# Scott L. Zuckerman, M.D., M.P.H.

1500 21st Avenue South 4340 Village at Vanderbilt Nashville, TN 37212 Phone (914) 980-3339 scott.zuckerman@yumc.org

#### **PROFESSIONAL**

08/2021-Present Assistant Professor of Neurological Surgery and Orthopaedic Surgery

Department of Neurological Surgery Vanderbilt University Medical Center

08/2020–07/2021 Assistant Attending Physician

Adult and Pediatric Comprehensive Spine Surgery Fellowship Department of Orthopedic Surgery and Neurological Surgery

Columbia University Medical Center New York Presbyterian Hospital

#### **EDUCATION**

Complex Spine Fellowship

08/01/2020–Pres. Adult and Pediatric Comprehensive Spine Surgery Fellowship

01/01-07/31/2020 Research Assistant, Clinical Spine Research

Department of Orthopedic Surgery

Columbia University Medical Center, New York, NY (Lawrence G. Lenke)

International Neurosurgery Fellowship

07/01-12/31/2019 Global Neurosurgery Fellow, Muhimbili Orthopaedic Inst., Dar Es Salaam, Tanzania

Weill Cornell Medical Center, New York, NY (Roger Härtl)

Residency

07/01/2012-06/30/2019 Department of Neurosurgery, Vanderbilt University Medical Center, Nashville, TN

Enfolded Residency Training

06/01-08/31/2016 Spinal Oncology, M.D. Anderson Cancer Center, *Houston, TX* (Laurence D. Rhines) 07/01-12/31/2015 Complex Spine, Vanderbilt University Medical Center, *Nashville, TN* (Joseph S. Cheng)

10/01-12/31/2016 Peripheral Nerve, Mayo Clinic, Rochester, MN (Robert J. Spinner)

Graduate

06/01/2015-08/31-2017 M.P.H., Epidemiology, Harvard University Chan School of Public Health, Boston MA

Medical School

08/01/2008-06/30/2012 M.D., Vanderbilt University School of Medicine, Nashville, TN

**Undergraduate** 

08/01/2004-06/30/2008 B.S., Cornell University, Magna Cum Laude, Ithaca, NY

# HONORS & AWARDS

Reside	ncy/Fellowship
2021	Top Deformity Abstract, AANS/CNS Spine Section, San Diego, CA
2020	Alfred Award for Military Distinction, Officer Training Command, U.S. Navy, Newport, RI
2018	Top Deformity Abstract, AANS/CNS Spine Section, Las Vegas, NV
2018	Lieutenant Commander, United States Navy Reserves, Nashville, TN
2018	ThinkFirst Injury Prevention Abstract Award, American Association Neurologic Surgeons, New Orleans, LA
2017	Best Basic Science Presentation, Resident Award, Tennessee Neurosurgical Society, Nashville, TN
2017	Charles Kuntz Scholar Award, AANS Spine Section, Las Vegas, NV
2016	ThinkFirst Injury Prevention Abstract Award, CNS, San Diego, CA
2016	Alpha Omega Alpha Medical Honor Society, Vanderbilt Chapter, Nashville, TN
2016	August McCravey Award, 67th Southern Neurosurgical Annual Meeting, San Antonio, TX
2015	Depuy Synthes Award Research on Brain and Craniofacial Injury, CNS, New Orleans, LA
2015	Resident Teaching Award, Vanderbilt Neurosurgery Residency, Nashville, TN
2013	Elliot Newman Prize, 1st place Oral Presentation, Vanderbilt Research Forum, Nashville, TN
2013	Mayfield Clinical Science Award, AANS/CNS Spine Section Meeting, Phoenix, AZ
2013	August McCravey Award, 64 <sup>rd</sup> Southern Neurosurgical Annual Meeting, Sarasota, FL
2012	CNS Ronald Tasker Award For Pain Research, CNS National Meeting, Chicago, IL
2012	August McCravey Award, 63 <sup>rd</sup> Southern Neurosurgical Annual Meeting, Amelia Island, FL
Modia	al School
2012	Vanderbilt University School of Medicine Award of Distinction, <i>Nashville, TN</i>
2012	
2012	Vanderbilt University School of Medicine Class President 2008-2012, Nashville, TN Vanderbilt University School of Medicine Graduation Speaker, Nashville, TN
2012	
2012	VUSM Annual Student Dean's Lectureship Award, Nashville, TN
2012	VUSM Infectious Diseases Student Award for Excellence, <i>Nashville, TN</i> Vanderbilt University Research Forum, 2 <sup>nd</sup> Place Clinical Oral Presentation, <i>Nashville, TN</i>
2011	Segal Americorps Education Award, Nashville, TN
2010	Segai Americorps Education Award, Nashvue, 11V
Under	<u>graduate</u>
2008	Cornell University SUNY Chancellor's Award Nomination, Ithaca, NY
2008	Richard A. Church Senior Service Award Honorable Mention, <i>Ithaca, NY</i>
2008	Magna Cum Laude, Latin Honors, <i>Ithaca, NY</i>
2007	Ann S. and Robert R. Morley Student Research Award, Ithaca, NY
2007	Mortar Board Senior Honor Society, Ithaca, NY
2007	Order of Omega Greek Honor Society, Ithaca, NY
2006	Ho-Nun-De-Kah Academic Honor Society, Ithaca, NY
2006	Golden Key National Honor Society, Ithaca, NY

# High School

- 2004 Westchester County Scholar Athlete Award, Varsity Basketball, Scarsdale, NY
- 2004 Casey Ferrone Leadership Award, Varsity Basketball, Scarsdale, NY
- 2003 Signifer National Honor Society, Scarsdale, NY

#### RESEARCH EXPERIENCE

## 2011 – Pres. Vanderbilt Sports Concussion Center (V-SCoRe), Co-Director for Research

Mentors: Allen K. Sills, MD and Gary S. Solomon, PhD

The Vanderbilt Sports Concussion Center is the only dedicated, multidisciplinary sports concussion clinic in Tennessee. Through collaboration among orthopedists, neuropsychologists, and neurosurgeons, the center conducts research in multiple areas regarding concussion safety and improving head injury research.

### 2011 - Pres. Vanderbilt Spinal Column Surgical Quality and Outcomes Research

Mentors: Clinton J. Devin, MD; Matthew J. McGirt, MD

Research goals include identifying factors associated with in-patient morbidity and cost, evaluating the comparative effectiveness and cost-utility of various surgical treatments, and determining medical resource utilization, occupational and societal costs, and direct medical costs of various surgical and non-surgical spine treatments

## 2009 – 2014 **Quality Improvement Research**

Mentors: J Mocco, MD MS; Daniel J. France, PhD, Tom R. Talbot, MD MPH Under the guidance of several mentors, conducted projects that addressed quality improvements in the operating room, including the effect of an electronic whiteboard on time-out compliance, how observer bias affects time-out compliance, risk factors for flash sterilization, and how the timeout is used in neurosurgery.

## 2008 – 2011 Orthopaedic Trauma Research

Mentor: William T. Obremskey, MD MPH

Conducted research projects in the areas of scapula fractures, traumatic knee dislocations, and hyperglycemia as a risk factor for surgical-site infection in critically-ill orthopaedic trauma patients.

### 2008 – 2010 Incarceration Community Research

*Mentor*: Jeff Blum, M. Div; Davidson County Sheriff's Department Interviewed incarcerated fathers to identify how jail programming can improve the father-child relationship and rehabilitate inmates.

### **GRANT FUNDING & REVIEW**

# 2016-2017 Vanderbilt Institute for Clinical and Translational Research Grant (\$5,000)

Principal Investigators: Gary S. Solomon, Scott L. Zuckerman

Project: Genetic Predictors of Post-Concussion Syndrome: A Genome Wide Association Study

### 2017 Centers for Disease Control and Prevention (CDC) Sports Concussion Grant Reviewer

*Title:* Development and evaluation of sports concussion prevention strategies (FOA: CE17-002) Reviewed and critiqued \$3.3 million grant for prevention and treatment of sport-related concussion among youth athletes.

# INVITED LECTURES & INTERVIEWS

- 1. **Zuckerman SL.** Sports and Brain Surgery: The Growing Epidemic of Sport-Related Concussion. *Belmont University: Brain Awareness Week.* March 19th, 2015. Belmont University.
- 2. **What Are the Consequences of Subconcussion?** 35<sup>th</sup> Annual National Neurotrauma Symposium; AANS/CNS Joint Section on Neurotrauma and Critical Care. July 9<sup>th</sup>, 2017. Snowbird, Utah.
- 3. **On-field concussion assessment.** Neurosurgical Care of Athletes Concussion, Spine, Peripheral Nerve and Return to Play. AANS Annual Meeting. April 29th, 2018. New Orleans, LA.
- 4. **The Sports Neurosurgeon and Pre-Participation Screening**. Neurosurgical Care of Athletes Concussion, Spine, Peripheral Nerve and Return to Play. AANS Annual Meeting. April 13th, 2019. San Diego, CA.
- 5. **On-field Concussion Assessment.** Neurosurgical Care of Athletes Concussion, Spine, Peripheral Nerve and Return to Play. AANS Annual Meeting. April 13th, 2019. San Diego, CA.
- 6. **Concussion in High School Sports.** Doctor Radio's Sports Medicine Show: Sirius XM. October 31st, 2019. New York, NY.
- 7. Closed Traction of Cervical Spine Fractures at Muhimbili Orthopedic Institute. 6th Hands-on Neurosurgery Neurotrauma and Critical Care Course, Tanzania. November 12th, 2019. Dar es Salaam, Tanzania.
- 8. **Time is Spine Muhimbili Orthopedic Institute Spine Trauma Protocol Experience.** 6th Hands-on Neurosurgery Neurotrauma and Critical Care Course, Tanzania. November 12th, 2019. Dar es Salaam, Tanzania.
- 9. **Subaxial Cervical Fracture Classifications and Surgical Techniques.** 6th Hands-on Neurosurgery Neurotrauma and Critical Care Course, Tanzania. November 12th, 2019. Dar es Salaam, Tanzania.
- 10. **Basics of Traumatic Spinal Injury and Spinal Cord Injury.** 6th Hands-on Neurosurgery Neurotrauma and Critical Care Course, Tanzania. November 12th, 2019. Dar es Salaam, Tanzania.
- 11. A peek behind the paper the benefits of team sport participation versus concerns of chronic traumatic encephalopathy. Neuro-Central. June 29th, 2020. Vanderbilt University Medical Center. Nashville, TN.
- 12. Early versus delayed surgery in acute spinal cord injury. Young African Neurosurgeon Webinar. September 25th, 2021. Virtual. Nashville, TN.
- 13. **Complex spinal surgery and introduction to a career in neurosurgery.** September 29th, 2021. Neurosurgery Elective, Vanderbilt University School of Medicine. Nashville, TN.

