Present	European Spine Journal
10/15-Present	BMC Infectious Diseases
10/15-Present	Future Medicine

Editor:

12/13-Present	SciTechnol
06/12-Present	ISRN Anatomy
10/13-Present	Journal of Clinical Diagnosis and Research
03/13-Present	JSM Neurosurgery and Spine

Journal Publications (all refereed):

Tender GC, Serban D. Minimally Invasive Transforaminal Lumbar Interbody Fusion: Comparison of Two Techniques. *Chirurgia*, 2014 Nov-Dec;109(6):812-821.

Erraso D, **Tender GC**, Levitt RC, Cui JG. Agrin requires specific proteins to selectively activate gamma-aminobutyric acid neurons for pain suppression. *Exp Neurol*, 2014 Nov;261:646-653.

Tender GC. Caudal vertebral body fractures following lateral interbody fusion in non-osteoporotic patients. *Ochsner J*, 2014 Spring;14(1):123-130.

Trahan J, Morales E, Richter EO, **Tender GC**. The effects of lumbar facet dowels on joint stiffness: a biomechanical study. *Ochsner J*, 2014 Spring;14(1):44-50.

Narayanan M, Serban D, **Tender GC**. Primary cervical spine carcinoid tumor in a woman with arm paresthesias and weakness: a case report. *J Med Case Rep*, 2013 Aug 23;7(1):214 [Epub ahead of print].

Trahan J, Serban D, **Tender GC**. Gunshot wounds to the spine in post-Katrina New Orleans. *Injury*, 2013 Nov;44(11):1601-1606.

Tender GC, Serban D. Genitofemoral nerve protection during the lateral retroperitoneal transpsoas approach. *Neurosurgery*, 2013 May 29 [Epub ahead of print].

Tender GC, Li YY, Cui JG. The role of nerve growth factor in neuropathic pain inhibition produced by resiniferatoxin treatment in the dorsal root ganglia. *Neurosurgery*, 2013 Jul;73(1):158-165.

Tender GC, Serban D. Traumatic spinal fracture treated by vertebroplasty: a case report. *J Med Case Rep*, 2012 Nov;6(1):390.

Haggerty CJ, **Tender GC**. Actinomycotic brain abscess and subdural empyema of odontogenic origin: case report and review of the literature. *J Oral Maxillofac Surg*, 2012 Mar;70(3):e210-213. Epub 2011 Dec 30.

Tender GC, Miller LE, Block JE. Percutaneous pedicle screw reduction and axial presacral lumbar interbody fusion for treatment of lumbosacral spondylolisthesis: a case series. *J Med Case Reports*, 2011 Sep12;5:454.

Tender GC, Kaye AD, Li YY, Cui JG. Neurotrophin-3 and tyrosine-kinase C have modulatory effects on neuropathic pain in the dorsal root ganglia. *Neurosurgery*, 2011 Apr;68(4):1048-1055.

Tender GC, Li YY, Cui JG. Brain-derived neurotrophic factor redistribution in the dorsal root ganglia correlates with neuropathic pain inhibition after resiniferatoxin treatment. *Spine J* 2010 Aug;10(8):715-720. Epub 2010 May7.

Janjua RM, Fernandez J, **Tender GC**, Kline DG. Submuscular transposition of the ulnar nerve for the treatment of cubital tunnel syndrome. *Neurosurgery* 2008 Oct;63(4 Suppl 2):321-324.

Yadla S, Lebude B, **Tender GC**, Sharan AD, Harrop JS, Hilibrand AS, Vaccaro AR, Ratliff JK. Traumatic spondyloptosis of the thoracolumbar spine. *J Neurosurg Spine* 2008 Aug;9(2):145-151.

Tender GC. Lumbar intradural varix masquerading as a nerve tumor. *J Neurosurg Spine* 2008 Jun;8(6):600.

Tender GC, Kline DG. The infraclavicular approach to the brachial plexus. *Neurosurgery* 2008 Mar;62(3 Suppl 1):180-184.

Tender GC, Li YY, Cui JG. Vanilloid receptor 1-positive neurons mediate thermal hyperalgesia and tactile allodynia. *Spine J* 2008 Mar-Apr;8(2):351-358.

Robert EG, Fallon KB, **Tender GC**. Isolated Rosai-Dorfman disease of the sacrum. Case illustration. *J Neurosurg Spine* 2006 May;4(5):425.

