PEER REVIEWED PUBLICATIONS

Chaput CD, Crawford NR, Ferrara L, Sandhu F, Malloy S, Pateder D, Biomechanical evaluation of a less invasive fixation device compared to conventional fixation in the setting of a direct decompression, submitted.

Sandhu FA, Fessler RG. Letter to the Editor. Alternative C-1 screw placement technique. *J Neurosurg: Spine*, Oct 20, 1-2, 2017. doi: 10.3171/2017.4.SPINE17463.

Felbaum DR, Stewart JJ, Suskin ZD, Gill WH, Sandhu FA. Unilateral C1 Sagittal split fractures: An unusal entity revisited, *World Neurosurg*, Oct 10. pii: S1878-8750(17)31724-2. doi: 10.1016/j.wneu.2017.09.206.

McGowan J, Felbaum D, Syed HR, Meuller KB, Sandhu FA. Electronic conductivity device guided S2 alar iliac: Technical report and case illustration, Aug, *Euro Spine J*, 26(11), 2941-50, 2017. doi: 10.1007/s00586-017-5242-0.

Ryan J, Jha RT, Sandhu FA, Treating cervical radiculopathy from a one-level disc herniation using a cervical disc arthroplasty: a review of the literature and available devices, Accepted, *Clin Neurol and Neurosurg*, 2017.

Felbaum DR, Stewart JJ, Anaizi AN, Sandhu FA, Nair MN, Voyadzis JM. Implementation and Evaluation of a Smartphone Application for the Perioperative Care of Neurosurgery Patients at an Academic Medical Center: Implications for Patient Satisfaction, Surgery Cancelations and Readmissions. *Oper Neurosurg*, 2017 May 25. doi: 10.1093/ons/opx112.

Felbaum DR, Steward J, Distaso C, Sandhu FA. Complication rate in minimally invasive revision lumbar discectomy: case series and technical report. *Clin Spine Surg*, 2017 Mar 6. doi: 10.1097/BSD.000000000000513.

Jha RT, Syed HR, Catalino M, Sandhu FA, Contralateral approach for minimally invasive treatment of upper lumbar intervertebral disc herniation: technical note and case series. *World Neurosurg*, 2017 Apr;100:583-589. doi: 10.1016/j.wneu.2017.01.059.

Felbaum DR, Fayed I, Stewart JJ, Sandhu FA, Relief of lumbar symptoms after cervical decompression in patients with tandem spinal stenosis presenting with primarily lumbar pain. *Cureus*, 8(12), e940, 2016.

Syed H, Yeager K, Sandhu FA. Resolution of the more anteriorly positioned psoas muscle following correction of spinal sagittal alignment from spondylolisthesis, *J Neurosurg: Spine*, Jan 6, 1-7, 2017. doi: 10.3171/2016.9.SPINE16324. Epub 2017 Jan 6.

Benjamin CG, Oermann EK, Thomas AJ, Distaso CT, Sandhu FA. Minimally invasive direct lateral transpsoas approach for the resection of a lumbar plexus schwannoma: technique report, *The Surgery Journal*, Vol 2(3): e66-69, 2016.

Nunley PD, Sandhu FA, Frank K, Stone M. Neurological Complications after Lateral Transpsoas Approach to Anterior Interbody Fusion with a Novel Flat Blade Spine-Fixed Retractor, *BioMed Research International*, Vol 2016, Article ID 8450712, 5 pages. (http://dx.doi.org/10.1155/2016/8450712)

Sandhu FA, Felbaum D, Utility of the inside-out technique for pediatric occipital cervical fusion and correction of the clivoaxial angle: A case illustration, *J Spine*, 5:1, 2016. (http://dx.doi.org/10.4172/2165-7939.1000278)

Spitz SM, Felbaum D, Sandhu F, Delayed Post-operative C5 Root Palsy and the use of Neurophysiological Monitoring, *Eur Spine J*, 24(12):2866-71, Dec 2015.

Kelahan CL, Sandhu FA, Sayah A, Multifocal Hemangioendothelioma of the Lumbar Spine and Response to Surgical Resection and Radiation, *Spine J*, 15(11):e49-56, Nov 2015.

Rhee JW, Petteys RJ, Anaizi AN, Sandhu FA, Voyadzis JM, Prospective evaluation of one-year outcomes in single-level percutaneous lumbar transfacet screw fixation in the lateral decubitus position following lateral transpsoas interbody, *Eur Spine J*, 24(11):2546-54, Nov 2015.

Felbaum D, Spitz SM, Sandhu FA, Correction of clivo-axial angle deformity in the setting of suboccipital craniectomy: Technical note, *J Neurosurg: Spine*, 10: 1-8, April, 2015.

Spitz SM, Sandhu FA, Voyadzis JM, Percutaneous "K-wireless" pedicle screw fixation: A technique evaluation of the initial experience of 100 screws with assessment of accuracy, radiation exposure and procedure time, *J Neurosurg: Spine*, 22:422-31, 2015.

Anaizi AN, Kalhorn C, Voyadzis JM, Sandhu FA. Thoracic Spine Localization Using Pre-operative Placement of Fiducial Makers and CT Myelography: A Technical Report. *J Neurol Surg A Cent Eur Neurosurg*, 76(1):66-71, 2014.

