



## John Ratliff, MD, FACS

Professor of Neurosurgery and, by courtesy, of Orthopaedic Surgery

 Curriculum Vitae available Online

### CLINICAL OFFICE (PRIMARY)

- **Stanford Neuroscience Health Center**

213 Quarry Rd

4th Fl MC 5958

Palo Alto, CA 94304

**Tel** (650) 723-6469      **Fax** (650) 725-0390

### Bio

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#### BIO

Dr. John Ratliff is Professor and Vice Chair of Neurosurgery, Departmental Quality Officer, and Co-Director of the Spine and Peripheral Nerve Surgery Division. As a spine surgeon, he treats a diverse array of degenerative spinal conditions. He has a specific research emphasis on quality improvement, decreasing complications in spine surgery, and improving surgical treatment of intramedullary spinal cord tumors.

Dr. Ratliff is Chair of the Joint AANS/CNS Washington Committee. He has served on the Executive Committee of the Congress of Neurological Surgeons and the Joint Section of Disorders of Spine and Peripheral Nerves, is Recording Secretary for the Council of State Neurosurgical Societies, and is on the Board of Directors of Neuropoint Alliance. He is immediate past-chairman of the joint AANS/CNS Neurosurgery Quality Council.

#### CLINICAL FOCUS

- Adult reconstructive spinal surgery
- Spinal cord neoplasms
- Spinal stenosis
- Minimally invasive spinal surgery
- Spinal metastatic disease
- Spinal disc herniation
- Radiosurgery of spinal tumors
- Peripheral Nerve Neoplasms
- Neurological Surgery

#### ACADEMIC APPOINTMENTS

- Professor - University Medical Line, Neurosurgery
- Professor - University Medical Line (By courtesy), Orthopaedic Surgery

## ADMINISTRATIVE APPOINTMENTS

- Instructor, New York University, Manhattan Veteran's Affairs Medical Center, Bellevue Medical Center, New York University, New York, New York, (2001-2002)
- Assistant Professor, Rush University School of Medicine, Chicago, Illinois, (2002-2005)
- Director of Spine and Peripheral Nerve Surgery, Rush University School of Medicine, Chicago, Illinois, (2002-2005)
- Assistant Professor, Thomas Jefferson University, Philadelphia, Pennsylvania, (2005-2008)
- Associate Professor, Thomas Jefferson University, Philadelphia, Pennsylvania, (2008-2011)
- Chair, Quality Improvement Workgroup, American Association of Neurological Surgeons/Congress of Neurological Surgeons, (2010- present)
- Associate Professor, Stanford University School of Medicine, (2011- present)
- Co-Director, Division of Spine and Peripheral Nerve Surgery, Department of Neurosurgery, Stanford University, (2011- present)
- Vice Chair, Operations and Development, Department of Neurosurgery, Stanford University, (2013- present)
- Member at Large, Congress of Neurological Surgeons, (2014-2016)
- Professor of Neurosurgery, Stanford University School of Medicine, (2016- present)
- Recording Secretary, Council of State Neurosurgical Societies, (2019-2021)
- Chair, Washington Committee, AANS/CNS, (2021-2023)

## HONORS AND AWARDS

- Charlie Kuntz Scholar Award, AANS/CNS Disorders of Spine and Peripheral Nerves Joint Section (2016)
- Denise O'Leary Award for Clinical Excellence, Stanford University Hospital and Clinics Board of Directors (2015)
- Top Oral Platform Presentation, AANS/CNS Disorders of Spine and Peripheral Nerves Joint Section (2015)
- Stanford University Department of Neurosurgery Excellence in Education and Mentorship Award, Stanford University Department of Neurosurgery (2013)
- Walsh Foundation Research Grant, Walsh Foundation (2013)
- Orthopedic Research and Education Foundation research grant award, Orthopedic Research and Education Foundation (2012)
- Robert Florin, MD Award for Excellence in Research, American Association of Neurological Surgeons (2010)
- Brandeis University Health Policy Leaders Program Scholarship, American College of Surgeons (2009)
- Chicago Institute for Neurosurgery and Neuroresearch Foundation Research Grant, Chicago Institute for Neurosurgery and Neuroresearch Foundation (2003)