Tender GC, Kline DG. Anterior supraclavicular approach to the brachial plexus. *Neurosurgery* 2006 Apr;58(4 Suppl 2):ONS-360-4.

Tender GC, Vortmeyer AO, Oldfield EH. Spinal intradural arteriovenous fistulas acquired in late adulthood: absent spinal venous drainage in pathogenesis and pathophysiology. Report of two cases. *J Neurosurg Spine* 2005 Dec;3(6):488-94.

Tender GC, Kline DG. Posterior subscapular approach to the brachial plexus. *Neurosurgery* 2005 Oct;57(4 Suppl):377-81

Tender GC, Walbridge S, Olah Z, Karai L, Iadarola M, Oldfield EH, Lonser RR. Selective Ablation of Nociceptive Neurons for Elimination of Hyperalgesia and Neurogenic Inflammation. *J Neurosurg* 2005 Mar;102:522-525.

Tender GC, Kutz S, Baratta RV, Voorhies RM. Unilateral Progressive Alterations in the Lumbar Spine: a Biomechanical Study. *J Neurosurg Spine* 2005 Mar;2:279-288.

Tender GC, Kutz S, Baratta RV, Voorhies RM. Unilateral Removal of Pars Interarticularis. *J Neurosurg Spine* 2005 Mar;2:298-302.

Tender GC, Smith RD. Pineal Ganglioglioma in a Young Girl: a Case Report and Review of the Literature. *J LA State Med Soc* 2004 Nov-Dec;156(6):316-318.

Tender GC, Thomas AJ, Thomas N, Kline DG. Gilliatt-Sumner Hand Revisited. A 25-year Experience. *Neurosurgery* 2004 Oct;55(4):883-890.

Tender GC, Awasthi D. Spontaneous Cervical Spinal Epidural Hematoma in a 12-year-old Girl. Case Report and Review of the Literature. *J LA State Med Soc* 2004 Jul-Aug;156(4):196-198.

Tender GC, Butman JA, Oldfield EH, Lonser RR. Thoracic Spinal Nerve Hemangioblastoma. Case Illustration. *J Neurosurg* 2004 Jul;1(1):142.

Tender GC, Awasthi D. Risk Stratification in Mild Head Injury Patients: the Head Injury Predictive Index. *J LA State Med Soc* 2003 Nov/Dec;155(6):338-342.

Tender GC, Kutz S, Awasthi D, Rigby P. Vascularized Temporalis Muscle Flap for Treatment of Otorrhea. Technical Note. *J Neurosurg* 2003 May;98(5):1128-32.

Tender GC, Ratliff J, Awasthi D, Buechter K. Gunshot Wounds to the Neck. *South Med J* 2001 Aug; 94(8):830-832.

Book Chapters:

Thoracic Outlet Syndrome. Janjua RM, **Tender GC**, Tiel RL, Kline DG, chapter in "Peripheral Nerve Surgery: Practical Applications in the Upper Extremity", by David J. Slutsky and Vincent R. Hentz, Churchill Livingstone, April 26, 2006.

The Gilliatt-Sumner Hand. **Tender GC**, Kline DG, chapter in "Thoracic Outlet Syndrome", by Illig K, Freischlag J, Thompson R, Springer, April, 2012.

Sacro-Iliac Joint Arthrodesis and Fixation. Gagnaniello C, **Tender GC**, Day J, Sutterlin C., Nader R.

Surgical Management in Gunshot Wounds to the Spine. Trahan J, **Tender GC**, chapter in Surgical Anatomy and Techniques to the Spine, Second Edition edited by Daniel H. Kim, MD, FACS; Alexander Vaccaro, MD, PhD; Curtis Dickman, MD; Dosang Cho, MD, PhD; SangKook Lee, MD; and Il-sup Kim, MD, Elsevier 2013.

Charcot Joint in the Spine. **Tender GC**, chapter in Clinical Decision Support: Spine Surgery, e-book, Decision Support in Medicine, 2014.

Frontal Sinus Fractures. **Tender GC**, Klugh A, Park MS, Laughlin RM, Haggerty CJ, chapter in Atlas of Operative Oral and Maxillofacial Surgery, edited by Christopher J Haggerty and Robert M Laughlin, Wiley Blackwell 2015.

