

Department of Neurological Surgery
University of Washington, Seattle WA
2023 Q3 **Faculty**, *Fellow*, and Resident
Peer Reviewed Publications

1. Hopper RA, Nguyen AN, Massenburg BB, **Lee A**, Mercan E. Direct Remodeling of Occipital Bullet Deformity in Sagittal Synostosis Improves Two-Year Posterior Morphology After Modified Pi Procedure. *Plast Reconstr Surg*. 2023. Epub 2023/07/03. doi: 10.1097/prs.00000000000010898. PubMed PMID: 37399527.
2. Pan J, Yap N, Prasse T, **Hofstetter CP**. Validation of smartphone app-based digital patient reported outcomes in full-endoscopic spine surgery. *Eur Spine J*. 2023;32(8):2903-9. Epub 2023/07/05. doi: 10.1007/s00586-023-07819-w. PubMed PMID: 37405531.
3. **Chesnut R**, **Temkin N**, Pridgeon J, Sulzbacher S, Lujan S, Videtta W, et al. Protocol for a Randomized Trial Comparing Intracranial Pressure Monitor-Based Management of Severe Pediatric Traumatic Brain Injury With Management Based on Imaging and Clinical Examination Without Intracranial Pressure Monitoring. *Neurosurgery*. 2023. Epub 2023/07/06. doi: 10.1227/neu.0000000000002582. PubMed PMID: 37409817.
4. Wahlster S, Zunt J, **Bonow R**. Surgical Debulking Before Medical Management in a Patient With Massive Racemose Neurocysticercosis. *Neurology*. 2023;101(14):627-8. Epub 2023/07/07. doi: 10.1212/wnl.00000000000207465. PubMed PMID: 37414569; PubMed Central PMCID: PMC10573143 disclosures.
5. **Chesnut RM**. Utility of Intracranial Pressure Monitoring in the Management of Traumatic Brain Injury. *World Neurosurg*. 2023. Epub 2023/07/08. doi: 10.1016/j.wneu.2023.06.053. PubMed PMID: 37419701.
6. Melbourne JA, Kehnemouyi YM, O'Day JJ, Wilkins KB, Gala AS, Petrucci MN, et al. including **Herron JA**. Kinematic adaptive deep brain stimulation for gait impairment and freezing of gait in Parkinson's disease. *Brain Stimul*. 2023;16(4):1099-101. Epub 2023/07/11. doi: 10.1016/j.brs.2023.07.003. PubMed PMID: 37429355.
7. Bajaj AI, Yap N, Derman PB, Konakondla S, Kashlan ON, Telfeian AE, **Hofstetter CP**. Comparative analysis of perioperative characteristics and early outcomes in transforaminal endoscopic lumbar discectomy: general anesthesia versus conscious sedation. *Eur Spine J*. 2023;32(8):2896-902. Epub 2023/07/14. doi: 10.1007/s00586-023-07792-4. PubMed PMID: 37450041.
8. McAvoy M, Hopper RA, **Lee A**, **Ellenbogen RG**, Susarla SM. Pediatric Cranial Vault and Skull Base Fractures. *Oral Maxillofac Surg Clin North Am*. 2023;35(4):597-606. Epub 2023/07/14. doi: 10.1016/j.coms.2023.04.008. PubMed PMID: 37442667.
9. **Levitt MR**. Was it worth it? *J Neurointerv Surg*. 2023;15(8):731-2. Epub 2023/07/15. doi: 10.1136/jnis-2023-020752. PubMed PMID: 37451828.
10. Maxin AJ, Gulek BG, Lee C, Lim D, Mariakakis A, **Levitt MR**, et al. Validation of a Smartphone Pupillometry Application in Diagnosing Severe Traumatic Brain Injury. *J Neurotrauma*. 2023;40(19-

20):2118-25. Epub 2023/07/19. doi: 10.1089/neu.2022.0516. PubMed PMID: 37464770.

11. Snider SB, **Temkin NR**, Barber J, Edlow BL, Giacino JT, Hammond FM, et al. Predicting Functional Dependency in Patients with Disorders of Consciousness: A TBI-Model Systems and TRACK-TBI Study. *Ann Neurol*. 2023. Epub 2023/07/20. doi: 10.1002/ana.26741. PubMed PMID: 37470289.

