

Lauren B. Raine

Curriculum Vitae

Work Address

Department of Physical Therapy, Movement and Rehabilitation Sciences
Department of Medical Sciences
Northeastern University
329 Interdisciplinary Science and Engineering Complex
805 Columbus Ave
Boston, MA 02115
Email: l.raine@northeastern.edu

Professional History

2022- Assistant Professor
Department of Physical Therapy, Movement & Rehabilitation Sciences
Department of Medical Sciences
Bouvé College of Health Sciences
Northeastern University

2021- 2022 Research Assistant Professor
Department of Physical Therapy, Movement & Rehabilitation Sciences
Bouvé College of Health Sciences
Northeastern University

Education

2016-2021 Post-doctoral Scholar
Department of Psychology
Northeastern University

2016 Doctor of Philosophy
Department of Kinesiology and Community Health
University of Illinois at Urbana- Champaign
Illinois Transdisciplinary Obesity Prevention Program Doctoral Fellow
Dissertation: *Obesity, visceral adipose tissue, and cognition in childhood*

2016 Master of Public Health
Department of Kinesiology and Community Health
University of Illinois at Urbana- Champaign
Practicum: *Growing Up Healthy*

2010 Bachelor of Science in Kinesiology University of Illinois at Urbana-Champaign
Degree awarded with honor

Professional Interests

Research Interests:

My research interest is in the public health implications of cognition and brain health; specifically, the investigation of physical activity, fitness, and (excess) body mass on brain health and cognition in children. I have examined these relationships using behavioral and neuroimaging measures to study the influence of acute and chronic physical activity on cognition. I am also interested in the relationship

between body composition and cognition, as the obesity epidemic continues to spread in children. I hope to gain a better understanding of the relationship between body composition and cognitive health that will lead to increased public health awareness about the inactivity levels of children and the vast health problems associated with these behaviors.

Scholarship

Ongoing Research Funding:

NIH, National Institute of Child Health & Human Development (R01HD094054)

Sympathetic nervous system mediation of acute exercise effects on childhood brain and cognition

2018 – 2023

PI: Charles Hillman

Role: Co-Investigator

Award: \$2,193,414

NIH, National Institute on Aging (R01AG053952)

Investigating Gains in Neurocognition in an Intervention Trial of Exercise

2016 – 2022

PI: Kirk Erikson

Role: Co-Investigator

Award: \$21,899,529

NIH, National Institute of Child Health & Human Development (R01HD097332)

Enhancing Children's Cognitive Function and Achievement through Carotenoid Consumption

2021 – 2026

PI: Naiman Khan

Role: Co-Investigator

Award: \$2,210,047

Submitted Grants:

Transforming Interdisciplinary Experiential Research (TIER) 1

BEaNS-EL: Body composition, EEG, And NnS in Early Life

Proposed Dates: 2023-2024

PI: Raine

Requested Funding: \$50,000

Noonan Deborah Munroe Noonan Memorial Research Fund

Promoting Active Play Among Preschoolers with Autism Spectrum Disorder

Proposed Dates: 2023-2025

PI: Jessica Hoffman

Role: Co-Investigator

Requested Funding: \$159,992

Previous Grant Support

Illinois Transdisciplinary Obesity Prevention Program

The Impact of Genetics on Childhood Obesity, Cognition, and Fitness

2015

Role: Co- Principal Investigator (Lauren Raine and Katie Robinson)

Award: \$10,000

Illinois Transdisciplinary Obesity Prevention Program

From Visceral Adiposity to ERPs

2013

Role: Co- Principal Investigator (Lauren Raine and Naiman Khan)

Award: \$10,000

Division of Nutritional Sciences Vision 20/20 Research Program

Tracking Physical Fitness and Body Composition in Middle School Students: A 3- A 3-Year Prospective Study

2011

PI: Charles Hillman

Role: Co-Investigator

Award: \$20,000

Manuscripts Under Review

1. Tinney, E. M., Loui, P., **Raine, L. B.**, Hiscox, L. V., Delgorio, P. L., Kramer, M. K., Schwarb, H. Martens, C. R. Kramer, A. F., Hillman, C. H., Johnson, C. L. Influence of mild cognitive impairment and body mass index on white matter integrity assessed by diffusion tensor imaging.
2. Yangüez, M., **Raine, L. B.**, Chanal, J., Bavelier, D., Hillman, C.H. Aerobic fitness and academic achievement: disentangling the indirect role of executive functions and intelligence.
3. Logan, N.E., Occidental, N., Watrous, J.N.H., **Raine, L.B.**, Kramer, A.F., & Hillman, C.H. The Differential Influence of Positive and Negative Health Factors on the Preadolescent Brain.
4. Hsieh, S. S., Kao, S. C., **Raine, L. B.**, McDonald, K. M., Pontifex, M. B., & Hillman, C.H. Effects of acute aerobic exercise on inhibitory control and neural oscillations in preadolescent children.
5. **Raine, L. B.**, Logan, N. E., Hunt, J. N., Hillman, C. H. Kramer, A. F. Training your brain and mind through exercise.
6. McDonald, K. M., Gabbard-Durnam, L., De Lisio, M., **Raine, L. B.**, Watrous, J.N.H., Kramer, A. F., Hillman, C. H., The Pandemic Lockdown Linked to Dysregulated Cortisol in Children.

Peer Reviewed Journal Articles:

1. **Raine, L. B.**, Erickson, K. I., Grove, G., Watrous, J. N. H., McDonald, K., Kang, C., Jakicic, J. M., Forman, D. E., Kramer, A. F., Burns, J. A., Vidoni, E. D., McAuley, E. & Hillman, C. H. (In Press) Cardiorespiratory Fitness Levels and Body Mass Index of Preadolescent Children and Older Adults during the COVID-19 Pandemic. *Frontiers in Public Health*.
2. Cannavale, C. N., Keye, S. A., Rosok, L., Martell, S., Holthaus, T. A., Reeser, G., **Raine, L. B.**, Mullen, S. P., Cohen, N. J., Hillman, C. H., Hammond, B. R., Renzi-Hammond, L., Khan, N. A. (2022.) Enhancing Children's Cognitive Function and Achievement through Carotenoid Consumption: The Integrated Childhood Ocular Nutrition Study (iCONS) Protocol. *Contemporary Clinical Trials*, 122, 106964.
3. Pindus, D. M., Selzer-Ninomiya, A., Nayak, A., Pionke, J. J., & **Raine, L. B.** (2022). Effects of reducing sedentary behaviour duration by increasing physical activity, on cognitive function, brain function and structure across the lifespan: a systematic review protocol. *BMJ open*, 12(10), e046077.

