

Deshdeepak Sahni, M.D.
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Professional Work Experience

- 08/2021 - present **Chief of Spine Surgery**
Brushy Creek Hospital, Round Rock, TX
- Leadership and ongoing development of a complex and minimally invasive spine surgery program
- 08/2020 - present **Founder, Managing Partner and Medical Director**
United Minimally Invasive Surgery Center, San Antonio, TX
- Lead, build and develop an outpatient minimally invasive spine surgery program
- 04/2018 - 03/2020 **Co-founder and Medical Director**
Midtown Surgery Center, Austin, TX
- Led, built and developed an outpatient minimally invasive spine surgery program
- 04/2016 - present **Capital Brain and Spine (Austin, TX)** www.bspine.com
Neurotrauma, traumatic brain injury and complex and minimally invasive spine surgery
- 04/2016 - 08/2021 **St. David's South Austin Medical Center**
Coordinator of Neurotrauma - coordinated and personally provided the majority of neurosurgical coverage, over 5 years, for brain and spine trauma at a Level 2 Trauma Center, the busiest ER in Central Texas.
- Saved more than 2 dozen lives of people dying from traumatic brain hemorrhages, fulminant hydrocephalus and life-threatening spinal trauma
 - Stabilized many dozens of unstable spines in people at risk of paralysis
 - Provided leadership through example to a fledgling neurotrauma program by taking a role that few Austin neurosurgeons were willing to embrace due to the high level of expectations and large volume of trauma that came through the hospital
- 04/2015 - 04/2016 **Neurotrauma medical center call coverage**
- Level 1 Trauma - University Medical Center of El Paso, TX
 - Level 2 Trauma - Del Sol Medical Center, El Paso, TX
 - Level 2 Trauma - Terre Haute Regional Hospital, Terre Haute, IN
 - Level 2 Trauma - Clearlake Regional Medical, Houston, TX
 - Veterans Affairs Medical Center, Iowa City, IA - performed elective spine surgery for veterans
- 08/2014 - 08/2015 **Fellowship –Texas Medical Center Orthopedic Spine Fellowship**

- UT-Houston-Memorial Hermann, Methodist Hospital, Texas Children's Hospital and MD Anderson Cancer Center, Houston
- Director: Dr. Rex Marco
- Spinal Deformity and Scoliosis Surgery, Minimally Invasive Surgery, Spinal Oncology, Spine Trauma, Spinal Reconstruction

06/2007 - 06/2014 **Residency – Baylor College of Medicine/MD Anderson Cancer Center**
Department of Neurosurgery Residency Program, Houston, Texas

Education

08/2005 - 5/2007 **Graduate – Columbia College of Physicians & Surgeons, New York, New York**

- Doctorate of Medicine

08/2002 -05/2005 **Tulane University School of Medicine, New Orleans, Louisiana**

- Doctorate of Medicine (2003-2005)
- Anatomy Certification Program (2002-2003)
- USMLE Step 1 – 262/99 – passed
- Transferred to Columbia University after Hurricane Katrina

2001 **Graduate – Columbia University, New York, New York**

- B.A.: Magna Cum Laude in English literature and premedical studies

Licenses, Privileges, Certifications & Membership

Board Certification: American Board of Clinical Neurosurgery (expires 2026)

State License(s): **Texas, Colorado**

ATLS, ACLS, BLS – qualified and currently active certifications

CNS, AANOS, NASS – currently active membership

Hospital Affiliations (Current)

HCA St. David's South Austin, Austin, TX

- Adult neurotrauma, cranial and spinal surgery
- Neurosurgical coverage for Level II trauma

Adult neurotrauma and spinal surgery privileges at the following facilities:

- The Hospital at Westlake Medical Center
- Brushy Creek Family Hospital
- Southwest General Hospital
- Legent Orthopedic + Spine Hospital
- Methodist Healthcare System Hospitals
- United Minimally Invasive Center

