

Kathryn Van Pelt

Data Scientist

Curriculum Vitae
October 2023

📍 Oak Street Health | KVP Consulting
✉ vanpelt.kathryn@gmail.com
🐦 @oconnor_kl
🔗 kvp1918

Education

2014-2018	PhD, Kinesiology Ann Arbor, MI, USA	University of Michigan, School of Kinesiology
2015-2017	MS, Clinical Research Design and Statistical Analysis Ann Arbor, MI, USA	University of Michigan, School of Public Health
2014-2016	MS, Kinesiology Ann Arbor, MI, USA	University of Michigan, School of Kinesiology
2006-2010	BA, Psychology Worcester, MA, USA	The College of the Holy Cross

Employment

2023-Present	Data Scientist I Chicago, IL, USA	Oak Street Health
2021-2023	CEO & Co-Founder, Data Scientist Lexington, KY, USA	Synaptek, LLC
2021-Present	Data Scientist Lexington, KY, USA	KVP Consulting
2018-2021	Post-Doctoral Fellow Lexington, KY, USA	University of Kentucky, Sanders-Brown Center on Aging
2014-2018	PhD Student and Graduate Research Assistant Laboratory Ann Arbor, MI, USA	University of Michigan, NeuroTrauma Research
2012-2014	Clinical Research Coordinator Boston, MA, USA	Massachusetts General Hospital
2010-2012	Research Technician Worcester, MA, USA	University of Massachusetts Medical School

Teaching

University of Kentucky	Guest Lecturer: Special Topics in Neurobiology (ANA 780)	Lexington, KY, USA
University of Michigan	Teaching Assistant: Statistics (MOVESCI 250)	Ann Arbor, MI, USA

Scholarship

- Note: Name change from O'Connor to Van Pelt in Fall 2018.
- ORCID: 0000-0002-5494-2357

In Preparation

1. Liebel SW, Van Pelt KL, Pasquina PF, McAllister TW, McCrea MA, Broglio SP, CARE Consortium Investigators. Sport-specific recovery trajectories for NCAA collegiate athletes following concussion

Refereed Journal Publications

Complete List of Published Work in My Bibliography: <https://www.ncbi.nlm.nih.gov/myncbi/browse/collection/46831018/>

1. Garcia GP, Czerniak LL, Lavieri MS, Liebel SW, Van Pelt KL, Pasquina PF, McAllister TW, McCrea MA, Broglio SP, CARE Consortium Investigators. (Under Review). Estimating the Relationship Between the Symptom-Free Waiting Period and Injury Rates After Return-to-Play from Concussion: A Simulation Analysis Using CARE Consortium Data. Sports Medicine. 2023; Online ahead of print. doi: 10.1007/s40279-023-01901-5

2. Stern AM, Van Pelt KL, Liu L, Anderson AK, Ostaszewski B, Mapstone M, O'Bryant S, Petersen ME, Christian BT, Handen BL, Selkoe DJ, Schmitt F, Head E. Plasma NT1-tau and A(42) correlate with age and cognitive function in two large Down syndrome cohorts. *Alzheimers Dement*. 2023 Jul 12;. doi: 10.1002/alz.13382. PubMed PMID: 37438872.
3. DiProspero ND, Keator DB, Phelan M, van Erp TGM, Doran E, Powell DK, Van Pelt KL, Schmitt FA, Head E, Lott IT, Yassa MA. Selective Impairment of Long-Range Default Mode Network Functional Connectivity as a Biomarker for Preclinical Alzheimer's Disease in People with Down Syndrome. *J Alzheimers Dis*. 2022;85(1):153-165. doi: 10.3233/JAD-210572. PubMed PMID: 34776436; PubMed Central PMCID: PMC9017677.
4. Van Pelt KL, Wolff L, Campbell DE, McGinty G, Zupan M, Jackson JC. Investigation of Aerobic and Muscular Fitness and Concussion Among Service Academy Cadets at the United States Air Force Academy: Results from the CARE Consortium. *Mil Med*. 2021 Dec 30;. doi: 10.1093/milmed/usab440. [Epub ahead of print] PubMed PMID: 34966923.
5. Wallace ER, Harp JP, Van Pelt KL, Koehl LM, Caban-Holt AM, Anderson-Mooney AJ, Jicha GA, Lightner DD, Robertson WC, Head E, Schmitt FA. Identifying dementia in Down syndrome with the Severe Impairment Battery, Brief Praxis Test and Dementia Scale for People with Learning Disabilities. *J Intellect Disabil Res*. 2021 Dec;65(12):1085-1096. doi: 10.1111/jir.12901. Epub 2021 Nov 16. PubMed PMID: 34786786; PubMed Central PMCID: PMC8842513.
6. Harp JP, Koehl LM, Van Pelt KL, Hom CL, Doran E, Head E, Lott IT, Schmitt FA. Cognitive and Behavioral Domains That Reliably Differentiate Normal Aging and Dementia in Down Syndrome. *Brain Sci*. 2021 Aug 25;11(9):1128. doi: 10.3390/brainsci11091128. PMID: 34573150; PMCID: PMC8468129.
7. Memmini AK, Van Pelt KL, Wicklund AH, Breedlove KM, Broglio SP. Evaluating adult decision-making modifiers in support of youth contact sports participation. *J Athl Train*. 2021 Jul 19. doi: 10.4085/1062-6050-0125.21. Epub ahead of print. PMID: 34279635.
8. Carmona-Iragui M, Alcolea D, Barroeta I, Videla L, Van Pelt KL, Schmitt F, Lightner D, Koehl L, Sacco S, Mircher C, Pape S, Nübling G, Levin J, Zaman S, Strydom A, Rebillat A, Head E, Blesa R, Lleó A, Fortea J. (2021). Prognostic performance and longitudinal changes in plasma Neurofilament light levels in Down syndrome: a multicenter longitudinal study. *Lancet Neurol*. 2021 Aug;20(8):605-614. doi: 10.1016/S1474-4422(21)00129-0. PMID: 34302785.
9. Van Pelt KL, Caccese JB, Eckner JT, Putukian M, Brooks MA, Cameron KL, Houston MN, Jackson JC, McGinty GT, Hillis CJ, McAllister T, McCrea MA, Broglio SP, Buckley TA. (2021). Detailed Description of Division I Ice Hockey Concussions: Findings from the NCAA and Department of Defense CARE Consortium. *J Sport Health Sci*. 10(2):162-171. doi: 10.1016/j.jshs.2021.01.004. Epub 2021 Jan 14. PMID: 33453430; PMCID: PMC7987562.
10. Van Pelt KL, Puetz T, Swallow J, Lapointe AP, Broglio SP. (2021). A Systematic-Review and Meta-Analysis of Concussion Rates: A Data-Driven Concussion Risk Classification. *Sports Med*. 2021 Jun;51(6):1227-1244. doi: 10.1007/s40279-021-01428-7. Epub 2021 Mar 15. PMID: 33721284.
11. Liebel SW, Van Pelt KL, Garcia GP, Czerniak LL, Lavieri MS, McCrea MA, McAllister T, Broglio SP. (Accepted, 2020). The Relationships Between Sports-Related Concussion and Sensation Seeking. *Int J Mol Sci*. 2020 Nov 30;21(23). doi: 10.3390/ijms21239097.
12. Thalman SW, Van Pelt KL, Lin A, Johnson NF, Andersen A, McCarty K, Davis R, Jicha G, Caban-Holt A, Robertson W, Lightner D, Powell D, Head E, Schmitt F. (2020). A Preliminary Study of Cerebral Blood Flow, Aging and Dementia in People with Down Syndrome. *J Intellect Disabil Res*. 2020 Dec;64(12):934-945. doi: 10.1111/jir.12784
13. Van Pelt KL, Koehl L, Caban-Holt A, Anderson-Mooney A, Head E, Schmitt FA. (2020). Feasibility of Dual-Task Gait to Estimate Alzheimer's Related Cognitive Decline in Down Syndrome. *Alzheimers Dement (Amst)*. 2020;12(1):e12092. doi: 10.1002/dad2.12092. eCollection 2020
14. Koehl LM, Van Pelt KL, Harp JP, Head E, Schmitt FA. (Accepted, 2020). Longitudinal Changes in Concurrent Dementia and Down Syndrome. *Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring*.
15. Van Pelt D, Vechetti I, Lawrence M, Van Pelt KL, Patel P, Miller B, Butterfield T, Dupont-Versteegden. (2020). Serum extracellular vesicle miR-203a-3p content is associated with skeletal muscle mass and protein turnover during disuse atrophy and regrowth. *Am J Physiol Cell Physiol*. 2020 Aug 1;319(2):C419-C431. doi: 10.1152/ajpcell.00223.2020.

