

CURRICULUM VITAE

Brandon L. Alderman, Ph.D.

Associate Professor

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PROFESSIONAL EXPERIENCE

August 2016 – present

Associate Professor

Department of Kinesiology and Health

Director of the Exercise Psychophysiology Laboratory

Rutgers University

August 2009 – July 2016

Assistant Professor

Department of Kinesiology and Health (formerly Exercise
Science and Sport Studies)

Rutgers University

August 2005 – May 2009

Assistant Professor

Division of Kinesiology and Health, University of Wyoming

August 2004 – May 2005

Assistant Professor

Department of Psychology, University of Minnesota Duluth

EDUCATION

2004

Doctor of Philosophy in Interdisciplinary Exercise Science

Department of Kinesiology

Arizona State University

2000

Master of Science in Kinesiology

Department of Kinesiology and Health

University of Wyoming

1997/1998

Bachelor of Science in Biology; Bachelor of Arts in Secondary
Science Education

University of Wyoming

RESEARCH AND SCHOLARSHIP

My primary research focus involves the role of exercise in promoting physiological, neurocognitive, and psychological resilience. My lab uses advanced psychophysiological techniques including electroencephalography and impedance cardiography to better understand acute and chronic adaptations to exercise, and how knowledge of these adaptations can be applied to intervention

development. This work is helping to elucidate mechanisms underlying the effects of exercise on mental health states (e.g., depression, anxiety, and cognitive function).

RESEARCH SUPPORT

Funded

<i>Title and Source</i>	<i>Period</i>
The Charles and Johanna Busch Memorial Fund Rutgers, The State University of New Jersey Busch Biomedical Grant (\$40,000.) Role: Co-I (PI Samantha Farris) <i>Reducing Fear of Body Sensations and Exercise Avoidance in Cardiac Rehabilitation</i>	2018-2020
Rutgers NJ Institute for Food Nutrition and Health One Nutrition Grant Program Intramural Pilot Grant (\$20,000) Role: Co-PI (Co-PI Diane Radler) <i>T.H.E.B.E.S.T.: Target Health, Eat Better, End Sitting Time.</i>	2016-2018
Rutgers University Brain Health Institute BHI Seed Funding (\$40,000) Role: Co-PI (Co-PI Tracey Shors) <i>It's about time: Learning to recover from sexual trauma in the past.</i>	2017-2018
New Jersey Commission on Brain Injury Research (NJCBIR) CBIR14ERG020 (\$537,095.) Role: Co-I (PI: Jennifer Buckman) <i>Validating HRV as an objective clinical measure of TBI symptom severity and recovery to inform physicians' return-to-play decisions.</i>	2014-2017
National Institute on Alcohol Abuse and Alcoholism K24AA021778 (\$834,705.) Role: Co-I (PI: Marsha Bates) <i>The baroreflex mechanism: Translation to alcohol use disorder treatment and prognostic models.</i>	2013-2018
The Charles and Johanna Busch Memorial Fund Rutgers, The State University of New Jersey Busch Biomedical Grant (\$25,000.) Role: Co-PI (with Co-PI Edward Selby) <i>Mental and physical (MAP) training as treatment for depression</i>	2013-2015
University of Wyoming Faculty Grant-In-Aid University of Wyoming, Division of Kinesiology and Health Faculty Seed Grant (\$7,440.) Role: PI <i>Examining the dose-response effects of acute resistance exercise on psychophysiological responses to stress.</i>	2008-2009
University of Wyoming College of Health Sciences Faculty Seed Grant	2008

University of Wyoming, Division of Kinesiology and Health
Faculty Seed Grant **(\$5,000.)**

Role: PI

The effects of aerobic and resistance exercise training on cardiovascular reactivity to stress in sedentary normotensive men and women.

University of Wyoming College of Health Sciences Faculty Seed Grant

2008

University of Wyoming, Division of Kinesiology and Health

Faculty Seed Grant **(\$4,797.)**

Role: Co-PI (PI: Jayne M. Jenkins)

The impact of a teaching methodology course on university graduate assistant's teaching behaviors for the purpose of promoting group cohesion to enhance exercise cohesion.