4. **Raine, L. B.**, Watrous, J. N., McDonald, K., Logan, N. E., Khan, N. A., Kramer, A. F., & Hillman, C. H. (2021). Aerobic Fitness, B-Vitamins, and Weight Status Are Related to Selective Attention in Children. *Nutrients*, 14(1), 201.
5. Logan, N.E., Westfall, D.R., **Raine, L.B.**, Anteraper, S.A., Chaddock-Heyman, L., Whitfield-Gabrieli, S., Kramer, A.F., & Hillman, C.H. (2022). The Differential Effects of Fitness and Adiposity on Functional Connectivity in Preadolescent Children. *Medicine and science in sports and exercise*.
6. Nemeskal, C. S., **Raine, L. B.**, Watrous, J., & Hillman, C. H. (2021). The relationship between sleep and cognitive and physical health. *International Journal of High School Research*, 3, 6-10. https://terra-docs.s3.us-east-2.amazonaws.com/IJHSR/Articles/volume3-issue5/2021_35_p6_Nemeskal.pdf.
7. Hsieh, S. S., **Raine, L. B.**, Ortega, F. B., & Hillman, C. H. (2021). The Role of Chronic Physical Activity in Alleviating the Detrimental Relationship of Childhood Obesity on Brain and Cognition. *Journal of Cognitive Enhancement*, 1-24.
8. **Raine, L. B.**, McDonald, K., Shigeta T., Hsieh, S. Hunt, J., Chiarlitti, N., Lim, M., Gebhardt, K., Collins, N., De Lisio, M., Mullen, S., Kramer, A. F., Hillman, C. H. (2021). Sympathetic Nervous System and Exercise Affects Cognition in Youth (SNEACY): Study Protocol for a Randomized Crossover Trial. *Trials*, 22(1), 1-10.
9. Liu, R., Hannon, B. A., Robinson, K. N., **Raine, L. B.**, Hammond, B. R., Renzi-Hammond, L. M., ... & Khan, N. A. (2021). Single Nucleotide Polymorphisms in CD36 Are Associated with Macular Pigment among Children. *The Journal of Nutrition*.
10. Felez-Nobrega, M., **Raine, L. B.**, Haro, J. M., Wijndaele, K., & Koyanagi, A. (2020). Temporal trends in leisure-time sedentary behavior among adolescents aged 12-15 years from 26 countries in Asia, Africa, and the Americas. *International Journal of Behavioral Nutrition and Physical Activity*, 17(1), 1-11.
11. **Raine, L. B.**, Kao, S. C., Drollette, E. S., Pontifex, M. B., Pindus, D., Hunt, J., ... & Hillman, C. H. (2020). The role of BMI on cognition following acute physical activity in preadolescent children. *Trends in Neuroscience and Education*, 100143.
12. Logan, N. E., **Raine, L. B.**, Drollette, E. S., Castelli, D. M., Khan, N. A., Kramer, A. F., & Hillman, C. H. (2020). The differential relationship of an afterschool physical activity intervention on brain function and cognition in children with obesity and their normal weight peers. *Pediatric Obesity*, e12708.
13. Chaddock-Heyman, L., Weng, T. B., Kienzler, C., Weissshappel, R., Drollette, E. S., **Raine, L. B.**, ... & Hillman, C. H. (2020). Brain Network Modularity Predicts Improvements in Cognitive and Scholastic Performance in Children Involved in a Physical Activity Intervention. *Frontiers in Human Neuroscience*, 14, 346.
14. Hsieh, S. S., Chueh, T. Y., Morris, T. P., Kao, S. C., Westfall, D. R., **Raine, L. B.**, ... & Hillman, C. H. (2020). Greater childhood cardiorespiratory fitness is associated with better top-down cognitive control: A midfrontal theta oscillation study. *Psychophysiology*, 57(12), e13678.
15. Westfall, D. R., Anteraper, S. A., Chaddock-Heyman, L., Drollette, E. S., **Raine, L. B.**, Whitfield-Gabrieli, S., ... & Hillman, C. H. (2020). Resting-State Functional Connectivity and Scholastic Performance in Preadolescent Children: A Data-Driven Multivoxel Pattern Analysis (MVPA). *Journal of Clinical Medicine*, 9(10), 3198.
16. Larsen, R. J., **Raine, L. B.**, Hillman, C. H., Kramer, A. F., Cohen, N. J., & Barbey, A. K. (2020). Body mass and cardiorespiratory fitness are associated with altered brain metabolism. *Metabolic brain disease*. <https://doi.org/10.1007/s11011-020-00560-z>

17. Walk, A. D., **Raine, L. B.**, Kramer, A. Cohen, N. J., Hillman, C. H., Khan, N. A. (2020) Adiposity is Related to Neuroelectric Indices of Motor Response Preparation in Preadolescent Children. *International Journal of Psychophysiology*. 10.1016/j.ijpsycho.2019.10.014
18. Kondiboyina, V., **Raine, L. B.**, Kramer, A. F., Khan, N. A., Hillman, C. H., & Shefelbine, S. J. (2019). Skeletal Effects of Nine Months of Physical Activity in Obese and Healthy-weight Children. *Medicine and science in sports and exercise*.
19. Loui, P., **Raine, L.**, Chaddock-Heyman, L., Kramer, A., & Hillman, C. (2019). Music Instrument Practice Predicts White Matter Microstructure and Cognitive Abilities in Childhood. *Frontiers in psychology*, 10, 1198.
20. Esteban-Cornejo, I., Rodriguez-Ayllon, M., Verdejo-Roman, J., Cadenas-Sanchez, C., Mora-Gonzalez, J., Chaddock-Heyman, L., **Raine, L. B.** ... & Catena, A. (2019). Physical fitness, white matter volume and academic performance in children: findings from the ActiveBrains and FITKids2 projects. *Frontiers in psychology*, 10.
21. Chaddock-Heyman, L., Erickson, K. I., Kienzler, C., Drollette, E., **Raine, L.**, Kao, S. C., ... & Kramer, A. (2018). Physical Activity Increases White Matter Microstructure in Children. *Frontiers in Neuroscience*, 12, 950.
22. Chojnacki, M. R., Holscher, H. D., Balbinot, A. R., **Raine, L. B.**, Biggan, J. R., Walk, A. M., ... & Khan, N. A. (2019). Relations between mode of birth delivery and timing of developmental milestones and adiposity in preadolescence: A retrospective study. *Early human development*, 129, 52-59.
23. Pindus, D. M., Drollette, E. S., **Raine, L. B.**, Kao, S. C., Khan, N., Westfall, D. R., ... & Kramer, A. F. (2019). Moving fast, thinking fast: The relations of physical activity levels and bouts to neuroelectric indices of inhibitory control in preadolescents. *Journal of Sport and Health Science*.
24. Moore, R. D., Sicard, V., Pindus, D., **Raine, L. B.**, Drollette, E. S., Scudder, M. R., ... & Hillman, C. H. (2019). A targeted neuropsychological examination of children with a history of sport-related concussion. *Brain injury*, 33(3), 291-298.
25. **Raine, L. B.**, Drollette, E., Kao, S. C., Westfall, D., Chaddock-Heyman, L., Kramer, A. F., ... & Hillman, C. H. (2018). The Associations between Adiposity, Cognitive Function, and Achievement in Children. *Medicine and science in sports and exercise*.
26. **Raine, L. B.**, Kao, S. C., Pindus, D., Westfall, D. R., Shigeta, T. T., Logan, N., ... & Khan, N. A. (2018). A large-scale reanalysis of childhood fitness and inhibitory control. *Journal of Cognitive Enhancement*, 1-23.
27. Chaddock-Heyman, L., Weng, T.B., Kienzler, C., Erickson, K.I., Voss, M.W., Drollette, E.S., **Raine, L.B.**, Kao, S.C., Hillman, C.H. and Kramer, A.F., 2018. Scholastic performance and functional connectivity of brain networks in children. *PloS one*, 13(1), p.e0190073.
28. Walk, A. M., **Raine, L. B.**, Kramer, A. F., Cohen, N. J., Khan, N. A., & Hillman, C. H. (2017). Differential effects of carbohydrates on behavioral and neuroelectric indices of selective attention in preadolescent children. *Frontiers in human neuroscience*, 11, 614.
29. Chojnacki, M. R., **Raine, L. B.**, Drollette, E. S., Scudder, M. R., Kramer, A. F., Hillman, C. H., & Khan, N. A. (2018). The negative influence of adiposity extends to intraindividual variability in cognitive control among preadolescent children. *Obesity*, 26(2), 405-411.
30. Drollette, E. S., Pontifex, M. B., **Raine, L. B.**, Scudder, M. R., Moore, R. D., Kao, S. C., ... & Khan, N. A. (2018). Effects of the FITKids physical activity randomized controlled trial on conflict monitoring in youth. *Psychophysiology*, 55(3), e13017.