16. Houston M, Van Pelt KL, D'Lauro C, Brodeur R, Campbell D, McGinty G, Jackson J, Kelly T, Peck K, Svoboda S, McAllister T, McCrea M, Broglio S, Cameron K. (2020). Test-Retest Reliability of Concussion Baseline Assessments in United States Service Academy Cadets: A Report from the NCAA-DoD CARE Consortium. *Journal of the International Neuropsychology Society*. doi: 10.1017/S1355617720000594.
17. Van Pelt KL, Cameron KL, Campbell DE, D'Lauro CJ, He X, Houston MN, Jackson JC, Johnson BR, McGinty G, Meehan S, O'Donnell PG, Pasquina P, Peck KY, Svoboda SJ, McAllister T, McCrea M, Broglio SP. (2020). Concussion recovery trajectories among United States Service Academy Members. *J Athl Train*. 2020 Jul 1;55(7):658-665. doi: 10.4085/1062-6050-10-19
18. Van Pelt KL, Cameron KL, Campbell DE, D'Lauro CJ, He X, Houston MN, Jackson JC, Johnson BR, McGinty G, Meehan S, O'Donnell PG, Pasquina P, Peck KY, Svoboda SJ, McAllister T, McCrea M, Broglio SP. (2019). A cohort study to identify and evaluate concussion risk factors across multiple injury settings: findings from the CARE Consortium. *Inj Epidemiol*. 2019 Jan 14;6(1):1. doi: 10.1186/s40621-018-0178-3
19. Buckley TA, Bryk KN, Van Pelt KL, Broglio SP, East SA, Zuckerman SL, Kuhn AW. (2019). Concussion and National Hockey League Player Performance: An Advanced Hockey Metrics Analysis. *J Athl Train*. 2019 May;54(5):527-533. doi: 10.4085/1062-6050-200-18
20. Van Pelt KL, Lapointe A, Galdys M, Dougherty L, Buckley TA, Broglio SP. (2019). Evaluating Performance of National Hockey League Players After a Concussion Versus Lower Body Injury. *J Athl Train*. 2019 May;54(5):534-540. doi: 10.4085/1062-6050-218-18
21. O'Connor KL. Concussion among military service academy members: identifying risk factors, recovery trajectories, and the role of mental health. *Br J Sports Med*. 2019 Mar;53(6):368-369. doi: 10.1136/bjsports-2018-099543
22. Zafar SF, Postma EN, Biswal S, Boyle EJ, Bechek S, O'Connor K, Shenoy A, Kim J, Shafi MS, Patel AB, Rosenthal ES, Westover MB. (2018). Effect of Epileptiform Abnormality Burden on Neurologic Outcome and Antiepileptic Drug Management After Subarachnoid Hemorrhage. *Clin Neurophysiol*. 2018 Nov;129(11):2219-2227. doi: 10.1016/j.clinph.2018.08.015
23. Rosenthal ES, Biswal S, Zafar SF, O'Connor KL, Bechek S, Shenoy AR, Boyle EJ, Shafi MM, Gilmore EJ, Foreman BP, Gaspard N, Leslie-Mazwi TM, Rosand J, Hoch DB, Cash S, Cole AJ, Patel AB, Westover MB. (2018). Continuous Electroencephalography for Predicting Delayed Cerebral Ischemia after Subarachnoid Hemorrhage: A Prospective Study of Diagnostic Accuracy. *Ann Neurol*. 2018 May;83(5):958-969. doi: 10.1002/ana.25232
24. Eckner JT, O'Connor KL, Broglio SP, Kutcher JS, Ashton-Miller JA. (2018). Comparison of Head Impact Exposure Between Male and Female High School Ice Hockey Athletes. *Am J Sports Med*. 2018 Jul;46(9):2253-2262. doi: 10.1177/0363546518777244
25. O'Connor KL, Allred CD, Cameron KL, Campbell DE, D'Lauro CJ, Houston MN, Johnson BR, Kelly T, McGinty G, O'Donnell PG, Peck KY, Svoboda SJ, Pasquina P, McAllister T, McCrea M, Broglio SP. (2018). Descriptive Analysis of a Baseline Concussion Battery Among U.S. Service Academy Members: Results from the Concussion Assessment, Research, and Education (CARE) Consortium. *Mil Med*. 2018 Nov 1;183(11-12):e580-e590. doi: 10.1093/milmed/usx130
26. Zafar SF, Postma EN, Biswal S, Fleuren L, Boyle EJ, Bechek S, O'Connor KL, Shenoy A, Jonnalahadda D, Kim J, Shafi MS, Patel AB, Rosenthal ES, Westover MB. (2017). Electronic Health Data Predict Outcomes after Subarachnoid Hemorrhage. *Neurocrit Care*. 2018 Apr;28(2):184-193. doi: 10.1007/s12028-017-0466-8
27. Edlow BE, Chatelle C, Spencer CA, Chu CJ, Bodien YG, O'Connor KL, Hirschberg RE, Hochberg LR, Giacino JT, Rosenthal ES, Wu O. (2017). Early detection of consciousness in ICU patients with severe traumatic brain injury. *Brain*. 2017 Sep 1;140(9):2399-2414. doi: 10.1093/brain/awx176
28. O'Connor KL, Peeters T, Szymanski S & Broglio SP. (2017). Individual Impact Magnitude vs. Cumulative Magnitude for Estimating Concussion Odds. *Ann Biomed Eng*. 2017 Aug;45(8):1985-1992. doi: 10.1007/s10439-017-1843-3
29. Kim JA, Rosenthal ES, Biswal S, Shenoy AV, O'Connor KL, Bechek SC, Valdery Moura J, Shafi MM, Patel AB, Cash SS, Westover M. (2017). Epileptiform Abnormalities Predict Delayed Cerebral Ischemia in Subarachnoid Hemorrhage. *Clin Neurophysiol*. 2017 Jun;128(6):1091-1099. doi: 10.1016/j.clinph.2017.01.016
30. Broglio SP, Lapointe A, O'Connor KL, & McCrea M. (2017). Head impact density: A model for the elusive concussion threshold. *J Neurotrauma*. 2017 Oct 1;34(19):2675-2683. doi: 10.1089/neu.2016.4767