12. Ashina H, Dodick DW, Barber J, **Temkin NR**, Chong CD, Adler JS, et al. including **Mac Donald C**. Prevalence of and Risk Factors for Post-traumatic Headache in Civilian Patients After Mild Traumatic Brain Injury: A TRACK-TBI Study. *Mayo Clin Proc*. 2023;98(10):1515-26. Epub 2023/07/23. doi: 10.1016/j.mayocp.2023.02.026. PubMed PMID: 37480909.

13. Boop SH, Shimony N, Boop FA. Review and update on pediatric ependymoma. *Childs Nerv Syst*. 2023;39(10):2667-73. Epub 2023/07/26. doi: 10.1007/s00381-023-06091-z. PubMed PMID: 37493720.

14. Simon TD, Sedano S, Rosenberg-Hasson Y, Durazo-Arvizu R, Whitlock KB, Hodor P, et al. including **Hauptman JS**, **Ojemann JG**. Lower levels of Th1 and Th2 cytokines in cerebrospinal fluid (CSF) at the time of initial CSF shunt placement in children are associated with subsequent shunt revision surgeries. *Cytokine*. 2023;169:156310. Epub 2023/07/31. doi: 10.1016/j.cyto.2023.156310. PubMed PMID: 37523803; PubMed Central PMCID: PMC10528342.

15. **Fillingham P**, Romero Bhathal J, Marsh LMM, Barbour MC, Kurt M, Ionita CN, et al. including **Levitt MR**. Improving the accuracy of computational fluid dynamics simulations of coiled cerebral aneurysms using finite element modeling. *J Biomech*. 2023;157:111733. Epub 2023/08/02. doi: 10.1016/j.jbiomech.2023.111733. PubMed PMID: 37527606; PubMed Central PMCID: PMC10528313.

16. Alattar AA, Dhawan S, Bartek J, Jr., Carroll K, Ma J, Sanghvi P, et al. Increased risk for ex-vacuo ventriculomegaly with leukoencephalopathy (EVL) in whole brain radiation therapy and repeat radiosurgery treated brain metastasis patients. *J Clin Neurosci*. 2023;115:95-100. Epub 2023/08/05. doi: 10.1016/j.jocn.2023.07.005. PubMed PMID: 37541084.

17. Norat P, Sokolowski JD, Gorick CM, Soldozy S, Kumar JS, Chae Y, et al. including **Walker M**, **Levitt MR**. Intraarterial Transplantation of Mitochondria After Ischemic Stroke Reduces Cerebral Infarction. *Stroke Vasc Interv Neurol*. 2023;3(3). Epub 2023/08/07. doi: 10.1161/svin.122.000644. PubMed PMID: 37545759; PubMed Central PMCID: PMC10399028.

18. Nguyen ED, Fard VN, Kim BY, Collins S, Galey M, Nelson BR, et al. including **Ramirez JM**. Genome Report: chromosome-scale genome assembly of the African spiny mouse (*Acomys cahirinus*). G3 (Bethesda). 2023;13(10). Epub 2023/08/08. doi: 10.1093/g3journal/jkad177. PubMed PMID: 37552705; PubMed Central PMCID: PMC10542272.

19. Abecassis IJ, Almallouhi E, Chalhoub RM, Helal A, Naidugari JR, Kasab SA, et al. including **Levitt MR**. The effect of occlusion location and technique in mechanical thrombectomy for minor stroke. *Interv Neuroradiol*. 2023;15910199231196451. Epub 2023/08/18. doi: 10.1177/15910199231196451. PubMed PMID: 37593806.

20. Bombardier CH, Fann JR, Ehde DM, Reyes MR, Burns SP, Barber JK, **Temkin NR**. Collaborative Care versus Usual Care to Improve Quality of Life, Pain, Depression, and Physical Activity in Outpatients with Spinal Cord Injury: The SCI-CARE Randomized Controlled Clinical Trial. *J Neurotrauma*. 2023. Epub

2023/08/19 20:42. doi: 10.1089/neu.2023.0200. PubMed PMID: 37597201.