PUBLICATIONS

Refereed Book and Monograph Chapters

1. **Alderman, B. L.**, Brush, C. J., & Bocchine, A. J. (2019). Depression treatment by exercise and physical activity. In D. Hackfort & R. J. Schinke (Eds.), *The Routledge international encyclopedia of sport and exercise psychology: Applied and practical measures (Volume 2)*.
2. **Alderman, B. L.**, Brush, C. J., & Ehmann, P. J. (2019). Effects of exercise on anxiety and stress-sensitive psychopathology. In M. Anshel (Ed.), *Handbook of Sport and Exercise Psychology: Volume 2* (pp. 345-361). Washington, DC: American Psychological Association.
3. **Alderman, B. L.**, & Olson, R. L. (2018). Prescribing exercise for mental health: Dose-response and exercise mode considerations. In M. Wegner and H. Budde (Eds.), *Exercise and Mental Health*. London: Taylor and Francis.
4. **Alderman, B. L.**, Bixby, W. R., & Olson, R. L. (2017). Using event-related potentials to assess neurocognitive impairment following sports-related concussions. In E. Hall and C. Ketcham (Eds.), *Concussion in Athletics: Assessment, Management, and Emerging Issues*. New York: NOVA Science Publishers.
5. Arent, S. M., & **Alderman, B. L.** (2013). Effects of resistance exercise on anxiety and depression. In J. Ciccolo and W. Kraemer (Eds.), *Resistance Training for the Prevention and Treatment of Chronic Disease*. London: Taylor and Francis.
6. **Alderman, B. L.** (2013). Individual response stereotypy. In G. Tenenbaum and R. Eklund (Eds.), *Encyclopedia of Sport Psychology*. London: Taylor and Francis.
7. Landers, D. M., & **Alderman, B. L.** (2007). Exercise relative to other treatments for reduction of anxiety and depression: Overcoming the principle of least effort. In T. Morris, P. Terry, & S. Gordon (Eds.), *Sport and exercise psychology: International perspectives* (pp. 83-93). Morgantown, WV: Fitness Information Technology.

Refereed Journal Articles (in print or accepted)

** Italicized names represent student authors

1. Brush, C. J., Bocchine, A. J., Olson, R. L., Ude, A. A., Dhillon, S. K., & **Alderman, B. L.** (2020). Does aerobic fitness moderate age-related cognitive slowing? Evidence from the P3 and lateralized readiness potentials. *International Journal of Psychophysiology*. <https://doi.org/10.1016/j.ijpsycho.2020.05.007>
2. *Brush, C. J., Foti, D., Bocchine, A. J., Muniz, K. M., Gooden, M. J., Spaeth, A., Miller, M. W., & Alderman, B. L.* (2020). Aerobic exercise enhances positive emotional reactivity in individuals with depressive symptoms: Evidence from neural responses to reward and emotional content. *Mental Health and Physical Activity*. <https://doi.org/10.1016/j.mhpa.2020.100339>
3. Xie, C., Alderman, B. L., Meng, F., Ai, J., & Chang, Y. K. (2020, *in press*). Acute high-intensity interval exercise improves inhibitory control among young adult males with obesity. *Frontiers in Psychology*.
4. Chang, Y. K., **Alderman, B. L.**, Chu, C. H., Hung, T. M., & Liu, J. H. (2020). Conducting exercise trials for obese adolescents within the effectiveness setting: A response with commentary to Ejima et al. (2019). *Psychology of Sport and Exercise*, *46*, 101605.
5. Conway, F., Domingues, M., Monaco, R., Lesnewich, L. M., Ray, A. E., **Alderman, B. L.**, & Buckman, J. F. (2020) Concussion symptom underreporting among incoming Division I college athletes. *Clinical Journal of Sports Medicine*, *30*, 203-209. doi: 10.1097/JSM.0000000000000557
6. *Brush, C. J., Olson, R. L., Ehmann, P. J., Bocchine, A. J., Bates, M. E., Buckman, J. F., ... Alderman, B. L.* (2019). Lower resting cardiac autonomic balance in young adults with current major depression. *Psychophysiology*, *56*(8), e13385. <https://doi.org/10.1111/psyp.13385>
7. *Lesnewich, L. M., Conway, F. N., Buckman, J. F., Brush, C. J., Ehmann, P. J., Eddie, D., Olson, R. L., Alderman, B. L., & Bates, M. E.* (2019). Associations of depression severity with heart rate and heart rate variability in young adults across normative and clinical populations. *International Journal of Psychophysiology*, *142*, 57-65. <https://doi.org/10.1016/j.ijpsycho.2019.06.005>
8. **Alderman, B. L.**, *Olson, R. L., & Brush, C. J.* (2019). Using event-related potentials to study the effects of chronic exercise on cognitive function. *International Journal of Sport and Exercise Psychology*. doi:10.1080/1612197X.2016.1223419.
9. Wang, C. C., **Alderman, B. L.**, Wu, C. H., Chi, L., Chen, S. R., Chu, I. H., & Chang, Y. K. (2019). Effects of acute aerobic and resistance exercise on cognitive function and salivary cortisol responses. *Journal of Sport and Exercise Psychology*, *41*, 73-81. <https://doi.org/10.1123/jsep.2018-0244>
10. *Brush, C. J., Ehmann, P. J., Hajcak, G., Selby, E. A., & Alderman, B. L.* (2018). Using multilevel modeling to examine blunted neural responses to reward in major depression. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, *3*, 1032-1039. <https://doi.org/10.1016/j.bpsc.2018.04.003>