31. O'Connor KL, Baker, MM, Dalton, SL, Dompier, TP, Broglio, SP, & Kerr, ZY. (2017). Epidemiology of Sport-Related Concussions in High School Athletes: National Athletic Treatment, Injury and Outcomes Network (NATION), 2011-2012 Through 2013-2014. *J Athl Train.* 2017 Mar;52(3):175-185. doi: 10.4085/1062-6050-52.1.15
32. O'Connor KL, Rowson S, Duma SM, & Broglio SP. (2017). Head-Impact-Measurement Devices: A Systematic Review. *J Athl Train.* 2017 Mar;52(3):206-227. doi: 10.4085/1062-6050.52.2.05
33. Broglio SP, Williams RM, O'Connor KL, & Goldstick J, (2016 Football Players' Head-Impact Exposure After Limiting of Full-Contact Practices. *J Athl Train.* 2016 Jul;51(7):511-8. doi: 10.4085/1062-6050-51.7.04
34. Wickerling E, Gaspard N, Zafar S, Maura VJ, Biswal S, Bechek S, O'Connor KL, Rosenthal ES, & Westover MB. (2016). Automation of Classical QEEG Trending Methods for Early Detection of Delayed Cerebral Ischemia: More Work to Do. *J Clin Neurophysiol.* 2016 Jun;33(3):227-34. doi: 10.1097/WNP.0000000000000278
35. Muniz CF, Shenoy AV, O'Connor KL, Bechek SC, Boyle EJ, Guanci M, Tehan TM, Zafar SF, Cole AJ, Patel AB, Westover MB, & Rosenthal ES. (2016). Clinical development and implementation of an institutional guideline for prospective EEG monitoring and reporting of delayed cerebral ischemia. *J Clin Neurophysiol.* 2016 Jun;33(3):217-26. doi: 10.1097/WNP.0000000000000281
36. Zafar SF, Westover MB, Gaspard N, Gilmore EJ, Foreman BP, O'Connor KL, & Rosenthal ES. (2016). Inter-rater agreement for consensus definitions of delayed ischemic events following aneurysmal subarachnoid hemorrhage. *J Clin Neurophysiol.* 2016 Jun;33(3):235-40. doi: 10.1097/WNP.0000000000000276
37. Williams RM, Dowling M & O'Connor, KL. (2016) Head impact measurement devices: A literature review. *Sports Health.* 2016 May/Jun;8(3):270-273. doi: 10.1177/1941738116641912
38. O'Connor, KL, Westover, MB, Mouhsin, MS, Iftimia, N. & Rosenthal, ES. (2014). High Risk for Seizures Following Subarachnoid Hemorrhage Regardless of Referral Bias. *Neurocrit Care.* 2014 Dec;21(3):476-82. doi: 10.1007/s12028-014-9974-y
39. O'Connor, K, Kline, A, Sawh, L, Rodrigues, S, Fisher, W, Kane, V, Kuhn, J, Ellison, M. & Smelson, D. (2013). Unemployment and Co-occurring Disorders Among Homeless Veterans. *Journal of Dual Diagnosis,* 9(2), 134-138.
40. Smelson, D., Kline, A., Kuhn, J., O'Connor, K., Rodrigues, S., Fisher, W., Sawh, L. & Kane, V. (2013). Utility of a Wraparound Engagement Intervention for Homeless Veterans with Co-occurring Disorders. *Psychological Services,* 10(2), 161-167.
41. Kalman, D., Herz, L., Monti, P., Kahler, C. W., Mooney, M., Rodrigues, S., & O'Connor, K. (2011). Incremental efficacy of adding bupropion to the nicotine patch for smoking cessation in smokers with a recent history of alcohol dependence: Results from a randomized, double-blind, placebo-controlled study. *Drug Alcohol Depend.* 2011 Nov 1;118(2-3):111-8. doi: 10.1016/j.drugalcdep.2011.03.005

