

Department of Neurological Surgery
University of Washington, Seattle WA
2022 Q2
Faculty, Fellow, and Resident Publications

PEER REVIEWED PUBLICATIONS

1. Jiang B, Murray C, Cole BL, Glover JNM, Chan GK, Deschenes J, Mani RS, Subedi S, Nerva JD, Wang AC, Lockwood CM, Mefford HC, Leary SES, **Ojemann JG**, Weinfeld M, Ene CI. Mutations of the DNA repair gene PNKP in a patient with microcephaly, seizures, and developmental delay (MCSZ) presenting with a high-grade brain tumor. *Sci Rep.* 2022;12(1):5386. Epub 2022/04/01. doi: 10.1038/s41598-022-09097-w. PubMed PMID: 35354845; PubMed Central PMCID: PMC8967877.
2. Pirozzi F, Berkseth M, Shear R, Gonzalez L, Timms AE, Sulc J, Pao E, Oyama N, Forzano F, Conti V, Guerrini R, Doherty ES, Saitta SC, Lockwood CM, Pritchard CC, Dobyns WB, Novotny E, Wright JNN, Saneto RP, Friedman S, **Hauptman J**, **Ojemann J**, Kapur RP, Mirzaa GM. Profiling PI3K-AKT-MTOR variants in focal brain malformations reveals new insights for diagnostic care. *Brain.* 2022;145(3):925-38. Epub 2022/04/01. doi: 10.1093/brain/awab376. PubMed PMID: 35355055.
3. Hussain I, **Hofstetter CP**, Wang MY. Innovations in Spinal Endoscopy. *World Neurosurg.* 2022;160:138-48. Epub 2022/04/03. doi: 10.1016/j.wneu.2021.11.099. PubMed PMID: 35364672.
4. Eaton JC, Cole BL, Paulson V, **Goldstein HE**, Lee A. Chondroblastoma of the Occipital Bone With Atypical Genetic Markers: A Case Report. *Cureus.* 2022;14(2):e22451. Epub 2022/04/05. doi: 10.7759/cureus.22451. PubMed PMID: 35371803; PubMed Central PMCID: PMCPMC8942088.
5. Volinn E, **Loeser JD**. What are the Origins of Chronic Back Pain of "Obscure Origins"? Turning Toward Family and Workplace Social Contexts. *Yale J Biol Med.* 2022;95(1):153-63. Epub 2022/04/05. PubMed PMID: 35370485; PubMed Central PMCID: PMCPMC8961709.
6. Siegel L, Yan H, Warsi N, Wong S, Suresh H, Weil AG, Ragheb J, Wang S, Rozzelle C, Albert GW, Raskin J, Abel T, **Hauptman J**, Schrader DV, Bollo R, Smyth MD, Lew SM, Lopresti M, Kizek DJ, Weiner HL, Fallah A, Widjaja E, Ibrahim GM. Connectomic profiling and Vagus nerve stimulation Outcomes Study (CONNECTIVOS): a prospective observational protocol to identify biomarkers of seizure response in children and youth. *BMJ Open.* 2022;12(4):e055886. Epub 2022/04/10. doi: 10.1136/bmjopen-2021-055886. PubMed PMID: 35396292; PubMed Central PMCID: PMC8995963.
7. Nelson LD, Magnus BE, **Temkin NR**, Dikmen S, Manley GT, Balsis S. How Do Scores on the Functional Status Examination (FSE) Correspond to Scores on the Glasgow Outcome Scale-Extended (GOSE)? *Neurotrauma Rep.* 2022;3(1):122-8. Epub 2022/04/12. doi: 10.1089/neur.2021.0057. PubMed PMID: 35403101; PubMed Central PMCID: PMC8985527.
8. Massenburg BB, Shepard E, Mercan E, Nassar A, Birgfeld CB, **Lee A**, **Ellenbogen RG**, Hopper RA. Morphologic Differences in Sagittal Synostosis with Age before Surgery. *Plast Reconstr Surg.*

2022;149(6):1165e-75e. Epub 2022/04/13. doi: 10.1097/prs.00000000000009143. PubMed PMID: 35413045.