Awards and Honors

- 2011 **Texas Children's Hospital Surgery Research Seed Grant Award** \$50,000
For the investigation of spinal cord regeneration after injury using nanomaterials
- 2011 **AO Spine Young Investigators Research Grant** \$30,000
Electrically stimulated nanographene as a scaffold for spinal cord regeneration
- 2010 **Medtronic-Neurosurgery Research and Education Fund Award (NREF)**
\$40,000 Nanomaterials as a scaffold for axonal regeneration following spinal cord injury
- 2005 – 2007 **Honors:** Neurology, General Surgery, Neurosurgery (Columbia), Neurosurgery (UCSF), Gastroenterology, Emergency Psychiatry
- 2003 – 2005 **Honors:** 14/15 preclinical medical school classes
- 2004 **George A. Adrouny Award for Outstanding Achievement in Biochemistry:**
Ranked #1/150 students in medical biochemistry, biogenomics and biochemistry boards
- 2004 **National Board of Medical Examiners (NBME)** board examinations in Physiology, Biochemistry, Pathology, Pharmacology & Physical diagnosis:
Greater than 99th percentile among national test-takers in all exams
- 2004 **Jewell Osterholm Neurosurgery Research Scholarship:**
Thomas Jefferson University Department of Neurosurgery, Philadelphia, PA
- 2003 **Louisiana Cancer Research Consortium Fellowship:**
LSU-Department of Pathology, New Orleans, LA
- 1998 - 2001 **Columbia University:** Honor Society, Dean's List, Mabel Robinson Scholarship, General Studies Scholarship, graduated Magna Cum Laude, Observer poetry contest

Research

- 2010 – 2011 **Texas Children's Hospital**, Department of Pediatric Neurosurgery
Nanocarbon scaffolds and mammalian neuron compatibility with Andrew Jea MD
- 2004 – 2005 **Tulane University School of Medicine**, Department of Neurosurgery
Skull-base and cerebrovascular research with Miguel Melgar, MD, PhD
- 2004 **Thomas Jefferson University**, Department of Neurosurgery
Neurosurgical research with James Harrop, MD and Ashwini Sharan, MD
Thomas Jefferson University, Department of Orthopedics
Spine research with Alexander Vaccaro, MD
- 2003 **LSU-New Orleans School of Medicine**, Department of Pathology, Cancer
Research On microsatellite instability in tumors with Barbara Schneider

Publications

- Melgar M, **Sahni D**, Weinand M: Thyrocervical trunk-external carotid bypass for positional cerebral ischemia due to common carotid occlusion. Technical note with illustrative cases. **Journal of Neurosurgery**. July 2005 Volume 103 Issue 1
- Vaccaro AR, **Sahni D**, Pahl MA, Harrop JS, Sharan AD, Venger BH, Haid RW, Vadera S: Bioabsorbable anterior cervical plating for single-level anterior cervical discectomy and fusion: two year follow-up of safety and effectiveness. **Spine**. August 15th 2006 Volume 31 issue 18
- (Book Chapter) – Harrop JS, Vadera S, **Sahni D**: Thorac and lumbar vertebral compression fractures. In **Decision Making in Spinal Care**. Anderson DG and Vaccaro AR (eds). Thieme Medical Publishers, New York. 2006
- (Book Chapter) – Harrop JS, Vadera S, **Sahni D**: Thoracolumbar burst fractures. In **Decision Making in Spinal Care**. Anderson DG and Vaccaro AR (eds). Thieme Medical Publishers, New York. 2006
- Schneider BG, **Sahni D**, Torres JC: Microsatellite instability in pterygia: Are there similarities between genetic lesions in pterygia in malignancies? **Cornea**. May 2007 Volume 26 Issue 4.
- Ransom ER, Mocco J Komotar RJ, **Sahni D**, Chang J, Schmidt JM, Sciacca RR, Mayer SA, Connolly ES: External ventricular drainage response in poor grade aneurysmal subarachnoid hemorrhage: effect on preoperative grading and prognosis. **Neurocritical Care**. June 2007 Volume 6 Issue 3
- **Sahni D**, Harrop JS, Kalfas IH, VaccaroAR, Sharan AD: Exophytic intramedullary meningioma of the cervical spinal cord: case report. **Journal of Clinical Neuroscience**. Oct 2008 Volume 15 Issue 10
- Sivaganesan A. Krishnamurthy R, **Sahni D**, Viswanathan C: Neuroimaging of ventriculoperitoneal shunt complications in children. **Pediatric Radiology**. June 28, 2012
- **Sahni D**, Mata J, Marcano D, Sivaganesan A, Tatsui C, Tour J, Jea, A: Biocompatibility of Graphene for Neuronal Interface. **Journal of Neurosurgery: Pediatrics**. March 2013
- **Sahni D**, Prasad P, Hadley C, Tran BH, Fulkerson DH, Hwang SW, Jea A: Pediatric pedicle screw (In)accuracy based on postoperative computed tomography. **Journal of Pediatric Neuroradiology**. February 2015, Volume 3, Number 4
- **Sahni D**, Shetty A, Vrabec JT, Donovan DT, Marco RAW. En Bloc Resection of Cervical Sarcoma Involving C1: Report of Two Cases and Surgical Considerations. **Journal of Spine**. 4:232, 2015.
- **Sahni D**, James KB, Hipp J, Holloway S, Marco RAW. Is there an Increased Incidence of Cervical Degenerative Disease in Surgeons who use Loupes and a Headlight? **Journal of Spine**. 4(5):256, 2015.