Refereed Published Abstracts/Presentations

1. Aderman MJ, Roach MH, Malvasi SR, Ross JD, Svoboda SJ, Robb J, McGinty G, Jackson J, Campbell D, Estevez CA, Brodeur RM, Van Pelt K, Susmarski A, Broglio SP, McCrea MA, McAllister T, Pasquina PF, Cameron KL. (Accepted 2023). The association between sleep duration and concussion symptom severity at baseline and post injury in United States service academy cadets and midshipmen. National Athletic Trainers' Association, Indianapolis, IN.
2. Malvasi SR, Aderman MJ, Roach MH, Ross JD, Svoboda SJ, Robb J, McGinty G, Jackson J, Campbell D, Estevez CA, Brodeur RM, Van Pelt K, Sumarski A, Broglio SP, McCrea MA, McAllister T, Pasquina PF, Cameron KL (Accepted 2023). Sleep Duration is Associated with Recovery Time after Concussion in United States Military Service Academy Cadets and Midshipmen. National Athletic Trainers' Association, Indianapolis, IN.
3. Strydiuk RA, Balendran V, Van Pelt K, Scott K, Boltz AJ, Lempke LB, Vesia M, Giordani B, McCrea M, McAllister T, Broglio SP. (Accepted 2023). Examining The Effect Of MRI Use On Sport-related Concussion Recovery Among Collegiate Student Athletes. American College of Sports Medicine Annual Meeting.
4. Van Pelt DW, Garcia GP, Hinds SR, Howell DR, McCollum J, Svoboda SJ, Van Pelt KL. (October 2022). Daily Concussion Symptom Presence and Severity is Highly Variable in a Healthy Population Over a 14-day Monitoring Period. 6th International Consensus Conference on Concussion in Sport, Amsterdam, Netherlands.
5. Van Pelt KL, Garcia GP, Hinds SR, Howell DR, McCollum J, Svoboda SJ, Van Pelt DW. (October 2022). Time of Day and Day of Week Do Not Meaningfully Impact Concussion Symptom Scores In Healthy Young Adults. 6th International Consensus Conference on Concussion in Sport. Amsterdam, Netherlands.