9. Saal-Zapata G, Rodriguez-Calienes A, Malaga M, Velasquez-Rimachi V, Moran C, Bustamante-Paytan D, Pacheco-Barrios N, Pacheco-Barrios K, Alva-Diaz C, **Walker M**. Microsurgical and endovascular treatment of posterior inferior cerebellar artery aneurysms: a systematic review and meta-analysis. *J Neurosurg Sci*. 2022. Epub 2022/04/14. doi: 10.23736/s0390-5616.22.05710-1. PubMed PMID: 35416457.
10. Durnford AJ, Akarca D, Culliford D, Millar J, Guniganti R, Giordan E, Brinjikji W, Chen CJ, Abecassis IJ, **Levitt M**, Polifka AJ, Derdeyn CP, Samaniego EA, Kwasnicki A, Alaraj A, Potgieser ARE, Chen S, Tada Y, Phelps R, Abla A, Satomi J, Starke RM, van Dijk JMC, Amin-Hanjani S, Hayakawa M, Gross B, Fox WC, **Kim L**, Sheehan J, Lanzino G, Kansagra AP, Du R, Lai R, Zipfel GJ, Bulters DO; CONDOR Investigators, including Meyer RM. Risk of Early Versus Later Rebleeding From Dural Arteriovenous Fistulas With Cortical Venous Drainage. *Stroke*. 2022;53(7):2340-5. Epub 2022/04/15. doi: 10.1161/strokeaha.121.036450. PubMed PMID: 35420453; PubMed Central PMCID: PMC9232241.
11. McAvoy M, Lee G, Boop S, Greil ME, Durler KA, Young CC, Craft L, **Chesnut RM**, Wahlster S. Fixed, Dilated, and Converting-Unreactive Pupil With Preserved Consciousness Indicating Acutely Rising Intracranial Pressure due to Traumatic Intraparenchymal Contusions: Case Report and Review of the Literature. *Neurohospitalist*. 2022;12(2):355-60. Epub 2022/04/15. doi: 10.1177/19418744211056613. PubMed PMID: 35419147; PubMed Central PMCID: PMC8995591.
12. Akbari SHA, Yahanda AT, Ackerman LL, Adelson PD, Ahmed R, Albert GW, Aldana PR, Alden TD, Anderson RCE, Bauer DF, Bethel-Anderson T, Bierbrauer K, Brockmeyer DL, Chern JJ, Couture DE, Daniels DJ, Dlouhy BJ, Durham SR, **Ellenbogen RG**, Eskandari R, Fuchs HE, Grant GA, Graupman PC, Greene S, Greenfield JP, Gross NL, Guillaume DJ, Hankinson TC, Heuer GG, Iantosca M, Iskandar BJ, Jackson EM, Jallo GI, Johnston JM, Kaufman BA, Keating RF, Khan NR, Krieger MD, Leonard JR, Maher CO, Mangano FT, McComb JG, McEvoy SD, Meehan T, Menezes AH, Muhlbauer MS, O'Neill BR, Olavarria G, Ragheb J, Selden NR, Shah MN, Shannon CN, Shimony JS, Smyth MD, Stone SSD, Strahle JM, Tamber MS, Torner JC, Tuite GF, Tyler-Kabara EC, Wait SD, Wellons JC, Whitehead WE, Park TS, Limbrick DD. Complications and outcomes of posterior fossa decompression with duraplasty versus without duraplasty for pediatric patients with Chiari malformation type I and syringomyelia: a study from the Park-Reeves Syringomyelia Research Consortium. *J Neurosurg Pediatr*. 2022:1-13. Epub 2022/04/16. doi: 10.3171/2022.2.Peds21446. PubMed PMID: 35426814.
13. Malloy JR, Nistal D, Heyne M, Tardif MC, Bohland JW. Delayed Auditory Feedback Elicits Specific Patterns of Serial Order Errors in a Paced Syllable Sequence Production Task. *J Speech Lang Hear Res*. 2022;65(5):1800-21. Epub 2022/04/21. doi: 10.1044/2022_jslhr-21-00427. PubMed PMID: 35442719.
14. Arynchyna-Smith A, Rozzelle CJ, Jensen H, Reeder RW, Kulkarni AV, Pollack IF, Wellons JC, Naftel RP, Jackson EM, Whitehead WE, Pindrik JA, Limbrick DD, McDonald PJ, Tamber MS, O'Neill BR, **Hauptman JS**, Krieger MD, Chu J, Simon TD, Riva-Cambrin J, Kestle JRW, Rocque BG;