## PEER REVIEWED PUBLICATIONS

- Rosenberg AD, Wambold D, Kraemer L, Begley-Keyes M, Zuckerman SL, Singh N, Cohen MM, Bennett MV. Ensuring Appropriate Timing of Antimicrobial Prophylaxis. *Journal of Bone and Joint Surgery*. 2008 Vol. 90(2): 226-232. PMID: 18245579.
- 2. **Zuckerman SL** & Wright DC. The Plight of Incarcerated Fathers: Learning How to Father Effectively Through Jail Programming. *American Jails Magazine*. July/August 2010.
- 3. **Zuckerman SL,** Song Y, Obremskey WT. Understanding the concept of medialization in scapula fractures. *Journal of Orthopaedic Trauma*. 2012. Jun;26(6):350-7. PMID: 21885996.
- 4. **Zuckerman SL,** Parikh R, Moore D, Talbot TR. Rationales for immediate use (flash) sterilization: A quality assurance assessment and risk factors for its use in knee and hip arthroplasties. *American Journal of Infection Control.* 2012. Nov;40(9):866-71. PMID: 22364918.
- 5. Richards JE, Kauffmann RM, **Zuckerman SL**, Obremskey WT, May AK. The Relationship of Stress-Induced Hyperglycemia and Surgical-Site Infection in Orthopaedic Surgery. *Journal of Bone and Joint Surgery*. 2012 Jul 3;94(13):1181-6. PMID: 22760385.
- 6. Shau DN, Parker SL, Mendenhall SK, **Zuckerman SL**, Devin C, McGirt MJ. Transforaminal lumbar interbody graft placement via an articulated delivery arm facilitates ventral and bilateral graft placement with

- increased segmental lordosis. *Journal of Spinal Disorders and Techniques*. 2015 May;28(4):140-6. PMID: 23059702.
- 7. Forbes JA, Rivas A, Tsai B, Ehtesham, M, **Zuckerman SL**, Wanna G, Weaver KD. Microsurgical localization of the cochlea. J Neurol Surg B Skull Base. 2012 Dec;73(6):410-414. 2012. PMID: 24294559.
- 8. **Zuckerman SL**, Solomon GS, Forbes JA, Haase RF, Sills AK, Lovell MR. Response to Acute Concussive Injury in Soccer Players: Is Gender a Modifying Factor? *Journal of Neurosurgery: Pediatrics.* 2012 Dec;10(6):504-10. PMID: 23030348.
- 9. **Zuckerman SL,** France DJ, Green C, Leming-Lee S, Anders S, Mocco J. Surgical Debriefing: A Reliable Roadmap to Completing the Patient Safety Cycle. *Neurosurgical Focus*. 2012 Nov;33(5):E4. PMID: 23116099.
- 10. **Zuckerman SL**, Green C, Carr K, Dewan MC, Morone PJ, Mocco J. Neurosurgical Checklists: Literature Review. *Neurosurgical Focus*. 2012 Nov;33(5):E2. PMID: 23116097.
- 11. **Zuckerman SL,** Odom MJ, Lee YM, Solomon GS, Forbes JA, Sills AK. Recovery from Sports-Related Concussion: Days to Return to Baseline in Adolescents vs. Young Adults. *Surgical Neurology International*. Jan-Feb 2012, Vol 3(1):130. PMID: 23227435.
- 12. Forbes JA, Awad Ahmed, **Zuckerman SL**, Carr K, Sills AK, Cheng J. Association between translational acceleration, rotational acceleration and concussion in helmeted collisions: literature review. *Neurosurgical Focus*. 2012 Dec;33(6):E10. PMID: 23199422.
- 13. **Zuckerman SL,** Kuhn A, Dewan MC, Morone PJ, Forbes JA, Solomon GS, Sills AK. Structural Brain Injury in Sport-Related Concussion. *Neurosurgical Focus*. 2012 Dec;33(6):E6. PMID: 23199429.
- 14. **Zuckerman SL,** Mocco J. Use of Thin-Slice CT in Acute Ischemic Stroke. *World Neurosurgery.* 2013. Feb;79(2):213-6. PMID: 23266456.
- Parker SL, Mendenhall SK, Shau DN, Zuckerman SL, Godil SS, Cheng JS, McGirt MJ. Minimally Invasive versus Open Transforaminal Lumbar Interbody Fusion (TLIF) for Degenerative Spondylolisthesis: Comparative Effectiveness and Cost-utility Analysis. World Neurosurgery. 2014. July-Aug;82(1-2):230-8. PMID: 23321379
- Godil SS, Parker SL, Zuckerman SL, Mendenhall SK, McGirt MJ. Accurately Measuring Outcomes After Surgery for Adult Chiari I Malformation: Determining the Most Valid and Responsive Instruments. Neurosurgery. 2013. May;72(5):820-7; discussion 827. PMID: 23381490.
- 17. Carr K, **Zuckerman SL**, Tomycz L, Pearson MP. Endoscopic removal of an intraventricular PNET Tumor: Retrieval of a free-floating fragment using urologic basket retrieval. *JNS Pediatrics*. 2013. Jul;12(1):25-9. PMID: 23621838.
- 18. **Zuckerman SL,** Poon SJ, Mainthia R, Hagan SL, Lockney TD, Zotov A, Holt GE, Bennett ML, Anders S, France DJ. Methodology and bias in assessing compliance with a surgical safety checklist. *Joint Commission Journal on Quality and Patient Safety*. 2013. Feb;39(2):77-82. PMID: 23427479.
- Lee YM, Odom MJ, Zuckerman SL, Solomon GS, Sills AK. Does Age Affect Symptom Recovery After Sports Related Concussion? A Study of High School and Collegiate Athlete. *JNS Pediatrics*. 2013. Dec;12(6):537-44. PMID: 24063601.
- 20. **Zuckerman SL**, Odom MJ, Lee YM, Solomon GS, Sills AK. Baseline Neurocognitive Scores in Athletes with Attention Deficit Spectrum Disorders and/or Learning Disability. *JNS Pediatrics*. 2013. Aug;12(2):103-9. PMID: 23790088.
- 21. **Zuckerman SL,** Mocco J. Response: Neurosurgical Checklists: A Review. Neurosurg Focus. 2013. Apr;34(4):E11. PMID:23570493
- 22. Ladner TR, **Zuckerman SL**, Mocco JD. Genetics of Cerebral Vasospasm. *Neurology Research International*. 2013. Vol. 2013. PMID: 291895
- 23. Odom MK, **Zuckerman SL**, Mocco JD. The Role of Magnesium in the Management of Cerebral Vasospasm. *Neurology Research International*. 2013; 943914. Epub May 21 2013. PMID: 943914.
- 24. Parker SL, Godil SS, **Zuckerman SL**, Mendenhall SK, Wells JA, Shau DN, McGirt MJ. Comprehensive assessment of 1-year outcomes and determination of minimum clinically important difference in pain, disability, and quality of life after suboccipital decompression for Chiari malformation I in adults. *Neurosurgery*. 2013 Oct; 73(4):569-81; discussion 581. PMID: 23787878.
- 25. Siuta M, **Zuckerman SL**, Mocco JD. Nitric Oxide in Cerebral Vasospasm: Theories, Measurement, and Treatment. *Neurology Research International*. 2013; 972417. Epub Jun 25 2013. PMID: 23878735.

- Parker SL, Zuckerman SL, Godil SS, Mendenhall SK, Tulipan N, McGirt MJ. Effect of Symptomatic Pseudomeningocele on Improvement in Pain, Disability, and Quality of Life following Suboccipital Decompression for Adult Chiari I Malformation. *Journal of Neurosurgery*. 2013. Oct;73(4):569-81; discussion 581.PMID: 23787878.
- 27. **Zuckerman SL,** Solomon GS, Sills AK. Response: Structural brain injury in sports-related concussion. Neurosurg Focus. 2013 May;34(5):E16. PMID: 23767075.
- 28. Godil SS, Parker SL, **Zuckerman SL**, Mendenhall SK, Devin CJ, Asher AL, McGirt MJ. Determining the quality and effectiveness of surgical spine care: patient satisfaction is not a valid proxy. *Spine Journal*. 2013. Sep;13(9):1006-12. PMID: 23685216.
- Lee YM, Zuckerman SL, Mocco J. Current Controversies in the Prediction, Diagnosis, and Management of Cerebral Vasospasm: Where Do We Stand? Neurology Research International. 2013. Oct 8. [Epub ahead of print]. PMID: 24228177.
- McClure, Zuckerman SL, Kutscher S, Gregory A, Solomon GS, Sills AK. Baseline Neurocognitive Testing in Sports-Related Concussion: The Importance of a Prior Night's Sleep. Am J Sports Med. 2014. Feb;42(2):472-8. PMID: 24256713.
- 31. Forbes JA, **Zuckerman SL**, Abla AA, Mocco J, Bode K, Eads T. Biomechanics of subdural hemorrhage in American football: review of the literature in response to rise in incidence. *Childs New Syst.* 2014. Feb;30(2):197-203. PMID: 24240553.
- 32. **Zuckerman SL,** Apple RP, Odom MJ, Lee YM, Solomon GS, Sills AK. Effect of sex on symptoms and return to baseline in sports-related concussion. *JNS Pediatrics*. 2014. Jan;13(1):72-81. PMID: 24206343.
- 33. Forbes JA, **Zuckerman SL**, He L, McCalley E, Lee YM, Solomon GS, Halstead PD, Sills AK. Subdural Hemorrhage in Two High-School Football Players: Post-Injury Helmet Testing. *Pediatric Neurosurg.* 2013. 49(1):43-9. PMID: 24192427.
- 34. Godil SS, Parker SL, **Zuckerman SL**, Mendenhall SK, McGirt MJ. Accurately measuring the quality and effectiveness of cervical spine surgery in registry efforts: determining the most valid and responsive instruments. *Spine J.* 2015. Jun 1;15(6):1203-9. PMID: 24076442.
- 35. Carr KR, **Zuckerman SL**, Mocco J. Inflammation, Cerebral Vasospasm, and Evolving Theories of Delayed Cerebral Ischemia. *Neurol Res Int.* 2013. 506584. Epub Aug 22 2013. PMID: 24058736.
- 36. **Zuckerman SL,** Solomon GS, Sills AK. Response: The challenge of matching across ages. *JNS Pediatrics*. 2013. 2013 Dec;12(6):536. PMID: 24436956.
- 37. **Zuckerman SL,** Seder DB, Tsujiara C, Cushing D, Gallup H, Mocco J, Hanel RA, Ecker RD. Aspirin allergy desensitization in cerebrovascular disease. A report of two cases, literature review and management guide for the neurointerventionalist. *Interventional Neuroradiology*. 2014. Feb; 20(1):5-11. PMID: 24556294.
- 38. **Zuckerman SL,** Eli IM, Morone PJ, Dewan MC, Mocco J. Novel technologies in the treatment of intracranial aneurysms. *Neurological Research*. 2014 Apr; 36(4):268-82. PMID: 24533618.
- 39. Parker SL, Godil SS, Mendenhall SK, **Zuckerman SL**, Shau D, Mcgirt MJ. Two-year comprehensive medical management of degenerative lumbar spine disease (lumbar spondylolisthesis, stenosis, or disc herniation): a value analysis of cost, pain, disability, and quality of life. Clinical article. JNS: Spine. 2014 Aug;21(2):143-9. PMID: 24785973.
- 40. Godil SS, Parker SL, **Zuckerman SL**, Mendenhall SK, Glassman D, McGirt MJ. Accurately Measuring the Quality and Effectiveness of Lumbar Surgery in Registry Efforts: Determining the Most Valid and Responsive Instruments. *Spine Journal*. 2014 April 24. PMID: 24768731.
- 41. Solomon GS, **Zuckerman SL.** Chronic Traumatic Encephalopathy in Professional Sports: Retrospective and Prospective Views. *Brain Injury*. 2015;29(2):164-70. Review. PMID: 25314314
- 42. **Zuckerman SL,** Forbes JA, Akshitkumar M, Krishnamoorthi H, Mathews L, Cheng J, McGirt MJ. Perioperative management of blood pressure in patients with thoracic disc herniation: Case series and review of the literature. *European Spine Journal*. Accepted. 2014. June 5. PMID: 24898311.
- 43. Parker SL, Godil SS, Mendenhall SK, **Zuckerman SL**, Shau DN, McGirt MJ. Two-year comprehensive medical management of degenerative lumbar spine disease (lumbar spondylolisthesis, stenosis, or disc herniation): a value analysis of cost, pain, disability, and quality of life. *J Neurosurg Spine*. 2014. Aug;21(2):143-9. PMID: 24785973.