6. Ali S, Van Pelt KL, Koehl LM, Caban-Holt AM, Anderson-Mooney AJ, Dennis B, Head E, Harp J, Glueck A, Powell D, Schmitt F. (October 2022) Correspondence between ABAS-II and VABS-II composite scales in a cohort of adults with Down Syndrome. National Academy of Neuropsychology. Denver, Colorado.
7. Van Pelt KL, Powell D, Head E, Schmitt F. (November 2020). Perivascular Space Volume and the Association with Age and Cognition in an Aging Down Syndrome Population. Annual Markesbery Symposium, Lexington, KY.
8. Liebel SW, Van Pelt KL, Garcia GP, Czerniak LL, McCrea MA, McAllister T, Broglio SP. (February 2021). Sensation-seeking is associated with sport-related concussion risk and incidence and sport contact level in collegiate athletes. INS 2021, San Diego, California.
9. Carmona-Iragui M, Alcolea D, Barroeta I, Videla L, Van Pelt KL, Schmitt F, Lightner D, Koehl L, Sacco S, Mircher C, Pape S, Nübling G, Levin J, Zaman S, Strydom A, Rebillat A, Head E, Blesa R, Lleó A, Fortea J. (Submitted, November 2020). Prognostic performance and longitudinal changes in plasma Neurofilament light levels in Down syndrome: a multicenter longitudinal study. LXXII Annual Meeting of the Spanish Neurology Society, Sevilla, Spain.
10. Memmini AK, Van Pelt KL, Wicklund AH, Breedlove KM, Broglio SP. (Submitted, October 2020). Parental educational level predicts child sport participation. 6th International Conference on Concussion in Sport, Paris, France.
11. Van Pelt KL, Koehl LM, Caban-Holt A, Head E, Schmitt FA. (Accepted, July 2020). Gait is associated with age and dementia assessments among individuals with Down Syndrome. Alzheimer's Association International Conference, Amsterdam, Netherlands.
12. Alcolea D, Carmona-Iragui M, Van Pelt KL, Blesa R, Lleó A, Fortea J. (Accepted, July 2020). Longitudinal Plasma Levels of a Neurofilament Light in Down Syndrome: A Multicenter Study. Alzheimer's Association International Conference, Amsterdam, Netherlands.
13. Wallace ER, Harp JP, Van Pelt KL, Koehl LM, Caban-Holt AM, Anderson-Mooney AJ, Robertson W, Lightner DD, Jicha GA, Head E, Schmitt FA. (Accepted, July 2020). Validity of the Severe Impairment Battery, Brief Praxis Test, and Dementia Questionnaire for Persons with Intellectual Disabilities in Differentiating Dementia Status in Individuals with Down Syndrome. Alzheimer's Association International Conference, Amsterdam, Netherlands.
14. Harp JP, Van Pelt KL, Caban-Holt A, Anderson-Mooney AJ, Robertson W, Lightner D, & Koehl LM. (February 2020). Characteristics of a Short Battery for Assessing Alzheimer Disease-Related Dementia in Adults with Down Syndrome. International Neuropsychological Society Annual Meeting, Denver, CO.
15. Van Pelt KL, McCarty K, Davis R, Lykins J, Jicha G, Caban-Holt A, Lightner D, Robertson W, Anderson-Mooney A, Head E & Schmitt F. (October 2019). Preliminary Analysis of the Association between Gait and Clinical Measures in Down Syndrome. Markesbery Symposium. Lexington, KY, USA.
16. Van Pelt KL, McCarty K, Davis R, Lykins J, Jicha G, Caban-Holt A, Lightner D, Robertson W, Brothers S, Lin A, Powell D, Head E & Schmitt F. (July 2019). Aging in Down syndrome: Age-Associated Brain Metabolite Changes. Alzheimer's Association International Conference. Los Angeles, California, USA.
17. Bookbinder HA, Houston MN, O'Connor KL, D'Lauro C, Brodeur R, Cameron KL, Campbell DE, Allred CD, Johnson BR, Kelly TF, Malvasi SM, McGinty GT, O'Donnell PG, Peck KY, Posner MA, Roach SP, Svoboda SJ, Pasquina PF, McAllister T, McCrea M, Broglio SP. (June 2019). Test-Retest Reliability of the BSI-18 in United States Service Academy Cadets: Findings from the NCAA-DoD CARE Consortium. Las Vegas, Nevada.
18. Thalman A, Lin A, Helman A, Brothers S, O'Connor K, Johnson N, Anderson A, McCarty K, Davis R, Jicha G, Caban-Holt A, Robertson W, Lightner D, Powell D, Head E, Schmitt F. (May 2019) Reduced Cerebral Blood Flow in Aging Adults with Down Syndrome: An Arterial Spin Labeling Study. International Society for Magnetic Resonance in Medicine. Montreal, QC, Canada.
19. Dougherty LA, Van Pelt KL, Lapointe AP, Feinberg GJ, Memmini AK, Breedlove KM, Broglio SP. (May 2019). Long Term Effects of Concussion on Eye Tracking Patterns. American College of Sports Medicine. Orlando, Florida.
20. Feinberg GJ, Lapointe AP, Van Pelt KL, Dougherty LA, Memmini A, Breedlove KM, Broglio SP. (May 2019). Examining Persistent Deficits in Gait Utilizing Inertial Measurement Units. American College of Sports Medicine. Orlando, Florida.
21. Van Pelt KL, Dougherty LA, Feinberg GJ, Lapointe AP, Broglio SP. (May 2019). No effect of randomizing concussion symptom presentation on symptom number or severity reporting. American College of Sports Medicine. Orlando, Florida.