31. Barnett, S. M., Khan, N. A., Walk, A. M., **Raine, L. B.**, Moulton, C., Cohen, N. J., ... & Hillman, C. H. (2017). Macular pigment optical density is positively associated with academic performance among preadolescent children. *Nutritional Neuroscience*, 1-9.
32. **Raine, L. B.**, Khan, N. A., Drollette, E. S., Pontifex, M. B., Kramer, A. F., & Hillman, C. H. (2017). Obesity, Visceral Adipose Tissue, and Cognitive Function in Childhood. *The Journal of Pediatrics*.
33. Hassevoort, K. M., Khazoum, S. E., Walker, J. A., Barnett, S. M., **Raine, L. B.**, Hammond, B. R., ... & Cohen, N. J. (2017). Macular carotenoids, aerobic fitness, and central adiposity are associated differentially with hippocampal-dependent relational memory in preadolescent children. *The Journal of pediatrics*, 183, 108-114.
34. Lubans, D., Richards, J., Hillman, C., Faulkner, G., Beauchamp, M., Nilsson, M., **Raine, L. B.** ... & Biddle, S. (2016). Physical activity for cognitive and mental health in youth: a systematic review of mechanisms. *Pediatrics*, 138(3), e20161642.
35. Chaddock-Heyman, L., Erickson, K. I., Chappell, M. A., Johnson, C. L., Kienzler, C., Knecht, A., **Raine, L. B.**... & Hillman, C. H. (2016). Aerobic fitness is associated with greater hippocampal cerebral blood flow in children. *Developmental Cognitive Neuroscience*.
36. **Raine, L. B.**, Biggan, J. R., Baym, C. L., Saliba, B. J., Cohen, N. J., & Hillman, C. H. (2018). Adolescent changes in aerobic fitness are related to changes in academic achievement. *Pediatric exercise science*, 30(1), 106-114.
37. Niemiro, G. M., **Raine, L. B.**, Khan, N. A., Emmons, R., Little, J., Kramer, A. F., ... & De Lisio, M. (2016). Circulating progenitor cells are positively associated with cognitive function among overweight/obese children. *Brain, behavior, and immunity*.
38. McCorkle, S. M., **Raine, L. B.**, Hammond, B. R., Renzi-Hammond, L., Hillman, C. H., & Khan, N. A. (2015). Reliability of Heterochromatic Flicker Photometry in Measuring Macular Pigment Optical Density among Preadolescent Children. *Foods*, 4(4), 594-604.
39. Mackenzie, MM, Zuniga, KE, **Raine, L. B.**, Awick, EA, Hillman, CH, Kramer, AF, McAuley, E. (2016). Associations between physical fitness indices and working memory in breast cancer survivors and age-matched controls. *Journal of Women's Health*, 25, 99-108
40. Kao, S. C., Drollette, E. S., Scudder, M. R., **Raine, L. B.**, Westfall, D. R., Pontifex, M. B., & Hillman, C. H. (2017). Aerobic fitness is associated with cognitive control strategy in preadolescent children. *Journal of motor behavior*, 49(2), 150-162.
41. Pindus, D. M., Drollette, E. S., Scudder, M. R., Khan, N. A., **Raine, L. B.**, Sherar, L. B., ... & Hillman, C. H. (2016). Moderate-to-Vigorous Physical Activity, Indices of Cognitive Control, and Academic Achievement in Preadolescents. *The Journal of pediatrics*, 173, 136-142.
42. Chaddock-Heyman, L., Erickson, K. I., Kienzler, C., King, M., Pontifex, M. B., **Raine, L. B.**, ... & Kramer, A. F. (2015). The Role of Aerobic Fitness in Cortical Thickness and Mathematics Achievement in Preadolescent Children. *PloS one*, 10(8), e0134115.
43. Moore, R. D., Pindus, D. M., Drolette, E. S., Scudder, M. R., Raine, L. B., & Hillman, C. H. (2015). The persistent influence of pediatric concussion on attention and cognitive control during flanker performance. *Biological psychology*.
44. Drollette, E. S., Scudder, M. R., **Raine, L. B.**, Davis Moore, R., Pontifex, M. B., Erickson, K. I., & Hillman, C. H. (2016). The sexual dimorphic association of cardiorespiratory fitness to working memory in children. *Developmental science*, 19(1), 90-108.