- 44. Tal A, **Zuckerman SL,** Wansink B. Watch What You Eat: Action-Related Television Content Increases Food Intake. *JAMA Intern Med.* 2014. Nov;174(11):1842-3. PMID: 25179157.
- 45. **Zuckerman SL,** Bhatia R, Tsujiara C, Baker CB, Szafran A, Cushing D, Aiken J, Tracy M, Mocco J, Ecker RD. Prospective series of two hours supine rest after 4Fr sheath based diagnostic cerebral angiography: Outcomes, Productivity and Cost. *Interventional Neuroradiology*. 2015 Feb;21(1):114-9. PMID: 25934785.
- 46. **Zuckerman SL,** Eli IM, Shah MN, Bradley N, Stutz CM, Park TS, Wellons JC. Radial to axillary nerve neurotization for brachial plexus injury in children: a combined case series. *Journal of Neurosurgery: Pediatrics*. 2014 Nov;14(5):518-26. PMID: 25192235.
- 47. Solomon GS, **Zuckerman SL.** Chronic traumatic encephalopathy in professional sports: retrospective and prospective views. *Brain Injury*2015;29(2):164-70. PMID: 25314314.
- 48. Morgan CD, **Zuckerman SL**, Lee YM, King L, Beaird S, Sills AK, Solomon GS. Risk Factors for Post-Concussion Syndrome in an Exclusively Sport-Related Concussion Group: Case Control Study. Submitted to: *Journal of Neurosurgery: Pediatrics*. 2015. 2015 Jun;15(6):589-98. PMID: 25745959.
- 49. Morgan CD, Stephens M, **Zuckerman SL**, Waitara MS, Morone PJ, Dewan MC, Mocco J. Physiologic Imaging in Acute Stroke. *Interventional Neuroradiology*. Aug;21(4):499-510. PMID: 26063695.
- 50. **Zuckerman SL,** Morgan CD, Burks S, Forbes JA, Chambless LB, Solomon GS, Sills AK. Functional and Structural Traumatic Brain Injury in Equestrian Sports: A Review of the Literature. Submitted to: *World Neurosurgery*. 2015 Jun;83(6):1098-113. PMID: 25535066.
- 51. Parker SL, Godil SS, **Zuckerman SL**, Mendenhall SK, Devin CJ, McGirt MJ. Extent of pre-operative depression is associated with return to work after lumbar fusion for spondylolisthesis. *World Neurosurgery*. 2015 Apr;83(4):608-13. PMID: 25527877.
- 52. **Zuckerman SL,** Lee YM, Odom MJ, Forbes JA, Solomon GS, Sills AK. Sports-Related Concussion in Helmeted vs. Unhelmeted Athletes. Who Fares Worse? *Int J Sports Med.* 2015. 2015 May;36(5):419-25. PMID: 25664998.
- 53. Spiotta AM, Vargas J, **Zuckerman SL**, Mokin M, Ahmed A, Mocco J, Turner RD, Turk AS, Chaudri MI, Myers P. Acute stroke after carotid endarterectomy: time for a paradigm shift? Multicenter experience with emergent carotid artery stenting with or without intracranial tandem occlusion thrombectomy. *Neurosurgery*. 2015 Apr;76(4):403-10. PMID:25621982.
- 54. **Zuckerman SL,** Fargen KM, Mocco J. Neurosurgical Checklists: A Growing Need. *Neurosurg Clinics of North America*. 2015. Apr;26(2):219-229. PMID: 25771277.
- 55. Yengo-Kahn AM, Johnson DJ, **Zuckerman SL**, Solomon GS. Concussions in the National Football League: A Current Concepts Review. *American Journal of Sports Medicine*. 2016 Mar;44(3):801-11. PMID: 25899432.
- 56. **Zuckerman SL,** Mistry AM, Hanif R, Chambless LB, Neimat JS, Wellons JC 3<sup>rd</sup> Mocco J, Sills AK, McGirt MK, Thompson RC. Neurosurgery Elective for Preclinical Medical Students: Early Exposure and Changing Attitudes. *World Neurosurgery*. 2016 Feb;86:120-6. PMID: 26361323.
- O'Lynnger TM, Zuckerman SL, Morone PJ, Dewan MC, Vasquez-Castellanos RA, Cheng JS. Trends for Spine Surgery for the Elderly: Implications for Access to Healthcare in North America. *Neurosurgery*. 2015;77 Suppl 4:S136-41. PMID: 26378351.
- 58. Morgan CD, **Zuckerman SL**, King LE, Beaird SE, Sills AK, Solomon GS. Post-concussion syndrome (PCS) in a youth population: Defining the diagnostic value and cost-utility of brain imaging. *Chid Nerv Syst.* 2015 Dec;31(12):2305-9. PMID: 26419243.
- 59. **Zuckerman SL,** Sivaganesan A, Zhang Chi, Dewan MC, Morone PJ, Kumar NG, Mocco J. Maximizing Efficiency and Diagnostic Accuracy Triage of Acute Stroke Patients: A Case-Control Study. *Interventional Neuroradiology*. 2016 Jun;22(3):304-9. PMID: 26842606.
- Zuckerman SL, Kerr ZY, Yengo-Kahn A, Wasserman AB, Covassin T, & Solomon GS. Epidemiology of Sports-Related Concussion in NCAA Athletes from 2009/10 to 2013/14: Incidence, Recurrence, and Mechanisms. *American Journal of Sports Medicine*. 2015 Nov;43(11):2654-62. PMID: 26330572.
- 61. Wasserman EB, Kerry ZY, **Zuckerman SL**, Covassin T. Epidemiology of Sports-Related Concussions in National Collegiate Athletic Association Athletes from 2009-2010 to 2013-2014: Symptom Prevalence, Symptom Resolution Time, and Return-to-Play Time. *American Journal of Sports Medicine*. 2015. 2016 Jan;44(1):226-33. PMID: 26546304.

- 62. Solomon GS, Kuhn AW, **Zuckerman SL.** Depression as a Modifying Factor in Sports-Related Concussion: A Critical Review of the Literature. *Physician and Sports Medicine*. 2016;44(1):14-9. PMID: 26567843.
- 63. Hoh BL, Gong Y, McDonough CW, Waters MF, Royster AJ, Sheehan TO, Burkley B, Michael F. Waters, Langaee TY, Mocco J, Zuckerman SL, Mummareddy N, Stephens ML, Ingram C, Shaffer CM, Denny JC, Brilliant MH, Kitchner TE, Linneman JG, Roden DM, Johnson JA CYP2C19 and CES1 polymorphisms and efficacy of clopidogrel and aspirin dual antiplatelet therapy in patients with symptomatic intracranial atherosclerotic disease. *Journal of Neurosurgery*. 2016 Jun;124(6):1746-51. PMID: 26587656.
- 64. Dewan MC, Morone PJ, **Zuckerman SL**, Mummareddy N, Ghiassi M, Ghiassi M. Paradoxical ischemia in bilateral Eagle syndrome: a case of false-localization from carotid compression. *Clin Neurol Neurosurg.* 2015 Dec 17:141:30-32. PMID: 26724428.
- 65. White-Dzuro GA, Maynard K, **Zuckerman SL**, Weaver KD, Russell PT, Clavenna MJ, Chambless LB. Risk of post-operative pneumocephalus in patients with obstructive sleep apnea undergoing transsphenoidal surgery. *Journal of Clinical Neuroscience*, 2016 Jul;29:25-8. PMID: 26916903.
- 66. **Zuckerman SL,** Allen LA, Broome C, Bradley N, Law C, Shannon C, Wellons JC. Functional outcomes of infants with Narakas Grade 1 birth-related brachial plexus palsy undergoing neurotization compared with infants who did not require surgery. *Child's Nervous System.* 2016 May;32(5):791-800. PMID: 26906477.
- 67. Solomon GS, Kuhn AW, Zuckerman SL, Casson IR, Viano DC, Lovell MR, Sills AK. Participation in Pre-High School Football and Neurological, Neuroradiological, and Neuropsychological Findings in Later Life: A Study of 45 Retired National Football League Players. Am J Sports Med. 2016 May;44(5):1106-15. PMID: 26888877.
- 68. Akinpelu BJ, **Zuckerman SL,** Gannon SR, Westrick A, Shannon C, Naftel RP. Pediatric isolated thoracic and/or lumbar transverse and spinous process fractures. J Neurosurg Pediatrics. 2016 Jun;17(6):639-44. PMID: 26894517.
- 69. **Zuckerman SL,** Prather CT, Yengo-Kahn AM, Solomon GS, Sills AK, Bonfield CM. Sport-related structural brain injury associated with arachnoid cysts: a systematic review and quantitative analysis. *Neurosurgical Focus. 2016.* Apr;40(4):E9. PMID: 27032926.
- 70. **Zuckerman SL,** Yengo-Kahn AM, Buckley TA, Solomon GS, Sills AK, Kerr ZY. Predictors of Post-Concussion Syndrome in Collegiate Student-Athletes *Neurosurgical Focus*. 2016 Apr;40(4):E13. PMID: 27032916.
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- 218.Gates M, Tang AR, Godil SS, Devin CJ, McGirt MJ, **Zuckerman SL**. Defining the relative utility of lumbar spine surgery: A systematic literature review of common surgical procedures and their impact on health states. J Clin Neurosci. 2021 Nov;93:160-167. [Epub ahead of print]. PMID: 34656241.
- 219. Zuckerman SL, Lai CS, Shen Y, Lee NJ, Kerolus MG, Ha AS, Buchanan IA, Leung E, Cerpa M, Lehman RA, Lenke LG. Incidence and risk factors of iatrogenic coronal malalignment after adult spinal deformity surgery: a single-center experience. J Neurosurg Spine. 2021 Oct 22:1-10. [Epub ahead of print]. PMID: 34678769

# PODIUM PRESENTATIONS (presenting author underlined)

- 1. **Zuckerman SL**, Poon, SJ, et al. Surgical Team Compliance with the Pre-Procedural Time Out: Evaluating Bias and Utility of the "Secret Shopping" Method.
  - VUMC Annual Research Forum, Nashville, TN, April 2011.
- 2. <u>Edwards JE</u>, Kauffmann RM, **Zuckerman SL**, Obremskey WT, May AK. The Relationship of Stress-Induced Hyperglycemia and Surgical-Site Infection in Orthopaedic Trauma Surgery.
  - Tennessee Chapter American College of Surgeons. Memphis, TN, July 2011.
- 3. <u>Forbes JA</u>, **Zuckerman** SL, Athavale S, Netterville JL, Thompson RC. Transzygomatic extended middle fossa approach used for resection of tumor involving upper, middle, and lower clivus.
  - International Neuro-Oncology Update, Nashville, TN, September 2011.