Videos, Electronic Media, and Multimedia:

“Minimally Invasive Spine Surgery” in New Orleans Living Magazine, Oct, 2015

Neurosurgery consultant for “The Brooke Ellison Story” movie (Original airdate: Oct 25, 2004, Director: Christopher Reeve).

“What Doesn’t Kill You...” – televised interview with a former patient who survived a gunshot wound to the head and subsequently recovered completely and was getting married (airdate: 2011)

Scientific Presentations:

Local:

- 2001** Spontaneous Cervical Spinal Epidural Hematoma in an Adolescent. A Case Report. *27th Annual Meeting of Louisiana Neurosurgical Society*, New Orleans, LA
- 2001** Neurosarcoidosis. A case report. *27th Annual Meeting of Louisiana Neurosurgical Society*, New Orleans, LA
- 2003** Gilliatt-Sumner Hand Revisited. *29th Annual Meeting of Louisiana Neurosurgical Society*, New Orleans, LA
- 2004** A Novel Therapy for Neuropathic Pain. *Alumni Association of LSU Neurosurgeons Meeting*, New Orleans, LA
- 2004** Selective Ablation of Nociceptive Neurons for Elimination of Neuropathic Pain. *Neuroscience Center of Excellence, Louisiana State University Science Center*, New Orleans, LA
- 2004** Selective Ablation of Nociceptive Neurons for Elimination of Neuropathic Pain. Poster presentation at the *16th Annual Retreat of the Neuroscience Center of Excellence, Louisiana State University Science Center*, New Orleans, LA
- 2004** Neuropathic Pain: From Bench to Bedside. Annual Meeting of the American Medical Students Association, New Orleans, LA
- 2004** Spinal Cord Injuries. Critical Care Nurses Meeting, New Orleans, LA
- 2005** Selective Ablation of Nociceptive Neurons for Elimination of Hyperalgesia and Neurogenic Inflammation. *31st Annual Meeting of Louisiana Neurosurgical Society*, New Orleans, LA
- 2009** Neurotrophin-3 has protective effects in a neuropathic pain rat model. CNS Annual Meeting, New Orleans, LA

- 2013** Guns and Drugs in Post-Katrina New Orleans: Gunshot Wounds to the Spine. Oral presentation, Louisiana State Neurosurgical Society, New Orleans, LA
- 2013** Posterior Dynamic Stabilization for the Treatment of Lumbar Stenosis. American Association of Neurological Surgeons annual meeting, New Orleans, LA
- 2014** Odontoid Screw Fixation – Technique and Pitfalls. LANS, New Orleans, LA
- 2016** Minimally Invasive Posterior Subscapular Approach for Recurrent Thoracic Outlet Syndrome: A Technical Note. LANS Annual meeting, New Orleans, LA

National:

- 2002** The Transoral Approach for Craniocervical Fusion with Bone Graft and an Anterior Craniocervical Plate. *13th Annual Meeting of the North American Skull Base Society*, San Diego, CA
- 2002** Modified Middle Fossa Approach for Repair of Cerebrospinal Fluid Fistulas. *13th Annual Meeting of the North American Skull Base Society*, San Diego, CA
- 2003** Parsectomy. A Biomechanical Study. *AANS – Spine and Peripheral Nerves Section Meeting*, Tampa, FL
- 2003** Digital Masters Video Symposium. *Congress of Neurological Surgeons Meeting*, Denver, CO
- 2003** Unilateral Removal of Pars Interarticularis. A Biomechanical Study. *Congress of Neurological Surgeons Meeting*, Denver, CO
- 2003** Parsectomy – A Clinical Study: Preliminary Results. Poster presentation at the *Congress of Neurological Surgeons Meeting*, Denver, CO
- 2003** Gilliatt-Sumner Hand Revisited. *American Academy of Neurological Surgery Meeting*, Williamsburg, VA
- 2004** A New Surgical Approach for Lumbar Radiculopathy. *George Washington University Department of Neurological Surgery*, Washington, DC
- 2004** Neurosurgery for Selective Inhibition of Neuropathic Pain. *Neurosurgical Society of the Virginias Meeting*, White Sulphur Springs, WV