45. **Raine, L. B.**, Scudder, M. R., Saliba, B. J., Kramer, A. F., & Hillman, C. (2016). Aerobic fitness and context processing in preadolescent children. *Journal of Physical Activity and Health*, 13(1), 94-101.
46. Khan, N. A., **Raine, L. B.**, Drollette, E. S., Scudder, M. R., & Hillman, C. H. (2015). The relation of saturated fats and dietary cholesterol to childhood cognitive flexibility. *Appetite*, 93, 51-56.
47. Zuniga, K. E., Mackenzie, M. J., Roberts, S. A., **Raine, L. B.**, Hillman, C. H., Kramer, A. F., & McAuley, E. (2016). Relationship between fruit and vegetable intake and interference control in breast cancer survivors. *European Journal of Nutrition*, 55(4), 1555-1562.
48. Khan, N. A., **Raine, L. B.**, Drollette, E. S., Scudder, M. R., Kramer, A. F., & Hillman, C. H. (2015). Dietary fiber is positively associated with cognitive control among prepubertal children. *The Journal of nutrition*, 145(1), 143-149.
49. Khan, N. A., Baym, C. L., Monti, J. M., **Raine, L. B.**, Drollette, E. S., Scudder, M. R., Moore, R. D., Kramer, A. F., Hillman, C. H., & Cohen, N. J. (2015). Central adiposity is negatively associated with hippocampal- dependent relational memory among overweight and obese children. *The Journal of Pediatrics*, 166, 302-308. Doi: 10.1016/j.peds.2014.10.008
50. Khan, N. A., **Raine, L. B.**, Drollette, E. S., Scudder, M. R., Cohen, N. J., Kramer, A. F., & Hillman, C. H. (2015). The relationship between total water intake and cognitive control among prepubertal children. *Annals of Nutrition & Metabolism*, 66, 38-41. (invited).
51. Baym, C. L., Khan, N. A., Pence, A., **Raine, L. B.**, Hillman, C. H., & Cohen, N. J. (2014). Aerobic fitness predicts relational memory but not item memory performance in healthy young adults. *Journal of Cognitive Neuroscience*, 26, 2645-2652.
52. Baym, C. L., Khan, N. A., Monti, J. M., **Raine, L. B.**, Drollette, E. S., Scudder, M. R., Moore, R. D., Kramer, A. F., Hillman, C. H., & Cohen, N. J. (2014). Dietary lipids are differentially associated with hippocampal dependent relational memory in prepubertal children. *American Journal of Clinical Nutrition*, 99, 1026-1032.
53. Khan, N. A., **Raine, L. B.**, Donovan, S. M., & Hillman, C. H. (2014). The cognitive implications of obesity and nutrition in childhood. *Monographs of the Society for Research in Child Development*, 79, 51-71. doi: 10.1111/mono.12130
54. Pontifex, M. B., Kamijo, K., Scudder, M. R., **Raine, L. B.**, Khan, N. A., Hemrick, B., Evans, E. M., Castelli, D. M., Frank, K. A., & Hillman, C. H. (2014). The differential association of adiposity and fitness with cognitive control in preadolescent children. *Monographs of the Society for Research in Child Development*, 79, 72-92. doi: 10.1111/mono.12134
55. Hillman, C. H., Pontifex, M. B., Castelli, D. M., Khan, N. A., **Raine, L. B.**, Scudder, M. R., Drollette, E. S., Moore, R. D., Wu, C.-T., Pindus, D. M., & Kamijo, K. (2014). Effects of the FITKids randomized controlled trial on executive control and brain function in children. *Pediatrics*, 134, 1063-1071.
56. Chaddock-Heyman, L., Erickson, K. I., Holtrop, J. L., Voss, M. W., Pontifex, M. B., **Raine, L. B.**, Hillman, C. H., & Kramer, A. F. (2014). Aerobic fitness is associated with greater white matter integrity in children. *Frontiers in Human Neuroscience*, 8, 1-7. doi: 10.3389/fnhum.2014.00584
57. Kamijo, K., Pontifex, M. B., Khan, N. A., **Raine, L. B.**, Scudder, M. R., Drollette, E. S., Evans, E. M., Castelli, D. M., & Hillman, C. H. (2014). The negative association of childhood obesity to the cognitive control of action monitoring. *Cerebral Cortex*, 24, 654-662. doi:10.1093/cercor/bhs349

58. Scudder, M. R., Federmeier, K. D., **Raine, L. B.**, Direito, A., Boyd, J. K., & Hillman, C. H. (2014). The association between aerobic fitness and language processing in children: implications for academic achievement. *Brain & Cognition*, 87, 140-152.
59. Khan, N. A., **Raine, L. B.**, Drollette, E. S., Scudder, M. R., Pontifex, M. B., Castelli, D. M., Donovan, S. M., Evans, E. M., & Hillman, C. H. (2014). Impact of the FITKids physical activity intervention on adiposity in prepubertal children. *Pediatrics*, 133, 875-883. doi: 10.1542/peds.2013-2246
60. Drollette, E. S., Scudder, M. R., **Raine, L. B.**, Moore, R. D., Saliba, B. J., Pontifex, M. B., & Hillman, C. H. (2014). Acute exercise facilitates brain function and cognition in children who need it most an ERP study of individual differences in inhibitory control capacity. *Developmental Cognitive Neuroscience*, 7, 53-64. doi:10.1016/j.dcn.2013.11.001
61. **Raine, L. B.**, Lee, H. K., Saliba, B. J., Chaddock-Heyman, L., Hillman, C. H., & Kramer, A. F. (2013). The influence of childhood aerobic fitness on learning and memory. *PLOS ONE*, 8, 1-6. doi:10.1371/journal.pone.0072666
62. Chaddock-Heyman, L., Erickson, K. I., Voss, M. W., Powers, J. P., Knecht, A. M., Pontifex, M. B., Drollette, E. S., Moore, R. D., **Raine, L. B.**, Scudder, M. R., Hillman, C. H., & Kramer, A. F. (2013). White matter microstructure is associated with cognitive control in children. *Biological Psychology*, 94, 109-115.
63. Moore, R. D., Wu, C.-T., Pontifex, M. B., O'Leary, K. C., Scudder, M., **Raine, L. B.**, Johnson, C., & Hillman, C. H. (2013). Aerobic fitness and intra-individual variability of neurocognition in preadolescent children. *Brain and Cognition*, 82, 43-57.
64. Pontifex, M. B., Saliba, B. J., **Raine, L. B.**, Picchiatti, D. L., & Hillman, C. H. (2013). Exercise improves behavioral, neurophysiologic, and scholastic performance in children with ADHD. *The Journal of Pediatrics*, 162, 543-551. doi:10.1016/j.jpeds.2012.08.036 (PMCID: PMC3556380)
65. Kamijo, K., Khan, N. A., Pontifex, M. B., Scudder, M. R., Drollette, E. S., **Raine, L. B.**, Evans, E. M., Castelli, D. M., & Hillman, C. H. (2012). The relation of adiposity to cognitive control and scholastic achievement in preadolescent children. *Obesity*, 20, 2406-2411.
66. Kamijo, K., Pontifex, M. B., Khan, N. A., **Raine, L. B.**, Scudder, M. R., Drollette, E. S., Evans, E. M., Castelli, D. M., & Hillman, C. H. (2012). The association of childhood obesity to neuroelectric indices of inhibition. *Psychophysiology*, 49, 1361-1371.
67. Chaddock, L., Hillman, C. H., Pontifex, M. B., **Raine, L. B.**, Johnson, C. R., & Kramer, A. F. (2012). Childhood aerobic fitness predicts cognitive performance one year later. *Journal of Sports Sciences*, 30, 421-430.
68. Hillman, C. H., Pontifex, M. B., Motl, R. W., O'Leary, K. C., Johnson, C. R., Scudder, M. R., **Raine, L. B.**, & Castelli, D. M. (2012). From ERPs to academics. *Developmental Cognitive Neuroscience*, 2S, S90-S98. doi:10.1016/j.dcn.2011.07.004
69. Voss, M. S., Chaddock, L., Kim, J. S., VanPatter, M., Pontifex, M. B., **Raine, L. B.**, Cohen, N. J., Hillman, C. H., & Kramer, A. F., (2011). Aerobic fitness is associated with greater efficiency of the network underlying cognitive control in preadolescent children. *Neuroscience*, 199, 166-176.
70. Wu, C.-T., Pontifex, M. B., **Raine, L. B.**, Chaddock, L., Voss, M. W., Kramer, A. F., & Hillman, C. H. (2011). Aerobic fitness and response variability in preadolescent children performing a cognitive control task. *Neuropsychology*, 25, 333-341 [PMID: 21443340].

