

JOEL S. BECKETT, MD, MHS, FAANS

Dual-Fellowship Trained, Board-Certified Neurosurgeon

Curriculum Vitae

CURRENT APPOINTMENTS

DISC Sports & Spine Center – Physician Partner – Spinal Neurosurgeon	August 2023 – Present
Cedars-Sinai Medical Center – Neurosurgeon	December 2024 – Present
Cedars-Sinai Marina del Rey Hospital – Neurosurgeon	October 2023 – Present
West Los Angeles Veterans Affairs Medical Center – Staff Neurosurgeon – National Surgery Office (NSO) Neurosurgery Surgical Advisory Board, Chair (2026–2029) Appointed by the VHA National Director of Surgery to chair the advisory board overseeing neurosurgical care across the Veterans Health Administration. Responsibilities include national quality oversight, facility site reviews, peer case review (PIM/IPCM), and policy guidance for all VA neurosurgery programs. – National Surgery Office Neurosurgery Surgical Advisory Board, Member (2023–2026) – UCLA Neurosurgery Residency Teaching Faculty	January 2021 – Present

CLINICAL TRIALS

CLARITY Trial (Aclarion / Nociscan) – Sub-Investigator, Lanman Spine – Prospective, randomized, multicenter study evaluating Nociscan augmented intelligence diagnostics for discogenic low back pain	2026 – Present
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PRIOR APPOINTMENTS

Assistant Professor of Neurosurgery, Orthopedic Surgery, and Radiation Oncology David Geffen School of Medicine at UCLA, Los Angeles, California – UCLA Spinal Surgery Fellowship, Associate Program Director – Director, Spinal Oncology Program – B1G 10 Research Consortium, Site Director	February 2021 – June 2024
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EDUCATION & TRAINING

Complex Spine Surgery Fellowship – Cleveland Clinic, Cleveland, Ohio	2020 – 2021
Complex and Tumor Spine Surgery Fellowship – Kaiser LAMC, Los Angeles, California	2019 – 2020
Neurosurgical Residency – University of California, Los Angeles	2013 – 2020
M.D.; M.H.S. (Clinical Research)	2008 – 2013

– Yale University School of Medicine, New Haven, Connecticut

B.A., Biochemistry, Summa Cum Laude

2004 – 2008

– Kenyon College, Gambier, Ohio

– Highest Honors in Chemistry with Thesis Distinction; Valedictorian

BOARD CERTIFICATION & LICENSURE

American Board of Neurological Surgery, Diplomate (#230544015)

California Medical License (A135568)

Nevada Medical License (23298)

ACLS / BLS Certified

California Fluoroscopy Supervisor and Operator (RHC00202978)

PROFESSIONAL MEMBERSHIPS

- American Association of Neurological Surgeons (AANS)
- Congress of Neurological Surgeons (CNS)
- Cervical Spine Research Society (CSRS)
- Scoliosis Research Society (SRS)
- California Association of Neurologic Surgeons (CANS)
- Society for Minimally Invasive Spine Surgery (SMISS)
- Sierra Spine Society

HONORS & AWARDS

Super Doctors Rising Stars	2022 – 2026
Los Angeles Best Doctors	2025, 2026
ADR Spine Top Doctor in Arthroplasty	
UCLA Batzdorf Neurosurgery Teaching Award (Best Faculty Teacher of Residents)	2023
UCLA Batzdorf Neurosurgery Teaching Award	2021
AANS Young Neurosurgeon Council, Elected Member	2018 – 2022
AANS Membership Committee Liaison	2020 – 2024
UCLA Resident Teaching Award	2019
CANS Southern Region Resident Representative	2017 – 2018
UCLA Resident Quality Award	2015
Olga Levin Foundation Fellow	2015 – 2016
Farr Scholar	2012
Doris Duke Charitable Foundation Clinical Scholars Fellowship	2011 – 2012
Valedictorian, Kenyon College	2008
Highest Honors in Chemistry with Thesis Distinction, Kenyon College	2008
Gordon L. Johnson Prize in Chemistry, Kenyon College	2008
Sigma Xi	2008
Barry M. Goldwater Scholarship	2007
Phi Beta Kappa (Junior Election)	2007
ACS National POLY-ED Undergraduate Award in Organic Chemistry	2006