## PROFESSIONAL EDUCATION

- Medical Education: Tulane University School of Medicine (1995) LA
- Board Certification: Neurological Surgery, American Board of Neurological Surgery (2005)
- Fellowship: New York University Medical Center (2002) NY
- Residency: Louisiana State University - New Orleans (2001) LA
- Internship: Louisiana State University - New Orleans (1996) LA
- MD, Tulane Medical School , Medicine (1995)

## LINKS

- Lab Site: <http://neurosurgery.stanford.edu/research/ratliff/research.html>
- Get a Second Opinion: <https://stanfordhealthcare.org/second-opinion/overview.html>

## Research & Scholarship

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### CURRENT RESEARCH AND SCHOLARLY INTERESTS

At present, I am working on a prospective measure to assess the risk of complications in spine surgery procedures. I am studying the impact of patient disease process, choice of operative approach, and patient pre-operative comorbidities on complication occurrence. The goal of this effort will be to develop a clinical tool that may be used in patient counseling.

Presently, a prospectively developed measure of comorbidities is being modeled to ICD-9 nomenclature for use in the Nationwide Inpatient Sample database.

My longer term research goals are to develop clearer means of assessing outcomes in spine surgery procedures and developing patient-centered outcomes assessments that may be scalable for larger populations.

### CLINICAL TRIALS

- Restore CLINICAL TRIAL, Recruiting
- MR Guided High Intensity Focused Ultrasound for Lumbar Back Pain, Not Specified

## Publications

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### PUBLICATIONS

- **Empowering Neurosurgical Leadership: Training the Next Generation of Neurosurgical Leaders.** *Neurosurgery*  
Razak, S. S., Veeravagu, A., Stiehl, E., Sharan, A. D., Levy, E., Khalessi, A. A., Kalkanis, S., Asmussen, B., Langer, D., Chambless, L. B., Hilgart, M., Ratliff, J., Haydu, et al  
2026
- **Health Care Resource Utilization in Management of Opioid-Naive Patients With Newly Diagnosed Neck Pain.** *JAMA network open*  
Jin, M. C., Jensen, M., Zhou, Z., Rodrigues, A., Ren, A., Barros Guinle, M. I., Veeravagu, A., Zygorakis, C. C., Desai, A. M., Ratliff, J. K.  
2022; 5 (7): e2222062
- **Expenditures and Health Care Utilization Among Adults With Newly Diagnosed Low Back and Lower Extremity Pain.** *JAMA network open*  
Kim, L. H., Vail, D. n., Azad, T. D., Bentley, J. P., Zhang, Y. n., Ho, A. L., Fatemi, P. n., Feng, A. n., Varshneya, K. n., Desai, M. n., Veeravagu, A. n., Ratliff, J. K.  
2019; 2 (5): e193676
- **A machine learning approach for predictive models of adverse events following spine surgery.** *The spine journal : official journal of the North American Spine Society*  
Han, S. S., Azad, T. D., Suarez, P. A., Ratliff, J. K.  
2019
- **Intracranial Hemorrhage in Deep Vein Thrombosis/Pulmonary Embolus Patients Without Atrial Fibrillation: Direct Oral Anticoagulants Versus Warfarin.** *Stroke*  
Lamsam, L., Sussman, E. S., Iyer, A. K., Bhambhani, H. P., Han, S. S., Skirboll, S., Ratliff, J. K.  
2018
- **Initial Provider Specialty is Associated with Long-term Opiate Use in Patients with Newly Diagnosed Low Back and Lower Extremity Pain.** *Spine*  
Azad, T. n., Vail, D. n., Bentley, J. n., Han, S. n., Suarez, P. n., Varshneya, K. n., Mittal, V. n., Veeravagu, A. n., Desai, M. n., Bhattacharya, J. n., Ratliff, J. n.  
2018
- **Predicting complication risk in spine surgery: a prospective analysis of a novel risk assessment tool.** *Journal of neurosurgery. Spine*  
Veeravagu, A., Li, A., Swinney, C., Tian, L., Moraff, A., Azad, T. D., Cheng, I., Alamin, T., Hu, S. S., Anderson, R. L., Shuer, L., Desai, A., Park, et al  
2017: 1-11