Petteys R, Sandhu FA. Minimally Invasive Lateral Retroperitoneal Corpectomy for Treatment of Focal Thoracolumbar Kyphotic Deformity: Case Report and Review of the Literature. *J Neurol Surg A Cent Eur Neurosurg*, 75(4):305-9, 2013.

Adkins DE, Sandhu FA, Voyadzis JM. Minimally Invasive Lateral Approach to the Thoracolumbar Junction: Operative Technique and Illustrative Case Series, *J Clin Neurosci*, 20(9):1289-94, 2013.

Rhee J, Voyadzis J-M, Anaizi AA, Sandhu FA. Minimally Invasive Resection of Lumbar Synovial Cyst from a Contralateral Approach: Case Report. *J Neurosurg: Spine*, 17(5):453-8, 2012.

Voyadzis JM, Gala VC, Sandhu FA, Fessler RG. Minimally Invasive Approach for Far lateral Discectomies: Results from 20 Patients. *Minimally Invas Neurosurg*, 53(3):122-126, 2010.

Oermann EK, Coppa ND, Margolis M, Sandhu FA. Extramedullary Hematopoietic Tumor Mimicking a Thoracic Nerve Root Schwannoma. *J Neurosurg: Spine*, 13:78-81, 2010.

Thomas JA, Tredway T, Fessler RG, Sandhu FA, An Alternative Method of placement of C1 Screws: Technical Report and Case Series. *J Neurosurg: Spine*, 12:337-341, 2010.

Rosen DS, O'Toole JE, Eichholz KM, Hrubes M, Huo D, Rice L, Sandhu FA, Fessler RG. Minimally invasive lumbar spinal decompression in the elderly: prospective outcomes of 50 patients greater than 75 years of age. *Neurosurgery*, 60(3): 503-510, 2007.

Lynskey JV, Sandhu FA, Dai HN, McAtee M, Slotkin JR, MacArthur L, Bregman BS. Delayed intervention with transplants and neurotrophic factors supports recovery of forelimb function after cervical spinal cord injury in adult rats. *J Neurotrauma*, 23(5): 617-34, 2006.

Isaacs RE, Podichetty V, Santiago P, Sandhu FA, Spears J, Kelley K, Rice L, Fessler RG. Minimally invasive microendoscopy-assisted transforaminal lumbar interbody fusion with instrumentation. *J Neurosurg: Spine*, 3(2): 98-105, 2005.

Sandhu, F.A., Santiago, Pl, Fessler, R.G.: Minimally Invasive Surgical Treatment of Lumbar Synoivial Cysts. *Year Book Of Neurology and Neurosurgery*, 331-332, 2005.

Isaacs RE, Podichetty VK, Sandhu FA, Santiago P, Spears JD, Aaronson O, Kelly K, Hrubes M, Fessler RG. Thoracic microendoscopic discectomy: A human cadaver study. *Spine*, 30(10): 1226-31, 2005.

Sandhu FA, Santiago P, Palmer S, Fessler RG. Minimally invasive treatment of lumbar synovial cysts. *Neurosurgery*, 54(1):107-111, 2004.

Perez-Cruet MJ, Kim BS, Sandhu F, Samartzis D, Fessler RG. Thoracic microendoscopic discectomy. *J Neurosurg: Spine*, 1(1): 58-63, 2004.

Le H, Sandhu FA, Fessler RG. Clinical outcomes of microendoscopic discectomy for revision lumbar discectomies. *Neurosurgical Focus*, 15(3): Article 12, 2003.

Fessler RG, Sandhu FA. Minimalism: Is Less More? Clinical Neurosurg, 50, 220-7, 2003.

Sandhu FA, Pait TG, Benzel E, Henderson FC. Occipitocervical fusion in rheumatoid arthritis using the inside-outside stabilization technique, *Spine*, 28(4):414-9, 2003.

Bregman BS, Coumans JV, Dai HN, Kuhn PL, Lynskey J, McAtee M, Sandhu F. Transplants and neurotrophic factors increase regeneration and recovery of function after spinal cord injury, *Prog Brain Res*, 137:257-73, 2002.

Sandhu FA and Martuza RL. Craniofacial hemangiopericytoma associated with oncogenic osteomalacia: case report, *J Neuro-Oncology*, 46(3):241-7, 2000.

Sandhu FA, Schellinger D and Martuza RL. A vascular extra-axial neurosarcoid mass mistaken for a convexity meningioma. *Neuroradiology*, 42:195-8, 2000.

Sandhu FA, Salim M, Aluidin V, and Zain SB. Expression of the carboxyl terminus of the amyloid precursor protein alters growth factor responsiveness in stably transfected PC12 cells. *Proc Natl Acd Sci*, 93(5):2180-5, 1996.

Zain S, Honda T, Kim Y, Lapan K, Nixon R, Sandhu F. Cellular and Mouse Models to Study Senile Plaque and Beta-Amyloid Specific Amyloidosis, *Neurobio Aging*, 15:S30-S30, 1994.

Sandhu FA, Porter RHP, Eller RV, Zain SB, Salim M, and Greenamyre JT. NMDA and AMPA receptors in transgenic mice expressing the human β -amyloid protein. *J Neurochem*, 61:2286-9 (1993).