Hydrocephalus Clinical Research Network. Endoscopic third ventriculostomy revision after failure of initial endoscopic third ventriculostomy and choroid plexus cauterization. *J Neurosurg Pediatr.* 2022;1-10. Epub 2022/04/23. doi: 10.3171/2022.3.Peds224. PubMed PMID: 35453104.

15. Sivakanthan S, Feroze A, Eaton J, **Saigal R**. Three Column Cervical Fracture-Dislocation in a 3-Year-Old Boy. *Cureus.* 2022;14(3):e23213. Epub 2022/04/23. doi: 10.7759/cureus.23213. PubMed PMID: 35449661; PubMed Central PMCID: PMC9012570.
16. Pease M, Arefan D, Barber J, Yuh E, Puccio A, Hochberger K, Nwachuku E, Roy S, Casillo S, **Temkin N**, Okonkwo DO, Wu S; **TRACK-TBI Investigators**. Outcome Prediction in Patients with Severe Traumatic Brain Injury Using Deep Learning from Head CT Scans. *Radiology.* 2022;304(2):385-94. Epub 2022/04/27. doi: 10.1148/radiol.212181. PubMed PMID: 35471108; PubMed Central PMCID: PMC9340242.
17. Sofoluke N, Barber SM, Telfeian AE, **Hofstetter CP**, Konakondla S. The Role of the Endoscope in Spinal Oncology: A Systematic Review of Applications and Systematic Analysis of Patient Outcomes. *World Neurosurg.* 2022;164:33-40. Epub 2022/04/29. doi: 10.1016/j.wneu.2022.04.072. PubMed PMID: 35483572.
18. Ohlsen TJD, Scanlon S, Perez FA, Ermoian RP, Paulson VA, **Hauptman JS**, Crotty EE, Ting MA. Synchronous rare tumors in a pediatric patient with a de novo cancer predisposition syndrome. *Pediatr Blood Cancer.* 2022:e29746. Epub 2022/04/30. doi: 10.1002/pbc.29746. PubMed PMID: 35484874.
19. Barkley AS, Sullivan LT, Gibson AW, Zalewski K, **Mac Donald CL**, Barber JK, Hakimian S, **Ko AL**, **Ojemann JG**, **Hauptman JS**. Acute Postoperative Seizures and Engel Class Outcome at 1 Year Postselective Laser Amygdalohippocampal Ablation for Mesial Temporal Lobe Epilepsy. *Neurosurgery.* 2022;91(2):347-54. Epub 2022/05/05. doi: 10.1227/neu.0000000000002023. PubMed PMID: 35506941.
20. Bruce M, DeWees D, Harmon J, Cates L, Khaing ZZ, Hofstetter CP. Blood Flow Changes Associated with Spinal Cord Injury Assessed by Non-linear Doppler Contrast-Enhanced Ultrasound. *Ultrasound Med Biol.* 2022;48(8):1410-9. Epub 2022/05/07. doi: 10.1016/j.ultrasmedbio.2022.03.004. PubMed PMID: 35523621.
21. Sarrami AH, Bass DJ, Rutman AM, Alexander MD, Aksakal M, Zhu C, **Levitt MR**, Mossa-Basha M. Idiopathic intracranial hypertension imaging approaches and the implications in patient management. *Br J Radiol.* 2022;95(1136):20220136. Epub 2022/05/07. doi: 10.1259/bjr.20220136. PubMed PMID: 35522777.
22. **Levitt MR**, Barros G. The way out is through. *J Neurointerv Surg.* 2022;14(6):527. Epub 2022/05/15. doi: 10.1136/neurintsurg-2022-019088. PubMed PMID: 35568485.
23. Palacios EM, Yuh EL, **Mac Donald CL**, Bourla I, Wren-Jarvis J, Sun X, Vassar MJ, Diaz-Arrastia R, Giacino JT, Okonkwo DO, Robertson CS, Stein MB, **Temkin N**, McCrea MA, Levin HS, Markowitz AJ, Jain S, Manley GT, Mukherjee P; **TRACK-TBI Investigators**. Diffusion Tensor Imaging Reveals Elevated Diffusivity of White Matter Microstructure that Is Independently Associated with