- **An assessment of data and methodology of online surgeon scorecards** *JOURNAL OF NEUROSURGERY-SPINE*  
Xu, L. W., Li, A., Swinney, C., Babu, M., Veeravagu, A., Wolfe, S. Q., Nahed, B. V., Ratliff, J. K.  
2017; 26 (2): 235-242
- **Predicting Occurrence of Spine Surgery Complications Using "Big Data" Modeling of an Administrative Claims Database** *JOURNAL OF BONE AND JOINT SURGERY-AMERICAN VOLUME*  
Ratliff, J. K., Balise, R., Veeravagu, A., Cole, T. S., Cheng, I., Olshen, R. A., Tian, L.  
2016; 98 (10): 824-834
- **Building an electronic health record integrated quality of life outcomes registry for spine surgery** *JOURNAL OF NEUROSURGERY-SPINE*  
Azad, T. D., Kalani, M., Wolf, T., Kearney, A., Lee, Y., Flannery, L., Chen, D., Berroya, R., Eisenberg, M., Park, J., Shuer, L., Kerr, A., Ratliff, et al  
2016; 24 (1): 176-185
- **Intraoperative Neuromonitoring in Single-Level Spinal Procedures A Retrospective Propensity Score-Matched Analysis in a National Longitudinal Database** *SPINE*  
Cole, T., Veeravagu, A., Zhang, M., Li, A., Ratliff, J. K.  
2014; 39 (23): 1950-1959
- **Usage of Recombinant Human Bone Morphogenetic Protein in Cervical Spine Procedures: Analysis of the MarketScan Longitudinal Database.** *journal of bone and joint surgery. American volume*  
Cole, T., Veeravagu, A., Jiang, B., Ratliff, J. K.  
2014; 96 (17): 1409-1416
- **The perils of comparative effectiveness, cost-effectiveness, and value of care research: lessons learned from washington state.** *Neurosurgery*  
Ratliff, J. K.  
2014; 61: 12-15
- **Impact of bone morphogenetic proteins on frequency of revision surgery, use of autograft bone, and total hospital charges in surgery for lumbar degenerative disease: review of the Nationwide Inpatient Sample from 2002 to 2008** *SPINE JOURNAL*  
Dagostino, P. R., Whitmore, R. G., Smith, G. A., Maltenfort, M. G., Ratliff, J. K.  
2014; 14 (1): 20-30
- **ASA grade and Charlson Comorbidity Index of spinal surgery patients: correlation with complications and societal costs** *SPINE JOURNAL*  
Whitmore, R. G., Stephen, J. H., Vernick, C., Campbell, P. G., Yadla, S., Ghobrial, G. M., Maltenfort, M. G., Ratliff, J. K.  
2014; 14 (1): 31-38
- **Revision rates and complication incidence in single- and multilevel anterior cervical discectomy and fusion procedures: an administrative database study** *THE SPINE JOURNAL*  
Veeravagu, A., Cole, T., Jiang, B., Ratliff, J. K.  
2013
- **Patient comorbidity score predicting the incidence of perioperative complications: assessing the impact of comorbidities on complications in spine surgery** *Clinical article JOURNAL OF NEUROSURGERY-SPINE*  
Campbell, P. G., Yadla, S., Nasser, R., Malone, J., Maltenfort, M. G., Ratliff, J. K.  
2012; 16 (1): 37-43
- **Geographic variation and regional trends in adoption of endovascular techniques for cerebral aneurysms** *JOURNAL OF NEUROSURGERY*  
Smith, G. A., Dagostino, P., Maltenfort, M. G., Dumont, A. S., Ratliff, J. K.  
2011; 114 (6): 1768-1777
- **Comparison of ICD-9 based, retrospective, and prospective assessments of perioperative complications assessment of accuracy in reporting** *Clinical article JOURNAL OF NEUROSURGERY-SPINE*  
Campbell, P. G., Malone, J., Yadla, S., Chitale, R., Nasser, R., Maltenfort, M. G., Vaccaro, A., Ratliff, J. K.  
2011; 14 (1): 16-22
- **3D Deep Learning for Brain Tumor Segmentation and Survival Prediction: A Comprehensive Multi-Modal Analysis Using the BraTS2020 Dataset.** *Journal of imaging*  
Sanker, V., Mahesh, D., Li, Z., Thaller, A., Heesen, P., Liverani, L., Wang, D., Cavagnaro, M. J., Medikonda, R. T., Prolo, L., Singh, H., Ratliff, J., Desai, et al  
2026; 12 (6)