Sandhu FA, Salim M and Zain SB. Expression of the human β -amyloid protein of Alzheimer's disease specifically in the brains of transgenic mice. *J Biol Chem*, 266(32):21331-4 (1991).

Sandhu FA. <u>Characterization and Studies of Transgenic Mice and Stably Transfected PC12 Cell Lines</u> <u>Expressing the Human Amyloid Precursor Protein of Alzheimer's Disease</u>. Doctoral Thesis, University of Rochester, 1994.

BOOKS

Vaccaro A, Fessler RG, Eck J, Sandhu FA, Voyadzis, Kepler C (Editors). Controversies in Spine Surgery: Open vs Minimally Invasive Procedures, Theime, in press.

O'Brien J, Sandhu FA, Kalantar SB, Drazin D (Editors). Resident's Guide to Spine Surgery, Springer, in preparation.

Sandhu FA, Voyadzis JM and Fessler RG (Editors), Decision Making for Minimally Invasive Spinal Surgery, Theime, 2011.

Sandhu FA (Guest Editor), Seminars in Spine Surgery: Minimally Invasive Spine Surgery, 23:1, March 2011.

BOOK CHAPTERS AND REVIEWS

Anaizi A, Sandhu FA. Nuances and Complications of Minimally Invasive Spine Surgery, Contemporary Neurosurg, 2012.

Pettys R, Sandhu FA. Craniovertebral Junction Instabilities and Surgical Fixation Techniques: Occipital plating, Occipital Condyle-C1 screw, Occipital Cervical Wiring in Surgical Anatomy & Techniques to the Spine, 2nd edition, Kim D, Vaccaro A, and Dickman C (eds), Theime, 2012.

Saratsis-Muhs AL, Sandhu FA, Voyadzis JM. Minimally Invasive Lumbar Discectomy in Decision Making for Minimally Invasive Spinal Surgery, Sandhu FA, Voyadzis JM and Fessler RG (eds), Thieme, pp72-85, 2010.

Subbaiah S, Fessler RG, Voyadzis JM, Sandhu FA. Minimally Invasive Lumbar Laminectomy for Stenosis in Decision Making for Minimally Invasive Spinal Surgery, Sandhu FA, Voyadzis JM and Fessler RG (eds), Thieme, pp61-71, 2010.

Anaizi A, Voyadzis JM, Sandhu FA. Minimally Invasive Lumbar Interbody Fusion: Choosing Between Approaches in Decision Making for Minimally Invasive Spinal Surgery, Sandhu FA, Voyadzis JM and Fessler RG (eds), Thieme, pp124-138, 2010.

Oermann EK, Smith Z, Khoo LT, Sandhu FA. Minimally Invasive Instrumentation Systems in Decision Making for Minimally Invasive Spinal Surgery, Sandhu FA, Voyadzis JM and Fessler RG (eds), Thieme, pp159-179, 2010.

Wilcox ME, Moquin RR, Sandhu FA. Postarthrodesis cervical stenosis: incidence, etiology, and surgical options. Semin Spine Surg, 18(4):225-229, 2006.

Moquin R, Sandhu FA, Henderson FC. Cystic Intramedullary Neoplasms of the Spinal Cord. Semin Spine Surg, 18(3):168-174, 2006.

Sharma M, Coppa N, Sandhu FA. Syringomyelia: a review. Semin Spine Surg, 18(3):180-184, 2006.

Jimenez J, Sandhu FA. Retroperitoneal Approach and Closure in Neurosurgical Atlas, Fessler RG, Sekhar LS (eds), Theime, pp417-420, 2006.

Sandhu FA, Jimenez J. Thoraco-abdominal Approach and Closure in Neurosurgical Atlas, Fessler RG, Sekhar LS (eds), Theime, pp413-16, 2006.

Sandhu FA, Perez-Cruet MJ, Fessler RG. Microendoscopic cervical foraminotomy and discectomy, An Anatomical Approach to Minimally Invasive Spinal Surgery, Perez-Cruet M, Khoo L, Fessler RG (eds), Quality Medical Publishing, St Louis, pp 337-348, 2006.

Sandhu FA. CD Horizon Sextant System in Spinal Instrumentation: Surgical Techniques. Kim DH, Vaccaro AR, Fessler RG (eds), Thieme, 2005.

Sandhu FA, Fessler RG. Minimally Invasive Transforaminal Lumbar Interbody Fusion, in Endoscopic Spinal Surgery, Kim DH, Fessler RG (eds), Theime, pp265-280, 2005.

Refai D, Sandhu F, Frempong-Boadu AK, Fessler RG. Endoscopic Assisted Transoral Odontoidectomy, in Endoscopic Spinal Surgery, Kim DH, Fessler RG (eds), Theime, pp41-47, 2005.

Sandhu FA, Thompson G, Perez-Cruet M, Fessler RG. Vertebroplasty and kyphoplasty: An overview in Vertebroplasty and Kyphoplasty, Resnick DK, Barr JD, Garfin SR (eds), Thieme, 2005.

Isaacs RE, Sandhu FA, Fessler RG: Microendoscopic Discectomy. In: Atlas of Minimal Access Spine Surgery. Regan J and Lieberman I (Eds.) Quality Medical Publishing, St. Louis, pp 465-85, 2004.