Dorothy E. and Thomas C. Jegla Biology Award, Kenyon College	2006
Chemical Rubber Company Chemistry Achievement Award	2005

GRANTS

Casa Colina Research Startup Fund	2021 – 2024
– <i>Deep learning analysis of gait in myelopathy</i>	
Amazon Web Services Pilot Grant	2017 – 2023
– <i>1,000 computing hours for Computer Vision in Neurosurgical Imaging</i>	
American Society of Maxillofacial Surgeons Pilot Grant	2013
– <i>Brain Structure and Function in Sagittal Synostosis</i>	
Lifeline Journal of Vascular Surgery Research Grant	2009

PATENTS

U.S. 62/581,463: Autonomous trajectory planning for external ventricular drain placement

PEER-REVIEWED PUBLICATIONS

1. Ratnaparkhi A, Moore S, Suri A, Wilson B, Alderete J, Florence TJ, Zarrin D, Berin D, Abuqubo R, Cook K, Jafari M, Bell JS, Macyszyn L, Vivas AC, Beckett J. The Perceived Roles of AI in Clinical Practice: National Survey of 941 Academic Physicians. *JMIR AI*. 2025 Dec 4;4:e72535. doi: 10.2196/72535. PMID: 41343815; PMCID: PMC12715463.
2. Zhu KJ, Cho AM, Beckett JS, Macyszyn L, Mathes D, Nguyen P, Irwin T, Kaouzanis C, Yu JW. A Systematic Review of the Complications Associated with Free Fibular Flaps in Adult and Pediatric Spinal Reconstruction. *J Reconstr Microsurg*. 2025 Jul;41(6):521-530. doi: 10.1055/a-2434-5882. PMID: 39362646.
3. Ratnaparkhi A, Beckett J. Digital Phenotyping, Wearables, and Outcomes. *Neurosurg Clin N Am*. 2024 Apr;35(2):235-241. doi: 10.1016/j.nec.2023.11.009. PMID: 38423739.
4. Florence TJ, Beckett JS, Holly LT. Degenerative Cervical Myelopathy. In: *Neuroscience for Neurosurgeons*. Cambridge University Press; 2024.
5. Ratnaparkhi A, Wilson B, Zarrin D, Suri A, Yoo B, Salehi B, Berin D, Cook K, Florence TJ, Laiwalla AN, Gaonkar B, Macyszyn L, Beckett J. Deep Learning Based Evaluation of Surgical Candidacy for Cervical Spinal Cord Decompression. Preprint. 2024 May.
6. Laiwalla AN, Ratnaparkhi A, Gaonkar B, Zarrin D, Wilson B, Cook K, Berdy E, Li I, Florence TJ, Berin D, Suri A, Attiah M, Holly LT, Macyszyn L, Beckett J. Lumbar Spinal Canal Segmentation in Cases with Lumbar Stenosis using Deep-U-Net Ensembles. *World Neurosurg*. 2023 Jul 10:S1878-8750(23)00939-7. doi: 10.1016/j.wneu.2023.07.009. PMID: 37437805.
7. Uy BR, Florence TJ, Suri A, Wilson B, Zarrin D, Holly LT, Macyszyn L, Beckett J. Upper lumbar spine far lateral disc herniations masquerading as peripheral nerve sheath tumors: illustrative cases. *J Neurosurg Case Lessons*. 2023 Apr 3;5(14):CASE22552. doi: 10.3171/CASE22552. PMID: 37014005.
8. Ratnaparkhi A, Laiwalla AN, Gaonkar B, Zarrin D, Cook K, Wilson B, Berdy E, Li I, Attiah M, Holly LT, Macyszyn L, Beckett J. Ensembling mitigates scanner effects in deep learning medical image segmentation with deep-U-Nets. *Proc SPIE 12033, Medical Imaging 2022: Computer-Aided Diagnosis*. 2022 Apr 4;120330I. doi: 10.1117/12.2611609.
9. Ratnaparkhi A, Laiwalla AN, Gaonkar B, Zarrin D, Cook K, Berdy E, Li I, Wilson B, Attiah M, Holly L, Macyszyn L, Beckett J, Batzdorf U. Structural Changes in the Cervicomedullary Junction in Adult Chiari Patients. *World Neurosurg*. 2022 Oct 25:S1878-8750(22)01463-2. doi: 10.1016/j.wneu.2022.10.047. PMID: 36307037.