- 4. <u>Parker SL</u>, **Zuckerman SL**, Shau D, Mendenhall S, Cheng J, Devin C, McGirt MJ. Cost-utility and comparative effectiveness analyses of trans-foraminal lumbar interbody fusion (TLIF) vs. comprehensive medical management for lumbar spondylolisthesis.
  - AANS/CNS Spine and Peripheral Nerve Meeting, Orlando, FL, March 2012.
  - North American Spine Society Meeting, Dallas, TX, October 2012.
  - Southern Neurosurgical Society Annual Meeting, Amelia Isl, FL, March 2012. August McCravey Award Winner.
- 5. <u>Parker SL</u>, Zuckerman SL, Shau D, Mendenhall S, Cheng J, Devin C, McGirt MJ. Cost-utility and comparative effectiveness analyses of laminectomy vs. comprehensive medical management for lumbar stenosis.
  - AANS/CNS Spine and Peripheral Nerve Meeting, Orlando, FL, March 2012.
  - AANS National Meeting, Miami, FL, April 2012.
- 6. <u>Parker SL</u>, **Zuckerman SL**, Shau DN, Mendenhall SK, McGirt MJ. Comprehensive assessment of one-year outcomes after suboccipital craniectomy for Chiari I malformation in adults.
  - AANS/CNS Spine and Peripheral Nerve Meeting, Orlando, FL, March 2012.
  - Southern Neurosurgical Society Annual Meeting, Amelia Island, FL, March 2013.
- 7. **Zuckerman SL,** Lee YM, Odom MJ, Solomon GS, Forbes JA, Sills AK. Sport-Related Concussion and Age: Number of Days to Neurocognitive Baseline.
  - Congress of Neurological Surgeons Meeting, Chicago, IL, October 2012.
  - Southern Neurosurgical Society Meeting, Sarasota, FL, February 2013.
  - VUMC Annual Research Forum, Nashville, TN, April 2013.
- 8. <u>Parker SL</u>, **Zuckerman SL**, Shau DN, Mendenhall SK, <u>Godil SS</u>, McGirt MJ. Accurately Measuring Outcomes After Surgery for Adult Chiari I Malformation: Determining the Most Valid and Responsive Instruments.
  - CNS Meeting, Chicago, IL, October 2012. Ronald Tasker Award.
  - AANS/CNS Spine Section Annual Meeting, Phoenix, AZ, March 2013.
  - North American Spine Society Meeting, Dallas, TX, October 2012.
  - Cervical Spine Research Society Meeting, Chicago, IL, December 2012.
- 9. <u>Parker SL</u>, Godil SS, **Zuckerman SL**, Shau DN, Mendenhall SL, Cheng J, Devin C, McGirt MJ Comprehensive Medical Management of Lumbar Stenosis and Spondylolisthesis is not Effective in Realworld Care: A Value Analysis of Cost, Pain, Disability and Quality of Life.
  - Congress of Neurological Surgeons National Meeting, Chicago, IL, October 2012.
- 10. <u>Godil SS, Parker SL, Zuckerman SL, Mendenhall SK, McGirt MJ. Determining The Quality and Effectiveness of Spine Surgery: Is Patient Satisfaction a Valid Proxy?</u>
  - Congress of Neurological Surgeons National Meeting, Chicago, IL, October 2012.
  - Cervical Spine Research Society (CSRS) Meeting, Chicago, IL, December 2012.
  - AANS/CNS Spine Section Annual Meeting, Phoenix, AZ, March 2013.
- 11. <u>Parker SL</u>, <u>Godil SS</u>, **Zuckerman SL**, Mendenhall S, Shau D, McGirt MJ. Accurately Measuring the Quality and Effectiveness of Lumbar Surgery in Registry Efforts: Determining the most Valid and Responsive Instruments.
  - North American Spine Society Meeting, Dallas, TX, October 2012.
  - AANS/CNS Spine Section Annual Meeting, Phoenix, AZ, March 2013.
- 12. **Zuckerman SL,** Parker SL, Godil SS, Wong CH, McGirt MJ. Defining the relative utility of lumbar spine surgery: A systematic literature review of common surgical procedures and their impact on health states.
  - North American Spine Society Meeting, Dallas, TX, Oct 2012.
- 13. <u>Parker SL</u>, Mendenhall S, Shau D, **Zuckermarn SL**, McGirt MJ. Minimally Invasive versus Open Transforaminal Lumbar Interbody Fusion (TLIF) for Degenerative Spondylolisthesis: Comparative Effectiveness and Cost-utility Analysis.
  - Southern Neurosurgical Society Annual Meeting, Amelia Island, FL, March 2012.

- North American Spine Society Meeting, Dallas, TX, October 2012.
- 14. <u>Parker SL</u>, Godil SS, **Zuckerman SL**, Shau D, Mendenhall S, Cheng JS, McGirt MJ. Cost-utility and comparative effectiveness analyses of laminectomy versus comprehensive medical management for lumbar stenosis.
  - North American Spine Society Meeting, Dallas, TX, October 2012.
- 15. <u>Godil SS</u>, Parker SL, **Zuckerman SL**, Shau D, Mendenhall S, Cheng JS, McGirt MJ. Accurately Measuring the Quality and Effectiveness of Cervical Spine Surgery in Registry Efforts: Determining the most Valid and Responsive Instruments.
  - North American Spine Society Meeting, Dallas, TX, October 2012.
- 16. **Zuckerman SL**, Lee YM, Odom MJ, Solomon GS, Sills AK. Establishing ImPACT Norms for the Learning Disabled Following Sports-Related Concussion: A Neglected Population.
  - AANS/CNS Pediatric Section Meeting, St. Louis, MO, November 2012.
  - Southern Neurosurgical Society Meeting, Sarasota, FL, February 2013.
- 17. **Zuckerman SL**, Solomon GS, Sills AK. Response to Acute Concussive Injury in Soccer Players: Is Gender a Modifying Factor?
  - Southern Neurosurgical Society Meeting, Sarasota, FL, February 2013.
- 18. **Zuckerman SL**, Godil SS, <u>Parker SL</u>, Aaronson OA, Devin CJ, McGirt MJ. Comparative Effectiveness, Cost Utility and Cost Benefit Analysis of Intra-Operative Neuromonitoring in Cervical Spine Surgery: Where is the Value?
  - Cervical Spine Research Society Meeting, Chicago, IL, December 2012.
  - AANS/CNS Spine Section Annual Meeting, Phoenix, AZ, March 2013.
- 19. Parker SL, Godil SS, Zuckerman SL, Shau D, Mendenhall S, Cheng JS, McGirt MJ. Comprehensive medical management of lumbar disc herniation, stenosis and spondylolisthesis is not effective in real-world care: A value analysis of cost, pain, disability, and quality of life.
  - Southern Neurosurgical Society Meeting, Sarasota, FL, February 2013.
  - AANS/CNS Spine Section Annual Meeting, Phoenix, AZ, March 2013.
- 20. <u>Godil SS</u>, **Zuckerman SL**, Parker SL, Aaronson O, Devin CJ, McGirt MJ. Comparative Effectiveness, Cost Utility and Cost Benefit Analysis of Intra-Operative Neuromonitoring in Lumbar Spine Surgery: Where is the Value?
  - AANS/CNS Spine Section Annual Meeting, Phoenix, AZ, March 2013.
- 21. <u>Mendenhall S.</u> Parker SL, Shau D, **Zuckerman SL**, Godil SS, McGirt MJ. Extent of Pre-operative Depression is associated with Return to Work after Lumbar Fusion for Spondylolisthesis.
  - AANS/CNS Spine Section Annual Meeting, Phoenix, AZ, March 2013.
- 22. <u>Parker SL</u>, <u>Godil SS</u>, **Zuckerman SL**, Shau D, Mendenhall S, Cheng JS. Clinical Outcomes and Cost Utility of Adult Spinal Deformity Surgery in Real-World Care.
  - Southern Neurosurgical Society Meeting, Sarasota, FL, February 2013.
  - AANS/CNS Spine Section Annual Meeting, Phoenix, AZ, March 2013.
- 23. <u>Dewan MC</u>, Godil SS, Parker SL, Mendenhall S, Shau D, **Zuckerman SL**, <u>Devin CJ</u>, McGirt MJ. Comparative Effectiveness and Cost-Benefit Analysis of Topical Vancomycin Powder in Posterior Spinal Fusion for Spine Trauma and Degenerative Spine Disease.
  - Southern Neurosurgical Society Meeting, Sarasota, FL, February 2013.
  - AANS/CNS Spine Section Annual Meeting, Phoenix, AZ, March 2013.
  - Int'l Meeting on Advanced Spine Techniques, Vancouver, Canada, July 2013.
  - North American Spine Society Meeting, New Orleans, LA, Oct 2013.
- 24. McClure DJ, **Zuckerman SL**, Kutscher S, <u>Gregory A</u>, Solomn GS. Baseline Neurocognitive Test Results In Non-concussed Athletes: Does Sleep Matter?
  - American Orthopedic Society for Sports Medicine, Chicago, IL, July 2013.