Sandhu, F.A., Fessler, R.G.: Minimally Invasive Spinal Surgery. In: Best New Technologies in Spine and Pain Management from A to Z. Eidelson, S.G. (Ed). Reliable Informative Medical Publications. San Diego, CA, 2004.

Sandhu, F.A., Christie, S., Song, J., Khoo, L.T., Laich, D., Fessler, R.G.: Minimally Invasive Transforaminal Interbody Fusion. In: Spinal Enstrumantasyon, S. Naderi (Ed.) META Basim Matbaacilik Hizmetleri, Bornova, Izmir, Turkey, pp. 293-307, 2004.

Sandhu FA, Isaacs RE, Fessler RG. Posterior Cervical Microendoscopic Discectomy/Foraminotomy in Masters of Orthopedic Surgery: The Spine, Bradford DS, Zdeblick TA (eds), Lippincott Williams & Wilkins, pp101-109, 2004.

Bregman BS, Coumans JV, Dai H-N, Lynskey J, Iarikov D, McAtee M, Sandhu F. Recovery of locomotion and skilled forelimb function after spinal cord injury in rats: Effects of transplants and neurotrophic factors, in Topics in spinal cord injury rehabilitation. Regeneration Research Update. David R. Apple, ed. Thomas Land Publishers, Inc. Vol. 8, No.4. pp 52-68, Spring 2003.

Bregman BS, Coumans J-V, Ding HN, Kuhn PL, Lynskey J, McAtee M, Sandhu F, Transplants and neurotrophic factors increase regeneration and recovery of function after spinal cord injury, in Progress in Brain Research, Elsevier, Vol. 137, pp 257-273, 2002.

Perez-Cruet MJ, Kim BS, Sandhu FA, Fessler RG. An update on endoscopic thoracic spine surgery: thoracic microendoscopic discectomy in Advances in Spinal Stabilization, Haid RW Jr, Subach BR, Rodts GE (eds), Progress Neurol Surg. Basel, Karger, Vol 16, pp 266-276, 2003.

Kim BS, Sandhu FA, Refai D, Fessler RG. Approaches to the Craniocervical Junction and Upper Cervical Spine. The Adult and Pediatric Spine, 3rd Edition, Frymoyer J, Wiesel S (eds), Lippincott Williams & Wilkins, pp 753-60, 2003.

Sandhu FA, McGrail KM. Management of Intracranial Hemorrhage, in Critical Pathways in Neurology, Cohan SL (ed), Dunitz Publishers, London, in press.

Sekula R, Sandhu FA, Oliverio P and Henderson FC. Intramedullary Tumors of the Cord. Seminars in Spine Surgery, 12(1), 1-10, 2000.

Sandhu FA, McGrail KM. Evaluation and Management of Low Back Pain. Emerg Medicine, 31(11);20-46, 1999.

Sandhu FA. Model sytems to study the β -amyloid protein of Alzheimer's disease. AGE, 17(1);7-11, 1994.

Sandhu FA. The Amyloid Precursor Protein and Alzheimer's Disease. Journal of the University of Rochester Medical Center, 5(1);17-24, 1993.

Sandhu FA. Transgenic mice: an overview. Journal of the University of Rochester Medical Center, 1(1);23-7, 1989.

ABSTRACTS

Chatain G, Deki T, Rotter J, Toledo R, Ironside N, Veznedaroglu E, Heiss J, Sandhu F, Myseros J, Magge S, Chima o, Keating R. Differences between symptom presentation for the pediatric and adult Chiari patient: Is it a different disease or a reflection of time. International Society for Pediatric Neurosurgery Annual Meeting, 2017, Boston, MA.

Mueller K Sandhu FA, Voyadzis J-M, Surgical site infection in minimally invasive versus open spinal surgery. A single center experience of 1,001 cases. Does the use of tubular retractors reduce infection rates?, In: Annual Meeting of American Association of Neurological Surgeons, 2017; Los Angeles, CA.

Malloy JP, Chaput CD, Sandhu FA, Rodriguez-Martinez NG, Crawford NR, Newcomb N, Bilateral Lumbar Fixation Following Microsurgical Decompression from a Unilateral Approach, In annual North American Spine Society meeting, 2016, Boston.

Felbaum D, Syed H, Anaizi A, Nair N, Sandhu F, Voyadzis J-M, Implementation and evaluation of a smartphone application for the perioperative care of patients undergoing routine neurosurgical procedures at an academic medical center, In Annual Meeting of Congress of Neurological Surgeons, 2016, San Diego.

Chaput CD, Pateder D, Sandhu FA, Soriano-Baron HE, Rodriguez-Martinez NG, Newcomb AG, Crawford NR, Bilateral Lumbar Fixation Following Microscopic Laminotomy from a Unilateral Approach. In Annual ISSAS Meeting 2016, Las Vegas, NV.

Williams J, Sandhu FA, Betz R, The Use of Dynamic Surgical Guidance (DSG) Shortens Placement of Pedicle Screw Time While Improving Accuracy, a teaching instrument for residents: A Cadaveric Study, In: SRS Annual Meeting, 2015; Minneapolis, MN.

Syed HR, Sandhu FA, Clinical Outcome and Complications Associated with Minimally Invasive Lumbar Spinal Decompression: An Analysis of 250 Cases, In: Walter Dandy Quadrennial Meeting, 2015.

