

## Representative Publications from the Stern Lab

### At Boston University Chobanian & Avedisian School of Medicine

(Updated October 11, 2022)

1. McKee AC, Cantu RC, *Nowinski CJ*, Hedley-Whyte ET, Lee HS, Kubilus CA, *Gavett BE*, Romero R, Budson AE, Ryu H, *Santini VE*, **Stern RA**. Chronic Traumatic Encephalopathy in athletes: Progressive tauopathy after repetitive head injury. *J Neuropathol Exp Neurol*. 2009;68:709-735. PMID: [PMC2945234](#)
2. McKee AC, **Stern RA**, *Nowinski CJ*, Stein T, Alvarez V, *Daneshvar D*, Lee H, Wojtowicz S, Hall G, *Baugh B*, *Riley D*, Kubilis C, Cormier K, Jacobs M, Martin B, Abraham C, Ikezu T, Reichard R, Wolozin B, Budson A, Goldstein G, Kowall N, Cantu R. The spectrum of disease in chronic traumatic encephalopathy. *Brain*. 2013;136:43-64. PMID: [PMC3624697](#)
3. **Stern RA**, *Daneshvar DH*, *Baugh CM*, *Seichepine DR*, *Montenigro PH*, *Riley DO*, *Fritts NG*, *Stamm JM*, *Robbins CA*, McHale L, Simkin I, Stein TD, Alvarez V, Goldstein LE, Budson AE, Kowall NW, *Nowinski CJ*, Cantu RC, McKee AC. Clinical presentation of Chronic Traumatic Encephalopathy. *Neurology*. 2013;81:1122-1129. PMID: [PMC3795597](#)
4. Mandelblatt JS, **Stern RA**, Luta G, McGuckin M, Clapp JD, Hurria A, Jacobsen PJ, Faul LA, Isaacs C, Denduluri N, Gavett B, Traina TA, Johnson P, Silliman RA, Turner RS, Howard D, VanMeter JW, Saykin A, Ahles T. Cognitive impairments in older breast cancer patients prior to systemic therapy: Is there an interaction between cancer and comorbidity? *J Clin Oncol*. 2014;32:1909-18. PMID: [PMC4050204](#)
5. *Montenigro PH*, *Baugh CM*, *Daneshvar DH*, Mez J, Budson AE, Au R, Katz D, Cantu RC, **Stern RA**. Clinical subtypes of chronic traumatic encephalopathy: Literature review and proposed research diagnostic criteria for Traumatic Encephalopathy Syndrome. *Alzheimers Res Ther*. 2014;6(5):68. PMID: [PMC4288217](#)
6. *Baugh CM*, *Kiernan PT*, Kroshus E, *Daneshvar DH*, *Montenigro PH*, McKee AC, **Stern RA**. Frequency of head impact related outcomes by position in NCAA Division I collegiate football players. *J Neurotrauma*. 2015;32(5):314-326. PMID: [PMC4628259](#)
7. Mez J, *Solomon TM*, *Daneshvar DH*, Murphy L, Kiernan PT, *Montenigro PH*, Kriegel J, Abdolmohammadi B, Fry B, Babcock KJ, Adams JW, Bourlas AP, Papadopoulos ZM, McHale L, Ardaugh BM, Martin BR, Dixon D, Nowinski CJ, Chaisson C, Alvarez VE, Tripodis Y, Stein TD, Goldstein LE, Katz DI, Kowall NW, Cantu RC, **Stern RA**, McKee AC. Assessing clinicopathological correlation in chronic traumatic encephalopathy: rationale & methods for the UNITE study. *Alzheimers Res Ther*. 2015;7(1):62. PMID: [PMC4601147](#)
8. *Stamm JM*, *Bourlas AP*, *Baugh CM*, *Fritts NG*, *Daneshvar DH*, Martin BM, McClean MD, Tripodis Y, **Stern RA**. Age of first exposure to football and later-life cognitive impairment in former NFL players. *Neurology*. 2015;84:1114-1120. PMID: [PMC4371403](#)
9. *Stamm JM*, Koerte IK, Muehlmann M, Pasternak O, *Bourlas AP*, *Baugh CM*, Giwerc MY, Zhu A, Coleman M, Bouix S, *Fritts NG*, Martin BM, Chaisson C, McClean MD, Lin AP, Cantu RC, Tripodis Y, **Stern RA\***, Shenton ME\*. Age at first exposure to football is associated with altered corpus callosum white matter microstructure in former professional football players. *J Neurotrauma*. 2015;32:1768-1776. PMID: [PMC4651044](#)