11. Olson, R. L., Brush, C. J., Ehmann, P. J., Buckman, J. F., & Alderman, B. L. (2018). A history of sport-related concussion is associated with sustained deficits in conflict and error monitoring. *International Journal of Psychophysiology*, *132 (Part A)*, 145-154. <https://doi.org/10.1016/j.ijpsycho.2018.01.006>
12. Liu, J. H., Alderman, B. L., Song, T. F., Chen, F. T., Hung, T. M., & Chang, Y. K. (2018). A randomized controlled trial of coordination exercise on cognitive function in obese adolescents. *Psychology of Sport and Exercise*, *34*, 29-38. <https://doi.org/10.1016/j.psychsport.2017.09.003>
13. Brush, C. J., Ehmann, P. J., Olson, R. L., Bixby, W. R., & Alderman, B. L. (2018). Do sport-related concussions result in long-term cognitive impairment? A review of event-related potential research. *International Journal of Psychophysiology*, *132 (Part A)*, 124-134. doi:10.1016/j.ijpsycho.2017.10.006
14. Rieder, R., Wisniewski, P. J., Alderman, B. L., & Campbell, S. C. (2017). Microbes and mental health: A review. *Brain, Behavior, and Immunity*, *66*, 9-17. <http://dx.doi.org/10.1016/j.bbi.2017.01.016>
15. Olson, R. L., Brush, C. J., Ehmann, P. J., & Alderman, B. L. (2017). A randomized trial of aerobic exercise on cognitive control in major depression. *Clinical Neurophysiology*, *128*, 903-913. doi:10.1016/j.clinph.2017.01.023. [PMID: 28402866]
16. Ehmann, P. J., Brush, C. J., Olson, R. L., Bhatt, S. N., Banu, A. H., & Alderman, B. L. (2017). Active workstations do not impair executive function in young and middle-age adults. *Medicine & Science in Sports & Exercise*, *49*, 965-974. doi:10.1249/MSS.0000000000001189. [PMID: 28009785]
17. Shors, T. J., Millon, E. M., Chang, H. Y. M., Olson, R. L., & Alderman, B. L. (2017). Do sex differences in rumination explain sex differences in depression? *Journal of Neuroscience Research*, *95(1-2)*, 711-718.
18. Chang, Y. K., Alderman, B. L., Chu, C. H., Wang, C. C., Song, T. F., Chen, F. T. (2017). Acute exercise has a general facilitative effect on cognitive function: A combined ERP temporal dynamics and BDNF study. *Psychophysiology*, *54*, 289-300.
19. Brush, C. J., Olson, R. L., Ehmann, P. J., Osovsky, S., & Alderman, B. L. (2016). Dose-response and time-course effects of acute resistance exercise on executive function. *Journal of Sport & Exercise Psychology*, *38*, 396-408. doi:10.1123/jsep.2016-0027. [PMID: 27385719]
20. Alderman, B. L., Olson, R. L., Brush, C. J., & Shors, T. J. (2016). Mental and Physical (MAP) Training: Combining meditation and aerobic exercise reduces depression and rumination while enhancing synchronized brain activity. *Translational Psychiatry*, *6*, e726; doi: 10.1038/tp.2015.225. [PMCID: PMC4872427]
21. Olson, R. L., Chang, Y. K., Brush, C. J., Kwok, A. N., Gordon, V., & Alderman, B. L. (2015). Neurophysiological and behavioral correlates of cognitive control during low and moderate intensity exercise. *Neuroimage*, *131*, 171-180. doi: 10.1016/j.neuroimage.2015.10.011 [PMID: 26458515]

22. **Alderman, B. L.**, Olson, R. L., Bates, M. E., Selby, E. A., Buckman, J. F., Brush, C. J., Panza, E. A., Kranzler, A., Eddie, D., & Shors, T. J. (2015). Rumination in major depressive disorder is associated with impaired neural activation during conflict monitoring. *Frontiers in Human Neuroscience*, 9:269. doi:10.3389/fnhum.2015.00269. [PMCID: PMC4428129]
23. Chu, C. H., **Alderman, B. L.**, Wei, G. X., Chan, K. H., & Chang, Y. K. (2015). Effects of acute aerobic exercise on motor response inhibition: An ERP study using the stop-signal task. *Journal of Sport and Health Science*, 4, 73-81.
24. Olson, R. L., Brush, C. J., O'Sullivan, D.J, & **Alderman, B. L.** (2015). Psychophysiological and ergogenic effects of music in swimming. *Comparative Exercise Physiology*, 11, 79-87. doi:10.3920/CEP150003.
25. Shors, T. J., Olson, R. L., Bates, M. E., Selby, E. A., & **Alderman, B. L.** (2014). Mental and physical (MAP) training: A neurogenesis-inspired intervention that enhances health in humans. *Neurobiology of Learning and Memory*, 115, 3-9.
26. **Alderman, B. L.**, & Olson, R. L. (2014). The relation of aerobic fitness to cognitive control and heart rate variability: A neurovisceral integration study. *Biological Psychology*, 99, 26-33.
27. Henderson, G. C., & **Alderman, B. L.** (2014). Determinants of resting lipid oxidation in response to a prior bout of endurance exercise. *Journal of Applied Physiology*, 116, 95-103.
28. **Alderman, B. L.**, Olson, R. L., & Mattina, D. M. (2014). Cognitive function during low-intensity walking: A test of the treadmill work station. *Journal of Physical Activity and Health*, 11, 752-758.
29. **Alderman, B. L.**, Benham-Deal, T., Beighle, A., Erwin, H. E., & Olson, R. L. (2012). Physical education's contribution to daily physical activity among middle school youth. *Pediatric Exercise Science*, 24, 634-648.
30. Beighle, A., Erwin, H., Morgan, C. F., & **Alderman, B. L.** (2012). Children's in-school and out-of-school physical activity during two seasons. *Research Quarterly for Exercise and Sport*, 83, 103-107.
31. Jenkins, J. M., & **Alderman, B. L.** (2011). Influence of sport education on group cohesion in university physical education. *Journal of Teaching in Physical Education*, 30, 214-230.
32. Beets, M. W., Cardinal, B. J., & **Alderman, B. L.** (2010). Parental social support and the physical activity-related behaviors of youth: A review. *Health Education & Behavior*, 37, 621-644.
33. **Alderman, B. L.**, Benham-Deal, T. B., & Jenkins, J. M. (2010). Change in parental influence on children's physical activity over time. *Journal of Physical Activity and Health* 7, 60-67.
34. Beighle, A., **Alderman, B.**, Morgan, C. F., & Le Masurier, G. (2008). Seasonality in children's pedometer-measured physical activity levels. *Research Quarterly for Exercise and Sport*, 79, 256-260.