10. Ashana AO, et al., Beckett J. Spinal Cord Drift Following Laminoplasty Versus Laminectomy and Fusion for Cervical Spondylotic Myelopathy. *Int J Spine Surg*. 2021 Apr 15.
11. Rahab A, et al., Beckett J. Predictors of Operative Duration and Complications in Single-Level Posterior Interbody Fusions for Degenerative Spondylolisthesis. *World Neurosurg*. 2021 Apr 18.
12. Wilson B, et al., Beckett J. Predicting Spinal Surgery Candidacy from Imaging Data Using Machine Learning. *Neurosurgery*. 2021 Jun 15.
13. Cabrejo R, et al., Beckett JS, Persing JA. Functional Network Development in Sagittal Craniosynostosis Treated with Whole Vault Cranioplasty. *J Craniofac Surg*. 2021 Jan 29.
14. Gaonkar B, Beckett J, et al. Eigenrank by committee: Von Neumann entropy based data subset selection and failure prediction for deep learning based medical image segmentation. *Med Image Anal*. 2021 Jan.
15. Sheppard JP, et al., Beckett JS. Patient Safety Analysis in Radiation Burden of Head Computed Tomography Imaging in 1185 Neurosurgical Inpatients. *World Neurosurg*. 2020 Jan;133:e308-e319. doi: 10.1016/j.wneu.2019.09.004. PMID: 31520752.
16. Attiah M, Beckett JS, et al. Natural history of the aging spine: a cross-sectional analysis of spinopelvic parameters in the asymptomatic population. *J Neurosurg Spine*. 2019 Sep 27:1-6. doi: 10.3171/2019.7.SPINE181164. PMID: 31561232.
17. Sun AH, Beckett JS, et al. An Investigation of Brain Functional Connectivity by Form of Craniosynostosis. *J Craniofac Surg*. 2019 Sep;30(6):1719-1723. doi: 10.1097/SCS.0000000000005537. PMID: 31022138; PMCID: PMC6800595.
18. Cabrejo R, et al., Beckett JS, Persing JA. What is the Functional Difference Between Sagittal With Metopic and Isolated Sagittal Craniosynostosis? *J Craniofac Surg*. 2019 Jun;30(4):968-973.
19. Cabrejo R, et al., Beckett JS, Persing JA. Understanding the Learning Disabilities Linked to Sagittal Craniosynostosis. *J Craniofac Surg*. 2019 Mar;30(2):497-502.
20. Lagman C, et al., Beckett JS. Red Blood Cell Transfusions Following Resection of Skull Base Meningiomas: Risk Factors and Clinical Outcomes. *J Neurol Surg B Skull Base*. 2018;79(6):599-605.
21. Beckett JS, Riber A, Gerber LN, Macyszyn L, Yang I, Holly LT. Autonomous Trajectory Planning for External Ventricular Drain Placement. *Oper Neurosurg (Hagerstown)*. 2018;15(4):433-439.
22. Brooks ED, Beckett JS, et al. The Etiology of Neuronal Development in Craniosynostosis: A Working Hypothesis. *J Craniofac Surg*. 2018;29(1):49-55.
23. Chung LK, Beckett JS, et al. Predictors of Outcomes in Fourth Ventricular Epidermoid Cysts: A Case Report and a Review of Literature. *World Neurosurg*. 2017 Sep;105:689-696.
24. Lagman C, Beckett JS, et al. Novel Method of Measuring Canal Dehiscence and Evaluation of its Potential as a Predictor of Symptom Outcomes After Middle Fossa Craniotomy. *Neurosurgery*. 2017 Aug 9.
25. Lagman C, et al., Beckett JS. Fatal Colloid Cysts: A Systematic Review. *World Neurosurg*. 2017 Aug 8;pii: S1878-8750(17)31284-6.
26. Bui TT, et al., Beckett JS. Isolated Transverse Process Fractures and Markers of Associated Injuries: The Experience of the University of California Los Angeles. *World Neurosurg*. 2017;82-88.
27. Gaonkar B, et al., Beckett JS. Multi-Parameter Ensemble Learning for Automated Vertebral Body Segmentation in Heterogeneously Acquired Clinical MR Images. *IEEE J Biomed Health Inform*. 2017.
28. Beckett JS, et al. Computerized Assessment of Superior Semicircular Canal Dehiscence Size using Advanced Morphological Imaging Operator. *J Neurol Surg B Skull Base*. 2017 Apr;78(2):197-200. doi: 10.1055/s-0036-1594241.
29. Beckett JS, et al. A Method of Locating the Dehiscence during Middle Fossa Approach for Superior Semicircular Canal Dehiscence Surgery. *J Neurol Surg B Skull Base*. 2017 Aug;78(4):353-358. doi: 10.1055/s-0037-1601886.