- **Robotic-assisted pedicle screw placement achieves high accuracy and narrows the experience gap: a preclinical evaluation.** *Journal of robotic surgery*  
Reza, A. T., Walper, M., Ng, M. K., Mastrokostas, P. G., Lee, A. S., de Oliveira, R. G., Poelstra, K. A., Ratliff, J. K., Sethi, R. K., Mont, M. A.  
2026; 20 (1)
- **A History of US Medical Device Regulation and Current Regulatory Framework.** *JBJS reviews*  
Gluski, J. M., Ward, M., Polly, D. W., Tileston, K., Cahill, P. J., Ratliff, J., Upadhyaya, C., Lo, S. L., Sciubba, D. M., Caridi, J. M.  
2026; 14 (6)
- **A History of US Medical Device Regulation and Current Regulatory Framework.** *JBJS reviews*  
Gluski, J. M., Ward, M., Polly, D. W., Tileston, K., Cahill, P. J., Ratliff, J., Upadhyaya, C., Lo, S. L., Sciubba, D. M., Caridi, J. M.  
2026; 14 (6)
- **Multisite Spinal Cord and Canal Morphometry Reveals Age-Linked and Sex-Linked Structural Vulnerability in Degenerative Cervical Myelopathy Outcomes.** *Neurosurgery*  
Smith, Z. A., Haynes, G., Bedard, S., Hameed, S., Khan, A. F., Dastgir, A., Baha, A., Kumar, S. G., Van Hal, M., Al Tamimi, M., Hu, S. S., Dhaher, Y., Shakir, et al  
2026
- **From Pixels to Precision: Generative Artificial Intelligence as a Paradigm Shift in Spine Imaging-Technical Foundations, Clinical Applications, and the Path to Safe Clinical Deployment.** *Neurospine*  
Ashraf, D., Sanker, V., Liverani, L., Park, C., Medikonda, R. T., Cavagnaro, M. J., Jeon, I., Ratliff, J., Desai, A.  
2026; 23 (2): 293-313
- **Sacral chordomas: surgical management, reconstruction, and translational advances: a systematic review.** *Journal of spine surgery (Hong Kong)*  
Sanker, V., Ghaddar, S., Ali, A. S., Gurumurthy, G. D., Jayan, M., Sheikh, M. Q., Liverani, L., Sunil, G., Kumar, S., Cavagnaro, M. J., Medikonda, R., Ratliff, J., Desai, et al  
2026; 12 (3): 36
- **Current Trends and Future Prospects of Radiomics and Machine Learning (ML) Models in Spinal Tumors-A Narrative Review.** *Journal of imaging*  
Sanker, V., Panchawgh, S., Kaur, A., Suresh, V., Mahesh, D., Ahmad, E., Hariharan, S., Pangal, D., Cavgnaro, M. J., Rusu, M., Ratliff, J., Desai, A.  
2026; 12 (3)
- **Stereotactic radiosurgery (SRS) for primary intradural spinal tumors: A systematic review and meta-analysis.** *Neurosurgical review*  
Nordin, E. O., Sanker, V., Heesen, P., Hariharan, S., Ciobanu-Caraus, O., Cavagnaro, M. J., Jeon, I., Park, D., Chang, S., Ratliff, J. K., Desai, A.  
2026; 49 (1)
- **Spatial distribution of spinal cord fMRI activity with electrocutaneous stimulation.** *medRxiv : the preprint server for health sciences*  
Bédard, S., Kaptan, M., Indriolo, T., Law, C. S., Pfyffer, D., Lee, L., Ratliff, J., Hu, S., Tharin, S., Smith, Z. A., Glover, G. H., Mackey, S., Cohen-Adad, et al  
2026
- **Sacral chordomas: surgical management, reconstruction, and translational advances: a systematic review** *JOURNAL OF SPINE SURGERY*  
Sanker, V., Ghaddar, S., Ali, A., Gurumurthy, G. D., Jayan, M., Sheikh, M., Liverani, L., Sunil, G., Kumar, S., Cavagnaro, M., Medikonda, R., Ratliff, J., Desai, et al  
2026
- **Value of Inpatient Neuromodulation: A National Analysis of Paddle Spinal Cord Stimulation Outcomes.** *Neurosurgery*  
Jain, B., Abikenari, M. A., Sadeghzadeh, S., Shah, A., Yoo, K. H., Azad, T. D., Hani, U., Ratliff, J. K., Ramayya, A. G., Veeravagu, A.  
2026
- **ISASS Recommendations and Coverage Criteria for Restorative Neurostimulation for Multifidus Dysfunction, Lumbar Region: Coverage Indications, Limitations, and/or Medical Necessity-An ISASS 2025 Guideline Update.** *International journal of spine surgery*  
Lorio, M. P., Lewandrowski, K. U., Lavelle, W., Essig, D. A., Yue, J., Ratliff, J., DiGiorgio, A., Kube, R., Radcliff, K., Shaffrey, C. I.  
2025
- **Stereotactic radiosurgery (SRS) for primary spinal bone tumors: a systematic review and meta-analysis.** *Neurosurgical review*  
Nordin, E. O., Sanker, V., Heesen, P., Dravid, A., Hariharan, S., Ciobanu-Caraus, O., Cavagnaro, M. J., Jeon, I., Park, D., Chang, S., Ratliff, J. K., Desai, A.