35. **Alderman, B. L.**, Arent, S. M., Landers, D. M., & Rogers, T. J. (2007). Aerobic exercise intensity and time of stressor administration influence cardiovascular responses to psychological stress. *Psychophysiology*, *44*, 759-766.
36. Arent, S. M., **Alderman, B. L.**, Short, E. J., & Landers, D. M. (2007). The impact of the testing environment on affective changes following acute resistance exercise. *Journal of Applied Sport Psychology*, *19*, 364-378.
37. **Alderman, B. L.**, Beighle, A., & Pangrazi, R. P. (2006). Enhancing motivation in physical education. *Journal of Physical Education, Recreation, and Dance*, *77*, 41-45, 51.
38. **Alderman, B. L.**, Landers, D. M., Carlson, J., & Scott, J. R. (2004). Factors related to rapid weight loss practices among international-style wrestlers. *Medicine and Science in Sports and Exercise*, *36*, 249-252. Abstract reprinted in R. Shephard (Ed., 2004), *Year Book of Sports Medicine*. Elsevier Publishing.
39. Rhea, M. R., & **Alderman, B. L.** (2004). A meta-analysis of periodized versus non-periodized strength and power training programs. *Research Quarterly for Exercise and Sport*, *75*, 413-422.
40. Urukawa, K. S., Landers, D. M., **Alderman, B. L.**, Rogers, T. J., & Arent, S. M. (2004). Effects of heading the ball and head injury on the cognitive functioning of soccer players. *International Journal of Soccer and Science*, *2*, 26-32.
41. Rogers, T. J., **Alderman, B. L.**, & Landers, D. M. (2003). Effects of life-event stress and hardiness on peripheral vision in a real-life stress situation. *Behavioral Medicine*, *29*, 21-26.

INVITED NATIONAL PRESENTATIONS

1. **Alderman, B. L.** (2018). Exercise as a transdiagnostic treatment in the era of RDoC. Invited presentation at the Department of Kinesiology and Community Health Seminar, University of Illinois at Urbana-Champaign.
2. **Alderman, B. L.** (2017). Integrating stress, cognition, and emotion in exercise interventions. Invited symposium presentation at the annual meeting of the American College of Sports Medicine, Denver, CO.
3. **Alderman, B. L.** (2017). Exercise as a stand-alone or combination treatment for cognitive control deficits in major depression. Invited symposium presentation at the annual meeting of the North American Society for the Psychology of Sport and Physical Activity. San Diego, CA.
4. **Alderman, B. L.** (2014). *Exercise enhances brain health: What about other sensorimotor-based interventions?* Invited presentation at the annual meeting of the American Psychological Association. Washington, DC.
5. **Alderman, B. L.**, & Landers, D. M. (2003). The relationship between exercise and enhancement of brain function and maze learning in animals. *Research Quarterly for Exercise and Sport*, *74* (1), A98. Invited symposium presentation at the annual meeting of the American Alliance for Health, Physical Education, Recreation and Dance. Philadelphia, PA.

PRESENTATIONS (Refereed and Invited to Scholarly and Professional Groups)