- 2004** Selective Ablation of Nociceptive Neurons for Elimination of Neuropathic Pain. *University of Virginia Department of Neurological Surgery*, Charlottesville, VA
- 2004** Selective Ablation of Nociceptive Neurons for Elimination of Hyperalgesia and Neurogenic Inflammation. *54th Annual Meeting of the Congress of Neurological Surgeons*, San Francisco, CA
- 2005** Selective Ablation of Nociceptive Neurons for Elimination of Hyperalgesia and Neurogenic Inflammation. Oral presentation at the *2005 Southern Neurosurgical Society Annual Meeting*, Key West, FL
- 2006** Vanilloid receptor 1-positive neurons mediate burn-like component of neuropathic pain. 21st Annual Meeting of North America Spine Society, Hawaii
- 2007** Mediation of thermal hyperalgesia and tactile allodynia by vanilloid receptor 1-positive neurons. 37th Annual Meeting of Society for Neuroscience, San Diego
- 2008** Neurotrophic factor alterations induced by resiniferatoxin treatment in the dorsal root ganglia contribute to neuropathic pain suppression. 38th Annual Meeting of Society for Neuroscience, Washington DC
- 2009** Extreme lateral interbody fusion (XLIF). Operative video. XIV World Congress of Neurological Surgery of the World Federation of Neurosurgical Societies. Boston, MA
- 2009** Brain derived neurotrophic factor involves resiniferatoxin-induced neuropathic pain inhibition. XIV World Congress of Neurological Surgery of the World Federation of Neurosurgical Societies. Boston, MA
- 2009** One-year follow-up results in the first 10 Axialif patients of a single surgeon. The Association of Presacral Spine Surgeons, Las Vegas, NV
- 2009** Minimally invasive transforaminal lumbar interbody fusion. 95th Annual Clinical Congress, Chicago, IL
- 2009** Axialif – The minimally invasive L5-S1 interbody fusion. 95th Annual Clinical Congress, Chicago, IL
- 2010** Neuropathic pain mechanisms in the dorsal root ganglia. AANS Annual Meeting, Philadelphia, PA

- 2010** Nerve Growth Factor in the Dorsal Root Ganglia Modulates Neuropathic Pain Inhibition after Resiniferatoxin Treatment. CNS Annual Meeting, San Francisco, CA, Top Ten Abstracts
- 2013** Genitofemoral nerve protection during lateral retroperitoneal approach. Oral presentation, Selby Spine 2013 Annual Meeting, Park City, UT
- 2013** Thoracic trauma. Oral presentation, American College of Spine Surgeons Annual Meeting, Las Vegas, NV
- 2013** Posterior Cervical C1-C2 Fusion. Oral video presentation, American College of Surgeons Annual Meeting, Washington, DC
- 2013** Minimally Invasive Transforaminal Lumbar Interbody Fusion. Oral video presentation, American College of Surgeons Annual Meeting, Washington, DC
- 2014** Overview of BMP Biologics. Selby annual meeting, Park City, UT
- 2014** Minimally Invasive L2, L3, and L4 Corpectomy. Selby annual meeting, Park City, UT
- 2014** Posterior Dynamic Stabilization for the Treatment of Lumbar Stenosis. American Association of Neurological Surgeons annual meeting, San Francisco, CA
- 2014** Thoracic Trauma. American College of Spine Surgeons annual meeting, Las Vegas, NV
- 2014** Minimally Invasive Transforaminal Lumbar Interbody Fusion. Poster presentation, ISASS, Miami, FL
- 2015** Minimally Invasive Transforaminal Lumbar Interbody Fusion (MI TLIF) – Comparison of Two Techniques AANS, Washington, DC
- 2015** Open Versus Minimally Invasive Transforaminal Lumbar Interbody Fusion: A Prospective Randomized Study. American Association of Neurological Surgeons Annual meeting, Washington, DC
- 2015** Prolonged Neurological Complications After Transpoas Direct Lateral Lumbar Interbody Fusion – Myth or Reality? American College of Spine Surgeons annual meeting, Las Vegas, NV
- 2015** Minimally Invasive Lumbar L4 Corpectomy and Fusion for Fracture. Operative Video. American College of Surgeons Clinical Congress, Chicago, IL