Syed HR, Felbaum D, Sandhu FA, Initial results with the use of fibrin glue as a hemostatic agent to prevent epidural hematoma following minimally invasive laminectomy, In: Annual Meeting of American Association of Neurological Surgeons, 2015; Washington, DC.

Syed HR, Felbaum D, Jha T, Voyadzis J-M, Sandhu FA, Early clinical results and complications associated with two-level minimally invasive lumbar spinal decompression: A technical report, In: Annual Meeting of American Association of Neurological Surgeons, 2015; Washington, DC.

Syed HR, Felbaum D, Sandhu FA, Percutaneous Transforaminal Interbody Fusion using OptiMesh: an initial operative experience and early outcomes for treating "vacuum" discs, In: Annual Meeting of American Association of Neurological Surgeons, 2015; Washington, DC.

Syed H, Sandhu FA, A leading neurosurgeon of his era: Ayub Khan Ommaya (1930-2008). In European Assoc of Neurosurg Soc (EANS) Meeting, 2014.

Syed H, Spitz S, Landry D, Kafchinski L, Gaffney C, Sandhu FA, Williams J, Powell D, Smith J, Betz R, The Use of an Electrical Conductivity-Monitoring Device (ECMD) Shortens the Learning Curve for Accurate Placement of Pedicle Screws: A Cadaveric Study. In Annual Meeting of Congress of Neurological Surgeons, 2014, Boston, MA.

Syed H, Sandhu FA, Resolution of "rising psoas muscle" position following correction of spinal sagittal alignment from spondylolisthesis: case report. In Annual Meeting of Congress of Neurological Surgeons, 2014, Boston, MA.

Syed H, Sandhu FA, Clinical outcome and complications associated with minimally invasive lumbar spinal decompression: an analysis of 250 cases. In Annual Meeting of Congress of Neurological Surgeons, 2014, Boston, MA.

Felbaum D, Spitz S, Sandhu FA, Occipital Cervical Fusion in the Setting of Prior Suboccipital Craniectomy: Technique Report and Case Series. In Annual ISSAS Meeting 2014, Miami, FL.

Syed H, Spitz S, Voyadzis J-M, Sandhu FA. Complications Associated with Minimally Invasive Extreme lateral Interbody Fusion (XLIF): An Analysis of 300 cases. In Annual Meeting of Congress of Neurological Surgeons, 2013, San Francisco, CA.

Spitz S, Sandhu FA, Petteys R, Syed H. Low Back Pain and Lumbar Radiculopathy Relieved by Cervical Spinal Cord Decompression in Patients with Tandem Spinal Stenosis:Case Series. In Annual Meeting of

Congress of Neurological Surgeons, 2013, San Francisco, CA.

Spitz S, Voyadzis J-M, Sandhu FA, Petteys R, Syed H. Percutaneous "K-Wireless" Pedicle Screw Fixation: Initial Experience with 68 screws with Assessment of Accuracy, Radiation Exposure and Procedure Time. In Annual Meeting of Congress of Neurological Surgeons, 2013, San Francisco, CA.

Adkins DE, Anaizi AN, Sandhu FA. Complication Rate in Minimally Invasive Revision Lumbar Discectomy: Case Series and Technical Note. In: Annual Meeting of Congress of Neurological Surgeons, 2012, Chicago, IL.

Anaizi AN, Adkins DE, Sandhu FA. Surgical Site infections in Minimally Invasive Lumbar Spine Surgery: A Case Series. In: Annual Meeting of Congress of Neurological Surgeons, 2012, Chicago, IL.

Oermann EK, Pendharker AV, Voyadzis JM, Sandhu FA. Early Results for Extreme Lateral Lumbar Interbody Fusion (XLIF) for the Surgical Correction of Low Grade Single Level Spondylolisthesis. In: Annual Meeting of American Association of Neurological Surgeons, 2012; Miami, FL.

Penharkar AV, Oermann EK, Voyadzis JM, Sandhu FA. Preliminary Results of Two Level Minimally Invasive Trans-foraminal Lumbar Interbody Fusion (MI-TLIF) for Low Back Pain and Radiculopathy. In: Annual Meeting of American Association of Neurological Surgeons, 2012; Miami, FL.

Sandhu FA, Nunley P. Novel Dual-Flat Blade Retractor for Lateral Transpsoas Approach to Anterior Interbody Fusion: Technique Description and Clinical Results. In: Annual Meeting of American Association of Neurological Surgeons, 2012; Miami, FL.

Anaizi AN, Sandhu FA. Minimally Invasive Lateral Lumbar Interbody Fusion (LLIF) with and without Recombinant Bone Morphogenic Protein (rBMP). In: Annual Meeting of American Association of Neurological Surgeons, 2012; Miami, FL.

Anaizi AN, Spitz S, Sandhu FA. Minimally Invasive Transforaminal Lumbar Interbody Fusion Augmented with Recombinant Bone Morphogenic Protein. In: Annual Meeting of American Association of Neurological Surgeons, 2012; Miami, FL.

Rodgers WB, Peterson MD, Tohmeh AG, Volcan IJ, Cummings JT, Sandhu F, Yoon S, Deviren V, Taylor W. Dynamically Evoked, Discrete-Threshold Electromyography (Emg) in the Extreme Lateral Interbody Fusion (XLIF®) Approach. Spine: Affliated Society Abstracts, p162, 2010.