71. Pontifex, M. B., **Raine, L. B.**, Johnson, C. R., Chaddock, L., Voss, M. W., Cohen, N. J., Kramer, F., & Hillman, C. H. (2011). Cardiorespiratory fitness and the flexible modulation of cognitive control in preadolescent children. *Journal of Cognitive Neuroscience*, 23, 1332-1345. [PMID: 20521857].
72. Chaddock, L., Erickson, K. I., Prakash, R. S., Kim, J. S., Voss, M. W., VanPatter, M., Pontifex, M. B., **Raine, L. B.**, Konkel, A. K., Hillman, C. H., Cohen, N. J., & Kramer, A. F. (2010). A neuroimaging investigation of the association between aerobic fitness, hippocampal volume and memory performance in preadolescent children. *Brain Research*, 1358, 172-183. [PMCID: 20735996].
73. Chaddock, L., Erickson, K. I., Prakash, R. S., VanPatter, M., Voss, M. W., Pontifex, M. B., **Raine, L. B.**, Hillman, C. H., Kramer, A. F. (2010). Basal ganglia volume is associated aerobic fitness in preadolescent children. *Developmental Neuroscience*, 32, 249-256.
74. Hillman, C. H., Pontifex, M. B., **Raine, L.**, Castelli, D. M., Hall, E. E., & Kramer, A. F. (2009). The effect of acute treadmill walking on cognitive control and academic achievement in preadolescent children. *Neuroscience*, 159, 1044-1054. [PMID: 19356688]

Book Chapters

1. Castelli, D.M., Hillman, C.H., **Raine, L.**, Drollette, E.S. (2020). Ten Years Later: What We Learned About After-school Programming from the Fitness Improves Thinking in Kids (FITKids) Clinical Trial. In Marttinen R., Centeio E., & Quarmby T. *Approaches to Before and After School Physical Activity Programs*. Abingdon, United Kingdom: Routledge

Abstracts

1. **Raine, L.B.**, Hopman-Droste, R. J., Padilla, A. B., Kramer, A. F. Hillman, C. H. (Submitted for June 2023) The Benefits of Acute Aerobic Exercise on Learning in a Virtual Classroom in Preadolescent Children, American College of Sports Medicine.
2. Cline, T. L., Watrous, J. N. H, Nwakamma, M., Tinney, E.M., McDonald, K. M., Morfini, F., **Raine, L.B.**, Gabbard-Durnam L., Kramer, A. F., Whitfield-Gabrieli, S., Hillman, C. H. (Submitted for June 2023) Multivariate Pattern Analysis of Childhood Functional Brain Network Connectivity After Acute Moderate-to-Vigorous Physical Activity. American College of Sports Medicine.
3. McDonald, K. M., Gabbard-Durnam L., De Lisio, M., **Raine, L. B.**, Morris, T., Bernard-Willis, Y., Watrous, J. N. H, Cline, T. L., Beaudry, K., Whitfield-Gabrieli, S., Kramer, A. F., Hillman, C. H. (Submitted for November 2022). The Pandemic Lockdown Linked to Dysregulated Cortisol in Children. *Society for Neuroscience*.
4. Logan, N.E., Occidental, N., Watrous, J.N.H., **Raine, L.B.**, Kramer, A.F., & Hillman, C.H. (Submitted for September 2022). The Differential Influence of Positive and Negative Health Factors on the Preadolescent Brain. *Society for Psychophysiological Research*.
5. Tinney, E. M., Loui, Psyche, L., **Raine, L. B.**, Kramer, A. F., Hillman, C. H., Johnson, C. L. (Submitted for September 2022). White Matter Integrity, Health Behaviors, and Mild Cognitive Impairment. *Society for Psychophysiological Research*.
6. Watrous, J. N. H, **Raine, L. B.**, McDonald, K. M. Padilla, A. B., Logan, N. E., Kramer, A. F., Hillman, C. H. (Submitted for May 2022). The Impact of the COVID-19 pandemic on Children's Physical Health. *American College of Sports Medicine*.
7. Padilla, A. B., **Raine, L. B.**, Hopman, R. J. Hillman, C. H., Kramer, A. F. (Submitted for May 2022). The Relation of Aerobic Fitness to Learning and Memory: A Pilot Study. *American College of Sports Medicine*.

8. Logan, N. E., Westfall, D. R., **Raine, L. B.**, Anteraper, S. A., Chaddock-Heyman, L., Whitfield-Gabrieli, S., Kramer, A.F., & Hillman, C.H. (Submitted for May 2022). The Differential Effects of Adiposity on Functional Connectivity in Preadolescent Children. *American College of Sports Medicine*.
9. Westfall, D. R., Anteraper, S. A., **Raine, L. B.**, Drollette, E. S., Chaddock-Heyman, L., Whitfield-Gabrieli, S., Kramer, A. F., Hillman, C. H. (September 2019). Differences in the Default Mode Network and Cognition Between Obese and Normal Weight Preadolescent Children. *Society for Psychophysiological Research*.
10. **Raine, L. B.**, Logan, N., Khan, N. A., Kramer, A. F., Hillman, C. H. (November 2018). Differential Relationships of Fitness and Adiposity on Cognitive Function. *Obesity Week*.
11. Robinson, K. N., **Raine, L. B.**, Khan, N. A., Kramer, A. F., Hillman, C. H., Teran-Garcia, M. (November 2018). Rare variant in preproghrelin gene is associated with response to after-school physical activity intervention in children. *Obesity Week*.
12. Mackenzie MJ, Zuniga KE, **Raine LB**, Awick EA, Roberts SA, Chaddock-Heyman L, Hillman CH, Kramer AF, McAuley E (March 2016). A case-control investigation of cardiorespiratory fitness on executive control in a task switching paradigm. Poster accepted for presentation at the 5th Biennial International Cancer & Cognition Task Force Meeting. Amsterdam, NL.
13. Mackenzie MJ, Zuniga KE, **Raine LB**, Awick EA, Hillman CH, Kramer AF, McAuley E (2015). Cardiorespiratory fitness, physical activity, and working memory in breast cancer survivors. *Annals of Behavioral Medicine*, 49 (Supplement), S174.
14. Khan, N.A., **Raine, L.B.**, Drollette, E.S., Scudder, M.R., Kao, S., Kramer, A.F., Donovan, S.M., & Hillman, C.H. (Submitted). Small gestational deficits have long-term effects on cognitive control among preadolescents.
15. Khan, N.A., **Raine, L.**, Winter, A.J., Cohen, N.J., Kramer, A.F., & Hillman, C.H. (Submitted). Differential effects of carbohydrates on changes in acute childhood cognitive control.
16. Khan, N.A., **Raine, L.B.**, Drollette, E.S., Scudder, M.R., Cohen, N.J., Kramer, A.F., & Hillman, C.H. (2014). The relation of total water intake to cognitive function among prepubertal children. *Proceedings of the Hydration for Health (H4H) conference*.
17. Khan, N.A., **Raine, L.B.**, Drollette, E.S., Scudder, M.R., Pontifex, M.B., & Hillman, C.H. (2014). Differences in cognitive flexibility between healthy weight and obese children: An ERP study. *FASEB Journal*.
18. Khan, N.A., **Raine, L.B.**, Drollette, E.S., Scudder, M.R., Cohen, N.J., Kramer, A.F., & Hillman, C. H. (2014). Associations between diet quality and cognitive control in childhood. *FASEB Journal*.
19. Olson, E. A., Drollette E. S., **Raine, L. B.**, Hillman, C. H., & McAuley, E. (2014). Immediate effects of blood glucose on working memory performance. *Annals of Behavioral Medicine*.
20. Drollette, E.S., Khan, N.A., **Raine, L. B.**, Scudder, M.R., Davis Moore, R., Komisarz, C.E., Kramer, A.F., & Hillman, C.H. (2014). The sexual dimorphic pattern of central adiposity on ERPs in 8- to 10-year-old Children. *Psychophysiology*.
21. **Raine, L.B.**, Pontifex, M.B., Khan, N.A., Scudder, M.R., Drollette, E.S., Davis Moore, R., Wu, C., Kamijo, K., Castelli, D.M., & Hillman, C.H. (2014). The FITKids randomized controlled trial: effects of physical activity on cognitive and brain health in children. *Psychophysiology*.
22. Pindus, D., Khan, N.A., Drollette, E.S., Davis Moore, R., Scudder, M.R., **Raine, L.B.**, Sherar, L., & Hillman, C.H. (2014). Physical activity intervention and changes in cognitive control in pre-pubertal children: Does intensity matter? Insights from the FITKids randomized controlled trial.