2025; 48 (1): 760

- **Automated Segmentation of Forearm Muscles: Clinical Associations With Hand Function, Muscle Volume and Intramuscular Fat.** *JCSM communications*  
Fundaun, J., Oliva, V., Bédard, S., Wesselink, E. O., Lynn, B. P., Pai S, A., Pfyffer, D., Kaptan, M., Berhe, N., Ratliff, J., Hu, S. S., Smith, Z. A., Hastie, et al  
2025; 8 (2): e70015
- **Mapping hand function with simultaneous brain-spinal cord functional MRI.** *Imaging neuroscience (Cambridge, Mass.)*  
Oliva, V., Bédard, S., Kaptan, M., Pfyffer, D., Chy, B., Aufrechtig, S., Berhe, N., Chaudhari, A. S., Tharin, S., Hu, S. S., Ratliff, J., Smith, Z. A., Smith, et al  
2025; 3
- **Current trends and future prospects of language models and processing systems in spine surgery - a scoping review.** *Neurosurgical review*  
Sanker, V., Nordin, E. O., Heesen, P., Elfadali, M. A., Anwar, M., Chintapalli, R. D., Cavagnaro, M. J., Zygorakis, C. C., Ratliff, J. K., Desai, A. M.  
2025; 48 (1): 633
- **Cost-effectiveness of Surgery for Spinal Metastasis: A Systematic Review.** *Spine*  
Heesen, P., Nordin, E. O., Sanker, V., Cavagnaro, M. J., Zygorakis, C. C., Ratliff, J., Desai, A. M.  
2025
- **Applications and Performance of Artificial Intelligence in Spinal Metastasis Imaging: A Systematic Review.** *Journal of clinical medicine*  
Sanker, V., Gowda, P., Thaller, A., Li, Z., Heesen, P., Qiang, Z., Hariharan, S., Nordin, E. O., Cavagnaro, M. J., Ratliff, J., Desai, A.  
2025; 14 (16)
- **Artificial Intelligence Models for Predicting Outcomes in Spinal Metastasis: A Systematic Review and Meta-Analysis.** *Journal of clinical medicine*  
Sanker, V., Dawer, P., Thaller, A., Li, Z., Heesen, P., Hariharan, S., Nordin, E. O., Cavagnaro, M. J., Ratliff, J., Desai, A.  
2025; 14 (16)
- **Artificial Intelligence for Non-Invasive Prediction of Molecular Signatures in Spinal Metastases: A Systematic Review.** *Bioengineering (Basel, Switzerland)*  
Sanker, V., Sanikomu, S., Thaller, A., Li, Z., Heesen, P., Hariharan, S., Nordin, E. O., Cavagnaro, M. J., Ratliff, J., Desai, A.  
2025; 12 (8)
- **Neurosurgical faculty and resident perspectives on collective bargaining efforts by resident physicians in the United States.** *Journal of neurosurgery*  
Agarwal, P., Zaki, M. M., Kumar, R. P., Eckmann, M. A., Shuman, W. H., Adogwa, O., Zalatimo, O. A., Schirmer, C. M., Zipfel, G. J., Selden, N. R., Ratliff, J. K., Lonser, R. R., Orrico, et al  
2025: 1-9
- **ISASS Recommendations and Coverage Criteria for Bone-Anchored Annular Defect Closure Following Lumbar Discectomy: Coverage Indications, Limitations, and/or Medical Necessity-An ISASS 2025 Policy Update on the Use of Bone-Anchored Annular Closure to Prevent Reherniation in High-Risk Lumbar Discectomy Patients.** *International journal of spine surgery*  
Lorio, M. P., Kube, R. A., Ratliff, J., DiGiorgio, A., Essig, D. A., Radcliff, K., Lewandrowski, K., Block, J. E.  
2025
- **Trends in Sacroiliac Joint Fusion Costs and Utilization in the Privately Insured Population.** *Global spine journal*  
Johnstone, T., Schonfeld, E., Sadeghzadeh, S., Marianayagam, N. J., Yoo, K. H., Ratliff, J. K., Veeravagu, A.  
2024: 21925682241309302
- **Health care utilization among Medicare beneficiaries with newly diagnosed back pain.** *North American Spine Society journal*  
Barros Guinle, M. I., Johnstone, T., Ruiz Colón, G. D., Weng, Y., Nettnin, E. A., Ratliff, J. K.  
2024; 20: 100565
- **Three-dimensional spatial distribution of lumbar paraspinal intramuscular fat revealed by spatial parametric mapping.** *European spine journal : official publication of the European Spine Society, the European Spinal Deformity Society, and the European Section of the Cervical Spine Research Society*  
Weber, K. A., Wesselink, E. O., Gutierrez, J., Law, C. S., Mackey, S., Ratliff, J., Hu, S., Chaudhari, A. S., Pool-Goudzwaard, A., Coppieters, M. W., Elliott, J. M., Hancock, M., De Leener, et al  
2024