Anaizi AN, Kalhorn C, Voyadzis JM, Sandhu FA. Thoracic Spine Localization Using Pre-operative Placement of Fiducial Makers and CT Myelography: A Technical Report. In: Congress of Neurological Surgeons Annual Meeting, 2010; San Francisco, CA.

Anaizi AN, Voyadzis JM, Sandhu FA. Stand-Alone Lateral Interbody Fusion. In: Congress of Neurological Surgeons Annual Meeting, 2010; San Francisco, CA.

Anaizi AN, Sandhu FA, Voyadzis JM. Minimally Invasive Lateral Interbody Fusion with Percutaneous Transfacet Fixation in the Lateral Decubitus Position: Operative Technique. In: Congress of Neurological Surgeons Annual Meeting, 2010; San Francisco, CA.

Thomas JA, Tredway T, Fessler RG, Sandhu FA. An Alternative Approach for Placing C1 Screws: Technical Report and Case Series. In: Annual Meeting of AANS/CNS Section on Disorders of the Spine and Peripheral Nerves; 2008; Orlando, FL.

Thomas JA, Sandhu FA. Treatment of Spondylolisthesis by Minimally Invasive TLIF. In: Annual Meeting of AANS/CNS Section on Disorders of the Spine and Peripheral Nerves; 2008; Orlando, FL.

Voyadzis JM, Gala VC, Sandhu FA, Fessler RG. Minimally Invasive Approach for Far Lateral Disc Herniations: Results in 19 Patients. In: Annual Meeting of American Association of Neurological Surgeons, 2007; Washington, DC.

Halliday A, Sandhu FA. Utilization of a Hybrid Minimally Invasive TLIF Construct to Achieve Lumbar Motion Segment Fusion. In: Congress of Neurological Surgeons Annual Meeting; 2004; San Francisco, CA.

Perez-Cruet MJ, Sandhu FA, Kelly K, Fessler RG. Minimally Invasive Multi-level Decompressive Cervical Laminectomy. In: Annual Meeting of AANS/CNS Section on Disorders of the Spine and Peripheral Nerves; 2003; Tampa, FL.

Perez-Cruet MJ, Santiago P, Sandhu FA, Kelly K, Fessler RG. Accuracy and Safety of Percutaneous Pedicle Screw Placement for Degenerative Lumbar Disease. In: Annual Meeting of AANS/CNS Section on Disorders of the Spine and Peripheral Nerves; 2003; Tampa, FL.

Issacs RE, Aaronson O, Sandhu FA, Santiago P, Fessler RG. Percutaneous Thoracic Pedicle Screw Placement. In: Annual Meeting of AANS/CNS Section on Disorders of the Spine and Peripheral Nerves; 2003; Tampa, FL

Sandhu FA, Coumans JVC, Benzel EC, Henderson FC. Cervicothoracic Stabilization in Metastatic Disease with the Telescopic Plate Spacer. In: Annual Meeting of AANS/CNS Section on Disorders of the Spine and Peripheral Nerves; 2003; Tampa, FL.

Voyadzis JM, Sandhu FA, Henderson FC. High Cervical Fusion/Stabilization with the Teloscopic Plate Spacer Following Corpectomy for Tumor. In: Annual Meeting of AANS/CNS Section on Disorders of the Spine and Peripheral Nerves; 2003; Tampa, FL.

Sandhu FA, Santiago P, Palmer S, Fessler RG: Minimally invasive surgical treatment of lumbar synovial cysts. In: Annual Meeting of the Congress of Neurological Surgeons, 2003; Denver, CO.

Santiago P, Sandhu FA, Fessler RG: Microendoscopic technique for the management of cervical spinal canal stenosis. In: Annual Meeting of the Congress of Neurological Surgeons, 2003; Denver, CO.

Perez-Cruet MJ, Sandhu FA, Santiago P, Issacs RE, Fessler RG: Minimally invasive microendoscopic thoracic discectomy. In: Annual Meeting of American Association of Neurological Surgeons, 2003; San Diego, CA.

Issacs RE, Aaronssen O, Sandhu FA, Santiago P, Fessler, RG: Thoracic microendoscopic discectomy. In: Annual Meeting of American Association of Neurological Surgeons, 2003; San Diego, CA.

Sandhu FA, McGrail K, Watson V. Causes and techniques to minimize artifacts and errors in magnetic resonance imaging angiography of aneurysms treated with Guglielmi detachable coil. In: Congress of Neurological Surgery Annual Meeting, 2000; San Antonio, TX.

Sandhu FA, Dai HN, McAtee M and Bregman BS. Propriospinal and segmental reorganization following spinal cord injury, delayed fetal transplantation and neurotrophin administration. Soc Neurosci Abs, 26(1) 862, 2000.

Lynskey JV, Sandhu FA, MacArthur LH, Dai, HN, McAtee M, Sinha M and Bregman BS. Regeneration of rubrospinal tract fibers contribute to functional recovery after chronic cervical spinal cord injury in adult rats. Soc Neurosci Abs, 26(1) 862, 2000.

Sandhu FA, Lynskey J, Dai, HN, McAtee M and Bregman BS. Fetal transplants and NTFs aid axonal regeneration and functional recovery in adult rats after chronic cervical spinal cord injury. Exp Neurol 161 (1), 403, 2000.