Long-Term Outcome after Mild Traumatic Brain Injury: A TRACK-TBI Study. *J Neurotrauma*. 2022. Epub 2022/05/18. doi: 10.1089/neu.2021.0408. PubMed PMID: 35579949.

24. Wei AD, Wakenight P, Zwingman TA, Bard AM, Sahai N, Willemsen MH, Schelhaas HJ, Stegmann APA, Verhoeven JS, de Man SA, Wessels MW, Kleefstra T, Shinde DN, Helbig KL, Basinger A, Wagner VF, Rodriguez-Buritica D, Bryant E, Millichap JJ, Millen KJ, Dobyns WB, Ramirez JM, **Kalume FK**. Human KCNQ5 de novo mutations underlie epilepsy and intellectual disability. *J Neurophysiol*. 2022;128(1):40-61. Epub 2022/05/19. doi: 10.1152/jn.00509.2021. PubMed PMID: 35583973; PubMed Central PMCID: PMC9236882.
25. Koch MJ, Duy PQ, **Grannan BL**, Patel AB, Raymond SB, Agarwalla PK, Kahle KT, Butler WE. Angiographic Pulse Wave Coherence in the Human Brain. *Front Bioeng Biotechnol*. 2022;10:873530. Epub 2022/05/21. doi: 10.3389/fbioe.2022.873530. PubMed PMID: 35592552; PubMed Central PMCID: PMC9110661.
26. Meyfroidt G, Bouzat P, Casaer MP, **Chesnut R**, Hamada SR, Helbok R, Hutchinson P, Maas AIR, Manley G, Menon DK, Newcombe VFJ, Oddo M, Robba C, Shutter L, Smith M, Steyerberg EW, Stocchetti N, Taccone FS, Wilson L, Zanier ER, Citerio G. Management of moderate to severe traumatic brain injury: an update for the intensivist. *Intensive Care Med*. 2022;48(6):649-66. Epub 2022/05/21. doi: 10.1007/s00134-022-06702-4. PubMed PMID: 35595999.
27. Toro C, Hatfield J, **Temkin N**, Barber J, Manley G, Ohnuma T, Komisarow J, Foreman B, Korley FK, Vavilala MS, Laskowitz DT, Mathew JP, Hernandez A, Sampson J, James ML, Raghunathan K, Goldstein BA, Markowitz AJ, Krishnamoorthy V; **TRACK-TBI Investigators**. Risk Factors and Neurological Outcomes Associated With Circulatory Shock After Moderate-Severe Traumatic Brain Injury: A TRACK-TBI Study. *Neurosurgery*. 2022;91(3):427-36. Epub 2022/05/21. doi: 10.1227/neu.0000000000002042. PubMed PMID: 35593705.
28. Barros G, Sen RD, McGrath M, Nistal D, **Sekhar LN**, **Kim LJ**, **Levitt MR**. Frailty Predicts Postoperative Functional Outcomes After Microsurgical Resection of Ruptured Brain Arteriovenous Malformations in Older Patients. *World Neurosurg*. 2022;164:e844-e51. Epub 2022/05/24. doi: 10.1016/j.wneu.2022.05.055. PubMed PMID: 35605939.
29. Lamba N, McAvoy M, Kavouridis VK, Smith TR, Touat M, Reardon DA, Iorgulescu JB. Short-term outcomes associated with temozolomide or PCV chemotherapy for 1p/19q-codeleted WHO grade 3 oligodendrogliomas: A national evaluation. *Neurooncol Pract*. 2022;9(3):201-7. Epub 2022/05/24. doi: 10.1093/nop/npac004. PubMed PMID: 35601971; PubMed Central PMCID: PMC9113268.
30. Edlow BL, Bodien YG, Baxter T, Belanger HG, Cali RJ, Deary KB, Fischl B, Foulkes AS, Gilmore N, Greve DN, Hooker JM, Huang SY, Kelemen JN, Kimberly WT, Maffei C, Masood M, Perl DP, Polimeni JR, Rosen BR, Tromly SL, Tseng CJ, Yao EF, Zürcher NR, **Mac Donald CL**, Dams-O'Connor K. Long-Term Effects of Repeated Blast Exposure in United States Special Operations Forces Personnel: A Pilot Study Protocol. *J Neurotrauma*. 2022. Epub 2022/05/28. doi: 10.1089/neu.2022.0030. PubMed PMID: 35620901.