- **Adhesive surface electrodes versus needle-based neuromonitoring in lumbar spinal surgery.** *Surgical neurology international*  
Chintapalli, R., Pangal, D., Cavagnaro, M. J., Guinle, M. I., Johnstone, T., Ratliff, J.  
2024; 15: 220
- **Using Machine Learning Models to Identify Factors Associated With 30-Day Readmissions After Posterior Cervical Fusions: A Longitudinal Cohort Study.** *Neurospine*  
Gonzalez-Suarez, A. D., Rezaei, P. G., Herrick, D., Tigchelaar, S. S., Ratliff, J. K., Rusu, M., Scheinker, D., Jeon, I., Desai, A. M.  
2024
- **Getting What You Pay For: Impact of Copayments on Physical Therapy and Opioid Initiation, Timing, and Continuation for Newly Diagnosed Low Back Pain.** *The spine journal : official journal of the North American Spine Society*  
Jin, M. C., Jensen, M., Barros Guinle, M. I., Ren, A., Zhou, Z., Zygorakis, C. C., Desai, A. M., Veeravagu, A., Ratliff, J. K.  
2024
- **Factors affecting retirement and workforce attrition in neurosurgery: results of a Council of State Neurosurgical Societies national survey.** *Journal of neurosurgery*  
Sharma, A. M., Tenny, S., Yang, G. L., Cheng, J., Ratliff, J. K., Steinmetz, M. P., Krishnamurthy, S., Adogwa, O., Swartz, K.  
2023: 1-10
- **Contemporary Trends in Minimally Invasive Sacroiliac Joint Fusion Utilization in the Medicare Population by Specialty.** *Neurosurgery*  
Hersh, A. M., Jimenez, A. E., Pellet, K. I., Gong, J. H., Jiang, K., Khalifeh, J. M., Ahmed, A. K., Raad, M., Veeravagu, A., Ratliff, J. K., Jain, A., Lubelski, D., Bydon, et al  
2023
- **Letter: Commentary: The Anatomy of Devalued Codes: The 63047 and the 22633.** *Neurosurgery*  
Ratliff, J. K., Tumialan, L. M., Orrico, K. O., Cheng, J. S.  
2023
- **Objective outcome measures may demonstrate continued change in functional recovery in patients with ceiling effects of subjective patient-reported outcome measures after surgery for lumbar degenerative disorders.** *The spine journal : official journal of the North American Spine Society*  
Ziga, M., Sosnova, M., Zeittberger, A. M., Regli, L., Bozinov, O., Weyerbrock, A., Ratliff, J. K., Stienen, M. N., Maldaner, N.  
2023
- **Representativeness of the American Spine Registry: a comparison of patient characteristics with the National Inpatient Sample.** *Journal of neurosurgery. Spine*  
Bydon, M., Sardar, Z. M., Michalopoulos, G. D., El Sammak, S., Chan, A. K., Carreon, L. Y., Norheim, E., Park, P., Ratliff, J. K., Tumialan, L., Pugely, A. J., Steinmetz, M. P., Hsu, et al  
2023: 1-10
- **Identification of Factors Associated With 30-Day Readmissions After Posterior Lumbar Fusion Using Machine Learning and Traditional Models: A National Longitudinal Database Study.** *Spine*  
Rezaei, P. G., Herrick, D., Ratliff, J. K., Rusu, M., Scheinker, D., Desai, A. M.  
2023
- **A Stepwise Replicable Approach to Negotiating Value-driven Supply Chain Contracts for Orthobiologics.** *The Journal of the American Academy of Orthopaedic Surgeons*  
Gupta, A., Lee, J., Chawla, A., Rajagopalan, V., Kohler, M., Moelling, B., McFarlane, K. H., Sheth, K. R., Ratliff, J. K., Hu, S. S., Wall, J. K., Shea, K. G.  
2023
- **Opioid usage in lumbar disc herniation patients with nonsurgical, early, and late surgical treatments.** *World neurosurgery*  
Zhou, Z., Jin, M. C., Jensen, M. R., Barros Guinle, M. I., Ren, A., Agarwal, A. A., Leaston, J., Ratliff, J. K.  
2023
- **Trends, Payments, and Costs Associated with BMP Use in Medicare Beneficiaries Undergoing Spinal Fusion.** *The spine journal : official journal of the North American Spine Society*  
Wadhwa, H., Wu, J. Y., Malacon, K., Ames, C., Ratliff, J., Zygorakis, C.  
2023
- **Quality and patient safety research in pediatric neurosurgery: a review.** *Child's nervous system : ChNS : official journal of the International Society for Pediatric Neurosurgery*