22. Brothers, S. L., Harp, J. P., Wallace, E. R., O'Connor, K., Head, E., Schmitt, F. A., & Koehl, L. M. (February 2019). Detecting dementia in Down syndrome with the Severe Impairment Battery (SIB). Presentation accepted for the 47th annual meeting of the International Neuropsychological Society, New York, New York.
23. O'Connor KL, McCary K, Davis R, Lykins J, Jicha G, Caban-Holt A, Lightner D, Roberston W, Brothers S, Lin A, Powell D, Schmitt F & Head E. (October 2018). Aging in Down syndrome: Short-term Metabolic Changes. Annual Markesbery Symposium, Lexington, KY.
24. O'Connor KL, Cameron KL, Campbell DE, D'Lauro CJ, Houston MN, Jackson JC, Johnson BR, McGinty G, O'Donnell PG, Pasquina P, Peck KY, Svoboda SJ, McAllister T, McCrea M, Broglio SP. (August 2018). Individual Symptoms Classify Typical and Atypical Concussion Recovery Duration. Military Health Systems Research Symposium. Tampa, Florida.
25. Swallow JS, Joseph JR, Willsey K, Lapointe AP, O'Connor KL, Broglio SP. (May 2018). Pupillary Light Reflex Changes after High Magnitude Sub-Concussive Impacts in High School Football Players. 2018 Sports Neuropsychology Society, Washington, DC.
26. Houston MN, O'Connor KL, D'Lauro CJ, Cameron KL, Allred D, Campbell DE, Houston MN, Jackson J, Johnson BR, Kelly T, McGinty G, O'Donnell PG, Peck KY, Svoboda SJ, Pasquina P, McAllister T, McCrea M, Broglio SP. (June 2018). Test-Retest Reliability of Concussion Baseline Assessments in United States Service Academy Cadets: A Report from the Concussion Assessment, Research, and Education Consortium. 2018 National Athletic Trainers Association Clinical Symposia, New Orleans, LA.
27. O'Connor KL, Allred D, Cameron KL, Campbell DE, D'Lauro CJ, Houston MN, Jackson J, Johnson BR, Kelly T, McGinty G, O'Donnell PG, Peck KY, Svoboda SJ, Pasquina P, McAllister T, McCrea M, Broglio SP. (May 2018). Concussion recovery trajectories among United States Service Academy Members. American College of Sports Medicine, Minneapolis, MN.
28. Cameron KL, Houston MN, O'Connor KL, Peck KY, Svoboda SJ, Kelly T, Allred D, Campbell DE, D'Lauro CJ, Jackson J, Johnson BR, McGinty G, O'Donnell PG, Pasquina P, McAllister T, McCrea M, Broglio SP. (May 2018). Risk of Concussion by Sex and Activity in U.S. Service Academy Cadets. American College of Sports Medicine, Minneapolis, MN.
29. Jackson J, Allred D, Anderson BM, Baldovich KJ, Cameron KL, Campbell DE, D'Lauro CJ, Houston MN, Johnson BR, Kelly T, McGinty G, O'Connor KL, O'Donnell PG, Peck KY, Robb JB, Svoboda SJ, Zupan MF, Pasquina P, McAllister T, McCrea M, Broglio SP. (June 2018). Concussion and Psychological Symptoms among United States Service Academy Cadets. American College of Sports Medicine, Minneapolis, MN.
30. Lapointe AL, O'Connor KL, Broglio SP. (September 2017). Time between impact as a factor in kinematic models predicting concussion. World Congress of Neurology, Kyoto, Japan.
31. Broglio SP, O'Connor KL, McAllister T, McCrea M. (September 2017). The effect of gender and somatization on concussion recovery. World Congress of Neurology Kyoto, Japan.
32. O'Connor KL, Allred CD, Cameron KL, Campbell DE, D'Lauro CJ, Houston MN, Johnson BR, McGinty G, O'Donnell PG, Peck KY, Svoboda SJ, McAllister T, McCrea M, Broglio SP. (September 2017). Contact sport exposure does not have detrimental effect on baseline neurocognitive performance or symptoms. World Congress of Neurology Kyoto, Japan.
33. O'Connor KL, Allred CD, Cameron KL, Campbell DE, D'Lauro CJ, Houston MN, Johnson BR, McGinty G, O'Donnell PG, Peck KY, Svoboda SJ, McAllister T, McCrea M, Broglio SP. (September 2017). History of diagnosed and undiagnosed concussions at baseline had differential impact on neurocognitive performance and symptom scores. World Congress of Neurology Kyoto, Japan.
34. Broglio SP, O'Connor KL, McAllister T, McCrea M. (August 2017). Concussion history and neurocognitive performance: Data from the Concussion Assessment, Research, and Education (CARE) Consortium. Military Health System Research Symposium, Tampa, FL
35. O'Connor KL, Allred CD, Cameron KL, Campbell DE, D'Lauro CJ, Houston MN, Johnson BR, McGinty G, O'Donnell PG, Peck KY, Svoboda SJ, McAllister T, McCrea M, Broglio SP. (August 2017). Effect of Environment on Neurocognitive Testing among United States Cadets. Military Health Systems Research Symposium. Tampa, Florida.
36. O'Connor KL, Bhargava T, Lapointe A, Broglio SP. (June 2017). NHL Concussion and Lower-Body Injury Risk Across the 2012-2015 Seasons. American College of Sports Medicine. Denver, Colorado.

37. O'Connor KL, Ashton-Miller J, Eckner JT. (February 2017). A case study of concussion resulting from the incorrect heading of a soccer clearance kick near midfield Big Sky Athletic Training Conference. Big Sky, Montana.
38. Eckner JT, O'Connor KL, Lipps DL, Yablon C, Franco LM, Ashton-Miller, JA, Jacobson, JA. (Accepted, March 2017). Reliability and Validity of Sonographic Cervical Muscle Cross-Sectional Area Measurements. American Institute of Ultrasound in Medicine. Lake Buena Vista, Florida.
39. Eckner JT, Goshtasbi A, Curtis KM, O'Connor KL, Franco L, Jacobson JA, Ashton-Miller JA. (February 2017). Investigating the neck's influence on concussion risk- is size or strength a better predictor of head kinematics? Association of Academic Physiatrists. Las Vegas, Nevada.
40. O'Connor KL, Allred CD, Cameron KL, Campbell DE, Houston MN, Johnson BR, D'Lauro C, McGinty G, O'Donnell PG, Peck KY, Svoboda SJ, McCrea M, McAllister T, & Broglio SP. (October 2016). The Prevalence of Concussion within the Military Academies: Findings from the Concussion Assessment, Research, and Education (CARE) Consortium. The 5th International Consensus Conference on Concussion in Sport. Berlin, Germany.
41. Edlow BL, Chatelle C, Spencer CA, Chu CJ, O'Connor KL, Hirschberg RE, Hochberg LR, Giacino JT, Rosenthal ES, Wu O (June 2016). Detecting consciousness and predicting recovery in acute severe traumatic brain injury. National Neurotrauma Society meeting, Lexington Kentucky.
42. Niceley MM, O'Connor K, Roos KG, Broglio SP, Dompier TP, Kerr ZY. (February, 2016). Concussions sustained in high school student-athletes from 27 sports, 2011/2012-2013/2014 school years. Big Sky Athletic Training and Sports Medicine Conference, Big Sky Montana.
43. O'Connor KL, Lapointe A, Galdys M, Broglio SP. (June 2016). The effect of concussion of pro ice hockey player performance. 2016 American College of Sports Medicine Conference, Boston, Massachusetts.
44. Broglio SP, Williams RM & O'Connor KL (June 2016). The effect of restricting full contact football practice on repeated head impact exposure. 2016 American College of Sports Medicine Conference, Boston, Massachusetts.
45. Dowling MM, Williams RM, O'Connor KL, Broglio SP (June 2016). No significant cognitive changes following season of high school soccer. 2016 American College of Sports Medicine Conference, Boston, Massachusetts.
46. O'Connor KL, Eckner JT, Bancroft R, Poherence M, Kutcher JS & Broglio SP. (2015, July). Effect of Previous Concussion on Baseline Neurocognitive Performance Between Genders. Poster presented at the 2015 AAN Sports Concussion Conference, Denver, Colorado.
47. Williams RM, O'Connor KL, Rettmann AN, Hillman CH, Broglio SP. (2015, July). Pre and post season ERP changes following sub-concussive head impacts during a season of football and the comparison to non-contact controls. Poster presented at the 2015 AAN Sports Concussion Conference, Denver, Colorado.
48. O'Connor, KL, Martini, D, Williams, R & Broglio, SP. (2015, April) Estimation of Concussive Injury Risk Among High School Football Players Using Linear Acceleration. Poster presented at University of Michigan, School of Kinesiology Graduate Research Symposium, Ann Arbor, Michigan.
49. Rosenthal ES, O'Connor KL, Zafar SF, Biswal S & Westover MB. (2015, February) Clinical performance of a prospective continuous electroencephalography (cEEG) ischemia monitoring service for predicting neurological decline after aneurysmal subarachnoid hemorrhage (SAH). Poster presented at the Annual American Clinical Neurophysiology Society Meeting, Houston, Texas.
50. O'Connor, KL, Martini, D & Broglio, SP. (2015, February) Sensitivity and Specificity of Linear Acceleration for Concussive Injury. Poster presented at Big Sky Athletic Training and Sports Medicine Conference, Big Sky, Montana.
51. Zafar SF, O'Connor KL, Gaspard N, Westover MB & Rosenthal ES. (2014, September) Inter-rater Agreement for Delayed Ischemic Events After Aneurysmal Subarachnoid Hemorrhage. Poster presented at the 12th Annual Neurocritical Care Society, Seattle, Washington.
52. Rosenthal ES, O'Connor KL, Zafar SF, Biswal S & Westover MB. (2014, September) Performance of Continuous Electroencephalography (cEEG) Ischemia Monitoring in Clinical Practice for the Prospective Detection of Neurologic Decline Following Subarachnoid Hemorrhage (SAH). Poster presented at the 12th Annual Neurocritical Care Society, Seattle, Washington.
53. O'Connor, KL., Pinals, DA., Smelson, D., Sawh, L., Fulwiler, C., Singer, S., Fisher, W., Hartwell, S. & Gonzalez, Z. (2014, June) A Needs Comparison of Justice-Involved Iraq/Afghanistan to Other Service Eras. Poster presented at The College on Problems of Drug Dependence 76th Annual Scientific Meeting, San Juan, Puerto Rico.