- 25. <u>Godil SS</u>, Parker SL, Mendenhall SK, <u>Zuckerman SL</u>, Shau DN, McGirt MJ. Cost-Utility and Comparative Effectiveness Analyses of Surgery versus Comprehensive Medical Management for Lumbar Spondylosis in Elderly.
  - Int'l Meeting on Advanced Spine Techniques, Vancouver, Canada, July 2013.
  - North American Spine Society Meeting, New Orleans, LA, 2013.
- 26. **Zuckerman SL,** Godil SS, Devin CJ, McGirt MJ. A Novel 6-Item Outcome Instrument (VBI-6) for Assessing the Effectiveness of Lumbar Surgery in Registry Efforts.
  - Int'l Meeting on Advanced Spine Techniques, Vancouver, Canada, July 2013.
- 27. <u>Godil SS</u>, **Zuckerman SL**, Devin CJ, McGirt MJ. Disparities in patient population with different type of insurance: Does it affect outcomes.
  - North American Spine Society Meeting, New Orleans, LA, Oct 2013.
- 28. **Zuckerman SL,** Godil SS, McGirt MJ. Understanding the effect of surgical complication on the value of surgical spine care: Evolution of the healthcare value equation.
  - North American Spine Society Meeting, New Orleans, LA, Oct 2013.
- 29. Zuckerman SL, Magarik JA, Espaillat KB, Bhatia K, Dewan MC, Morone PJ, Mocco J. Implementation of an Institutional-Wide Acute Stroke Algorithm: Improving Stroke Quality Metrics.
  - AANS/CNS Vascular Section Meeting, San Diego, CA, Feb 2014.
  - Society for Neurointerventional Surgery. Colorado Springs, CO, July 2013.
- 30. Morgan CD, <u>Zuckerman SL</u>, Lee YM, Solomon GS, Sills AK. Risk Factors for Post-Concussion Syndrome in an Exclusively Sport-Related Concussion Group: Case Control Study.
  - Congress of Neurological Surgeons Meeting, Boston, MA, October 2014.
- 31. White-Dzuro B, Maynard K, Zuckerman SL, Clavenna M, Weaver KD, Russell P, Chambless LB. Transsphenoidal Pituitary Surgery, Sleep Apnea, and Pneumocephalus: Is There A Link?
  - North American Skull Base Society Meeting, Tampa Bay, FL, February 2015.
- 32. Zuckerman SL, Wasserman E, Yengo-Kahn AM, Solomon GS, Kerr ZY. Descriptive Epidemiology, Mechanisms, and Symptom Resolution of Concussion Sustained by National Collegiate Athletic Association Student-Athletes, 2009/10-2013/14 Academic Years.
  - Congress of Neurological Surgeons, New Orleans, LA, October 2015.
- 33. Yengo-Kahn AM, **Zuckerman SL**, Solomon GS. The Effect of Psychotropic Medications and Psychiatric Illness on the Baseline Neurocognitive Assessment of Young Athletes Using the ImPACT Test Battery: A Pilot Study.
  - Congress of Neurological Surgeons, New Orleans, LA, October 2015.
- 34. **Zuckerman SL,** Prather CT, <u>Yengo-Kahn AM</u>, Solomon GS, Sills AK, Bonfield CM. Sport-related structural brain injury associated with arachnoid cysts: a systematic review and quantitative analysis.
  - Southern Neurosurgical Society, San Antonio, TX, March 2016
- 35. **Zuckerman SL**, Yengo-Kahn AM, Buckley TA, Solomon GS, Sills AK, Kerr ZY. Predictors of Post-Concussion Syndrome in Collegiate Student-Athletes.
  - Southern Neurosurgical Society, San Antonio, TX, March 2016
- 36. **Zuckerman SL**, Chotai S, Devin CJ, Parker SL, Stonko DS, Wick JB, Hale AT, McGirt MJ, Cheng JS. Surgical resection of intradural extramedullary spinal tumors: patient reported outcomes and minimum clinically important difference.
  - Southern Neurosurgical Society, San Antonio, TX, March 2016
  - American Association of Neurosurgical Surgeons, Chicago, IL, May 2016
- 37. Green J, **Zuckerman SL**, Dalton SL, Djoko A, Folger D, Cheng JS, Kerr ZY. Epidemiology of "Stingers" in NCAA Football, 2009/10-2014/15 academic years
  - AANS Spine Section, Orlando, FL, March 2016
- 38. Solomon GS, Kuhn AW, **Zuckerman SL**, Casson IR, Viano DC, Lovell MR, Sills AK. Participation in pre-high school football and neurological, neuroradiological, and neuropsychological findings later in life: a study of 45 retired NFL players.
  - American Association of Neurosurgical Surgeons, Chicago, IL, May 2016

- 39. Kerr ZY, **Zuckerman SL**, Wasserman EB, Covassin T, Djoko A, Dompier TP. Concussion symptomatology and return to play in youth, high school, and college American football athletes.
  - American Association of Neurosurgical Surgeons, Chicago, IL, May 2016
- 40. **Zuckerman SL,** Totten DJ, Rubel KE, Kuhn AW, Yengo-Kahn AM, Solomon GS. Mechanisms of injury as a diagnostic predictor of sport-related concussion severity in football, basketball, and soccer: Results from a regional\_concussion registry
  - Congress of Neurological Surgeons, San Diego, CA, September 2016.
- 41. Kuhn AY, <u>Zuckerman SL</u>, Solomon GS, Casson IR. Interrelationships Among Neuroimaging Biomarkers, Neuropsychological Test Data, and Symptom Reporting in a cohort of Retired National Football League (NFL) Players.
  - Congress of Neurological Surgeons, San Diego, CA, September 2016.
- 42. Kerr ZY, Wasserman EB, **Zuckerman SL**, Yengo-Kahn AM, Dompier TP. Factors associated with post-concussion syndrome in United States high school student-athletes.
  - 5th International Consensus Conference on Concussion in Sport, Berlin, Germany, October 2016
- 43. **Zuckerman SL,** Chotai S, <u>Sielatycki A</u>, Parker SL, Kim E, Sivaganesan A, McGirt MJ, Devin CD. Effect of graft type on patient reported outcomes and costs following anterior cervical discectomy and fusion.
  - Cervical Spine Research Society, Toronto, Canada, November 2016.
- 44. **Zuckerman SL**, Chang G, Walsh G, Mehran R, Everson RG, Lee SH, Rao G, Tatsui CE, Rhines LD. Outcomes of Surgery for Sacral Chordoma and Impact of Complications: A Report of 50 Consecutive Patients with Long-term Follow-up.
  - AANS Spine Section, Las Vegas, NV, March 2017.
- 45. <u>Lakomkin N</u>, Stannard B, **Zuckerman Sl**, Girojanapa J, Camara-Quintana J, Kolb L, Montejo J, Cheng JS. Preoperative Risk Stratification in Spine Tumor Surgery A Comparison of Three Assessment Scores
  - AANS Spine Section, Las Vegas, NV, March 2017.
- 46. <u>Lakomkin N</u>, **Zuckerman SL**, Stannard B, Lader T, Girojanpa J, Kolb L, Montejo J, Sarkiss C, Cheng JS. The Utility of Preoperative Laboratory Values in Patients Undergoing Craniotomy for Subdural Hematoma."
  - AANS, Los Angeles, CA, April 2017.
- 47. <u>Lakomkin N</u>, **Zuckerman SL**, Ladner R, Girojanapa J, Kolb L, Montejo J, Sarkiss C, Stannard B, Cheng JS. Major Complications Following Microvascular Decompression: 6-Year Incidence and Predictive Risk Factors.
  - AANS, Los Angeles, CA, April 2017.
- 48. **Zuckerman SL,** Brett BL, Yengo-Kahn AM, Kuhn AW, Solomon GS. Risk factors associated with sustaining a sport-related concussion: An initial synthesis study of 12,320 student athletes.
  - Congress of Neurological Surgeons, Boston, MA, October 2017.
- 49. <u>Legaretta AD</u>, Brett BL, Solomon GS, **Zuckerman SL**. The role of family and personal psychiatric history in sport-related post-concussion syndrome following sport-related concussion: a story of compounding risk.
  - Southern Neurosurgical Society, Amelia Island, FL March 2018.
- 50. **Zuckerman SL,** Amini B, Lee SH, Tatsui CE, Rhines LD. Magnetic resonance imaging findings predict overall survival and local recurrence in patients undergoing en bloc resection of sacral chordomas.
  - AANS Spine Section, Orlando, FL, March 2018
- 51. **Zuckerman SL**, Bilsky MH, Yamada Y, Laufer I. Brachytherapy in Spinal Tumors: A Systematic Review.
  - AANS Spine Section, Orlando, FL, March 2018
- 52. **Zuckerman SL**, Kerr ZY, Pierpoint L, Than KD, Wilson TJ. A 10-Year Analysis of Peripheral Nerve Injuries in High School Sports.
  - AANS Spine Section, Orlando, FL, March 2018
- 53. **Zuckerman SL**, Lakomkin N, Smith JS, Shaffrey CS, Devin CJ. Death Within One Year After Adult Spinal Deformity Surgery: Incidence and Predictors.
  - AANS Spine Section, Orlando, FL, March 2018

- 54. <u>Gelinne A</u>, **Zuckerman SL**, Benzil D, Grady S, Callas P, Durham S. United States Medical Licensing Exam Step I Score as a Predictor of Neurosurgical Career Beyond Residency.
  - American Association of Neurosurgical Surgeons, New Orleans, LA, May 2018
- 55. **Zuckerman SL.** A Football Helmet Prototype That Reduces Linear and Rotational Acceleration With the Addition of an Outer Shell
  - Tennessee Neurosurgeon Society, Nashville, TN, August 2017
  - American Association of Neurosurgical Surgeons, New Orleans, LA, May 2018
- 56. Yengo-Kahn AM, Kuhn AW, Brett B, Zalneraitis BH, Ghaly A, Stotts J, Patel R, Gentry W, Oluealw M, Solomon GS, **Zuckerman SL**. Professional athlete performance decline following concussion: an analysis of three major sports.
  - American Association of Neurosurgical Surgeons, New Orleans, LA, May 2018
- 57. **Zuckerman SL**, Rossi V, Devin CJ, Foley KT, Knightly JJ, Bisson EF, Glassman SD, Asher AL. The Institute for Healthcare Improvement NeuroPoint Alliance Cooperative Quality Improvement Project: Using National Registries to Design Continuous Quality Improvement Protocols NPA-IHI Talk.
  - American Association of Neurosurgical Surgeons, New Orleans, LA, May 2018
- 58. Brett BL, Kuhn AW, <u>Yengo-Kahn AM</u>, Kerr ZY, Bonfield CM, Solomon GS, **Zuckerman SL**. Initial symptom presentation after high school football-related concussion varies by time point in a season: an initial investigation.
  - Congress of Neurosurgical Surgeons, Houston, TX, October 2018
- 59. Wolfson D, Kuhn AW, Yengo-Kahn AM, Brett BL, **Zuckerman SL.** Chronic traumatic encephalopathy research in the public domain: what makes headlines?
  - Southern Neurosurgical Society, Key Largo, FL, February 2019
- 60. Roth SG, Kelly PD, **Zuckerman SL**, Attia A, Jaobin J. Adult spinal cord astrocytomas: Treatment trends

   Southern Neurosurgical Society, Key Largo, FL, February 2019
- 61. **Zuckerman SL,** Lakomkin N, Sivaganesan A, Asher A, Devin CJ. Which patients undergoing ACDF are most appropriate for an ambulatory surgery center? A pilot study.
  - AANS Spine Section, Miami, FL, March 2019
- 62. **Zuckerman SL,** Lakomkin N, Sivaganesan A, Asher A, Devin CJ. Which patients undergoing ACDF are most appropriate for an ambulatory surgery center? A pilot study.
  - AANS Spine Section, Miami, FL, March 2019
- 63. Zuckerman SL, Cerpa M, Lenke LG, Cerpa M, Shaffrey CI, Smith JS, Carreon LY, Cheung KMC, Kelly MP, Fehlings MG, Ames CP, Boachie-Adjei O, Dekutoski MB, Kebaish KM, Lewis SJ. Patient-Reported Outcomes After Complex Adult Spinal Deformity Surgery: 5-Year Results of the Scoli-RISK-1 Study
  - Scoiliosis Research Society, Virtual, September 2020
- 64. <u>Cerpa M</u>, Lenke LG, **Zuckerman SL**, Shaffrey CI, Smith JS, Carreon LY, Cheung KMC, Kelly MP, Fehlings MG, Ames CP, Boachie-Adjei O, Dekutoski MB, Kebaish KM, Lewis SJ. Non-neurologic complications after complex adult spinal deformity surgery: what happens during long-term follow-up?
  - Scoiliosis Research Society, Virtual, September 2020
- 65. <u>Lenke LG</u>, **Zuckerman SL**, Cerpa M, Shaffrey CI, Smith JS, Carreon LY, Cheung KMC, Kelly MP, Fehlings MG, Ames CP, Boachie-Adjei O, Dekutoski MB, Kebaish KM, Lewis SJ. The Scoli-RISK 1 Results of Lower Extremity Motor Function 5-years after Complex Adult Spinal Deformity Surgery.
  - Scoiliosis Research Society, Virtual, September 2020
- 66. A. Yengo-Kahn, J. Wallace, V. Jimenez, D. Totten, C. Bonfield, **SL Zuckerman.** Exploring the outcomes and experiences of Black and White athletes following a sport-related concussion: a retrospective cohort study.
  - American Academy of Neurology: Sports Concussion Conference, July 2021.
- 67. Riedler JS, Zuckerman SL, Vivas AC, Lombardi JM, Kim JS, Cerpa C, Lenke LG. Should selective thoracic fusion be reserved for nonstructural compensatory lumbar curves? Radiographic and clinical results from propensity score matched patients at minimum five year follow up.
  - North American Spine Society, Virtual, 2020