10. Alosco ML, Tripodis Y, Jarnagin J, Baugh CM, Martin B, Chaisson CE, Estochen N, Song L, Cantu RC, Jeromin A, **Stern RA**. Repetitive head impact exposure and later-life plasma total tau in former NFL players. *Alzheimers Dement (Amst)*. 2016;7:33-40. PMCID: [PMC5312499](#)
11. Chapman KR, Bing-Canar H, Alosco ML, Steinberg EG, Martin B, Chaisson C, Kowall N, Tripodis Y, **Stern RA**. Mini-Mental State Examination and Logical Memory scores for entry into Alzheimer trials. *Alzheimers Res Ther*. 2016;8:9. PMCID: [PMC4762168](#)
12. Gavett BE, Gurnani AS, Saurman JL, Chapman KR, Steinberg EG, Martin B, Chaisson CE, Mez J, Tripodis Y, **Stern RA**. Practice effects on story memory and list learning tests in the neuropsychological assessment of older adults. *PLoS One*. 2016;11(10):e0164492. PMCID: [PMC5053775](#)
13. **Stern RA**, Abularach LM, Seichepine DR, Alosco ML, Gavett BE, Tripodis Y. Office-based assessment of driving in older adults with and without cognitive impairment. *Journal of Geriatr Psychiatry and Neurol*. 2016;29(6):352-360. PMID: 27647790
14. **Stern RA**, Tripodis Y, Baugh CM, Fritts NG, Martin BM, Chaisson C, Cantu RC, Joyce JA, Shah S, Ikezu T, Zhang J, Gercel-Taylor C, Taylor DD. Plasma exosomal tau as a potential biomarker for chronic traumatic encephalopathy. *J Alzheimers Dis*. 2016;51(4):1099-1109. PMCID: [PMC4833534](#)
15. Alosco ML, Kasimis AB, Stamm JM, Chua AS, Baugh CM, Daneshvar DH, Robbins CA, Mariani M, Hayden J, Conneely S, Au R, Torres A, McClean MD, McKee AC, Cantu RC, Mez J, Nowinski CJ, Martin BM, Chaisson CE, Tripodis Y\*, **Stern RA\***. Age of first exposure to American football and long-term neuropsychiatric and cognitive outcomes. *Translational Psychiatry*. 2017;7, e1236. PMCID: PMC5639242
16. Montenegro PH, Alosco ML, Martin BM, Daneshvar DH, Mez J, Chaisson CE, Nowinski CJ, Au R, McKee AC, Cantu RC, McClean MD, **Stern RA\***, Tripodis Y\* Cumulative head impact exposure predicts later-life depression, apathy, executive dysfunction, and cognitive impairment in former high school and college football players. *J Neurotrauma*. 2017;34(2):328-340. PMCID: [PMC5220530](#)
17. **Stern RA**, Seichepine D, Tschoe C, Fritts NG, Alosco ML, Berkowitz O, Burke P, Howland J, Olshaker J, Cantu RC, Baugh CM, Holsapple JW. Utilization of evidence-based guidelines in the evaluation and management of concussion: A survey of New England emergency departments. *J Neurotrauma*. 2017; 34:861-868. PMCID: [PMC5314982](#)
18. Tripodis Y, Alosco ML, Ziogiannis N, Gavett BE, Chaisson C, Martin B, McClean MD, Mez J, Kowall N, **Stern, R.A**. The effect of traumatic brain injury history on rate of cognitive decline among older adults with normal cognition and Alzheimer's disease dementia. *J Alzheimers Dis*. 2017; 59(1):251-263. PMCID: [PMC5614490](#)
19. Alosco ML, Koerte IK, Tripodis Y, Mariani M, Chua AS, Jarnagin J, Rahimpour Y, Puzo, C, Healy RC, Martin B, Chaisson CE, Cantu RC, Au R, McClean M, McKee AC, Lin AP, Shenton ME, Killiany RJ, **Stern RA**. White matter signal abnormalities in former National Football League players. *Alzheimers Dement*. 2018; 10:56-65. PMCID: PMC5699890
20. Alosco ML, Sugarman MA, Besser LM, Tripodis Y, Martin B, Palmisano JN, Kowall NW, Au R, Mez J, DeCarli C, Stein TD, McKee AC, Killiany RJ, **Stern RA**. A clinicopathological investigation of white matter hyperintensities and Alzheimer's disease neuropathology. *J Alzheimers Dis*. 2018; 63(4):1347-1360. doi: 10.3233/JAD-180017. PMID: 29843242