Abstracts

- (Abstract) – **Sahni D**, Schneider BG, JC Torres: Microsatellite instability in pterygia: Are there similarities between genetic lesions in pterygia in malignancies? Tulane University research day. New Orleans, LA 2003
- (Abstract) – Vadera S, Hanna AS, **Sahni D**, Flanders A, Harrop JS, Sharan AD: Relationship between the internal carotid artery and the lateral mass of C1 based on CT findings and its application to the insertion of C1 lateral mass screws. American Association of Neurological Surgeons meeting. New Orleans, LA 2005
- (Abstract) – **Sahni D**, Vaccaro AR, Sharan A, Harrop J, Venger BH, Haid RW. Long-term Clinical and Magnetic Resonance Imaging Evaluation of Bioabsorbable Anterior Cervical Plate Resorption following Fusion for Degenerative and Traumatic Disc Disruption. Congress of Neurological Surgeons meeting. Boston, MA 2005
- (Abstract) – **Sahni D**, Harrop J, Sharan A. Clinical Significance of Spinal Intracranial Air (Pneumorrhachis). Congress of Neurological Surgeons meeting. Boston, MA 2005
- (Oral Abstract) – **Sahni D**, Melgar M. Cerebral Revascularization for Chronic Carotid Artery Occlusion. Congress of Neurological Surgeons meeting. Chicago, IL 2006
- (Abstract) – **Sahni D**, Sivagenesan A, Tatsui C, Jea A, Luerksen T. Spinal Cord Regeneration: Are Carbon Nanotubes Biocompatible Scaffolds for Axonal Growth? Texas Children's Hospital. Surgical Research Day . Houston, TX May 21, 2010
- (Abstract) – **Sahni D**, Sivagenesan A, Tatsui C, Jea A, Luerksen T. Spinal Cord Regeneration: Are Carbon Nanotubes Used as Scaffolds for Axonal Growth Biocompatible? Congress of Neurological Surgeons meeting. San Francisco, CA 2010
- (Abstract) – **Sahni D**, Mata J, Luerksen T, Jea A. Biocompatibility of graphene for neuronal interface. Texas Children's Hospital Surgical Research Day. Houston, TX May 5, 2011
- (Abstract) – **Sahni D**, Prashad G, Jea A. Thoracic, Lumbar, and Sacral Pedicle Screw (In)accuracy as a Function of Surgeon Experience, Patient Age, and Diagnosis in the Pediatric Spine and the Spine of the Transitional Patient: Postoperative Computed Tomography Assessment. Texas Children's Hospital Surgical Research Day. Houston, TX May 10, 2013

Talks, Lectures and Presentations

- **Sahni D.** The Role of Complement Proteins in Stroke. Department of Neurological Surgery, Grand Rounds, Columbia University, New York, NY July 27, 2006
- **Sahni D.** The Role of Complement Proteins in Stroke. Department of Neurological Surgery, Grand Rounds, UCSF, San Francisco, CA Sept 14, 2006
- **Sahni D.** Cerebral Revascularization for Chronic Carotid Artery Occlusion. Department of Neurological Surgery, Grand Rounds, Columbia University, New York, NY Oct 5, 2007
- **Sahni D.** Nanotechnology and Neurosurgery. Department of Neurological Surgery. Grand Rounds, Baylor College of Medicine, Houston, TX May 14, 2010
- **Sahni D.** T1 Pelvic Angle: A New Measure of Sagittal Balance. Department of Neurological Surgery, Grand Rounds, Medical College of Wisconsin, Milwaukee, WI Feb 13, 2015
- **Sahni D.** Anterior retroperitoneal and thoraco-abdominal approach to the spine. Cadaver lab and lecture. University of Texas at Houston, Department of Orthopedic Surgery. Feb 24, 2015
- **Sahni D.** Considerations for post-operative care of the cervical spine patient / Identifying common and potential complications, Clinical Management of Cervical Spine Trauma: Depuy Synthes, Emerging Care Providers Workshop, Houston, TX March 6, 2015

Other

Ad hoc reviewer Spine

Hobbies

Travel, origami, US History, moderate fluency in Spanish, weightlifting, fitness/running and non-fiction