- 68. <u>Lee NJ.</u> Kim JS, Lombardi JM, Vivas AC, Reidler JS, **Zuckerman SL,** Park P, Leung E, Cerpa M, Lenke LG. Flexion-extension radiographs underestimate instability in patients with single-level lumbar spondylolisthesis. Comparing flexion-supine imaging may be more appropriate.
  - North American Spine Society, Virtual, 2020
- 69. <u>Kim JS</u>, Arvind V, Schwartz JT, Valliani A, Geng E, Lee NJ, Lombardi JM, Vivas AC, Reidler JS, **Zuckerman SL**, Cho B, Vulapalli M, Cho SK, Lehman RA. Natural language processing of operative note dictations to automatically generate CPT codes for billing.
  - North American Spine Society, Virtual, 2020
- 70. <u>Kim JS</u>, Lee NJ, Lombardi LM, Vivas AC, **Zuckerman SL**, Reidler JS, Cerpa M, Leung E, Lehman A, Lenke LG. Extended length of stay after complex adult spinal deformity surgery: predictors and impact on clinical and patient-reported outcomes
  - American Academy of Neurology: Sports Concussion Conference, Virtual, July 2021.
- 71. **Zuckerman SL,** Lai CS, Shen Y, Kerolus MG, Ha AS, Buchanan IA, Cerpa M, Lee NJ, Leung E, Lehman RA, Lenke LG. Postoperative coronal malalignment after adult spinal deformity surgery: incidence, risk factors, and impact on 2-year outcomes.
  - AANS/CNS Spine Section, San Diego, CA, July 2021.
  - Scoliosis Research Society, St. Louis, MO, September, 2021.
- 72. **Zuckerman SL,** Lai CS, Shen Y, Kerolus MG, Ha AS, Buchanan IA, Cerpa M, Lee NJ, Leung E, Sardar Z, Lehman RA, Lenke LG. Which Coronal Measurements & How Much Coronal Malalignment Most Accurately Predicts 2-year PROs After ASD Surgery?
  - AANS/CNS Spine Section, San Diego, CA, July 2021.
  - North American Spine Society, Boston, MA 2021
- 73. **Zuckerman SL**, Lai CS, Shen Y, Kerolus MG, Ha AS, Buchanan IA, Cerpa M, Lee NJ, Leung E, Sardar Z, Lehman RA, Lenke LG. Establishing a Threshold of Impairment to Define Coronal Malalignment in Adult Spinal Deformity Patients.
  - AANS/CNS Spine Section, San Diego, CA, July 2021.
- 74. **Zuckerman SL,** Lai CS, Shen Y, Kerolus MG, Ha AS, Buchanan IA, Cerpa M, Lee NJ, Leung E, Lehman RA, Lenke LG. Do Adult Spinal Deformity Patients Undergoing Surgery Continue to Improve After 1-year Postoperative?
  - AANS/CNS Spine Section, San Diego, CA, July 2021.
- 75. **Zuckerman SL,** Sardar Z, Marciano G, Kerolus MG, Buchanan IA, Ha AS, Cerpa M, Le Huec JC, Bourret S, Hasegawa K, Wong HK, Liu G, Dennis Hey HW, Riahi H, Kelly MP, Lenke LG. Assessing coronal alignment from odontoid to sacrum: a normative volunteer study of the Odontoid-CSVL distance.
  - AANS/CNS Spine Section, San Diego, CA, July 2021.
- 76. **Zuckerman SL,** Sardar Z, Marciano G, Kerolus MG, Buchanan IA, Ha AS, Cerpa M, Le Huec JC, Bourret S, Hasegawa K, Wong HK, Liu G, Dennis Hey HW, Riahi H, Kelly MP, Lenke LG. How much pelvic obliquity exists in a normative population? A multi-ethnic study of asymptomatic volunteers.
  - AANS/CNS Spine Section, San Diego, CA, July 2021.
- 77. **Zuckerman SL**, Lai CS, Shen Y, Kerolus MG, Ha AS, Buchanan IA, Cerpa M, Lee NJ, Leung E, Lehman RA, Lenke LG. Be prepared: Preoperative Coronal Malalignment Often Leads to More Extensive Surgery than Sagittal Malalignment during Adult Spinal Deformity Surgery.
  - AANS/CNS Spine Section, San Diego, CA, July 2021.
- 78. Zuckerman SL, Lai CS, Shen Y, Kerolus MG, Ha AS, Buchanan IA, Cerpa M, Lee NJ, Leung E, Lehman RA, Lenke LG. Role of *Pelvic Obliquity & Leg Length Discrepancy* in Adult Spinal Deformity Patients with Coronal Malalignment.
  - AANS/CNS Spine Section, San Diego, CA, July 2021.
  - North American Spine Society, Boston, MA 2021
- 79. <u>Ha AS, **Zuckerman SL,**</u> Coury JRR, Lee NJ, Ferrer XE, Buchanan IA, Kerolus MG, Cerpa M, Lombardi JM, Dyrszka MD, Sardar ZM, Lehman RA, Lenke LG. Central Sacral Pelvic Line (CSPL) is a Useful

- Radiographic Parameter that Correlates with Clinical Outcomes of Coronal Alignment after Spine Deformity Surgery.
  - Scoliosis Research Society, St. Louis, MO, September, 2021.
- 80. <u>Ha AS</u>, Mathew J, Ferrer XE, Coury JR, Luzzi AJ, Hong, **Zuckerman SL**, Buchanan IA, Kerolus MG, Cerpa M, Lombardi JM, Dyrszka MD, Sardar ZM, Lehman RA, Lenke LG. Preoperative Paraspinal Fat Atrophy of the Upper Instrumented Vertebrae Musculature in Spine Deformity Surgery is a Risk Factor for Proximal Junctional Kyphosis and Sagittal Malalignment.
  - Scoliosis Research Society, St. Louis, MO, September, 2021.
- 81. <u>Ha AS</u>, Mathew J, Ferrer XE, Coury JR, Luzzi AJ, Hong, **Zuckerman SL**, Buchanan IA, Kerolus MG, Cerpa M, Lombardi JM, Dyrszka MD, Sardar ZM, Lehman RA, Lenke LG. C2 Pelvic Angle (C2PA) is a Useful Intraoperative Radiographic Parameter that Correlates with the Risk of Developing Proximal Junctional Kyphosis Postoperatively.
  - Scoliosis Research Society, St. Louis, MO, September, 2021.
- 82. <u>Lombardi JM</u>, **Zuckerman SL**, Cerpa M, Sardar ZM, Lehman RA, Lenke LG. Can machine learning improve our ability to predict reoperations in adult spinal deformity surgery: A leap forward in predictive modeling.
  - Scoliosis Research Society, St. Louis, MO, September, 2021.
- 83. **Zuckerman SL,** Lai CS, Shen Y, Kerolus MG, Ha AS, Buchanan IA, Cerpa M, Lee NJ, Leung E, Lehman RA, Lenke LG. The lumbosacral fractional curve vs. maximum coronal cobb angle in adult spinal deformity patients with coronal malalignment: which matters more?
  - North American Spine Society, Boston, MA, October 2021
- 84. Zuckerman SL, Cerpa M, Lenke LG, Kelly MP, Line B, Smith JS, Shaffrey, Kebaish Khal, Klineberg E, Kim HJ, Schwab F, Gupta M, Lafage V, Lafage R, Burton, Bess S, International Spine Study Group (ISSG). Prospective Enrollment of Adult Spinal Deformity Patients Demonstrates Radically Different Demographic, Radiographic and HRQOL Parameters for Primary vs. Revision Patients.
  - North American Spine Society, Boston, MA, October 2021
- 85. **Zuckerman SL**, Lai C, Cerpa M, Sardar Z, Lenke LG. Optimal Intraoperative Fluid Management in Adult Spinal Deformity Correction Surgery.
  - North American Spine Society, Boston, MA, October 2021
- 86. **Zuckerman SL,** Lai CS, Shen Y, Kerolus MG, Ha AS, Buchanan IA, Cerpa M, Lee NJ, Leung E, Lehman RA, Lenke LG. Evaluation of Coronal Alignment From the Skull Using the Novel Orbital-Coronal Vertical Axis Line
  - North American Spine Society, Boston, MA, October 2021
- 87. Kerolus MG, Zuckerman SL, Buchanan IA, Ha AS, Vulapalli M, Herbert M, Cerpa M, Riew KD. Physical Examination Findings of Patients with Myelopathy and Diabetes Mellitus.
  - Cervical Spine Research Society, Atlanta, GA, December 2021

### POSTER PRESENTATIONS

- 1. Rosenberg A, **Zuckerman SL**. Anabolic steroids and risk of anesthesia complications.
  - American Society of Anesthesiologists National Meeting. Chicago, IL, October 2006.
- 2. **Zuckerman, SL**, Wansink B, Payne C. Exploding Cars vs. Boring interviews: How television programming and food convenience affect food consumption.
  - Experimental Biology Conference. San Diego, CA, April 2008.
- 3. **Zuckerman SL**, Song, Y, Corr B, Obremskey WT. Medialization of the Glenoid in Scapula fractures: Does it occur?
  - VUMC Annual Research Forum. Nashville, TN, April 2010.

