

# Brian E. Snell, MD, FAANS

*Curriculum Vitae*

Neuroscience Specialists, P.C. · 14100 Parkway Commons Drive, Suite 100 · Oklahoma City, OK 73134

(405) 748-3300

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## EDUCATION

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- Butler University, Indianapolis, Indiana** May 1994  
B.S. in Chemistry, *Cum Laude* with Highest Honors in Chemistry
- Indiana University School of Medicine** May 1998  
Doctor of Medicine  
Honors Designation in Surgery
- University of Oklahoma College of Medicine** June 1999 – June 2004  
General Surgery Internship, July 1998–June 1999  
Neurological Surgery Residency, July 1999–June 2004  
Board-Certified in Neurosurgery, ABNS — June 2009
- Medical College of Wisconsin** July 2004 – June 2005  
Complex Spinal Surgery Fellowship

## HONORARY AWARDS

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- Augustus McCravey Award** (overall best paper) — Wienecke RJ, Snell BE, Tompkins P, Stevens FA, Loftus CM. Changes in Energy-Related Metabolites Following Focal Cerebral Ischemia in Spontaneously Hypertensive Rats. 2002 Annual Meeting of the Southern Neurosurgical Society, Savannah, Georgia. 2002
- 1st Place — CNS Annual Meeting Poster Competition** — Snell BE, Tompkins P, Wolfla CE. Ventral Epidural Pressure Response to Spinal Motion in the Presence of Graded Cervical Spinal Canal Compromise Without and With Laminectomy. CNS 51st Annual Meeting, San Diego, California. 2001
- Honors Designation in Surgery** — Clinical and Laboratory Honors Program in Surgery, Indiana University School of Medicine 1997
- Sigma Xi National Honor Society, Associate Member 1994–present

## MEDICAL LICENSURE

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- State of Oklahoma  
State of Texas  
State of Wisconsin

## WORK HISTORY

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<b>Neuroscience Specialists, P.C.</b> 14100 Parkway Commons Drive, Suite 100, Oklahoma City, OK 73134 (405) 748-3300	2008–present
<b>Tyler Neurosurgical Associates, P.A.</b> 700 Olympic Plaza, Suite 850, Tyler, Texas 75701 (903) 595-2441	2005–2008

## PROFESSIONAL ORGANIZATIONS

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North American Spine Society, Active Member	2010–2019; 2022–present
American Board of Neurological Surgery, Diplomate	2009–present
American Association of Neurological Surgeons, Active Member	2000–present
Congress of Neurological Surgeons	1999–2019
International Spine Intervention Society	2010–2013
CyberKnife Society	2006–2010
Rocky Mountain Neurosurgical Society	2006–2010
Texas Association of Neurological Surgeons	2005–2008
Smith County Medical Society	2005–2008
Texas Medical Association	2005–2008
American Medical Association	1994–2008

## SERVICE

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<b>Omnia Medical</b> — Scientific Advisory Board, Member	April 2025–present
<b>Indianapolis Youth Orchestra</b> — Board of Directors, Member	October 2023–present
<b>Oklahoma Spine Hospital</b> — Board of Managers and Medical Executive Committee, Manager/Member	June 2016–January 2026
<b>Oklahoma Spine Hospital</b> — Peer Review Committee, Member	June 2016–present
<b>Oklahoma Spine Hospital</b> — Medical Records Committee, Member	2012–2021
<b>Mercy Hospital, Oklahoma City</b> — Blood Bank Utilization Committee, Member	2012
<b>Sergeant-at-Arms Committee</b> — Congress of Neurological Surgeons 52nd Annual Meeting, Philadelphia	2002
<b>Sergeant-at-Arms Committee</b> — Congress of Neurological Surgeons 51st Annual Meeting, San Diego	2001

## RESEARCH

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Studying the effects of age, gender, and bone mineral density on human thoracic spine biomechanics. Protocol: pure moment and combined loading studies on T6–T11 segments; intradiscal pressure response studies; and vertebral body compression testing.	2004–2005
Employed the MCAO suture model in the rat and cDNA micro-array techniques to examine temporal profiling of gene expression patterns during ischemia.	2001
Studied purine metabolites via microdialysis during ischemia and reperfusion with the MCAO suture model in the rat. Studied the ventral epidural pressure response to spinal motion in the presence of graded cervical spinal canal compromise without and with laminectomy in the cat.	2000
<b>Honors Candidate</b> — Clinical and Laboratory Honors Program in Surgery, Indiana University School of Medicine. Employed intracellular electrophysiological techniques to study the effect of ryanodine at the crayfish neuromuscular junction (Richard N. Friedman, Ph.D.).	1997
<b>Research Assistant</b> — Butler University, Department of Chemistry (Meng-Chih Su, Ph.D.). Described the kinetics of aryl substitutions with lithium organocuprates.	1991–1994