**International:
1997**

Posters presented at *The First Black Sea Neurosurgical Congress*, Mamaia, Romania:
Fronto-orbito-zygomatic Approach in Large Tumors of the Anterior Fossa.
Rapid Malignant Degeneration of a Fibrillary Astrocytoma as a Consequence of Secondary Immunodeficiency. Case Report and Review of the Literature.
Cranio-Facial Trauma with Retention of Giant Foreign Bodies. Two Case Reports.
Superior Longitudinal Sinus Thrombosis in Stewart-Morgagni-Morel Syndrome (Hyperostosis Frontalis Interna). Case Report.
Giant Meningiomas with Minimal Symptomatology. Case Series.
Left Temporo-Occipital Arteriovenous Malformation with Minimal Symptoms.
Giant Arachnoid Cyst with Minimal Symptomatology. Case Report.
Giant Intraventricular Meningioma. A Rare Case.

- 2004** Gilliatt-Sumner Hand Revisited. 15th Meeting of the Sunderland Society, Toronto, Ontario
- 2006** Vanilloid receptor 1-positive neurons mediate neuropathic pain. 59th Annual Meeting of Neurosurgical Society, Las Croabas, Puerto Rico
- 2007** Neuropathic pain. Second International Congress on Neuropathic Pain, Berlin, Germany
- 2008** Resiniferatoxin induced alteration of neurotrophic factors in the dorsal root ganglia of allodynic rats. 23rd Annual Meeting of North America Spine Society, Toronto, Canada
- 2008** Minimally invasive interbody fusion. The Fourth Annual International Neurosurgery Conference, web-based
- 2011** Percutaneous reduction and anterior fixation of grade 2 lumbosacral spondylolisthesis – oral presentation, 14th European Congress of Neurosurgery, Rome, Italy
- 2011** Minimally invasive transforaminal lumbar interbody fusion with bilateral decompression – poster presentation, 14th European Congress of Neurosurgery, Rome, Italy
- 2011** L1 corpectomy and fixation via minimal access transthoracic / retroperitoneal approach – video presentation, 14th European Congress of Neurosurgery, Rome, Italy

- 2012** Facet dowel stabilization after lumbar laminectomy. A biomechanical evaluation. Oral presentation, International Society for Minimally Invasive Spine Surgery (ISMIS), Antalya, Turkey,
- 2012** Anatomical comparison of two minimally invasive fusion techniques. Poster presentation, International Society for Minimally Invasive Spine Surgery (ISMIS), Antalya, Turkey
- 2012** Minimally invasive vertebroplasty treatment for lumbar burst fracture. Poster presentation, International Society for Minimally Invasive Spine Surgery (ISMIS), Antalya, Turkey
- 2012** Extreme lateral interbody fusion (XLIF) complications. Oral presentation, International Society for Minimally Invasive Spine Surgery (ISMIS), Antalya, Turkey
- 2012** Neurotrophins in the dorsal root ganglia modulate neuropathic pain after resiniferatoxin treatment. Oral presentation, World Congress of Pain Clinicians, Granada, Spain
- 2012** Minimally invasive lumbar corpectomy and fusion for burst fracture with canal compromise. Oral presentation, Montreal 2012 International Trauma Conference, Montreal, Quebec
- 2012** Gunshot wounds to the spine in post-Katrina New Orleans. Oral presentation, Montreal 2012 International Trauma Conference, Montreal, Quebec
- 2012** Minimally invasive spine surgery: the way of the future. Oral presentation, Romanian Congress of Neurosurgery, Bucharest, Romania
- 2013** Agrin Inhibits Spinal Cord Injury Induced Neuropathic Pain. Poster presentation, 4th International Congress on Neuropathic Pain, Toronto, Canada
- 2013** AxiaLIF: Procedure, Outcomes, Complications, and Future. Oral presentation, Sociedad Mexicana de Cirugia Neurologica XXII Annual Meeting, Ixtapa, Mexico
- 2013** Abordajes Extremos-Laterales en Columna Lumbar. XVII Congreso de la Sociedad de Cirugia Neurologica de Occidente, Guanajuato, Mexico, Dec 4, 2013.
- 2013** Fijacion Axial Lumbosacra. XVII Congreso de la Sociedad de Cirugia Neurologica de Occidente, Guanajuato, Mexico
- 2013** Tratamiento del Síndrome de Vertebra Adyacente con XLIF. XVII Congreso de la Sociedad de Cirugia Neurologica de Occidente, Guanajuato, Mexico