1. Brush, C. J. & **Alderman, B. L.** (2019, November). The effects of moderate-intensity aerobic exercise on reward sensitivity and emotional reactivity among women with depressive symptoms. Verbal presentation at the Annual Meeting of the *Association for Behavioral and Cognitive Therapies*, Atlanta, GA.
2. Brush, C. J., **Alderman, B. L.**, & Hajcak, G. (2019, September). Identifying optimal task length to elicit the largest between group effects in reward processing during a simple gambling task. Poster presentation at the Annual Meeting of *Society for Psychophysiological Research*, Washington, DC.
3. Brush, C. J., Foti, D., Miller, M. W., Bocchine, A. J., Muniz, K. M., Gooden, M. J., & **Alderman, B. L.** (2019, September). Acute aerobic exercise boosts emotional reactivity to pleasant images but does not impact reward processing. Poster presentation at the Annual Meeting of *Society for Psychophysiological Research*, Washington, DC.
4. Bocchine, A. J., Brush, C. J., Ude, A. A., Pappas, G., Muniz, K. M., & **Alderman, B. L.** (2019, June). Aerobic fitness moderates dynamic processing of negative emotional stimuli in depression. Verbal presentation at the Annual Meeting of *North American Society for Psychology of Sport and Physical Activity*, Baltimore, MD.
5. Ude, A. A., Pappas, G., Brush, C. J., Bocchine, A. J., Silverstein, S. M., Erickson, M. A., & **Alderman, B. L.** (2019, June). The moderating role of aerobic fitness on cognition in first-episode schizophrenia: Evidence from the P3 event-related potential. Poster presentation at the Annual Meeting of *North American Society for Psychology of Sport and Physical Activity*, Baltimore, MD.
6. **Alderman, B. L.**, Brush, C. J., & Ehmann, P. J. (2018). Influence of comorbid anxiety and depression on error-related brain activity. Poster presentation at the Annual Meeting of the *Society for Psychophysiological Research*, Quebec City, QC.
7. Brush, C. J., Ehmann, P. J., Hajcak, G., Selby, E. A., & **Alderman, B. L.** (2018). Using multilevel modeling to examine blunted neural responses to reward in major depression. Poster presentation at the Annual Meeting of the *Society for Psychophysiological Research*, Quebec City, QC.
8. Bocchine, A. J., Brush, C. J., Ehmann, P. J., & **Alderman, B. L.** (2018). Selective impairments in recognition memory among individuals with MDD. Poster presentation at the Annual Meeting of the *Society for Psychophysiological Research*, Quebec City, QC.
9. Ehmann, P. J., Brush, C. J., Bocchine, A. J., & **Alderman, B. L.** (2018). The reliability and convergent validity of the P3 cognitive ERP elicited by traditional flanker and oddball paradigms. Poster presentation at the Annual Meeting of the *Society for Psychophysiological Research*, Quebec City, QC.
10. Brush, C. J., Ehmann, P. J., Olson, R. L., Bocchine, A. J., & **Alderman, B. L.** (2018). Fitness as a moderator of the aging and cognition relationship: An ERP study. Verbal presentation at the Annual Meeting of the *North American Society for Psychology of Sport and Physical Activity*, Denver, CO.

11. *Muniz, K. M., Brush, C. J., Ehmann, P. J., Bocchine, A. J., & Alderman, B. L. (2018). Attentional focus manipulations on affective, exertional, and physiological responses to maximal exercise. Poster presentation at the Annual Meeting of the North American Society for Psychology of Sport and Physical Activity, Denver, CO.*
12. *Gooden, M. J., Muniz, K. M., Brush, C. J., Ehmann, P. J., Bocchine, A.J., & Alderman, B. L. (2018). The effects of acute exercise on reward processing during a monetary gambling task. Poster presentation at the Annual Meeting of the North American Society for Psychology of Sport and Physical Activity, Denver, CO.*
13. *Ehmann, P. J., Brush, C. J., Bocchine, A. J., & Alderman, B. L. (2018). Acute aerobic exercise improves emotion regulation: Evidence from the late positive potential. Verbal presentation at the Annual Meeting of the North American Society for Psychology of Sport and Physical Activity, Denver, CO.*
14. *Brush, C. J., Ehmann, P. J., & Alderman, B. L. (2018). Prediction of treatment response to exercise in adults with major depressive disorder. Poster presentation at the Annual Meeting of the Society of Behavioral Medicine, New Orleans, LA.*
15. *Radler, D. R., Griehs, R., Banu, A. H., Brush, C. J., Ehmann, P. J., & Alderman, B. L. (2018). Relationship between changes in weight, physical activity and executive function. Annals of Behavioral Medicine, 52, S93. Poster presentation at the Annual Meeting of the Society for Behavioral Medicine, New Orleans, LA.*
16. *Bocchine, A. J., Brush, C. J., Ehmann, P. J., & Alderman, B. L. (2017). Autonomic and behavioral responses to an emotional Stroop task in high and low anxious individuals. Poster presentation at the Annual Meeting of the Society for Psychophysiological Research, Vienna, Austria.*
17. *Brush, C. J., Ehmann, P. J., Olson, R. L., Bocchine, A. J., & Alderman, B. L. (2017). Characterizing treatment response to 8-weeks of aerobic exercise in major depressive disorder. Poster presentation at the Annual Meeting of the North American Society for Psychology of Sport and Physical Activity, San Diego, CA.*
18. *Ehmann, P. J., Brush, C. J., Olson, R. L., Bocchine, A. J., Bhatt, S. N., Banu, A. H., & Alderman, B. L. (2017). Age and task-specific moderators of the aerobic fitness and executive function relationship. Poster presentation at the Annual Meeting of the North American Society for Psychology of Sport and Physical Activity, San Diego, CA.*
19. **Alderman, B. L.** & Radler, D. R. (2017). Relationship between changes in weight, physical activity, and executive function among adults with overweight and obesity who participated in a 12-week diet and physical activity intervention. Paper presented at the *One Nutrition—One Health symposium*, Institute for Food, Nutrition, and Health, Rutgers University.
20. *Bocchine, A. J., Olson, R. L., Brush, C. J., Ehmann, P. J., & Alderman, B. L. (2017). Effects of an 8-week moderate-intensity aerobic exercise intervention on episodic memory and cognitive control. Poster presentation the Annual Meeting of the American College of Sports Medicine, Denver, CO.*