31. Morris RS, Figueroa JF, Pokrzywa CJ, Barber JK, **Temkin NR**, Bergner C, Karam BS, Murphy P, Nelson LD, Laud P, Cooper Z, de Moya M, Trevino C, Tignanelli CJ, deRoos-Cassini TA. Predicting outcomes after traumatic brain injury: A novel hospital prediction model for a patient reported outcome. *Am J Surg.* 2022. Epub 2022/06/01. doi: 10.1016/j.amjsurg.2022.05.016. PubMed PMID: 35637020.
32. **Fillingham P**, Rane Levendovszky S, Andre J, Parsey C, Bindschadler M, Friedman S, Kurt M, Aliseda A, **Levitt MR**. Patient-specific computational fluid dynamic simulation of cerebrospinal fluid flow in the intracranial space. *Brain Res.* 2022;1790:147962. Epub 2022/06/07. doi: 10.1016/j.brainres.2022.147962. PubMed PMID: 35667413.
33. Burgraff NJ, Phillips RS, Severs LJ, Bush NE, Baertsch NA, **Ramirez JM**. Inspiratory rhythm generation is stabilized by I(h). *J Neurophysiol.* 2022;128(1):181-96. Epub 2022/06/09. doi: 10.1152/jn.00150.2022. PubMed PMID: 35675444; PubMed Central PMCID: PMC9291429.
34. Crowe CS, **Hauptman JS**, **Lee A**, **Ellenbogen RG**, Ettinger RE, Susarla SM. Progressive-Tension Sutures in Reconstruction of Posterior Trunk Defects in Pediatric Patients: A Prospective Series. *Plast Reconstr Surg.* 2022;150(2):435e-8e. Epub 2022/06/09. doi: 10.1097/prs.0000000000009331. PubMed PMID: 35674641.
35. Langford DJ, Gewandter JS, Amtmann D, Reeve BB, Hertz S, **Loeser JD**, Veasley C, Turk DC, Dworkin RH. Patient-Reported Chronic Pain Intensity: More Than Meets the Eye. *Patient.* 2022;15(4):383-7. Epub 2022/06/09. doi: 10.1007/s40271-022-00585-9. PubMed PMID: 35676465.
36. Scoville JP, Joyce E, D AT, Bounajem MT, Thomas A, Ogilvy CS, Moore JM, Riina HA, Tanweer O, Levy EI, Spiotta AM, Gross BA, Jankowitz BT, Cawley CM, Khalessi AA, Pandey AS, Ringer AJ, Hanel R, Ortiz RA, Langer D, **Levitt MR**, Binning M, Taussky P, Kan P, Grandhi R. Radiographic and clinical outcomes with particle or liquid embolic agents for middle meningeal artery embolization of nonacute subdural hematomas. *Interv Neuroradiol.* 2022;15910199221104631. Epub 2022/06/09. doi: 10.1177/15910199221104631. PubMed PMID: 35673710.
37. Jung S, Zimin PI, Woods CB, Kayser EB, Haddad D, Reczek CR, Nakamura K, **Ramirez JM**, Sedensky MM, Morgan PG. Isoflurane inhibition of endocytosis is an anesthetic mechanism of action. *Curr Biol.* 2022;32(14):3016-32.e3. Epub 2022/06/11. doi: 10.1016/j.cub.2022.05.037. PubMed PMID: 35688155; PubMed Central PMCID: PMC9329204.
38. Schneider ALC, Barber J, **Temkin N**, Gardner RC, Manley G, Diaz-Arrastia R, Sandsmark D. Associations of Preexisting Vascular Risk Factors With Outcomes After Traumatic Brain Injury: A TRACK-TBI Study. *J Head Trauma Rehabil.* 2022. Epub 2022/06/11. doi: 10.1097/htr.0000000000000798. PubMed PMID: 35687893.
39. Creutzfeldt CJ, **Levitt MR**, Leslie-Mazwi TM. Is Endovascular Thrombectomy for the Very Elderly? *Stroke.* 2022;53(7):2227-9. Epub 2022/06/16. doi: 10.1161/strokeaha.122.039340. PubMed PMID: 35703096; PubMed Central PMCID: PMC9247017.

