

CURRICULUM VITAE
BRIAN E. SNELL, MD, FAANS

EDUCATION

Butler University, Indianapolis, Indiana

B.S. in Chemistry

Cum Laude with Highest Honors in Chemistry

Degree conferred: May 1994

Indiana University School of Medicine (IUSOM)

M.D.

Honors Designation in Surgery

Degree conferred: May 1998

University of Oklahoma College of Medicine

General Surgery Internship

July 1998-June 1999

Neurological Surgery Residency

July 1999-June 2004

ABNS written exam passed 3/2002

Board-Certified in Neurosurgery by the American Board of Neurological Surgery (ABNS) as of June 2009

Medical College of Wisconsin

Spinal Surgery Fellowship

July 2004-June 2005

HONORARY AWARDS

- | | |
|--------------|---|
| 2002 | 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, March 6-9, 2002. |
| 2001 | 1st place in 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. Poster 488. Congress of Neurological Surgeons 51 st Annual Meeting, San Diego, California, September 29-October 4, 2001. |
| 1997 | Honors Designation in Surgery. Clinical and Laboratory Honors Program in Surgery, Indiana University School of Medicine |
| 1994-present | Sigma Xi National Honor Society, Associate Member (inactive status) |

MEDICAL LICENSURE

State of Oklahoma

State of Texas

State of Wisconsin

WORK HISTORY

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

PROFESSIONAL ORGANIZATIONS

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

SERVICE

- 10/2023-present **Indianapolis Youth Orchestra**
Board of Directors, Member
- 6/2016-present **Oklahoma Spine Hospital**
Board of Managers and Medical Executive Committee, Manager/Member
- 6/2016-present **Oklahoma Spine Hospital**
Peer Review Committee, Member
- 2002 **Sergeant-at-Arms Committee**
Congress of Neurological Surgeons 52nd Annual Meeting, Philadelphia, Pennsylvania, September 21-26, 2002
- 2001 **Sergeant-at-Arms Committee**
Congress of Neurological Surgeons 51st Annual Meeting, San Diego, California, September 29-October 4, 2001

RESEARCH

- 2004-2005 Studying the effects of age, gender, and bone mineral density on human thoracic spine biomechanics. Protocol consists of: 1) pure moment and combined loading studies on T6-T11 segments employing motion analysis techniques, 2) segmental studies evaluating intradiscal pressure responses to loading, and 3) vertebral body compression testing.
- 2001 Employed the MCAO suture model in the rat and cDNA micro-array techniques to examine temporal profiling of gene expression patterns during ischemia.

- 2000 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.
- 1997 **Honors Candidate**
Clinical and Laboratory Honors Program in Surgery
Richard N. Friedman, Ph.D., Neurological Surgery Department. Employed intracellular electrophysiological techniques to study the effect of ryanodine at the crayfish neuromuscular junction.
- 1991-1994 **Research Assistant**
Meng-Chih Su, Ph.D., Butler University Department of Chemistry. Described the kinetics of aryl substitutions with lithium organocuprates.

PUBLICATIONS

11. 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.
10. Snell BE, Maiman DJ. Decompression, Arthrodesis, and Arthroplasty: Decision Making in the Surgical Treatment of Lumbar Disc Disease. **Clin Neurosurg** **52**:271-278, 2005.
9. Snell BE, Loftus CM. Cervical carotid revascularization: indications from a surgical perspective. **Neurosurg Clin N Am** **16(2)**:257-258, 2005.
8. 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.
7. Snell BE, Loftus CM. Carotid Endarterectomy—Part II: Surgical Technique and Management of Concurrent Vascular Diseases. **Contemporary Neurosurgery** **25(21)**:1-10, 2003.
6. Snell BE, Loftus CM. Carotid Endarterectomy—Part I: Indications and Perioperative Planning. **Contemporary Neurosurgery** **25(20)**:1-6, 2003.
5. 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 of the literature. **J Neurosurg** **95(2 Suppl)**:243-245, 2001.
4. Snell BE, Tompkins P, Stevens FA, Loftus CM. Continuous purine metabolite analysis by intracerebral microdialysis in spontaneously hypertensive rats with focal cerebral ischemia. **J Cereb Blood Flow Metab** **21(Suppl 1)**:S471, 2001.
3. Francel PC, Snell BE. Age and outcome of traumatic brain injury in infants and children. **Brain Injury Source** **3(2)**:14-16, 1999.
2. Francel PC, Snell BE. Aging and traumatic brain injury. **Brain Injury Source** **3(1)**:8-11, 1999.
1. Spanenberg WJ, Snell BE, Su M-C. Kinetic study of aryl substitution with organocuprates. **Microchemical J** **47**:79-89, 1993.