- 4. Obremskey WT, Richards JE, **Zuckerman SL**, Staples KS. Outcomes in Early Treatment of Traumatic Knee Dislocations.
  - VUMC Annual Research Forum. Nashville, TN, April 2010.
- 5. **Zuckerman SL**, Stovall J, Blum J. Fathering Behind Bars: Improving Communication Between Incarcerated Fathers and their Children.
  - Vanderbilt School of Medicine Emphasis Research Forum. Nashville, TN, May 2010.
- 6. **Zuckerman SL**, Parikh R, Moore DC, Talbot TR. Factors Associated with Flash Sterilization of Surgical Instruments in Total Knee and Hip Arthroplasty.
  - VUMC Annual Research Forum. Nashville, TN, April 2011.
- 7. Edwards JE, **Zuckerman SL**, Obremskey WT. The Value of Hemoglobin A1C and the Relationship to Post-operative Complications in Orthopaedic Trauma Surgery.
  - VUMC Annual Research Forum. Nashville, TN, April 2011.
- 8. Mainthia R, Lockney DT, Zotov A, **Zuckerman SL**, Poon SJ, Hagan S, France D. Implementation of an electronic **checklist** system in the operating room increases surgical team compliance with pre-incision safety practices.
  - International Forum on Quality & Safety Healthcare. Amsterdam, Netherlands, April 2011.
- 9. **Zuckerman SL,** Forbes JA, Sills AK, Thompson RC, Halstead D. Subdural Hemorrhage in Two High School Football Players: Are Helmets to Blame?
  - VUMC Annual Research Forum. Nashville, TN, April 2012.
- 10. **Zuckerman SL,** Solomon GS, Forbes JA, Haase RF, Sills AK, Lovell MR. Response to Acute Concussive Injury in Soccer Players: Is Gender a Modifying Factor?
  - Congress of Neurological Surgeons (CNS) National Meeting, Chicago, IL, April 2012.
  - VUMC Annual Research Forum. Nashville, TN, April 2012.
  - AANS National Meeting, New Orleans, LA, April 2013.
- 11. Parker SL, **Zuckerman SL**, Shau DN, Mendenhall S, McGirt MJ. Cost-utility and comparative effectiveness analyses of transforaminal lumbar interbody fusion (TLIF) versus comprehensive medical management for lumbar spondylolisthesis.
  - VUMC Annual Research Forum. Nashville, TN, April 2012.
- 12. Godil SS, Parker SL, **Zuckerman SL**, Mendenhall SK, McGirt MJ. Determining the quality and effectiveness of spine surgery: Is patient satisfaction a valid proxy.
  - VUMC Annual Research Forum. Nashville, TN, April 2012.
- 13. **Zuckerman SL,** Godil SS, Parker SL, Mendenhall SK, Shau DN, Adogwa O, McGirt MJ. Preoperative Zung depression scale predicts outcome and patient satisfaction after revision lumbar surgery.
  - VUMC Annual Research Forum. Nashville, TN, April 2012.
- 14. **Zuckerman SL,** Parker SL, Godil SS, Shau DN, Mendenhall SK, McGirt MJ. Cost-utility and comparative effectiveness analyses of laminectomy versus comprehensive medical management for lumbar stenosis.
  - VUMC Annual Research Forum. Nashville, TN, April 2012.
- 15. Parker SL, Mendenhall SK, Shau DN, **Zuckerman SL**, Cheng J, McGirt MJ. Minimally invasive versus open transforaminal lumbar interbody fusion (TLIF) for degenerative spondylolisthesis: Comparative effectiveness and cost-utility analysis.
  - VUMC Annual Research Forum. Nashville, TN, April 2012.
- 16. Parker SL, Kilaru B, **Zuckerman SL**, Shau DN, Mendenhall SK, Godil SS, McGirt MJ. Comprehensive assessment of one-year outcomes after suboccipital craniectomy for Chiari I malformation in adults.
  - VUMC Annual Research Forum. Nashville, TN, April 2012.
- 17. Carr K, **Zuckerman SL**, Tomycz L, Pearson MP. Endoscopic removal of an intraventricular PNET Tumor: Retrieval of a free-floating fragment using urologic basket retrieval.
  - AANS/CNS Section on Pediatric Neurological Surgery, St. Louis, MO, November 2012.
- 18. **Zuckerman SL,** Odom MJ, Lee YM, Solomon GS, Forbes JA, Sills AK. Recovery from Sports-Related Concussion: Days to Return to Baseline in Adolescents vs. Young Adults.
  - AANS National Meeting, New Orleans, LA, April 2013.

- VUMC Annual Research Forum. Nashville, TN, April 2013.
- 19. **Zuckerman SL,** Lee YM, Odom MJ, Solomon GS, Sills AK. Establishing ImPACT Norms for the Learning Disables Following Sports-Related Concussion: A Neglected Population.
  - AANS National Meeting, New Orleans, LA, April 2013.
  - VUMC Annual Research Forum. Nashville, TN, April 2013.
- 20. **Zuckerman SL,** Kuhn A, Dewan MC, Morone PJ, Forbes JA, Solomon GS, Sills AK. Structural Brain Injury in Sports-Related Concussion.
  - AANS National Meeting, New Orleans, LA, April 2013.
  - VUMC Annual Research Forum. Nashville, TN, April 2013.
- 21. **Zuckerman SL,** Odom MJ, Lee YM, Solomon GS, Sills AK. Does Age Affect Symptom Recovery After Sports Related Concussion? A Study of High School and Collegiate Athletes.
  - AANS National Meeting, New Orleans, LA, April 2013.
  - VUMC Annual Research Forum. Nashville, TN, April 2013.
- 22. **Zuckerman SL,** Odom MJ, Lee YM, Solomon GS, Sills AK. Gender and Sports-Related Concussion: Female Athletes Take Longer to Return to Symptom Baseline than Males.
  - VUMC Annual Research Forum. Nashville, TN, April 2012.
  - AANS National Meeting, New Orleans, LA, April 2013.
- 23. **Zuckerman SL,** France DJ, Green C, Leming-Lee S, Anders S, Mocco J. Surgical Debriefing: A Reliable Roadmap to Completing the Patient Safety Cycle.
  - AANS National Meeting, New Orleans, LA, April 2013.
- 24. **Zuckerman SL**, Green C, Carr K, Dewan MC, Morone PJ, Mocco J. Neurosurgical Checklists: Literature Review.
  - AANS National Meeting, New Orleans, LA, April 2013.
- 25. **Zuckerman SL,** Godil SS, McGirt MJ. Understanding the effect of surgical complication on the value of surgical spine care: Evolution of the healthcare value equation.
  - Int'l Meeting on Advanced Spine Techniques, Vancouver, Canada, July 2013.
- 26. **Zuckerman SL,** Godil SS, McGirt MJ. Understanding the effect of surgical complication on the value of surgical spine care: Evolution of the healthcare value equation.
  - Congress of Neurological Surgeons, San Francisco, CA, October 2013.
- 27. **Zuckerman SL,** Sivaganesan A, Zhang C, Morone PJ, Dewan MC, Mocco J. High Specificity Identification of Acute Large Vessel Stroke: Maximizing Cohort Selection for Potential Mechanical Thrombectomy.
  - Congress of Neurological Surgeons, Boston, MA, October 2014.
- 28. Vargas J, **Zuckerman SL**, Chaudry I, Turner R, Turk A, Spiotta A. Emergent Carotid Artery Stenting with or without Intracranial Tandem Occlusion Lesions Following Carotid Endarterectomy.
  - Society for Neurointerventional Surgery. Colorado Springs, CO, July 2013.
- 29. **Zuckerman SL,** Odom MJ, Lee YM, Solomon GS, Sills AK. Sports-Related Concussion in Helmeted vs. Non-Helmeted Athletes: Who Fares Worse?
  - VUMC Annual Research Forum. Nashville, TN, April 2013.
  - Congress of Neurological Surgeons, Boston, MA, October 2014.
- 30. **Zuckerman SL,** Magarik JA, Espaillat KB, Bhatia K, Dewan MC, Morone PJ, Mocco J. Implementation of an Institutional-Wide Acute Stroke Algorithm: Improving Stroke Quality Metrics.
  - Congress of Neurological Surgeons, Boston, MA, October 2014.
- 31. Ladner TR, **Zuckerman SL**, He L, Mocco J, Ecker R. Multi-center experience with surgical and endovascular management of ruptured and unruptured posterior inferior cerebellar artery aneurysms.
  - AANS/CNS Vascular Section Meeting, Nashville, TN, Feb 2015.
- 32. Ladner TR, **Zuckerman SL**, He L, Sanborn M. Mocco J, Ecker R. Parent Vessel Occlusion for Treatment of Cerebral Aneurysms: Is There Still an Indication? A Series of 14 Patients.
  - AANS National Meeting, Washington DC, May 2015.

- 33. **Zuckerman SL,** Akshitkumar M, Hanif R, Neimat JS, Wellons JC, Mocco J, Sills AK, Mocco J, Thompson RC. Neurosurgery Elective for Preclinical Medical Students: Early Exposure and Changing Attitudes.
  - AANS National Meeting, Washington DC, May 2015.
- 34. Morgan CD, **Zuckerman SL**, Beaird S, King L, Sills AK, Solomon GS. Post-Concussion Syndrome (PCS) in a Youth Population: Defining the Diagnostic Value and Cost-Utility of Imaging
  - AANS National Meeting, Washington DC, May 2015.
- 35. Ladner TR, He L, Lakomkin N, Ordonez DE, Sellyn G, **Zuckerman SL**, Mocco J. Clinical and Cosmetic Results of the Modified Minipterional Craniotomy for Unruptured Aneurysm Clipping
  - Congress of Neurological Surgeons, New Orleans, LA, October 2015.
- 36. Wasserman EB, **Zuckerman SL**, Kerr Z. Descriptive Epidemiology of Concussions Sustained by National Collegiate Athletic Association Student-Athletes, 2009/10-2013/14 Academic Years.
  - 48th Annual UNC Chapel Hill School of Medicine Student Research Day, Chapel Hill, NC, November 2015
- 37. **Zuckerman SL,** Gentry WS, Patel RD, Ghaly AW, Kuhn AW, Yengo-Kahn AM, Solomon GS. Player performance after returning from concussion in the national football league (NFL): a pilot study
  - American Association of Neurological Surgeons, Chicago IL, May 2016
- 38. Cuculic D, Sosa I, Ferencic A, stemberga V, **Zuckerman SL.** Second-impact syndrome has some hypersensitivity traits suggesting need for reconsideration of hypersensitivity classification.
  - World Sports Medicine Congress, Ljubljana, Slovenia, 2016
- 39. **Zuckerman SL,** Kuhn AW, Solomon GS, Cason IR, Viano DC. Interrelationships among neuroimaging and neurologic outcomes in a cohort of retired National Football League (NFL) Players.
  - 5th International Consensus Conference on Concussion in Sport, Berlin, Germany, October 2016
- 40. **Zuckerman SL,** Kuhn AW, Yengo-Kahn Am, Kerr ZY, Totten DJ, Solomon GS, Sills AK. Age and sport are associated with higher odds of playing through a concussion and delayed removal from play.
  - 5th International Consensus Conference on Concussion in Sport, Berlin, Germany, October 2016
- 41. **Zuckerman SL,** Kuhn AW, Yengo-Kahn AM, Zalneraitis BH, Totten DJ, Bonfield CM, Solomon GS, Sills AK. Outcomes after sport-related concussion: does socioeconomic status matter?
  - 5th International Consensus Conference on Concussion in Sport, Berlin, Germany, October 2016
- 42. Yengo-Kahn AM, Gardner R, Kuhn AW, Solomon GS, Bonfield CM, **Zuckerman SL.** Sport-Related Structural Brain Injury: A Case Series of Subdural Hemorrhage in American High School Football.
  - Congress of Neurological Surgeons, Boston MA, October 2017
- 43. **Zuckerman SL,** Rao G, Rhines LD, McCutcheon I, Everson R, Tatsui. Treatment of Metastatic Pathologic Fractures with Interbody Distraction and Anterior Column Reconstruction: Operative Technique and Case Series.
  - Congress of Neurological Surgeons, Boston MA, October 2017
- 44. Yengo-Kahn AM, Gardner R, Kuhn AW, Solomon GS, Bonfield CM, **Zuckerman SL.** Sport-Related Structural Brain Injury: A Case Series of Subdural Hemorrhage in American High School Football.
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- 45. **Zuckerman SL,** Bilsky MH, Laufer I. Chordomas of the Skull Base, Mobile Spine, and Sacrum: An Epidemiologic Investigation of Presentation, Treatment, and Survival.
  - Congress of Neurological Surgeons, Boston MA, October 2017
- 46. **Zuckerman SL,** Kelly PD, Dewan MC, Morone PJ, Yengo-Kahn AM, Magarik JA, Baticulon RE, Zusman EE, Solomon GS, Wellons JC 3rd. Do pre-residency factors accurately predict subsequent surgical resident performance? A systematic review and its applicability to neurosurgery training.
  - American Association of Neurological Surgeons, New Orleans, LA, 2018
- 47. **Zuckerman SL,** Lakomkin N, Than KD, Smith JS, Shaffrey CI, Devin CJ. The Impact of Resident and Fellow Involvement in Adult Spinal Deformity Surgery.
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- 48. Monk S, Bhatia A, Legaretta A, Kirby PW, Brett BL, Yengo-Kahn AM, Solomon GS, **Zuckerman SL**. Structural and Functional Brain Imaging Findings After Acute Sport-Related Concussion in American Football Players: Systematic Review and Meta-Analysis.