21. Romero Bhathal J, Marsh L, **Levitt MR**, Geindreau C, Aliseda A. Towards Prediction of Blood Flow in Coiled Aneurysms Before Treatment: A Porous Media Approach. *Ann Biomed Eng.* 2023. Epub 2023/08/20. doi: 10.1007/s10439-023-03340-9. PubMed PMID: 37598136.

22. **Chesnut RM, Bonow RH.** Craniectomy or Craniotomy for Acute Subdural Hematoma. *N Engl J Med.* 2023;389(9):862. Epub 2023/08/30. doi: 10.1056/NEJMc2308428. PubMed PMID: 37646686.

23. Tanner D, Murthy S, Lavista Ferres JM, **Ramirez JM**, Mitchell EA. Risk factors for late (28+ weeks' gestation) stillbirth in the United States, 2014-2015. *PLoS One.* 2023;18(8):e0289405. Epub 2023/08/30. doi: 10.1371/journal.pone.0289405. PubMed PMID: 37647261; PubMed Central PMCID: PMC10468071.

24. Oddo M, Taccone FS, Petrosino M, Badenes R, Blandino-Ortiz A, Bouzat P, et al. including **Chesnut RM, Greil ME.** The Neurological Pupil index for outcome prognostication in people with acute brain injury (ORANGE): a prospective, observational, multicentre cohort study. *Lancet Neurol.* 2023;22(10):925-33. Epub 2023/09/01. doi: 10.1016/s1474-4422(23)00271-5. PubMed PMID: 37652068.

25. Severs LJ, Bush NE, Quina LA, Hidalgo-Andrade S, Burgraff NJ, Dashevskiy T, et al. including **Ramirez JM.** Purinergic signaling mediates neuroglial interactions to modulate sighs. *Nat Commun.* 2023;14(1):5300. Epub 2023/09/01. doi: 10.1038/s41467-023-40812-x. PubMed PMID: 37652903; PubMed Central PMCID: PMC10471608.

26. Sedano S, Kronman MP, Whitlock KB, Zhou C, Coffin SE, **Hauptman JS**, et al. Associations of Standard Care, Intrathecal Antibiotics, and Antibiotic-Impregnated Catheters With Cerebrospinal Fluid Shunt Infection Organisms and Resistance. *J Pediatric Infect Dis Soc.* 2023;12(9):504-12. Epub 2023/09/08. doi: 10.1093/jpids/piad064. PubMed PMID: 37681670.

27. Eaton JC, Meyer RM, Lim DH, Greil ME, Williams JR, Young CC, Barber JK, Temkin NR, Bonow RH, Chesnut RM. Acute Extra-Arachnoid Subdural Hematomas in Patients 50 Years and Older: When Subdurals Act Like Epidurals. *World Neurosurg.* 2023. Epub 2023/09/09. doi: 10.1016/j.wneu.2023.08.134. PubMed PMID: 37683917.

28. Alarie ME, Provenza NR, **Herron JA**, Asaad WF. Automated artifact injection into sensing-capable brain modulation devices for neural-behavioral synchronization and the influence of device state. *Brain Stimul.* 2023;16(5):1358-60. Epub 2023/09/11. doi: 10.1016/j.brs.2023.09.005. PubMed PMID: 37690601.

29. Kelly-Hedrick M, Liu SY, **Temkin N**, Barber J, Komisarow J, Manley G, et al. Association of Early Beta-Blocker Exposure and Functional Outcomes in Critically Ill Patients With Moderate to Severe Traumatic Brain Injury: A Transforming Clinical Research and Knowledge in Traumatic Brain Injury Study. *Crit Care Explor.* 2023;5(9):e0958. Epub 2023/09/11. doi: 10.1097/cce.0000000000000958. PubMed PMID: 37693305; PubMed Central PMCID: PMC10484371.

30. Manning A, Han V, Stephens A, Wang R, Bush N, Bard M, **Ramirez JM, Kalume F.** Elevated susceptibility to exogenous seizure triggers and impaired interneuron excitability in a mouse model of Leigh syndrome epilepsy. *Neurobiol Dis.* 2023;187:106288. Epub 2023/09/14. doi: 10.1016/j.nbd.2023.106288. PubMed PMID: 37704057.