21. Alosco ML, Tripodis Y, Fritts NG, Heslegrave A, Baugh CM, Conneely S, Mariani M, Martin BM, Frank S, Mez J, Stein TD, Cantu RC, McKee AC, Shaw LM, Trojanowski JQ, Blennow K, Zetterberg H, & **Stern RA**. Cerebrospinal fluid tau, A $\beta$ , and sTREM2 in former National Football League players: Modeling the relationship between repetitive head impacts, microglial activation, and neurodegeneration. *Alzheimers Dement*. 2018; 14:1159-1170. PMCID: [PMC6131058](#).
22. Sugarman MA, Alosco ML, Tripodis Y, Steinberg EG, **Stern RA**. Neuropsychiatric symptoms and the diagnostic stability of mild cognitive impairment. *J Alzheimers Dis*. 2018; 62:1841-1855.
23. Alosco ML, **Stern RA**. Youth exposure to repetitive head impacts from tackle football and long-term neurologic outcomes: A review of the literature, knowledge gaps and future directions, and societal and clinical implications. *Semin Pediatr Neurol*, 2019; 30:107-116. PMID: 31235012
24. Alosco ML, Tripodis Y, Koerte IK, Jackson JD, Chua A, Mariani M, Haller O, Foley EM, Martin B, Palmisano J, Singh B, Green K, Lepage C, Mühlmann M, Makris N, Cantu R, Lin AP, Coleman M, Pasternak O, Mez J, Bouix S, Shenton ME, **Stern RA**. Interactive effects of racial identity and repetitive head impacts on cognitive function, structural MRI-derived volumetric measures, and cerebrospinal fluid tau and A $\beta$ . *Front Hum Neurosci*, 2019; 13:440. PMCID: PMC6933867
25. Muraoka S, Jedrychowski M, Tatebe H, DeLeo AM, Ikezu S, Tokuda T, Gygi SP, **Stern RA**, Ikezu T. Proteomic profiling of extracellular vesicles isolated from cerebrospinal fluid of former National Football League players at risk for chronic traumatic encephalopathy. *Front Neurosci*, 2019 Oct 9;13:1059. PMID: 3164949. PMCID: PMC6794346
26. **Stern RA**, Adler CH, Chen K, Navitsky M, Luo J, Dodick DW, Alosco ML, Tripodis Y, Goradia DD, Martin B, Mastroeni D, Fritts NG, Jarnagin J, Devous MD Sr, Mintun MA, Pontecorvo MJ, Shenton ME, Reiman EM. Tau positron-emission tomography in former National Football League players. *NEJM*, 2019; 380:1716-1725. PMID: 30969506, PMCID: PMC6636818
27. Sugarman MA, McKee AC, Stein TD, Tripodis Y, Besser LM, Martin B, Palmisano JN, Steinberg EG, O'Connor MK, Au R, McClean M, Killiany R, Mez J, Weiner MW, Kowall NW, **Stern RA**,\* Alosco ML.\* Failure to detect an association between self-reported traumatic brain injury and Alzheimer's disease neuropathology and dementia. *Alzheimers Dement*, 2019; 15:686-698.
28. Alosco ML,\* Tripodis Y,\* Baucom Z, Mez J, Stein TD, Martin B, Haller O, Conneely S, McClean MD, Nosheny RL, Mackin RS, McKee AC, Weiner MW,\* **Stern RA**.\* The late contributions of repetitive head impacts and TBI to depression symptoms and cognition. *Neurology*, 2020; 95:e793-e804. PMC7605500.
29. Sugarman MA, Zetterberg H, Blennow K, Tripodis Y, McKee AC, Stein TD, Martin B, Palmisano JN, Steinberg EG, Simkin I, Budson AE, Killiany R, O'Connor MK, Au R, Qiu WWQ, Goldstein LE, Kowall NW, Mez J, **Stern RA**,\* Alosco ML,\* A longitudinal examination of plasma neurofilament light and total tau for the clinical detection and monitoring of Alzheimer's disease. *Neurobiol Aging*, 2020; 94:60-70.
30. Wessels AM, Lines C, **Stern RA**, Kost J, Voss T, Mozley LH, Furtek C, Mukai Y, Aisen PS, Cummings JL, Tariot PN, Vellas B, Dupre N, Randolph C, Michelson D, Andersen SW, Shering C, Sims JR, Egan MF. Cognitive outcomes in trials of two BACE inhibitors in Alzheimer's disease. *Alzheimer's Dementia*, 2020; 16:1483-1492.doi: 10.1002/alz.12164.