- 2014** Cervical Trauma. Oral presentation, XVIII Congreso de la Sociedad de Cirugia Neurologica de Occidente, Puerto Vallarta, Mexico
- 2014** AxiaLIF: Indications, Technique, and Safety. Oral presentation, XVIII Congreso de la Sociedad de Cirugia Neurologica de Occidente, Puerto Vallarta, Mexico
- 2014** Minimally Invasive Lateral Approaches to the Lumbar Spine. Oral presentation, Plenary Session, XVIII Congreso de la Sociedad de Cirugia Neurologica de Occidente, Puerto Vallarta, Mexico
- 2014** Minimally Invasive Transforaminal Lumbar Interbody Fusion (MI TLIF) – Comparison of Two Techniques. Poster presentation, EANS, Prague, Czech Republic, Oct 12, 2014.
- 2014** Minimally Invasive L4 Corpectomy for Traumatic Fractures. Poster presentation, EANS, Prague, Czech Republic
- 2014** Axial Presacral Lumbosacral Interbody Fusion (AxiaLIF). Poster presentation, EANS, Prague, Czech Republic
- 2015** Open Versus Minimally Invasive Transforaminal Lumbar Interbody Fusion: A Prospective Randomized Study. European Association of Neurological Surgeons Annual meeting, Madrid, Spain
- 2016** Minimally invasive lumbar corpectomy for traumatic fractures. Poster presentation, EANS, Athens, Greece.
- 2016** Minimally invasive versus open transforaminal lumbar interbody fusion: a prospective randomized study. Poster presentation, EANS, Athens, Greece.
- 2016** Minimally Invasive Posterior Subscapular Approach to the Brachial Plexus. Oral presentation, EANS, Athens, Greece.
- 2016** Spinal primary pain generator identification by CT-SPECT. Poster presentation, Eurospine, Berlin, Germany

Invited Faculty to Clinical Courses with National Participation

Less Invasive Technologies Symposium. Chairman, Clinical course and cadaver work-shop, New Orleans, LA, Dec 7, 2007.

Foundations in Neurosurgery. Faculty, Clinical course and cadaver work-shop for craniomaxillofacial surgery, New Orleans, LA, Jul 24, 2008.

Minimally Invasive Interbody Fusion Techniques. Chairman, Clinical course and cadaver work-shop, New Orleans, LA, Oct 24, 2008.

Axialif – The Minimally Invasive L5-S1 Fusion. Chairman, Clinical course and cadaver work-shop, New Orleans, LA, Dec 12, 2008.

Advanced Techniques in Minimally Invasive Spine Surgery. Chairman, Clinical course and cadaver work-shop, New Orleans, LA, Oct 9, 2009.

Goodman Oral Board Preparation Course. Faculty, Course sponsored by The American Association of Neurological Surgeons, Houston, TX, Nov 8-10, 2009.

Advanced Techniques in Minimally Invasive Spine Surgery. Chairman, Clinical course and cadaver work-shop, New Orleans, LA, Sep 17, 2010.

Minimally Invasive Spine Surgery Techniques. Chairman, Clinical course and cadaver work-shop, New Orleans, LA, Nov 18, 2011.

Posterior Dynamic Stabilization for the Treatment of Lumbar Stenosis. Invited faculty, American Association of Neurological Surgeons annual meeting, New Orleans, LA, Apr 29, 2013.

Thoracic Trauma. Invited faculty, American College of Spine Surgeons annual meeting, Las Vegas, NV, Jun 8, 2013.

Odontoid Screw Fixation – Technique and Pitfalls. Invited faculty, LANS clinical course and cadaver work-shop, New Orleans, LA, Jan 17, 2014.

Overview of BMP Biologics. Invited faculty, Selby annual meeting, Park City, UT, Jan 30, 2014.

Minimally Invasive L2, L3, and L4 Corpectomy. Invited faculty, Selby annual meeting, Park City, UT, Jan 30, 2014.

Posterior Dynamic Stabilization for the Treatment of Lumbar Stenosis. Invited faculty, American Association of Neurological Surgeons annual meeting, San Francisco, CA, Apr 8, 2014.

Thoracic Trauma. Invited faculty, American College of Spine Surgeons annual meeting, Las Vegas, NV, Apr 25, 2014.

Goodman Oral Board Preparation Course. Faculty, Course sponsored by The American Association of Neurological Surgeons, Houston, TX, Nov 7, 2015.