31. Pan J, Boop SH, Barber JK, Susarla SM, Durfy S, Ojemann JG, Goldstein HE, Lee A, Browd S, Ellengogen RG, Hauptman JS. Perioperative complications and secondary retethering after pediatric tethered cord release surgery. *J Neurosurg Pediatr.* 2023;1-10. Epub 2023/09/20. doi: 10.3171/2023.6.Peds23259. PubMed PMID: 37728397.
32. Boop S, Gibson A, Pedersen K, Coppel D, Durfy S, Patel AJ, Lee A, Ravanpay AR. Virtual Interviews in Neurosurgery Resident Selection: A Follow-up Report. *World Neurosurg.* 2023. Epub 2023/09/23. doi: 10.1016/j.wneu.2023.09.051. PubMed PMID: 37739171.
33. Maxin AJ, Gulek BG, Lee C, Lim D, Mariakakis A, Levitt MR, et al. Response to Zanier and Citerio. *J Neurotrauma.* 2023. Epub 2023/09/24. doi: 10.1089/neu.2023.0468. PubMed PMID: 37742117.
34. Solis F, Plasencia A, Wahlster S, Walker M, Levitt MR, Ecos R. Flow Diversion for the Treatment of Intracranial Aneurysms in a Peruvian Cohort: Experiences from a Limited-Resource Setting and Barriers to Implementation. *World Neurosurg.* 2023;180:79-85. Epub 2023/09/25. doi: 10.1016/j.wneu.2023.09.058. PubMed PMID: 37742718.
35. Uchida K, Matsukawa H, Sowlat MM, Elawady SS, Alawieh A, Jabbour P, et al. including Levitt MR. Gender Differences in Procedural Clinical Complications and Outcomes of Intracranial Aneurysms: Analysis of the Stroke Thrombectomy and Aneurysm Registry. *Neurosurgery.* 2023. Epub 2023/09/25. doi: 10.1227/neu.0000000000002695. PubMed PMID: 37747370.
36. Etemad LL, Yue JK, Barber J, Nelson LD, Bodien YG, Satris GG, et al. including Temkin NR. Longitudinal Recovery Following Repetitive Traumatic Brain Injury. *JAMA Netw Open.* 2023;6(9):e2335804. Epub 2023/09/26. doi: 10.1001/jamanetworkopen.2023.35804. PubMed PMID: 37751204; PubMed Central PMCID: PMC10523170.
37. Coppel D, Barber J, Temkin NR, Mac Donald CL. Combat Deployed Service Members by Blast TBI and Service Separation Status 5-years Post-deployment: Comparison of Cognitive, Neurobehavioral, and Psychological Profiles of Those Who Left vs. Those Still Serving. *Mil Med.* 2023. Epub 2023/09/27. doi: 10.1093/milmed/usad378. PubMed PMID: 37756615.
38. Nattino G, Gamberini L, Brissy O, Carrara G, Chesnut R, Chiarini V, et al. including Temkin NR. Comparative Effectiveness of Intracranial Pressure Monitoring on 6-Month Outcomes of Critically Ill Patients With Traumatic Brain Injury. *JAMA Netw Open.* 2023;6(9):e2334214. Epub 2023/09/27. doi: 10.1001/jamanetworkopen.2023.34214. PubMed PMID: 37755832; PubMed Central PMCID: PMC10534270.
39. Rahimzadeh V, Fogarty J, Caulfield T, Auñón-Chancellor S, Borry P, Candia J, et al. including Williams MA. Ethically cleared to launch? *Science.* 2023;381(6665):1408-11. Epub 2023/09/28. doi: 10.1126/science.adh9028. PubMed PMID: 37769066.
40. Philipson EB, Machamer J, Dikmen S, Temkin N. Traumatic Brain Injuries Impact on School One Month and One Year After Injury. *Neurotrauma Rep.* 2023;4(1):507-14. Epub 2023/09/29. doi: 10.1089/neur.2022.0069. PubMed PMID: 37771425; PubMed Central PMCID: PMCPMC10523406.