23. Lynch, B., Verstynen, T., Weinstein, A.M., Khan, N.A., **Raine, L.B.**, Scudder, M.R., Drollette, E.S., Kramer, A.F., Hillman, C.H., & Erickson, K.I. (2014). Dissociable effects of lean mass versus fat mass on neuromorphology in children. *American Psychosomatic Society*.
24. Khan, N.A., Baym, C.L., **Raine, L.B.**, Drollette, E.S., Scudder, M.R., Kramer, A.F., Cohen, N.J., & Hillman, C.H. (2013). Central adiposity predicts hippocampal-dependent relational memory in prepubertal children. *FASEB Journal*.
25. **Raine, L.B.**, Khan, N.A., Drollette, E.S., Scudder, M.R., Cohen, N.J., Kramer, A.F., & Hillman, C.H. (2013). Towards a better understanding of the negative relationship between adiposity and cognitive health in prepubertal children. *FASEB Journal*.
26. **Raine, L. B.**, Pontifex, M. B., Scudder, M. R., O'Leary, K. C., Wu, C. T., Drollette, E. S., Castelli, D. M., & Hillman, C. H. (2011). The FITKIDS Trial: The beneficial effects of a 9-month activity intervention on preadolescent cognition. *Psychophysiology*, 48, S.
27. Drollette, E. S., Pontifex, M. B., Scudder, M. R., **Raine, L. B.**, Saliba, B. J., & Hillman, C. H. (2012). Acute exercise modulates P3 amplitude for children who need it most: An ERP study of individual differences using the flanker task. *Psychophysiology*, 49, S89.
28. Kamijo, K., Pontifex, M. B., Khan, N. A., **Raine, L. B.**, Scudder, M. R., Drollette, E. S., Evans, E. M., Castelli, D. M., & Hillman, C. H. (2012). Childhood obesity and action monitoring. *Psychophysiology*, 49, S89.
29. Pontifex, M. B., Kamijo, K., Scudder, M. R., **Raine, L. B.**, Khan, N. A., Evans, E. M., Castelli, D. M., & Hillman, C. H. (2012). The differential association between adiposity, fitness, and cognitive control in preadolescent children. *Psychophysiology*, 49, S100.
30. Scudder, M. R., Federmeier, K. D., **Raine, L. B.**, Direito, A., Boyd, J., Hillman, C. H. (2012). The association between aerobic fitness and semantic processing in children. *Psychophysiology*, 49, S89.
31. Khan, N. A., **Raine, L. B.**, Drollette, E., Scudder, M. R., Pontifex, M. B., Castelli, D. M., Hillman, C. H., Donovan, S. M., & Evans, E. M. (2012). Television viewing and intake of added sugars are related to central adiposity in prepubertal children. *The Journal of the Federation of American Societies for Experimental Biology*, 26, 369.5.
32. Pontifex, M. B., Saliba, B. J., **Raine, L. B.**, Picchietti, D. L., & Hillman, C. H. (2012). Acute exercise enhances inhibition in children with ADHD. *Medicine & Science in Sports & Exercise*, 44, S105.
33. Chien-Ting, W., Pontifex, M. B., O'Leary, K. C., Scudder, M. R., **Raine, L. B.**, Johnson, C. R., & Hillman, C. H. (2011). Aerobic fitness and intra-individual variability on neurocognitive function in preadolescent children. *Medicine & Science in Sports & Exercise*, 43, S174.
34. Pontifex, M. B., O'Leary, K. C., **Raine, L. B.**, Chien-Ting, W., Drollette, E. S., Castelli, D. M., & Hillman, C. H. (2011). The beneficial effects of fitness training on neurocognitive function in preadolescent children. *Medicine & Science in Sports & Exercise*, 43, S176.
35. Chaddock, L., Erickson, K. I., Prakash, R. S., Kim, J. S. Voss, M. W., VanPatter, M., Pontifex, M. B., **Raine, L. B.**, Konkel, A., Hillman, C. H., Cohen, N. J., & Kramer, A. F. (2010). A Neuroimaging investigation of the association between aerobic fitness, hippocampal volume and memory performance in preadolescent children. *Journal of Cognitive Neuroscience*, SB82.
36. Pontifex, M. B., O'Leary, K. C., Johnson, C. R., Scudder, M. R., **Raine, L. B.**, Motl, R. W., Castelli, D. M., & Hillman, C. H. (2010). From ERPs to academics. *Psychophysiology*, 47, S42.
37. Wu, C., Pontifex, M. B., O'Leary, K. C., Scudder, M. R., **Raine, L. B.**, Johnson, C. R., & Hillman, C. H. (2010). Aerobic fitness and intra-individual variability in preadolescent children. *Psychophysiology*, 47, S43.

38. Pontifex, M. B., **Raine, L. B.**, Chaddock, L., VanPatter, M., Voss, M. W., Kim, J. S., Cohen, N. J., Kramer, A. F., & Hillman, C. H. (2009). Fitness and the modulation of cognitive control in preadolescent children. *Psychophysiology*, *46*, S37.
39. Pontifex, M. B., **Raine, L. B.**, Witten, B. N., Castelli, D. M., Hall, E. E., Hillman, C. H. (2008). The Effects of acute aerobic exercise on the cognitive control of attention and academic achievement in preadolescent children. *Psychophysiology*, *45*, S36.

Conference Presentations (not included in abstracts)

1. McAuley, E., Mackenzie, M. Zuniga, K., Awick, E., **Raine, L.**, Hillman, C. (2014). Objective and Subjective Memory Impairment in Breast Cancer Survivors: Effects of Fitness and Nutrition. *Psycholoncology*, *23* (Suppl. 3), 312-313. DOI: 10.1111/j.1099-1611.2014.3696. Presented at the World Congress of Psycho Oncology, Lisbon, Portugal, October 20-24, 2014.
2. Olson, E. A., Drollette, E. S., **Raine, L. B.**, Hillman, C., & McAuley E. *Working Memory Efficiency in Older Adults with Type 2 Diabetes*. Poster presentation at the 7th World Congress on Prevention of Diabetes and its Complications. Madrid, Spain, November 2012.
3. Kamijo, K., Khan, N. A., Pontifex, M. B., Scudder, M. R., Drollette, E. S., **Raine, L. B.**, Evans, E. M., Castelli, D. M., & Hillman, C. H. (2011). The negative relation of adiposity to cognitive health in preadolescent children: Perspectives on academic achievement. Poster presented at the ACSM Conference on Physical Activity, Cognitive Function, and Academic Achievement: Moving Students to Better Performance. Washington: DC.
4. Pontifex, M. B., Saliba, B. J., **Raine, L. B.**, Picchietti, D. L., & Hillman, C. H. (2011). Enhancing inhibition in children with ADHD: The effect of a single bout of physical activity. Poster presented at the ACSM Conference on Physical Activity, Cognitive Function, and Academic Achievement: Moving Students to Better Performance. Washington: DC.
5. **Raine, L. B.**, Pontifex, M. B., Scudder, M. R., O’Leary, K. C., Wu, C. T., Drollette, E. S., Castelli, D. M., & Hillman, C. H. (2011). The FITKIDS Trial: The beneficial effects of a 9-month activity intervention on preadolescent cognition. Poster presented at the ACSM Conference on Physical Activity, Cognitive Function, and Academic Achievement: Moving Students to Better Performance. Washington: DC.
6. Hillman, C. H., Pontifex, M. B., **Raine, L. B.**, Castelli, D. M., Hall, E. E., & Kramer, A. F. (2009). The Effects of acute aerobic exercise on the cognitive control of attention and academic achievement in preadolescent children. Poster presented at the 2009 Biennial Meeting of the Society for Research in Child Development, Denver, CO.
7. **Raine, L. B.**, Hillman, C. H., Pontifex, M. B., Castelli, D. M., Hall, E. E., & Kramer, A. F. (2009). The Effect of acute treadmill walking on cognitive control and academic achievement in preadolescent children. Poster presented at the 2009 CHAD, Health and Wellness Initiative Symposium, University of Illinois at Urbana-Champaign, IL.