31. Alosco ML, Mariani ML, Adler CH, Balcer LJ, Bernick C, Au R, Banks SJ, Barr WB, Bouix S, Cantu RC, Coleman MJ, Dodick DW, Farrer LA, Geda YE, Katz DI, Koerte IK, Kowall NW, Lin AP, Marcus DS, Marek KL, McClean MD, McKee AC, Mez J, Palmisano JN, Peskind ER, Tripodis Y, Turner RW 2nd, Wethe JV, Cummings JL, Reiman EM, Shenton ME, **Stern RA**; DIAGNOSE CTE Research Project Investigators. Developing methods to detect and diagnose chronic traumatic encephalopathy during life: rationale, design, and methodology for the DIAGNOSE CTE Research Project. *Alzheimers Res Ther*. 2021 Aug 12;13(1):136. doi: 10.1186/s13195-021-00872-x. PMID: 34384490; PMCID: PMC8357968.
32. Katz DI, Bernick C, Dodick DW, Mez J, Mariani ML, Adler CH, Alosco ML, Balcer LJ, Banks SJ, Barr WB, Brody DL, Cantu RC, Dams-O'Connor K, Geda YE, Jordan BD, McAllister TW, Peskind ER, Petersen RC, Wethe JV, Zafonte RD, Foley ÉM, Babcock DJ, Koroshetz WJ, Tripodis Y, McKee AC, Shenton ME, Cummings JL, Reiman EM, **Stern RA**. National Institute of Neurological Disorders and Stroke Consensus Diagnostic Criteria for Traumatic Encephalopathy Syndrome. *Neurology*. 2021 May 4;96(18):848-863. doi: 10.1212/WNL.0000000000011850. Epub 2021 Mar 15. PMID: 33722990; PMCID: PMC8166432.
33. Muraoka S, DeLeo AM, Yang Z, Tatebe H, Yukawa-Takamatsu K, Ikezu S, Tokuda T, Issadore D, **Stern RA**, Ikezu T. Proteomic Profiling of Extracellular Vesicles Separated from Plasma of Former National Football League Players at Risk for Chronic Traumatic Encephalopathy. *Aging Dis*. 2021 Sep 1;12(6):1363-1375. doi: 10.14336/AD.2020.0908. PMID: 34527415; PMCID: PMC8407879.
34. *Foley ÉM*, Tripodis Y, Yhang E, Koerte IK, Martin BM, Palmisano J, Makris N, Schultz V, Lepage C, Muehlmann M, Wróbel PP, Guenette JP, Cantu RC, Lin AP, Coleman M, Mez J, Bouix S, Shenton ME, **Stern RA**, Alosco ML. Quantifying and Examining Reserve in Symptomatic Former National Football League Players. *J Alzheimers Dis*. 2022;85(2):675-689. doi: 10.3233/JAD-210379. PMID: 34864657; PMCID: PMC8926024.
35. *Phelps A*, Alosco ML, Baucom Z, Hartlage K, Palmisano JN, Weuve J, Mez J, Tripodis Y, **Stern RA**. Association of Playing College American Football With Long-term Health Outcomes and Mortality. *JAMA Netw Open*. 2022 Apr 1;5(4):e228775. doi: 10.1001/jamanetworkopen.2022.8775. PMID: 35442450; PMCID: PMC9021915.
36. Alosco ML, Tripodis Y, Baucom ZH, Adler CH, Balcer LJ, Bernick C, Mariani ML, Au R, Banks SJ, Barr WB, Wethe JV, Cantu RC, Coleman MJ, Dodick DW, McClean MD, McKee AC, Mez J, Palmisano JN, Martin B, Hartlage K, Lin AP, Koerte IK, Cummings JL, Reiman EM, **Stern RA**, Shenton ME, Bouix S; DIAGNOSE CTE Research Project. White matter hyperintensities in former American football players. *Alzheimers Dement*. 2022 Aug 22. doi: 10.1002/alz.12779. Epub ahead of print. PMID: 35996231.
37. Alosco ML\*, Su Y\*, Stein TD\*, Protas H, Cherry JD, Adler CH, Balcer LJ, Bernick C, *Pulukuri SV*, *Abdolmohammadi B*, Coleman MJ, Palmisano JN, Tripodis Y, Mez J, Rabinovici GD, Marek KL, Beach TG, Johnson KA, Huber BR, Koerte I, Lin AP, Bouix S, Cummings JL, Shenton ME, Reiman EM\*\*, McKee AC\*\*, **Stern RA\*\***. Associations between near end-of-life Florataucipir PET and Postmortem CTE-related tau neuropathology in six former American football players. *European Journal of Nuclear Medicine and Molecular Imaging*. 2022 Sept 1; 1-29. Epub ahead of print.