- Ruiz Colón, G. D., Wu, A., Ratliff, J. K., Prolo, L. M.  
2023
- **A Protocol for Reducing Intensive Care Utilization After Craniotomy: A 3-Year Assessment.** *Neurosurgery*  
Ruiz Colón, G. D., Ohkuma, R., Pendharkar, A. V., Heifets, B. D., Li, G., Lu, A., Gephart, M. H., Ratliff, J. K.  
2023
  - **Neurosurgical Utilization, Charges, and Reimbursement After the Affordable Care Act: Trends From 2011 to 2019.** *Neurosurgery*  
Hersh, A. M., Dedrickson, T., Gong, J. H., Jimenez, A. E., Materi, J., Veeravagu, A., Ratliff, J. K., Azad, T. D.  
2023
  - **Utilization Trends, Cost, and Payments for Adult Spinal Deformity Surgery in Commercial and Medicare-Insured Populations.** *Neurosurgery*  
Wadhwa, H., Leung, C., Sklar, M., Ames, C. P., Veeravagu, A., Desai, A., Ratliff, J., Zygorakis, C. C.  
2022
  - **Modifiers of and Disparities in Palliative and Supportive Care Timing and Utilization among Neurosurgical Patients with Malignant Central Nervous System Tumors.** *Cancers*  
Jin, M. C., Hsin, G., Ratliff, J., Thomas, R., Zygorakis, C. C., Li, G., Wu, A.  
2022; 14 (10)
  - **An integrated risk model stratifying seizure risk following brain tumor resection among seizure-naive patients without antiepileptic prophylaxis.** *Neurosurgical focus*  
Jin, M. C., Parker, J. J., Prolo, L. M., Wu, A., Halpern, C. H., Li, G., Ratliff, J. K., Han, S. S., Skirboll, S. L., Grant, G. A.  
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