Lumbar Lateral Approach. LANS Practical Course for residents. New Orleans, LA, Jan 15, 2016.

Invited Faculty to other Neurosurgery Programs

Visiting Professor at University of Virginia, topic: “Minimally Invasive Spine Surgery”, Feb 9-12 2012.

Invited Faculty to International Clinical Courses

Trends in the Spine Surgical Techniques. Director, Clinical course on minimally invasive thoracic and lumbar fusion techniques, Bucharest, Romania, Jul 17-23, 2010.

Minimally Invasive Transforaminal Lumbar Interbody Fusion Techniques. Director, Clinical course on minimally invasive lumbar interbody fusion techniques, Bucharest, Romania, Oct 25-29, 2010.

Lumbar Fusion – Minimally Invasive Techniques. Director, Clinical course on minimally invasive spine surgery, Bucharest, Romania, Jul 18-22, 2011.

Minimally Invasive Lumbar Fusions. Director, Clinical course on minimally invasive thoracic and lumbar fusion techniques, Bucharest, Romania, Sep 24-28, 2012.

Extreme Lateral Interbody Fusions. Director, Clinical course on minimally invasive thoracic and lumbar fusion techniques, Bucharest, Romania, Aug 25-29, 2014.

Minimally Invasive Approaches for Degenerative Lumbar Pathology. Director, Clinical course on minimally invasive thoracic and lumbar fusion techniques, Bucharest, Romania, Mar 23-27, 2014.

Minimally Invasive Spine Surgery. Moderator, XVIII Congreso de la Sociedad de Cirugia Neurologica de Occidente, Puerto Vallarta, Mexico, Jul 16-19, 2014.

MIS Techniques. Director, CME Clinical course on minimally invasive spine surgery, Bucharest, Romania, Jun 25-26, 2015.

SERVICE ACTIVITIES

University/Institutional Service:

Director, Trauma Neurosurgery Program, University Hospital Campus of Medical Center of Louisiana at New Orleans (05/12–Present): The physician in this position coordinates neurotrauma patient care with the other trauma team members and educates students, residents, and other trauma faculty members in the specific neurosurgical needs of trauma patients.

Director, Minimally Invasive Spine Surgery Program, University Hospital Campus of Medical Center of Louisiana at New Orleans (07/14–Present): The physician in this position is responsible for performing minimally invasive spinal surgery and educating the neurosurgery residents in this field.

Student CSI 101 Program, Audubon House, Faculty (2011–Present): The physician in this position is responsible for coordinating and evaluating the ethics and disease template training of LSU first year medical students.

Student CSI 201 Program, Audubon House, Faculty (2016): The physician in this position is responsible for coordinating and evaluating the ethics and disease template training of LSU second year medical students.

Student Clerkship Program, Coordinator (2011–Present): The physician in this position is responsible for coordinating and evaluating the performance of LSU medical students rotating on the neurosurgery service.

Promotions Committee, Member (2011): The physicians in this position are responsible for critically evaluating the promotion applications of LSU academic physicians and making the appropriate recommendations.

Peer Evaluation Committee, Member (2011): The physicians in this position are responsible for evaluating the performance of LSU academic physicians and taking the appropriate actions if the standard of care is not fulfilled.

Ad Hoc Committee, Chairman (2016): Responsible for critically evaluating the promotion applications of LSU Neu physicians and making the appropriate recommendations.

Clinical Service:

Inpatient Service Activities:

07/05-08/05	Attending Neurosurgeon, Medical Center of Louisiana at New Orleans (MCLNO) - Charity Hospital
10/05-04/06	Attending Neurosurgeon, LSU-Baton Rouge at Earl K. Long, Neurosurgery Service
04/06-04/07	Attending Neurosurgeon, MCLNO-Elmwood Campus, Neurotrauma Service
11/06-07/15	Attending Neurosurgeon, LSU Interim Hospital, Neurosurgery Service
08/05-Present	Attending Neurosurgeon, Touro Hospital
01/07-Present	Attending Neurosurgeon, West Jefferson Medical Center,
01/10-Present	Attending Neurosurgeon, Children’s Hospital
03/10-06/14	Attending Neurosurgeon, Ochsner Baptist Hospital
08/15-Present	Attending Neurosurgeon, University Medical Center