54. O'Connor KL, Edlow BL, Hirschberg RE, Gupta R, Greenberg SM, Giacino JT, Wu O, Rosenthal ES. (2014, April) Heart Rate Variability as an Assessment of Arousal in Early Traumatic Coma: Pilot Results from the Traumatic Coma RESPONSE Study. Poster presented at the Massachusetts General Hospital Scientific Advisory Committee Meeting, Boston, Massachusetts.
55. Edlow BL, O'Connor KL, Chu CJ, Hirschberg RE, Villien M, Westover MB, Greer DM, Greenberg SM, Giacino JT, Rosenthal ES, Wu O. (2013). Advanced Neuroimaging in Disorders of Consciousness. Massachusetts General Hospital Hampton Symposium: Frontiers in Imaging, Boston, Massachusetts.
56. O'Connor, K.L., Shafi, M.M., Iftimia, N.A., Westover, M.B., Rosenthal, E.S. (2013, October) Effects of referral bias on rates and predictors of seizure in high-grade aneurysmal subarachnoid hemorrhage. Poster presented at the 11th Annual Neurocritical Care Society, Philadelphia, Pennsylvania.
57. Edlow, B.L., O'Connor, K.L., Chu, C.J., Hirschberg, R.E., Kramer, M.A., Gupta, R., Greenberg, S.M., Giacino, J.T., Rosenthal, E.S., Wu, O. (2013, October) Multimodal Assessment of Arousal Networks in Early Traumatic Coma: Pilot Results from the Traumatic Coma RESPONSE Study. Poster presented at the 11th Annual Neurocritical Care Society, Philadelphia, Pennsylvania.
58. Edlow, B.L., O'Connor, K.L., Chu, C.J., Hirschberg, R.E., Kramer, M.A., Gupta, R., Greenberg, S.M., Giacino, J.T., Wu, O., Rosenthal, E.S. (2013, October) Differential RESPONSE to Language, Music, and Motor Imagery in Early Traumatic Coma: Pilot Results from the Traumatic Coma RESPONSE Study. Poster presented at the 11th Annual Neurocritical Care Society, Philadelphia, Pennsylvania.
59. Rosenthal, E.S., Westover, M.B. & O'Connor, K.L. (2013, February) Effectiveness of EEG Ischemia Monitoring in Clinical Practice for the Detection of Delayed Cerebral Ischemia after Subarachnoid Hemorrhage. Poster presented at the International Stroke Conference, Honolulu, Hawaii.
60. Rosenthal, E.S., Kamalian, M.S., O'Connor, K.L., Borgie, R.C., Schwamm, L.H., Bonmassar, G. & Lev, M.H. (2012, October). Electrical Impedance Spectroscopy at the Bedside Discriminates Ischemic Stroke and Intracerebral Hemorrhage Patients from Healthy Control Subjects. Poster presented 10th Annual Neurocritical Care Society, Denver, Colorado.
61. O'Connor, K., Kline, A., Sawh, L., Rodrigues, S., Kane, V., Kuhn, J., Ziedonis, D., Ellison, M., Smelson, D., & Gonzalez, G. (2012, June). Longitudinal analysis of the unemployment rates of veterans entering MISSION. Poster session presented at the annual meeting of the College on Problems of Drug Dependence, Palm Springs, California.
62. Rodrigues, S., Kline, A., **O'Connor, K.*, Sawh, L., Kane, V., Kuhn, J., Ziedonis, D., Smelson, D., & Gonzalez, G. (2012, June). Demographic and risk factor characteristics of homeless veterans with co-occurring mental health and substance use in MISSION. Poster session presented at the annual meeting of the College on Problems of Drug Dependence, Palm Springs, California.
63. Smelson, D., Kline, A., Rodrigues, S., O'Connor, K., St. Hill, L., Sawh, L., Ziedonis, D., & Gonzalez, G. (2012, June). A low-intensity treatment engagement intervention for homeless veterans with co-occurring mental health and substance abuse problems: MISSION. Poster session presented at the annual meeting of the College on Problems of Drug Dependence, Palm Springs, California.
64. Rodrigues, S., Kline, A., Sawh, L., Smelson, D., O'Connor, K., Kane, V., Kuhn, J., Serper, M., & Ziedonis, D. (2013). Childhood experiences and demographic characteristics of homeless veterans with co-occurring mental health and substance use disorders in MISSION [Abstract presented at the 102nd Annual Psychological Association Meeting on Multigenerational Transmission of Psychopathology]. *Comprehensive Psychiatry*, epub 54(1), e9.
65. O'Connor, K., Sophis, E., Abruzzese, E., & DiGirolamo, G. (2010, May). The positive effects of positive affect. Presentation at First Annual Biological Psychology Research Symposium, the College of the Holy Cross, Worcester, Massachusetts.
66. O'Connor, K. & DiGirolamo, G. (2009, September). When good is bad: The negative consequences of positive memories. Poster presented at the Sixteenth Annual Undergraduate Summer Research Symposium, the College of the Holy Cross, Worcester, Massachusetts.
67. O'Connor, K., Patel, N., Manatt, M., Fritz, B., Myers, B., Bitran, D. & DiGirolamo, G. (2009, September). Improving Control via Drugs: A mouse pilot study. Poster presented at the Sixteenth Annual Undergraduate Summer Research Symposium, the College of the Holy Cross, Worcester, Massachusetts.