Lynskey J, Sandhu FA, Dai, HN, McAtee M and Bregman BS. Axonal regeneration and functional recovery in adult rats after chronic cervical spinal cord injury. Soc Neurosci Abs 25(1), 492, 1999.

Sandhu FA, Honda T, Katayama S, Salim M, Nixon R, and Zain S. Characterization of a 33 kD form of APP-C100 from stably transfected PC12 cells and transgenic mice. J Cell Biochem 17D, 161, 1993.

Sandhu FA, Brady DR, Zain SB. Brain specific expression of the human beta amyloid protein in transgenic mice. Neurobiol Aging 13(Supplement 1), S112,1992.

Sandhu FA, Zain S. Transgenic mice expressing β -amyloid protein of Alzheimer's disease in non-neuronal central nervous system cells. J Cell Biochem Supplement 16E, 213, 1992.

Sandhu FA, La Bonne CB, Majocha RE, Tate-Osteroff B, Walcott E, Ventosa-Michelman M, Chou WG, Marotta CA, Zain S. Genetically engineered PC12 cells overexpressing β -amyloid. J Cell Biochem Supplement 14F, 62, 1990.

Abrahams C, Sandhu F, Weber KT, Janicki JS. Collagen matrix morphology in the hypertrophied primate myocardium. Lab Invest 54(1), 2A, 1986.

INVITED ORAL PRESENTATIONS

World Federation of Neurological Surgeons Meeting (Istanbul, Turkey)

- Midline lumbar fusion techniques with a novel system of implants
- Complications associated with minimally invasive Extreme Lateral Interbody Fusion (XLIF): an analysis of 300 cases

International Society of Minimal Intervention in Spine Surgery Annual Meeting (Chicago, 2017)

•TLIF is Superior to Percutaneous or Lateral Fusions for Treatment of Spondylolisthesis

Interactive Spine Summit Meeting (Park City, UT, 2017)

Cervical spondylosis: treatment options and decision making

American Pakistani Physicians Association Annual Meeting (Washington, DC, 2016)

•Current Surgical Techniques and Approaches to MIS Spine Surgery

Japanese Congress of Neurological Surgeons 36th Annual Meeting (Osaka, Japan, 2016)

• Dynamic Surgical Guidance for Placement of Pedicle Screws

Selby Spine Conference (Park City, UT, 2016)

Cervical arthroplasty should replace most fusions

1st Dandy Quadrennial Meeting (Dubai, 2015)

• Complications associated with minimally invasive Extreme Lateral Interbody Fusion (XLIF): an analysis of 300 cases

AANS Annual Meeting (Washington, DC, 2015)

•Percutaneous Transfacet Screw Insertion:

Indications, Technique and Complication Avoidance

AANS Spine Section Meeting (Pheonix, 2015)

•Lateral lumbar fusion cadaver training course

AMCICO, Mexican Spine Association Annual Meeeting (Taxtula, Mexico, 2014)

- •Surgical Management of vertebral fractures with Percutaneous Pedicle Screws
- •Interspinous Process Spacers, their use in degenerative disc disease
- MIS treatment of Thoracic Disc Herniation and MIS Corpectomy for Kyphotic Deformity

Direct Look Lateral Access Surgery Course (Washington, DC 2014)

Complications of lateral access surgery

Meeting of the Minds, Advanced Deformity Conference (Washington, DC 2014)

•Who requires fusion in addition to decompression in adult degenerative scoliosis

Facet Fixation Course, Faculty

- Facetlink surgeon training for lumbar stabilization (Berlin, Germany 2014)
- Facetlink surgeon training for lumbar stabilization (Washington, DC 2016)

Mexican Congress of Minimally Invasive Spine Surgery (Guanjato, Mexico 2013)

- •Minimally Invasive Decompression for Stenosis
- •Uses and Indications for PAD Interspinous Fusion Device

Complex Deformity Correction Forum (Savilla, Spain 2013)

- Minimally Invasive Treatment of Spondylolisthesis
- Complication Avoidance in Lateral Access Surgery

•Complex Deformity Correction: Case presentation

Brazilian Spine Congress

Placement of percutaneous pedicle screws using K-wireless technique (Sao Paulo, 2013)

AANS Annual Meeting

• Post-Operative C5 Root Palsy and the Use of Neurophysiologic Monitoring (Miami, 2012)

Congress of Neurological Surgeons Annual Meeting, Luncheon Seminar

- Minimally Invasive Nuances for Treating Spondylolisthesis (Chicago, 2012)
- •Minimally Invasive Nuances for Treating Spondylolisthesis (Washington, 2011)

Neurosurgical Society of Australiasia Annual Meeting, Oral Presentation

• Early Results Using a Novel Lateral Transpsoas Approach and Retractor for Performing Anterior Lumbar Interbody Fusions (Fiji, 2011)

6th Annual Temple University Spine Symposium

•An Evidence Based Analysis of Minimally Invasive Lumbar Spine Surgery (Philadelphia, 2010)

AANS Fundamentals of Spine Surgery Course for Residents

•Bone Fusion Techniques, Chicago, 2012 (Faculty)