Surgical Experience:

Calendar Year	Major Cases Performed
2015	311
2014	322
2013	205
2012	191
2011	182
2010	210
2009	220
2008	190

Inpatient Clinical Productivity – Fiscal Year 2015 charges – \$2,092,651 (12,948 RVUs)
 Inpatient Clinical Productivity – Fiscal Year 2014 charges – \$1,679,408 (10,680 RVUs)
 Inpatient Clinical Productivity – Fiscal Year 2013 charges – \$1,206,837 (7,098 RVUs)
 Inpatient Clinical Productivity – Fiscal Year 2011 charges – \$1,302,120
 Inpatient Clinical Productivity – Fiscal Year 2010 charges – \$1,259,248
 Inpatient Clinical Productivity – Fiscal Year 2009 charges – \$912,989
 (Touro \$344,191; WJMC \$329,934; University Hospital \$238,864)
 Inpatient Clinical Productivity – Fiscal Year 2008 charges – \$1,030,808
 (Touro \$398,008; WJMC \$427,256; University Hospital \$205,544)

Clinic coverage:

07/05-08/05	Attending Neurosurgeon, Medical Center of Louisiana at New Orleans (MCLNO)- Charity Hospital, every Monday
08/05- Present	Attending Neurosurgeon, Louisiana State University Healthcare Network, Weekly
10/05-04/06	Attending Neurosurgeon, LSU-Baton Rouge at Earl K. Long, Neurosurgery Service, every Monday
04/06-12/08	Attending Neurosurgeon, MCLNO-West Jefferson Medical Center, Neurotrauma Service, every Wednesday
01/09-07/15	Attending Neurosurgeon, LSU Interim Hospital, Neurosurgery Service, every Monday
12/09-05/10	Attending Neurosurgeon, Louisiana State University North Oaks, one week per month
08/15-Present	Attending Neurosurgeon, University Medical Center, Neurosurgery Service, every Monday

Call:

07/05-08/05	Neurosurgery trauma call, Charity Hospital – 4 times/month
07/05-08/05	Neurosurgery general call, Charity Hospital – 4 times/month
04/06-04/07	Neurosurgery trauma call, MCLNO-Elmwood Campus, 10 times every month
04/06-04/07	Neurosurgery general call, MCLNO-Elmwood Campus, 10 times every month
04/07-06/12	Neurosurgery trauma call, LSU Interim Hospital, 5 times every month

04/07-06/12	Neurosurgery general call, LSU Interim Hospital, 5 times every month
07/12-07/15	Neurosurgery trauma and general call, LSU Interim Hospital, 13 times every month
08/05-07/12	Neurosurgery call, Touro Hospital, 15 days every month
08/12-Present	Neurosurgery call, Touro Hospital, 7 days every month
01/07-Present	Neurosurgery call, West Jefferson Medical Center, 3 days every month
08/15-Present	Neurosurgery call, University Medical Center, 11 days per month
08/15-Present	Neurosurgery trauma and general call, University Medical Center, 13 times every month

Administrative Responsibilities:

Departmental:

Faculty for the LSU Neurosurgery Residency (08/05-Present): This position involves being part of the teaching faculty, reviewing the performance of the residents and the faculty, evaluating individual rotations, and making sure the ACGME/RRC requirements are met. Preparing for periodic ACGME site visits is also a part of this position. The RRC conducted a site visit this year and the program has been given full accreditation, without citation, for a five year period. The program has nine neurosurgery residents.

Faculty for Morbidity and Mortality conference, Journal Club, and Grand Rounds for LSU Department of Neurosurgery, (08/05-Present): This position involves assisting the residents with the preparation of the material for the conferences and the interpretation of various clinical data.

LSUHSC:

Neurosurgery Trauma Liaison (08/05-04/12): and Director, Trauma Neurosurgery Program (05/12-present): Provide ongoing improvement in neurosurgical management of trauma patients, participate in the weekly Trauma Peer Review and Trauma Committee meetings and offer input regarding the neurosurgical management of multi-trauma patients.

Director, Minimally Invasive Spine Surgery (07/14-Present): Provide MIS options for spine patients, teach MIS techniques to residents and students, publish and present state-of-the-art techniques in MIS.

Community Service Activities:

Mission trips to Romania – treating the indigent patients in need of spine surgery.