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41. Kulbe JR, Jain S, Nelson LD, Korley FK, Mukherjee P, Sun X, Okonkwo DO, Giacino JT, Vassar MJ, Robertson CS, McCrea MA, Wang KKW, **Temkin N**, **Mac Donald CL**, Taylor SR, Ferguson AR, Markowitz AJ, Diaz-Arrastia R, Manley GT, Stein MB; **TRACK-TBI Investigators**. Association of day-of-injury serum glial fibrillary acidic protein concentration and six-month posttraumatic stress disorder in patients with mild traumatic brain injury. *Neuropsychopharmacology*. 2022. Epub 2022/06/19. doi: 10.1038/s41386-022-01359-5. PubMed PMID: 35717463.
42. **Sekhar LN**, *Shenoy VS*, Holdefer R, White M. Commentary: A Novel Approach to Microvascular Decompression for Hemifacial Spasm: Method Description and Associated Outcomes. *Oper Neurosurg (Hagerstown)*. 2022;23(1):e23-e5. Epub 2022/06/22. doi: 10.1227/ons.0000000000000263. PubMed PMID: 35726931.
43. *Shenoy VS*, **Sekhar LN**. Letter to the Editor Regarding "Surgical Treatment of Trochlear Nerve Schwannomas: Case Series and Systematic Review". *World Neurosurg*. 2022;163:144. Epub 2022/06/23. doi: 10.1016/j.wneu.2022.03.047. PubMed PMID: 35729809.
44. **Temkin N**, Machamer J, Dikmen S, Nelson LD, Barber J, Hwang PH, Boase K, Stein MB, Sun X, Giacino J, McCrea MA, Taylor SR, Jain S, Manley G; **TRACK-TBI Investigators**. Risk Factors for High Symptom Burden Three Months after Traumatic Brain Injury and Implications for Clinical Trial Design: A Transforming Research and Clinical Knowledge in Traumatic Brain Injury Study. *J Neurotrauma*. 2022. Epub 2022/06/28. doi: 10.1089/neu.2022.0113. PubMed PMID: 35754333.
45. Gaudette É, Seabury SA, **Temkin N**, Barber J, DiGiorgio AM, Markowitz AJ, Manley GT; **TRACK-TBI Investigators**. Employment and Economic Outcomes of Participants With Mild Traumatic Brain Injury in the TRACK-TBI Study. *JAMA Netw Open*. 2022;5(6):e2219444. Epub 2022/06/30. doi: 10.1001/jamanetworkopen.2022.19444. PubMed PMID: 35767257; PubMed Central PMCID: PMC9244609.