21. *Brush, C. J. & Alderman, B. L.* (2017). The relation of fitness and life stress on the temporal dynamics of cognition in older adults: Evidence from the P3 and lateralized readiness potentials. Paper presented at the annual meeting of the American College of Sports Medicine, Denver, CO.
22. *Ehmann, P. J. & Alderman, B. L.* (2017). Effects of exercise on neurocardiac responses to a sad mood induction in MDD. Paper presented at the annual meeting of the American College of Sports Medicine, Denver, CO.
23. *Alderman, B. L., Olson, R. L., Brush, C. J., Ehmann, P. J., & Shors, T. J.* (2016). Combining aerobic exercise and focused-attention meditation to target cognitive control processes in major depressive disorder. Paper presented at the Society for Psychophysiological Research, Minneapolis, MN.
24. *Brush, C. J., Olson, R. L., Ehmann, P. J., & Alderman, B. L.* (2016). Effects of an 8-week moderate-intensity aerobic exercise intervention on conflict monitoring processes in major depressive disorder. Poster presentation at the Society for Psychophysiological Research, Minneapolis, MN. Poster also presented at the second annual 2016 Rutgers Brain Health Institute Symposium, Branchburg, NJ.
25. *Ehmann, P. J., Brush, C. J., Olson, R. L., & Alderman, B. L.* (2016). Resting cardiac autonomic balance (CAB) predicts current major depressive disorder. Poster presentation at the Society for Psychophysiological Research, Minneapolis, MN.
26. *Brush, C. J., Olson, R. L., Ehmann, P. J., James-Palmer, A. J., Schreier, C. D., & Alderman, B. L.* (2016). Event-related potential indices of cognitive function in long-term yoga practitioners. Poster presentation at the Annual Meeting of the North American Society for the Psychology of Sport and Physical Activity, Montreal, QC.
27. *Olson, R. L., Brush, C. J., Ehmann, P. J., & Alderman, B. L.* (2016). Effects of an 8-week aerobic exercise intervention on ruminative thought patterns in major depressive disorder. Verbal presentation at the Annual Meeting of the American College of Sports Medicine, Boston, MA.
28. *Brush, C. J., Olson, R. L., Ehmann, P. J., & Alderman, B. L.* (2016). The influence of sport-related concussion on autonomic and cognitive function. Poster presentation at the Annual Meeting of the American College of Sports Medicine, Boston, MA.
29. *Ehmann, P. J., Olson, R. L., Brush, C. J., & Alderman, B. L.* (2016). Sexual dimorphic association between cardiorespiratory fitness and cardiac autonomic responses to mental challenge. Poster presentation at the Annual Meeting of the American College of Sports Medicine, Boston, MA.
30. *Banu, L. M., Buckman, J. F., Olson, R. L., Brush, C. J., Eddie, D., Peyser, D., Bates, M. E., Shors, T. J., & Alderman, B. L.* (2016). Relationships between alcohol use, depression, and neurocardiac functioning. Paper presented at the 4th annual Collaborative Perspectives on Addiction (CPA) meeting: Reducing health disparities through addiction science and practice. San Diego, CA.