AANS Annual Meeting Practical Courses

- Current Surgical Techniques and Approaches to MIS Spine Surgery, Philadelphia 2010 (Faculty)
- Current Surgical Techniques and Approaches to MIS Spine Surgery, San Diego 2009 (Faculty)
- Current Surgical Techniques and Approaches to MIS Spine Surgery, Washington, DC 2007 (Faculty)
- •Surgical Anatomy of the Thoracic and Lumbar Spine, San Diego, 2005 (Faculty)
- •Surgical Anatomy of the Thoracic and Lumbar Spine, New Orleans, 2003 (Faculty)

Applications of Minimal Access Spinal Surgery

- Neurology/Neurosurgery Grand Rounds, Georgetown University, Sept 21, 2004
- •Neurosurgery Grand Rounds, Walter Reed Army Medical Center, April 4, 2005
- Grand Rounds, Southern Maryland Hospital, August 3, 2005
- •Neurosurgery Grand Rounds, Syracuse University, November 5, 2005

Kyphoplasty: Advanced Applications (Course Instructor)

- Advanced Surgeon Training Course, Kyphon, Dallas, TX, February, 2005
- •Surgeon Training Course, Kyphon, Toronto, Canada, November, 2006
- Surgeon Training Course, Kyphon, Washington, DC, May, 2008

Minimally Invasive PLIF:Indications and Technique (Course Instructor)

- •MAST Course, Medtronic, Memphis, TN, October, 2003
- •MAST Course, Medtronic, Seattle, WA, July, 2004
- •MAST Course, Medtronic, Washington, DC, October, 2007

XLIF:Indications and Technique (Course Instructor)

- •MVP Course, NuVasive, Baltimore, MD January, 2008
- •MVP Course, NuVasive, San Diego, CA June, 2008

- •MVP Course, NuVasive, San Diego, CA December, 2008
- •MVP Course, NuVasive, San Diego, CA April, 2010

Lateral Interbody Fusion and Percutaneous Screw Techniques (Course Instructor)

- •Surgeon Training Course, K2M, Newark, NJ, November, 2010
- Surgeon Training Course, K2M, Denver, CO, April, 2011
- Surgeon Training Course, K2M, Houston, TX, May 2011
- Surgeon Training Course, K2M, Coventry, UK, May 2011
- Surgeon Training Course, K2M, Leesburg, VA, June 2011
- Surgeon Training Course, K2M, San Francisco, CA, July 2011
- Surgeon Training Course, K2M, Chicago, IL, August 2011
- Surgeon Training Course, K2M, Fiji, September 2011
- Surgeon Training Course, K2M, Sydney, Australia, October 2011
- Surgeon Training Course, K2M, New York, NY April, 2012
- Surgeon Training Course, K2M, Detroit, MI September, 2012
- Surgeon Training Course, K2M, Minneapolis, MN, June, 2013

Annual AANS/Spine Section Meeting, Orlando, Florida, March 2, 2002

• Occipitocervical Fusion in Rheumatoid Patients Using the Inside-Outside Stabilization Technique

Neural Transplantation and Repair (INT-7) Meeting, Odense, Denmark, August 28,1999

• Axonal Regeneration and Functional Recovery in Adult Rats After Chronic Cervical Spinal Cord Injury

Analysis of transgenic mice expressing the carboxyl 100 amino acids of the human amyloid precursor protein in glial cells (updated findings):

- American Aging Association Annual Meeting, Montreal, October 11, 1993
- •American Aging Association Annual Meeting, San Francisco, October 19, 1992
- •The Third International Conference on Alzheimer's Disease and Related Disorders, Abano Therme, Italy, July 17, 1992
- Advances in the Understanding of Neurodegenerative Diseases, Big Sky, Montana, April 3, 1992
- •Sterling-Winthrop Drug Co., Rensselear, NY, October 9, 1991

PATENTS

Access system for minimally invasive spinal surgery, Sandhu FA, US Pat number 8,480,576 (issued July 9, 2013)

Stand-alone access system for minimally invasive spinal surgery, Sandhu, FA, US Pat numbers 8,986,344 (issued March 24, 2015), 9,414,831 (issued August 16, 2016)

Occipital fixation and assembly, system and method for attaching the same, Sandhu F, Strauss KR, McClintock L, US Pat number 9,597, 122 (issued March 21,2017)

Surgical rod scorer and method of use of the same, McClintock L, Strauss KR, Sandhu F, US Pat numbers 8,506,603 (issued August 13, 2013), 8,714,427 (issued May 6, 2014), 9,144,447 (issued Sept 29, 2015)

Mesh cage scoring and cutting system, Sandhu F, McClintock L, Strauss KR, US pat number 9,393,709 (issued June 19, 2016)

Percutaneous tube assembly, Sandhu FA, Abdelgany MF, Oh YH, US Pat number 8,414,484 (issued April 9, 2013)

Facet screw system and method, Brumfield D, Abdelgany MF, Faizan A, Sandhu F, US Pat number 9,668,784 (issued June 6,2017)

Lateral access retractor and method of use, Nunley P, Natali C, Sandhu F, Childs R, Moore B, US Pat numbers 8,449,463 (issued May 28, 2013), 9,186,132 (issued Nov 17, 2015), 9,192,367 (issued Nov 24, 2015), 9,220,491 (issued Dec 29,2015)

Cervical spine retractor, Sandhu FA, US Pat number 8,668,715 (issued March 11, 2014)