## PUBLICATIONS

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1. Williams J, Berven S, **Snell B**, Sandhu F. Biomechanical Assessment of Stresses, Weight, and Movement Within the Sacroiliac Joint to Better Understand Fixation Device Placement: A Finite Element Analysis Study. *Journal of Vascular and Interventional Radiology* 37(4 Suppl): 108507, 2026. 2026
2. **Snell BE**, Nasr F, Wolfla CE. Single-stage thoracolumbar vertebrectomy with circumferential reconstruction and arthrodesis: technical note. *Neurosurgery* 58(4 Suppl 2):263-268, 2006. 2006
3. **Snell BE**, Maiman DJ. Decompression, Arthrodesis, and Arthroplasty: Decision Making in the Surgical Treatment of Lumbar Disc Disease. *Clinical Neurosurgery* 52:271-278, 2005. 2005
4. **Snell BE**, Loftus CM. Cervical carotid revascularization: indications from a surgical perspective. *Neurosurgery Clinics of North America* 16(2):257-258, 2005. 2005
5. Wolfla CE, **Snell BE**, Honeycutt JH. Cervical ventral epidural pressure response to graded spinal canal compromise and spinal motion. *Spine* 29(14):1524-1529, 2004. 2004
6. **Snell BE**, Loftus CM. Carotid Endarterectomy—Part II: Surgical Technique and Management of Concurrent Vascular Diseases. *Contemporary Neurosurgery* 25(21):1-10, 2003. 2003
7. **Snell BE**, Loftus CM. Carotid Endarterectomy—Part I: Indications and Perioperative Planning. *Contemporary Neurosurgery* 25(20):1-6, 2003. 2003
8. **Snell BE**, Adesina A, Wolfla CE. Unicameral bone cyst of a cervical vertebral body and lateral mass with associated pathologic fracture in a child: case report and review. *Journal of Neurosurgery* 95(2 Suppl):243-245, 2001. 2001
9. **Snell BE**, Tompkins P, Stevens FA, Loftus CM. Continuous purine metabolite analysis by intracerebral microdialysis in spontaneously hypertensive rats with focal cerebral ischemia. *Journal of Cerebral Blood Flow and Metabolism* 21(Suppl 1):S471, 2001. 2001
10. Francel PC, **Snell BE**. Age and outcome of traumatic brain injury in infants and children. *Brain Injury Source* 3(2):14-16, 1999. 1999
11. Francel PC, **Snell BE**. Aging and traumatic brain injury. *Brain Injury Source* 3(1):8-11, 1999. 1999

12. Spanenberg WJ, **Snell BE**, Su M-C. Kinetic study of aryl substitution with organocuprates. 1993  
*Microchemical Journal* 47:79-89, 1993.

## BOOK CHAPTERS

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1. **Snell BE**, Honeycutt JH, Loftus CM. Surgical Management of Extracranial Carotid Artery Disease. In: Schmidek HH, Roberts DW, eds. *Schmidek & Sweet's Operative Neurosurgical Techniques: Indications, Methods, and Results*, 5th ed. New York: Saunders, Chapter 72.
2. **Snell BE**, Wienecke RJ, Loftus CM. Surgical Management Options to Prevent Ischemic Stroke. In: Adams HP, ed. *Handbook of Cerebrovascular Diseases*. New York: Marcel Dekker, Chapter 16.
3. **Snell BE**, Wienecke RJ, Loftus CM. Surgical Management of Extracranial Vascular Occlusive Disease. In: *Controversies in Neurological Surgery: Neurovascular Diseases*. New York: Thieme.
4. **Snell BE**, Loftus CM. Surgical Treatment of Distal Anterior Cerebral Artery Aneurysms. In: Batjer HH, Loftus CM, eds. *Textbook of Neurological Surgery*. New York: Lippincott Williams & Wilkins, 2003, pp 2397-2402.