31. Millon, E. M., **Alderman, B. L.**, Olson, R. L., Brush, C. J., & Shors, T. J. (2016). Mental and physical (MAP) training: A neurogenesis-inspired intervention that turns rumination into reflection. Poster presentation at the 2016 Anxiety and Depression (ADAA) Conference, Philadelphia, PA.
32. Olson, R. L., Brush, C. J., del Prado, K., & **Alderman, B. L.** (2015). Neural responses to food images in normal weight, overweight, and obese individuals. Paper presented at the annual meeting of the Society for Psychophysiological Research. Seattle, WA.
33. **Alderman, B. L.**, Olson, R. L., Brush, C. J., & Shors, T. J. (2015). Mental and physical (MAP) training as a neurobehavioral intervention for cognitive control and rumination in depression. Paper presented at the annual meeting of the Society for Psychophysiological Research. Seattle, WA.
34. Shors, T. J., Olson, R. L., Brush, C. J., & **Alderman, B. L.** (2015). Mental and physical (MAP) training: Combining meditation and aerobic exercise enhances synchronized brain responses during conflict monitoring. Paper presented at the annual meeting of the Mind & Life Institute. Garrison, NY.
35. **Alderman, B. L.**, Olson, R. L., Brush, C. J., & Shors, T. J. (2015). Effects of a combined mental and physical (MAP) training intervention on depressive symptoms, rumination, mindfulness, and aerobic fitness in major depressive disorder. *Journal of Sport & Exercise Psychology*, 37, S93-S154. Paper presented at the annual meeting of the North American Society for the Psychology of Sport and Physical Activity. Portland, OR.
36. Brush, C. J., Olson, R. L., Osovsky, S., & **Alderman, B. L.** (2015). Dose-response and time-course effects of acute resistance exercise on core executive functions. *Journal of Sport & Exercise Psychology*, 37, S93-S154. Paper presented at the annual meeting of the North American Society for the Psychology of Sport and Physical Activity. Portland, OR.
37. **Alderman, B. L.**, Olson, R. L., Selby, E. A., Bates, M. E., Buckman, J. F., & Shors, T. J. (2014). Rumination in major depressive disorder is associated with impairments in ERP correlates of inhibitory cognitive control. *Psychophysiology*, 51, S77. Paper presented at the annual meeting of the Society for Psychophysiological Research. Atlanta, GA.
38. Olson, R. L., Qian, L., Del Prado, K., & **Alderman, B. L.** (2014). Response monitoring and cognitive control in obesity. *Psychophysiology*, 51, S62. Paper presented at the annual meeting of the Society for Psychophysiological Research. Atlanta, GA.
39. Shors, T. J., Olson, R. L., Chang, M., Selby, E., Bates, M.E., & **Alderman, B. L.** (2014) Mental and physical (MAP) training: A neurogenesis-inspired intervention enhances health in homeless traumatized young mothers in the community. Program No. 773.01. 2014 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience. Online. Paper presented at the annual meeting of the Society for Neuroscience. Washington, DC.
40. Olson, R. L., Kwok, A. N., Gordon, V., & **Alderman, B. L.** (2014). Cognitive performance during acute cycling: Neuroelectric and dose-response effects. *Journal of Sport & Exercise Psychology*, 36, S79-S121. Paper presented at the annual meeting of the North American Society for the Psychology of Sport and Physical Activity. Minneapolis, MN.

41. **Alderman, B. L., Gralla, M. H., & Olson, R. L.** (2014). Relationships among physical fitness and physical activity to academic and cognitive performance in 6th graders. *Journal of Sport & Exercise Psychology*, 36, S79-S121. Paper presented at the annual meeting of the North American Society for the Psychology of Sport and Physical Activity. Minneapolis, MN.
42. **Alderman, B. L., Olson, R. L., Townsend, M. A., & Perucho, J. F.** (2014). Concussion history and years of high-risk sport participation on cognitive control. *Medicine & Science in Sports & Exercise*, 46, 5S. Paper presented at the annual meeting of the American College of Sports Medicine. Orlando, FL. Also presented at the Mid-Atlantic ACSM conference and published as *Brush, C. J., Olson, R. L., Townsend, M. A., Perucho, J. F., & Alderman, B. L.* (2014). Concussion history and years of high-risk sport participation on cognitive control. *International Journal of Exercise Science: Conference Proceedings*, 9(3), 14.
43. **Alderman, B. L.** (2014). Effects of mental and physical (MAP) training on cognitive control in major depressive disorder. Paper presented at the American Psychological Association, Collaborative Perspectives on Addiction, Atlanta, GA.
44. Selby, E. A., Bates, M. E., Eddie, D., **Alderman, B. L.**, Shors, T. J. (2014). *Bringing neuroscience into addiction treatment through behavioral interventions*. Paper presented at the American Psychological Association, Collaborative Perspectives on Addiction, Atlanta, GA.
45. Shors, T. J., Olson, R. L., Selby, E. A., Kranzler, A., Panza, E., Anderson, M., Loiselle, R., Tammineed, P., Eddie, D., Bates, M. E., & **Alderman, B. L.** (2013). *Mind does matter: Using mental and physical skill (MAP) training to enhance brain health and human happiness*. Paper presented at the annual meeting of the Mind & Life Institute.
46. Olson, R. L., & **Alderman, B. L.** (2013). The relationship between aerobic fitness and cognitive control: A heart rate variability study. *Medicine & Science in Sports & Exercise*, 45 (5), 5S. Paper presented at the annual meeting of the American College of Sports Medicine. Indianapolis, IN.
47. Mason, J. J., Gomez, M., & **Alderman, B. L.** (2013). Affective responses during and following maximal exercise: Effects of attentional association and dissociation. *Medicine & Science in Sports & Exercise*, 45 (5), 555. Paper presented at the annual meeting of the American College of Sports Medicine. Indianapolis, IN.
48. Gralla, M. H., & **Alderman, B. L.** (2013). Effects of physical education on cognition and total daily activity. *Research Quarterly for Exercise and Sport*, 84, S1. Paper presented at the annual meeting of the American Alliance for Health, Physical Education, Recreation, & Dance. Charlotte, NC.
49. **Alderman, B. L., Olson, R. L., & Mattina, D.** (2012). Effects of low-intensity walking on cognitive functioning. *Medicine & Science in Sports & Exercise*, 44, 5S. Paper presented at the annual meeting of the American College of Sports Medicine. San Francisco, CA.
50. **Alderman, B. L., Benham Deal, T. B., & Kittinger, J.** (2012). Adolescents' perception of parental and peer influence on physical activity. *Research Quarterly for Exercise and Sport*, 83,