30. Nagasawa DT, Beckett JS, et al. United States Medical Licensing Exam Step 1 Scores Directly Correlate with American Board of Neurological Surgery Scores: A Single-Institution Experience. *World Neurosurg*. 2016. doi: 10.1016/j.wneu.2016.11.091.
31. Beckett JS, et al. Coil embolization through the Marathon microcatheter: Advantages and pitfalls. *Interv Neuroradiol*. 2016. doi: 10.1177/1591019916667722.
32. Samra S, Bourne D, Beckett J, et al. Decision-making and Management of Ulnar Polydactyly of the Newborn: Outcomes and Satisfaction. *J Hand Surg Asian Pac Vol*. 2016 Oct;21(3):313-320.
33. Brooks ED, Yang J, Beckett JS, et al. Normalization of brain morphology after surgery in sagittal craniosynostosis. *J Neurosurg Pediatr*. 2016 Apr;17(4):460-468.
34. Beckett JS, Brooks ED, Lacadie C, Vander Wyk B, Jou RJ, Steinbacher DM, Constable RT, Pelphrey KA, Persing JA. Altered Brain Connectivity in Sagittal Craniosynostosis. *J Neurosurg Pediatr*. 2014 Jun;13(6):690-698.
35. Hashim PW, Patel A, Chang CC, Beckett JS, Persing JA. Does an elevated bony ridge along the course of the metopic suture equal metopic synostosis? Implications for management. *J Craniofac Surg*. 2014 Jan;25(1):55-58.
36. Beckett JS, Pfaff MJ, DiLuna ML, Steinbacher DM. Dolichocephaly without sagittal synostosis. *J Craniofac Surg*. 2013 Sep;24(5):1713-1715.
37. Travieso R, Chang CC, Turner JS, Beckett JS, Wong K, Teng E, Steinbacher DM. A Range of Condylar Hypoplasia Exists in Treacher Collins Syndrome. *J Oral Maxillofac Surg*. 2013 Feb;71(2):393-397.
38. Beckett JS, Persing JA, Steinbacher DM. Bilateral Orbital Dymorphology in Unicoronal Synostosis. *Plast Reconstr Surg*. 2013 Jan;131(1):125-130.
39. Beckett JS, Chadha P, Persing JA, Steinbacher DM. Classification of trigonocephaly in metopic synostosis. *Plast Reconstr Surg*. 2012 Sep;130(3):442-447.
40. Morris R, Beckett J, Steinbacher DM. Simultaneous costochondral ramus-condyle reconstruction and mandibular distraction for hemifacial microsomia. *J Oral Maxillofac Surg*. 2012 Oct;70(10):541-546.
41. Abe R, Beckett J, Abe R, Nixon A, Rochier A, Yamashita N, Sumpio B. Olive Oil Polyphenols Differentially Inhibit Smooth Muscle Cell Proliferation through a G1/S Cell Cycle Block Regulated by ERK1/2. *Int J Angiol*. 2012 Jun;21(2):069-076.
42. Abe R, Beckett J, Abe R, Nixon A, Rochier A, Yamashita N, Sumpio B. Olive oil polyphenol oleuropein inhibits smooth muscle cell proliferation. *Eur J Vasc Endovasc Surg*. 2011 Feb;41(6):814-820.
43. Beckett JS, Beckett JD, Hofferberth JE. A Divergent Approach to the Diastereoselective Synthesis of Several Ant-Associated Iridoids. *Org Lett*. 2010 Apr;12(7):1408-1411.