BOOK CHAPTERS

4. 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 edition. New York: Saunders, Chapter 72.
3. 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.
2. Snell BE, Wienecke RJ, Loftus CM. Surgical Management of Extracranial Vascular Occlusive Disease. In: *Controversies in Neurological Surgery: Neurovascular Diseases*. New York: Thieme.
1. 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

25. Snell BE. Indications for Anterior Cervicothoracic Corpectomy. New Perspectives on Spine Surgery (Aesculap Academy), Miami, Florida, November 6, 2015.
24. Snell BE. Non-surgical Therapies for Disorders of the Spine. Dallas Work Comp Seminar, Dallas, Texas, June 10, 2011.
23. Snell BE. Non-surgical Therapies for Disorders of the Spine. Oklahoma City Work Comp Seminar, Oklahoma City, Oklahoma, May 15, 2011.
22. Snell BE. Treatment of Lumbar Spine Disorders. Neuroscience Specialists Work Comp Seminar, Oklahoma City, Oklahoma, April, 29, 2011.
21. Snell BE. Non-surgical Therapies for Disorders of the Spine. Tulsa Work Comp Seminar, Tulsa, Oklahoma, April 15, 2011.
20. Snell BE. Traumatic Brain Injury: Evaluation & Management. CMSA-OK Annual Meeting, Oklahoma City, Oklahoma, October 7, 2010.
19. Snell BE. Surgical Treatment of the Cervical Spine. Worker's Comp Symposium, Oklahoma City, Oklahoma, November 14, 2008.
18. Snell BE. Back to Work. CMSA-OK Annual Conference, Oklahoma City, Oklahoma, October 30, 2008.
17. Snell BE. Intramedullary Spinal Cord Tumors. East Texas Medical Center Neurological Institute Neuro Focus 2008, Tyler, Texas, February 29, 2008.
16. 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 27, 2007.
15. Snell BE. Surgical Treatment of Lumbar Disc Disease. Smith County Medical Society Retired Physician's Luncheon, Tyler, Texas, March 13, 2006.
14. 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 5-8, 2003. (Oral poster)
13. 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. Congress of Neurological Surgeons 52nd Annual Meeting, Philadelphia, Pennsylvania, September 21-26, 2002. (Oral poster)
12. Snell BE, Francel PC. Pediatric Head Injuries for the Primary Care Physician. 5th Annual Primary Care Update 2002, Oklahoma City, Oklahoma, May 10, 2002.
11. 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 6-9, 2002.
10. Snell BE, Loftus CM. Neuroprotection. Review and Update in Neuroscience for Neurosurgeons (RUNN course), Marine Biological Laboratory, Woods Hole, Massachusetts, October 20-27, 2001.
9. 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 Thirty-Sixth Annual Meeting, Steamboat Springs, Colorado, June 17-21, 2001.
8. 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 25, 2001.
7. Snell BE, Su M-C. Aryl Substitutions with Lithium Dimethylcuprate: A Kinetic Study. Paper 185. Great Lakes-Central Joint Regional ACS Meeting, Ann Arbor, June 1-3, 1994.
6. Snell BE, Su M-C. Aryl Substitutions with Lithium Organocuprates: A Kinetic Study. Chemistry Seminar Series, Butler University, Indianapolis, Indiana, March 24, 1994.

5. 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 7, 1992.
4. Snell BE, Su M-C. Mechanism of Simple Aryl Substitutions Using Organocuprates. Indiana Academy of Science Conference, Muncie, Indiana, November 6, 1992.
3. Snell BE, Su M-C. Kinetic Study of Aromatic-Carbon Direct Coupling with Lithium Dimethylcuprate. Paper 448. 24th American Chemical Society Central Regional Meeting, Cincinnati, Ohio, May 26-29, 1992.
2. Snell BE, Su M-C. Kinetic Study of Aromatic-Carbon Direct Coupling with Lithium Dimethylcuprate. Fourth Undergraduate Research Conference, Butler University, Indianapolis, Indiana, April 10, 1992.
1. Snell BE, Su M-C. Mechanistic Study of Aryl Substitution with Organocopper Reagents. Page 57. Second Great Lakes College Chemistry Conference, East Lansing, Michigan, March 21, 1992.

POSTERS

10. 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. Congress of Neurological Surgeons 54th Annual Meeting, San Francisco, California, October 16-21, 2004.
9. Snell BE, White BT. Posterior Lumbar Interbody Fusion Using Reabsorbable Interbody Spacers. Poster 1226. 2004 Annual Meeting of the American Association of Neurological Surgeons, Orlando, Florida, May 1-6, 2004.
8. 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 (Brain 03), Calgary, Alberta, June 30, 2003.
7. 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 Annual Meeting of the American Association of Neurological Surgeons, Chicago, Illinois, April 6-11, 2002.
6. 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 Annual Meeting of the American Association of Neurological Surgeons, Chicago, Illinois, April 6-11, 2002.
5. 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. The Fifth Joint Meeting of the AANS/CNS Section on Cerebrovascular Surgery and the American Society of Interventional and Therapeutic Neuroradiology, Addison (Dallas), Texas, February 3-6, 2002.
4. 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. The Fifth Joint Meeting of the AANS/CNS Section on Cerebrovascular Surgery and the American Society of Interventional and Therapeutic Neuroradiology, Addison (Dallas), Texas, February 3-6, 2002.
3. 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. Congress of Neurological Surgeons 51st Annual Meeting, San Diego, California, September 29-October 4, 2001.
2. 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. Congress of Neurological Surgeons 51st Annual Meeting, San Diego, California, September 29-October 4, 2001.
1. 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 16-20, 2001.

ARTICLES

2. Snell BE, Pritz MB, Smith RR. Pitfalls in the Diagnosis of Lesions of the Jugular Bulb. X802 Biomedical Research Paper, 1995.
1. 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.

NON-ACADEMIC HONORS & ACHIEVEMENTS

- 1990-1994 **Jordan College of Fine Arts Violin Performance Award**, Butler University. Quarter tuition scholarship.
- 1988 **Indiana State School Music Association State Championship Orchestra member**, Carmel High School Orchestra.
- 1985-1990 **Indiana State School Music Association Solo & Ensemble Contest participant**. Eighteen first place and three second place performances.