Symposium Presentations

1. O'Connor KL. Effect of Environment on Neurocognitive Testing among United States Cadets. 2017 Annual CARE investigator meeting. June 13th, 2017.

2. O'Connor KL. Comparison of driving records for those with and without a concussion history. International Brain Injury Association. New Orleans, Louisiana. March 31, 2017.
3. O'Connor KL. Characteristics of Cadets at the United States Service Academies. 2016 Annual CARE investigator meeting. November 9th, 2016.
4. O'Connor KL. Effect of a single session of football on learning performance. 2016 Massey Traumatic Brain Injury Conference. October 24th, 2016.
5. O'Connor KL. Effects of Concussion on Ice Hockey Player Performance. 2016 Kinesiology Grad Research Day. April 12th, 2016.
6. O'Connor KL. Effect of Previous Concussion on Baseline Neurocognitive Performance Between Genders. 2015 AAN Sports Concussion Conference. Denver, Colorado. July 8th, 2015.

Book Chapters

1. **Van Pelt KL*, Head E, Schmitt F, Koehl LM, Alzheimer's Disease and Down Syndrome, in Rosenberg's Molecular and Genetic Basis of Neurological and Psychiatric Disease, Sixth Edition, Rosenberg RN, Pascual JM (Eds), Academic Press (Submitted, 2019).
2. Helman A, O'Connor KL, Schmitt FA, Head E, Brain Aging and Alzheimer's disease in Down syndrome, in The Oxford Handbook of Down Syndrome and Development, Burack JA, Edgin J, Abbeduto L, Busiglio J (Eds), Oxford University Press, New York (2019).

Honors and Awards

Fellowship

1. T32 Post-Doctoral Fellow, University of Kentucky, Training in Translational Research in Alzheimer's and Related Dementias (TRIAD), 2018-2020
2. University of Michigan, Rackham Predoctoral Fellowship, 2017-2018

Awards

1. De Luca Foundation Travel Grant, 2018
2. American Kinesiology Association, Doctoral Scholar Award, 2018
3. University of Michigan, Rackham Professional Development Grant, 2017
4. University of Michigan, School of Kinesiology Travel Award, 2017
5. University of Michigan, Shirley Cooper Graduate Student Travel Award, 2017
6. University of Michigan, Rackham Conference International Travel Grant, 2017
7. Journal of Athletic Training, Kenneth Knight award for outstanding research manuscript, 2016
8. University of Michigan, Injury Center Summer Internship, Summer 2016
9. University of Michigan, School of Kinesiology Travel Award, 2016
10. University of Michigan, Shirley Cooper Graduate Student Travel Award, 2016
11. University of Michigan, Rackham Conference International Travel Grant, 2016
12. University of Michigan, School of Kinesiology Paul A Hunsicker Memorial Award, 2016
13. University of Michigan, School of Kinesiology Travel Award, 2015
14. University of Michigan, Rackham Conference Travel Grant, 2015

Grants

Previous

1. Synaptek, Van Pelt KL Leveraging smartphone data to improve clinical decisions in concussion care. NSF SBIR. \$216,269. 2021-2022.
2. O'Connor, KL & Broglio, SP. An investigation of the effect of eliminating body checking at the pee-wee level. University of Michigan, Rackham Pre-Candidate Award. \$2,049. 2015-2016.
3. O'Connor, KL & Broglio SP. Chronic Effects of Concussion on Eye Tracking Measures of Executive Functioning. University of Michigan, Rackham Candidate Award. \$3,365. 2017-2018.

Service

Professional Service

- Scientific Advisory Board
 - Concussion Assessment, Research and Education Consortium, 2018-Present