## ORAL PRESENTATIONS

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1. **Snell BE**. ALIF with Omnia TiBrid SA. Omnia Medical Scientific Advisory Board Annual Meeting, Chicago, IL. June 2025
2. **Snell BE**. Indications for Anterior Cervicothoracic Corpectomy. New Perspectives on Spine Surgery (Aesculap Academy), Miami, Florida. November 2015
3. **Snell BE**. Non-surgical Therapies for Disorders of the Spine. Dallas Work Comp Seminar, Dallas, Texas. June 2011
4. **Snell BE**. Non-surgical Therapies for Disorders of the Spine. Oklahoma City Work Comp Seminar, Oklahoma City, Oklahoma. May 2011
5. **Snell BE**. Treatment of Lumbar Spine Disorders. Neuroscience Specialists Work Comp Seminar, Oklahoma City, Oklahoma. April 2011
6. **Snell BE**. Non-surgical Therapies for Disorders of the Spine. Tulsa Work Comp Seminar, Tulsa, Oklahoma. April 2011
7. **Snell BE**. Traumatic Brain Injury: Evaluation & Management. CMSA-OK Annual Meeting, Oklahoma City, Oklahoma. October 2010
8. **Snell BE**. Surgical Treatment of the Cervical Spine. Worker's Comp Symposium, Oklahoma City, Oklahoma. November 2008
9. **Snell BE**. Back to Work. CMSA-OK Annual Conference, Oklahoma City, Oklahoma. October 2008
10. **Snell BE**. Intramedullary Spinal Cord Tumors. East Texas Medical Center Neurological Institute Neuro Focus 2008, Tyler, Texas. February 2008
11. **Snell BE**, Nasr FF, Wolfla CE. Single-Stage Thoracolumbar Vertebrectomy with Circumferential Reconstruction and Arthrodesis. Texas Association of Neurological Surgeons Annual Meeting, Dallas, Texas. April 2007
12. **Snell BE**. Surgical Treatment of Lumbar Disc Disease. Smith County Medical Society Retired Physician's Luncheon, Tyler, Texas. March 2006

13. **Snell BE**, White BT. Analysis and Outcome of Posterior Lumbar Interbody Fusion Using Reabsorbable Interbody Spacers. AANS/CNS Section on Disorders of the Spine and Peripheral Nerves Annual Meeting, Tampa, Florida. March 2003
14. **Snell BE**, Thomas RD, Puckett TA, Wolfla CE. Early Surgical Treatment of Patients With Upper- and Mid-Thoracic Spine Fractures Without and With Neurological Deficit. CNS 52nd Annual Meeting, Philadelphia, Pennsylvania. September 2002
15. **Snell BE**, Francel PC. Pediatric Head Injuries for the Primary Care Physician. 5th Annual Primary Care Update 2002, Oklahoma City, Oklahoma. May 2002
16. Wienecke RW, **Snell BE**, Tompkins P, Stevens FA, Loftus CM. Changes in Energy-Related Metabolites Following Focal Cerebral Ischemia in Spontaneously Hypertensive Rats. 2002 Annual Meeting of the Southern Neurosurgical Society, Savannah, Georgia. March 2002
17. **Snell BE**, Loftus CM. Neuroprotection. Review and Update in Neuroscience for Neurosurgeons (RUNN course), Marine Biological Laboratory, Woods Hole, Massachusetts. October 2001
18. **Snell BE**, Puckett TA, Wolfla CE. Analysis and Outcome of Ten Operated Upper- and Mid-Thoracic Spine Fractures Without and With Neurological Deficit. Rocky Mountain Neurosurgical Society 36th Annual Meeting, Steamboat Springs, Colorado. June 2001
19. **Snell BE**, Tompkins P, Wolfla CE. Graded Cervical Spinal Canal Compromise and Resultant Ventral Epidural Pressure Response to Spinal Motion Without and With Laminectomy. Department of Surgery Resident Research Forum, Oklahoma City, Oklahoma. May 2001
20. **Snell BE**, Su M-C. Aryl Substitutions with Lithium Dimethylcuprate: A Kinetic Study. Great Lakes-Central Joint Regional ACS Meeting, Ann Arbor, Michigan. June 1994
21. **Snell BE**, Su M-C. Aryl Substitutions with Lithium Organocuprates: A Kinetic Study. Chemistry Seminar Series, Butler University, Indianapolis, Indiana. March 1994
22. **Snell BE**, Su M-C. Kinetic Study of Aromatic-Carbon Direct Coupling with Lithium Dimethylcuprate. Third Annual Argonne Symposium for Undergraduates in Science, Engineering, and Mathematics, Argonne, Illinois. November 1992
23. **Snell BE**, Su M-C. Mechanism of Simple Aryl Substitutions Using Organocuprates. Indiana Academy of Science Conference, Muncie, Indiana. November 1992
24. **Snell BE**, Su M-C. Kinetic Study of Aromatic-Carbon Direct Coupling with Lithium Dimethylcuprate. 24th American Chemical Society Central Regional Meeting, Cincinnati, Ohio. May 1992
25. **Snell BE**, Su M-C. Kinetic Study of Aromatic-Carbon Direct Coupling with Lithium Dimethylcuprate. Fourth Undergraduate Research Conference, Butler University, Indianapolis, Indiana. April 1992
26. **Snell BE**, Su M-C. Mechanistic Study of Aryl Substitution with Organocopper Reagents. Second Great Lakes College Chemistry Conference, East Lansing, Michigan. March 1992