Invited Guest Editor:

Journal of Clinical Medicine: Special Issue “Child Behavior and Psychophysiology”

Presentations

1. SoCRS Rehabilitation Spotlight Lunch Series, October 2022: “Neuroscience and Children’s Health: Utilizing Past Research to Optimize Future Interventions”
2. Greater New York ACSM Chapter Fall Conference, November 2021: Invited Presentation “Neurocognitive Consequences of Obesity in Childhood: Implications of Physical Activity for Promoting Children’s Brain Health”

3. APTA of Massachusetts' Pediatric Special Interest Group, September 2020: Invited Presentation "Hopscotch, Soccer, and Broccoli: Implications of Health Behaviors for Promoting Children's Brain Health"
4. European Youth Heart Study, September 2018: Invited Oral Presentation "Differential Relationships of Fitness and Adiposity on Cognitive Function"
5. 2018 Learning Connection Summit, presented by the United Dairy Industry of Michigan: Invited Symposia "The Effects of Exercise, Obesity, and Nutrition on Cognition in Children"
6. Action for Healthy Kids 2014: Illinois School Wellness Conference Guest Presentation

Teaching Experience

Undergraduate and Graduate Classes:

Northeastern University Bouvé College of Health Sciences

Department of Physical Therapy, Movement and Rehabilitation Sciences

PTMRS 3400: Human Kinesiology

Spring 2021, Spring 2022

Instructor

Northeastern University Honors Program

HONR 3310: Hopscotch, Soccer, and Broccoli: Implications of Neuroscience for Promoting Children's Brain Health

Spring 2019, Spring 2020, Fall 2020, Fall 2021, Fall 2022

Instructor

19 Honors students

Northeastern University Physician Assistant Program

PA 6330 Research Design

Summer 2019, Summer 2020, Summer 2021, Summer 2022

Instructor

40-50 Physician Assistant graduate students

Northeastern University Department of Physical Therapy, Movement & Rehabilitation Sciences

PT7020 Technologies in Movement and Rehabilitation Science

Spring 2022

Guest Lecturer

Northeastern University Department of Psychology

PSYC 5150 Proseminar in Clinical Neuroscience

Fall 2022

Guest Lecturer

Northeastern University Department of Physical Therapy, Movement & Rehabilitation Sciences

PT 7030 Interdisciplinary Seminar in Rehabilitation Science

Fall 2022

Guest Lecturer

The University of Pittsburgh, Department of Psychology

Exercise and the Brain

Spring 2021
Guest Lecturer

University of Ottawa, Health Sciences
Exercise and Chronic Disease Prevention 20219
Fall 2021
Guest Lecturer

Northeastern University Bouvé College of Health Science
HLTH5450 Healthcare Research
Spring 2021
Guest Lecturer

University of North Carolina at Greensboro, Department of Kinesiology
Exercise Psychology
Spring 2018
Guest Lecturer

Berklee College of Music
Kinesiology 645: Exercise Psychology
Spring 2018
Guest Lecturer
3 lectures, 20 students/ lecture

Northeastern University College of Science, Psychology Department
PSYC 3450 Learning and Motivation
Fall 2017
Guest Lecturer

University of Illinois Urbana- Champaign
KIN 140 Social Science of Human Movement
Teaching Assistant

CHLH 575 Chronic Disease Epidemiology
Teaching Assistant

KIN 494 Advanced Topics- Guest Lecturer

HDFS 494 Transdisciplinary Obesity Prevention Research Sciences- Guest Lecturer

KIN 494 Psych of Sport Performance “Youth in Sport”- Guest Lecturer

KIN 494 Special Topics- Lifestyle, Obesity, and Cognition “Obesity and Physical Activity Effects on Childhood Cognitive Control”- Guest Lecturer

CHLH 101 “Obesity and Physical Activity Effects on Childhood Cognitive Control”- Guest Lecturer

HDFS 494 “Transdisciplinary Obesity Prevention Research Sciences: Brain Health”- Guest Lecturer

Doctoral Dissertation Committee Member

Nicole E. Logan

Dissertation Proposal: “The Differential Relationships of Obesity and Excess Adiposity in Understanding the Associations between Physical Activity and Cognitive and Brain Function in Preadolescent Children”

Northeastern University, College of Science Department of Psychology

Mireia Felez Nobrega,

Doctorate of Philosophy Degree

Universitat de Vic. Conferred 2017

Student Mentorship

PhD

Trevor Cline, Northeastern University

Emma Tinney, Northeastern University

Mark Nwakamma, Northeastern University

Katherine McDonald, Northeastern University

Nicole Logan, Northeastern University

Tatsuya Theodore Shigeta, Northeastern University

Daniel Westfall, Northeastern University

Doctor of Physical Therapy

Julia Carzo, Jun Hasegawa, Niyati Parikh, Anmol Patel

Graduate Capstone project 2023

Early Life Factors Related to Later Childhood Health

Madison Doherty, Kelly Poon, Kristin Sakoda, Angela Tzen

Graduate Capstone project 2022

The Influence of BMI and Fitness on IQ

Tyler Axelson, Hannah Donnelly, and Johnathan L’Hommedieu

Graduate Capstone project 2021

Northeastern University RISE (Research Innovation Scholarship Entrepreneurship)

Virtual Poster (April, 2021): The relationship of B-vitamins and executive function in children

Kyle Curtis, Andrew Kaplan, Gwen Wilbert, Amy Haggerty

Graduate Capstone project 2020

Northeastern University RISE (Research Innovation Scholarship Entrepreneurship)

Virtual Poster (April 9, 2020): The Role of BMI on Cognition Following Acute Physical Activity in Preadolescent Children

Nikki M. Takemori and Nicole M. Kui

Graduate Capstone project 2019

Northeastern RISE (Research Innovation Scholarship Entrepreneurship)
Poster (April 4, 2019): Impact of the FITKids Intervention on Body Composition in Preadolescent Children

Masters

Trevor L. Cline

The Effects of Moderate-Intensity Walking on Functional Connectivity in Preadolescent Children