- Congress of Neurological Surgeons, Houston, TX, 2018.
- 49. Legaretta A, Bhatia A, Monk S, Kirby PW, Brett BL, Yengo-Kahn AM, Solomon GS, **Zuckerman SL.** Long-Term Structural and Functional Brain Imaging Findings in American Football Players: Systematic Review and Meta-Analysis.
  - Congress of Neurological Surgeons, Houston, TX, 2018.
- 50. Brett BL, Mummareddy N, Kuhn AW, Yengo-Kahn AM, **Zuckerman SL.** The Relationship between Prior Concussions and Depression is Modified by Somatic Symptomatology in Retired NFL Athletes.
  - Congress of Neurological Surgeons, Houston, TX, 2018.
- 51. **Zuckerman SL,** Yengo-Kahn AM, Lee T, Swanson T, Kwiatkowski T, Weinberg G, Sills AK, Solomon GS. Preliminary Evaluation of the HS-1000 Acoustic Neuromonitoring Device in the Diagnosis and Assessment of Sport-Related Concussion.
  - Congress of Neurological Surgeons, Houston, TX, 2018.
- 52. Dennis J, Kirby PW, Yengo-Kahn AM, Solomon GS, **Zuckerman SL.** A Bioinformatics Algorithm Versus Billing Codes to Study Post-Concussion Syndrome using the Electronic Medical Record: Validating a Method to Capture an Important Patient Population.
  - Congress of Neurological Surgeons, Houston, TX, 2018.
- 53. Wolfson D, Kuhn AW, Yengo-Kahn AM, Brett BL, **Zuckerman SL.** Chronic traumatic encephalopathy research in the public domain: what makes headlines?
  - American Association of Neurological Surgeons, Dan Diego, CA, 2019
- 54. Legarreta A, Brett BA, Monsour M, Solomon GS, **Zuckerman SL.** Sport-related concussion treatment at a comprehensive sports concussion center: does earlier referral mean faster recovery?
  - American Association of Neurological Surgeons, Dan Diego, CA, 2019
- 55. **Zuckerman SL,** Lai CS, Shen Y, Kerolus MG, Ha AS, Buchanan IA, Cerpa M, Lee NJ, Leung E, Lehman RA, Lenke LG. Postoperative coronal malalignment after adult spinal deformity surgery: incidence, risk factors, and impact on 2-year outcomes.
  - North American Spine Society (NASS), Boston, MA, 2021
- 56. Lee NJ, Buchanan IA, **Zuckerman SL et al**. A Multicenter Comparison Between the Mazor X and the Renaissance in Robot-Assisted Spine Surgery: A Propensity-Matched Analysis of 2,671 Screws and 400 Patients with a 1 Year Minimum Follow-Up.
  - Global Spine Congress, Paris, France, 2021
  - North American Spine Society (NASS), Boston, MA, 2021
- 57. Lee NJ, Buchanan IA, **Zuckerman SL**, et al. What is the Comparison in Robot Complications, Radiation Exposure, and Clinical Outcomes Between Percutaneous and Open Robot-Assisted Short Lumbar Fusion? A Multicenter, Propensity-Matched Analysis of 310 Patients
  - Global Spine Congress, Paris, France, 2021
- 58. Lee NJ, Buchanan IA, **Zuckerman SL**, Boddapati V, Leung E, Park PJ, Mathew J, Buchholz AL, Pollina J, Jazini E, Haines CM, Schuler TC, Khan A, Mullin JP, Good CR, Lombardi JM, Lehman RA. The Trends in Robot Complications, Operative Efficiency, Radiation Exposure, and Clinical Outcomes After Robot-Assisted Spine Surgery: A Multicenter Study of 722 Patients and 5005 Screws from 2015-2019.
  - International Society for the Advancement of Spine Surgery, Miami, FL, 2021
- 59. <u>Kerolus MG</u>, Zuckerman SL, Buchanan AS, Cerpa M, Iyer R, Lai C, Lomabrdi J, Lehman RA, Riew KD, Lenke LG. Does Upper Instrumented Vertebrae Selection Influence 2 Year Postoperative Cervical Sagittal Range of Motion Following Thoracolumbar Spinal Deformity Surgery Starting in the Upper Thoracic Region?
  - Scoliosis Research Society, St. Louis, MO, September 2021
- 60. Lee NJ, Buchanan IA, **Zuckerman SL**, Boddapati V, Leung E, Park PJ, Mathew J, Buchholz AL, Pollina J, Jazini E, Haines CM, Schuler TC, Khan A, Mullin JP, Good CR, Lombardi JM, Lehman RA. "Is There a Difference in Screw Accuracy, Robot Time Per Screw, Robot Abandonment, and Radiation Exposure Between the Mazor X and the Renaissance? A Propensity-Matched Analysis of 1,179 Robot-Assisted Screws."

- North American Spine Society (NASS), Boston, MA, Octobers 2021

#### TEXTBOOK CHAPTERS

- 1. Ghiassi M, **Zuckerman SL**, Ghiassi M, Mocco J. Endovascular cerebral revascularization. Dr. Spetzler's Neurovascular Surgery. Second Edition. Robert F. Spetzler, Yashar M., Kalani, S., Nakaji, Peter. Thieme: Publishing Group: Stuttgart, New York, Rio. Peter Nakaji. 2015. ISBN 9781604067590.
- 2. Dewan MC, **Zuckerman SL**, Morone PJ, Mocco J. Chapter 58: Penumbra Aspiration System. Neurointerventional Techniques, Tricks of the Trade: First Edition. Edited by: Dr. F. L. Gonzales, Felipe C. Albuquerque, Cameron G. McDougall.
- 3. **Zuckerman SL,** Wellons JC. Neurosurgical Knowledge Update: Congenital Brachial Plexus Palsy. *Neurosurgery: Maintenance of Certification.* Edited by: Drs. Mark Krieger and Gerald Grant. 2016. Thieme Publishers: NY, NY.
- 4. Wong CH, **Zuckerman SL**, Morone PJ, Houseman C, Cheng JS. Spinal Cord Herniation and Spontaneous Cerebrospinal Fluid Leak. *Benzel's Spine Surgery, 2-Volume Set:* 4th Edition. 2016. Elsevier. ISBN: 9780323400305.
- 5. Wong CH, **Zuckerman SL**, Houseman CM, Cheng JS. Concepts and Mechanics of Spinal Biomechanics. *Youmans/Winn Neurologic Surgery, 4-Volume Set, 7th Edition.* 2017. Elsevier. ISBN: 780323287821.
- 6. **Zuckerman SL,** Morone PJ, Dewan MC, Lakomkin N, Cheng JS. Open Posterior Lumbar Approach: Foraminotomy, Hemilaminectomy, Microdiscectomy, and Laminectomy. *Atlas of Neurosurgical Techniques: Spine and Peripheral Nerves, 2<sup>nd</sup> Edition.* Richard G. Fessler and Laligam N. Sekhar. 2016. Thieme. ISBN: 9781626230545.
- 7. Kerr ZY, **Zuckerman SL**, Register-Mihalik JK, Wasserman EB, McLeod TC, Dompier TP, Comstock RD, Marshall SW. Estimating concussion incidence using sports injury surveillance systems: Complexities and potential pitfalls. *Neurologic Clinics*. 2016.
- 8. **Zuckerman SL,** Yengo-Kahn AM, Kuhn AW, Kerr ZY. Athletic performance after sport-related concussion. *Concussions in Athletics: Assessment, Management and Emerging Issues.* 2017. Nova Publishers.
- 9. Laufer I, **Zuckerman SL**, Bilsky M. NOMS Decision Framework. *Metastatic Spine Disease: A Guide to Diagnosis and Management*. Edited by Dr. Rex A. Marco. Springer. 2018.
- 10. Mummareddy N, **Zuckerman SL**, Bonfield CM. Post-laminectomy kyphosis in children. 2019. Advances in Health and Disease. Volume 16. Editor: Lowell T. Duncan. Nova Science Publishers, Inc. New York.

#### **MENOTRSHIP**

### Medical Students/Residents

- 1. Mitch Odom
- 2. Young Lee
- 3. Andrew W. Kuhn
- 4. Nikita Lakomkin
- 5. Aaron M. Yengo-Kahn
- 6. Daniel J. Wolfson
- 7. Nishit Mummareddy
- 8. Steven Routh

#### **Post-Doctoral Candidates**

9. Hani Chanbour

#### **EDITORIAL ACTIVITIES**

## 1. Journal Reviewer

- 1. New England Journal of Medicine
- 2. The Lancet
- 3. Spine
- 4. Journal of the American Medical Association: Pediatrics
- 5. Global Spine Journal
- 6. Brain Injury
- 7. PLOS One
- 8. American Journal of Sports Medicine
- 9. British Journal of Sports Medicine
- 10. Orthopaedic Journal of Sports Medicine
- 11. Annals of Neurology
- 12. Journal of Neurotrauma
- 13. Neurosurgical Review
- 14. Pediatrics
- 15. Sports Medicine
- 16. Advances in Medical Education and Practice
- 17. Cancer Management and Research
- 18. Oncotargets and Therapy
- 19. The Physician and Sports Medicine
- 20. Journal of Applied Biomechanics
- **21.** Injury Epidemiology
- 22. Journal of Pediatric Neurology
- 23. Journal of Neurosurgery Research and Reviews
- 24. Developmental Neuropsychology
- **25.** Sports Biomechanics
- 26. British Journal of Neurosurgery
- 27. Journal of Science and Medicine in Sport
- 28. Journal of Sport and Health Science
- 29. Applied Neuropsychology: Adult
- 30. Applied Neuropsychology: Child
- **31.** Concussion
- 32. The Clinical Neuropsychologist
- 33. Brain & Behavior
- 34. Journal of Attention Disorders
- 35. Journal of Clinical and Experimental Neuropsychology
- **36.** Journal of Neuropsychiatry and Clinical Neurosciences
- 37. Journal of Spine & Neurosurgery
- 38. Journal of Sports Sciences
- **39.** Journal of Sports Medicine and Physical Fitness
- 40. Journal of Neurosurgical Sciences
- 41. Journal of NeuroInterventional Surgery
- 42. World Journal of Surgical Oncology
- 43. Sport & Exercise Medicine: BMJ Open
- 44. International Journal of Sports Physiology and Performance
- 45. Disability and Health Journal
- 46. Open Access Journal of Sports Medicine
- 47. Computer Methods and Programs in Biomedicine

Scott L. Zuckerman, M.D., M.P.H.

- **48.** Sultan Qaboos Medical Journal **49.** Journal of African Health Sciences

# HOBBIES

Baseball, basketball, softball, golf, weightlifting, Crossfit, and baseball history.