## POSTERS

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1. **Snell BE**, Wolfla CE. Analysis and Outcome of Early Surgical Treatment in Patients with Upper and Mid-thoracic Spine Fractures without and with Neurological Deficit. Poster 298. CNS 54th Annual Meeting, San Francisco, California. October 2004
2. **Snell BE**, White BT. Posterior Lumbar Interbody Fusion Using Reabsorbable Interbody Spacers. Poster 1226. 2004 AANS Annual Meeting, Orlando, Florida. May 2004

3. Tompkins P, Wienecke RJ, **Snell B**, Stevens FA, Loftus CM. Analysis of Lactate and Pyruvate Levels by Intracerebral Microdialysis in Spontaneously Hypertensive Rats in Response to Focal Cerebral Ischemia. XXI International Symposium on Cerebral Blood Flow, Metabolism, and Function, Calgary, Alberta. June 2003
4. **Snell BE**, Tompkins P, Stevens FA, Loftus CM. Intracerebral Microdialysis Analysis of Neurochemical Pathway Activation Time Course in Spontaneously Hypertensive Rats with Focal Cerebral Ischemia. 2002 AANS Annual Meeting, Chicago, Illinois. April 2002
5. **Snell BE**, Tompkins P, Stevens FA, Lerner MR, Brackett DJ, Loftus CM. Analysis of Gene Expression Modulation with Focal Cerebral Ischemia in Spontaneously Hypertensive Rats Utilizing a cDNA Expression Array. 2002 AANS Annual Meeting, Chicago, Illinois. April 2002
6. **Snell BE**, Tompkins P, Stevens FA, Loftus CM. Time Course of Neurochemical Pathway Activation in Spontaneously Hypertensive Rats with Focal Cerebral Ischemia by Intracerebral Microdialysis. Fifth Joint Meeting of the AANS/CNS Section on Cerebrovascular Surgery and ASITN, Addison (Dallas), Texas. February 2002
7. **Snell BE**, Tompkins P, Stevens FA, Lerner MR, Brackett DJ, Loftus CM. Analysis of Gene Expression Employing a cDNA Expression Array in the Rat Model of Reversible, Focal Cerebral Ischemia. Fifth Joint Meeting of the AANS/CNS Section on Cerebrovascular Surgery and ASITN, Addison (Dallas), Texas. February 2002
8. **Snell BE**, Tompkins P, Stevens FA, Loftus CM. Continuous Purine Metabolite Analysis by Intracerebral Microdialysis in Spontaneously Hypertensive Rats with Focal Cerebral Ischemia. Poster 197. CNS 51st Annual Meeting, San Diego, California. September 2001
9. **Snell BE**, Tompkins P, Wolfla CE. Ventral Epidural Pressure Response to Spinal Motion in the Presence of Graded Cervical Spinal Canal Compromise Without and With Laminectomy. Poster 488. CNS 51st Annual Meeting, San Diego, California. September 2001
10. **Snell BE**, Loftus CM. Surgical Technique of Carotid Endarterectomy with Special Emphasis on Primary Hemashield Patch Angioplasty. Poster D700. 12th World Congress of Neurosurgery, Sydney, Australia. September 2001

## ARTICLES

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1. **Snell BE**, Pritz MB, Smith RR. Pitfalls in the Diagnosis of Lesions of the Jugular Bulb. X802 Biomedical Research Paper, 1995. 1995
2. **Snell BE**. Aryl Substitutions with Lithium Organocuprates: A Kinetic Study. Unpublished thesis presented to the Department of Chemistry and the Committee on Honors, Butler University, 1994. 1994

## NON-ACADEMIC HONORS & ACHIEVEMENTS

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- Jordan College of Fine Arts Violin Performance Award, Butler University (quarter tuition scholarship) 1990–1994
- Indiana State School Music Association State Championship Orchestra member, Carmel High School Orchestra 1988
- Indiana State School Music Association Solo & Ensemble Contest participant — 18 first place and 3 second place performances 1985–1990