Emma Tinney

The Relationship Between Health Factors and White Matter in Mild Cognitive Impairment

Sasha McCorkle, University of Illinois

Master of Public Health

Allie Hill (2023): Practicum and Capstone advisor

Olivia Kostas (2023): Practicum and Capstone advisor

Undergraduate Projects

Abigail Padilla: Senior Capstone project, Health Sciences 2021-2022

Northeastern University

ClassVR: The Effects of Acute Aerobic Exercise on Learning in a Virtual Classroom

Rebecca Shorin: Senior Capstone project, Health Sciences 2019

Northeastern University RISE (Research Innovation Scholarship

Entrepreneurship) Poster (April 4, 2019): The Effect of FITKids Intervention on Fitness and Adiposity in Overweight and Obese Children

Olivia Rowe: Honors Thesis project, Department of Psychology 2019

The Effect of Acute, Moderate-Intensity Exercise on Creative Thinking in Children of Varying Body Mass Percentiles

Undergraduate Research Assistants

2023: Luke Sodemann, Naomi Rajput, Natalia Negron-Morales, Grace Gravini, Gianna Meurer, Sofia Murray, Jose Luigi Bengco

2022: Eva Miklos, Ivy Cao, Abigail Padilla, Corvens Depaliste, Kristin Sakoda, Luke Sodemann, Ethan Makarewycz, Kaitlyn Meek, Michael Quinn, Abielle De Veaux, Naomi Rajput, Natalia Negron-Morales, Grace Gravini, Gianna Meurer, Sofia Murray

2021: Ysabeau Bernard-Willis, Michelle Lim, Ethan Makarewycz, Alessandra Marinaro, Sofia Mazuera, Nicole Occidental, Abigail Padilla, Michael Quinn, Kristin Sakoda, Chenelle Jones, Jose Agudelo Cuartas, Shannon Ali, Meghana Annambhotla, Corvens Depaliste, Lasya Dutta, Niki Janzer, Karol Lillianfeld, Rachel Lines, Kaitlyn Meek, Maggie Mwangi, Tanu Padma, Ashley Phan, Alisa Posner, Josephine Robb, Kyle Robertson, Kamyab Salehi-Pirouz, Nikita Seth, Zachary Smith, Ryan Sodemann, Aaron Strong, Rebecca Templeton, Arjun Valay

2020: Ysabeau Bernard-Willis, Michelle Lim, Ethan Makarewycz, Alessandra Marinaro, Abigail Padilla, Michael Quinn

2019: Julia Bertsch, Sarah Binder, Michelle Lim, Ally Marinaro, Michael Quinn, Marika Van Dusen, Daniella Dalsheim, Rahul Suryadevara, Stephannie Adorno-Martinez, Whinter Collin, Christopher Han, Umin Jalloh, Victoria Mukerjee, Nicole Occidental, Kali Pereira, Tony Perniciaro, Alisa Posner

2018: Anthony Beetem, Caroline Bennett, Sarah Binder, Rose Castle, Kay Chow, Annissa DeSilva, Kristen Gebhardt, Julianna Lebron Echandy, Jane Li, Noah Milman, Olivia Rowe, Rebecca Shorin, Rebecca Wallenstein, Gwen Wilbert, Zoe Zwerling

2017: Carla Arango, Jincheng B Chen, Annissa DeSilva, Julianna Lebron Echandy, Caroline Gallo, Kristen Gebhardt, Jane Jingchun Li, Lisa Ramdas, Olivia Rowe, Rebecca Shorin

2016: Hannah Hagan, Brandi Hertel, Camille Garcia, Maria Pacheco, Jack Soneson

2015: Cameron Fenton, Michael Johnson, Kyle McClatchey, Ray Urban, Adam Winter, Charlene Yeager

2014: Melody Chang, Matt Neufeld, Joey O'brien, Victoria Rodriquez

2013: Aashiv Bharij, Maren Dixon, Christian Jorns, Erin Lamb, Eric Silverman, Matt Sloan, Connor Snarskis, Vita Wu

2012: Kelly Brander, Karah Bush, Dustin Massel, Brian Saliba

Continuing Education

Racial Literacy Pop Up (Spring, 2021) offered by faculty from Northeastern University. Racial Literacy offered a space for honest dialogue about race and racism. This 1-credit pop-up covered developing racial literacy and refers to detecting, naming, opposing, and replacing racism. The course included five modules: Racial Literacy: Introduction and Reflections, History, Culture, Community and Policing, and Racial Transformation and Reflection.

Integrating Equity and Inclusion In Your Discipline (Fall, 2022) offered through Northeastern University CATLR. This was a 2-part webinar series. This interactive webinar covered inequities, racism, and/ or bias that professionals grapple with in research, academic, and teaching. We discussed and learned how to raise students' awareness of these issues using activities and assignments. In this two-part workshop series, these issues were explored in specific disciplines and lessons were created that closely integrated with course subject matter.

Navigating Early Career Funding Opportunities (Fall, 2022) offered through the NIH. This webinar provided an overview of opportunities for early-stage investigators, described how networking and mentorship can strengthen applications, and provided resources for individuals to become fully independent researchers.

Service

Administrative Services to the University

Northeastern University Department of Physical Therapy, Movement and Rehabilitation Sciences: Course Development for “Experimental Design and Applied Statistics” 2022.

Northeastern University Department of Physical Therapy, Movement and Rehabilitation Sciences Research Task Force: 2022 Research Report Development, Fall 2022.

Northeastern University Department of Medical Sciences Physician Assistant Program: Capstone Committee, Fall 2022.

Northeastern University School of Clinical and Rehabilitation Sciences Research Mission Task Force, member 2021, Spring 2022.

Northeastern University College of Science Compliance Liaison for the Center for Cognitive and Brain Health, safety courier 2020-2021.

Northeastern University Department of Physical Therapy, Movement and Rehabilitation Sciences: Master’s Course Development for “Applications of Biomechanics in Human Function and Movement” 2020.

Northeastern University Biomedical Imaging Center Search committee member for an MR Technologist position at the Interdisciplinary Science and Engineering Complex (2018).

University of Illinois Urbana- Champaign Graduate student representative on a search committee for an open rank tenure track faculty search in Epidemiology for the MPH program (2012).

Services to the University Students Beyond the Classroom

Northeastern University NEURONS Club guest lecturer during Brain Awareness Week. Presentation Title: Neurocognitive Consequences of Obesity: Interventions to Promote Children’s Brain Health (March, 2022).

Northeastern University AMSA: member of the Research Panel; presented an overview of the research being done at the Center for Cognitive and Brain Health (October, 2022).

Ad Hoc Journal Reviews

Applied Cognitive Psychology

Brain Sciences

Clinical Epidemiology and Global Health

Cognition

Frontiers in Behavioral Neuroscience

Frontiers in Psychology

International Journal for Environmental Research and Public Health

Journal of Clinical Medicine

Journal of Cognitive Enhancement

Journal of Nutritional Biochemistry

Journal of Pediatrics

Medicine & Science in Sports & Exercise

Neuroscience and Biobehavioral Reviews

Neuroscience Letters

Pediatric Exercise Science

Physiological Reports

Psychology of Sport & Exercise

Research Quarterly for Exercise and Sport

SAGE Open

Scientific Reports

The Journal of Pediatrics