- A73-A74. Paper presented at the annual meeting of the American Alliance for Health, Physical Education, Recreation, & Dance. Boston, MA.
51. *Delli Paoli, A. G., Olson, R. L., & Alderman, B. L.* (2011). Relationship among body image concerns, exercise motivation, and behavior: A self-determination perspective. *Journal of Sport & Exercise Psychology, 33*, S126-S200. Paper presented at the annual meeting of the North American Society for the Psychology of Sport and Physical Activity. Burlington, VT.
 52. **Alderman, B. L.**, Benham Deal, T., & *Olson, R.* (2011). Parental and peer influences on 5th and 6th graders physical activity. *Medicine & Science in Sports & Exercise, 43*, 327. Paper presented at the annual meeting of the American College of Sports Medicine. Denver, CO.
 53. **Alderman, B. L.**, & Arent, S. M. (2010). Dose-response effects of resistance exercise on cardiovascular responses to laboratory stressors. *Medicine & Science in Sports & Exercise, 42* (5), S409. Poster presented at the annual meeting of the American College of Sports Medicine. Baltimore, MD.
 54. **Alderman, B. L.**, & Benham-Deal, T. B. (2008). Parental influence on children's physical activity. *Medicine & Science in Sports & Exercise, 40* (5), S322. Poster presented at the annual meeting of the American College of Sports Medicine. Indianapolis, IN.
 55. *Pellegrino, J., Fishman, K., Epstein, M., Davitt, P., Alderman, B. L., & Arent, S. M.* (2008). Differential affective responses to acute hatha yoga and moderate intensity resistance training. *Medicine & Science in Sports & Exercise, 40* (5), S17. Paper presented at the annual meeting of the American College of Sports Medicine. Indianapolis, IN.
 56. Arent, S. M., *Shay, A., Pellegrino, J., Epstein, M. H., & Alderman, B. L.* (2008). *The relationship between anticipatory hormonal response, state anxiety, and performance in Division I college wrestlers.* Paper presented at the annual meeting of the National Strength and Conditioning Association. Las Vegas, NV.
 57. *Young, B. D., & Alderman, B. L.* (2007). State anxiety and blood pressure responses to resistance exercise of different intensities. *Medicine & Science in Sports & Exercise, 39* (5), S453. Poster presented at the annual meeting of the American College of Sports Medicine. New Orleans, LA.
 58. **Alderman, B. L.** (2006). Exercise and stress reactivity: Clarifying inconsistencies in the literature. *Psychophysiology, 43*, S8. Invited symposium presentation at the Forty-Sixth annual meeting of the Society for Psychophysiological Research. Vancouver, BC, Canada.
 59. Arent, S. M., *Legatt, J., Diver, T., Pellegrino, J., & Alderman, B. L.* (2006). State anxiety and biochemical responses to different resistance training intensities: The role of muscular failure. *Medicine & Science in Sports & Exercise, 38* (5), S342. Poster presented at the annual meeting of the American College of Sports Medicine. Denver, CO.
 60. **Alderman, B. L.**, Beighle, A., Morgan, C., & LeMasurier, G. (2006). Seasonal variation in children's objectively measured physical activity. *Research Quarterly for Exercise and Sport, 77* (1), A22-A23. Poster presented at the annual meeting of the American Alliance for Health, Physical Education, Recreation and Dance. Salt Lake City, UT.

61. **Alderman, B. L.**, Landers, D. M., & Arent, S. M. (2005). Parasympathetic rebound and time of stressor administration influence psychophysiological responses to stress. *Medicine & Science in Sports & Exercise*, 37 (5), S461. Paper presented at the annual meeting of the American College of Sports Medicine. Nashville, TN.
62. **Alderman, B. L.**, & Landers, D. M. (2004). The influence of cardiorespiratory fitness and hostility on psychophysiological stress reactivity. *Medicine & Science in Sports & Exercise*, 36 (5), S91. Paper presented at the annual meeting of the American College of Sports Medicine. Indianapolis, IN.
63. Rhea, M. R., & **Alderman, B. L.** (2003). *A meta-analysis of periodized and nonperiodized strength and power training programs*. Paper presented at the annual meeting of the National Strength and Conditioning Association. Indianapolis, IN.
64. Landers, D. M., **Alderman, B. L.**, & Rogers, T. J. (2003). School policy makers' views of the importance of physical education in the curriculum. *Research Quarterly for Exercise and Sport*, 74 (1), A22-A23. Invited presentation at the annual meeting of the American Alliance for Health, Physical Education, Recreation and Dance. Philadelphia, PA.
65. **Alderman, B. L.**, Rogers, T. J., Johnson, T. A., & Landers, D. M. (2003). A meta-analysis of exercise and stress reactivity. *Medicine & Science in Sports & Exercise*, 35 (5), S26. Poster presented at the annual meeting of the American College of Sports Medicine. San Francisco, CA.
66. **Alderman, B. L.**, Rogers, T. J., Johnson, T. A., & Landers, D. M. (February, 2003). Effects of exercise and fitness on stress reactivity: A meta-analytic review. Paper presented at the 4th annual Life, Earth, and Social Sciences Graduate Research Symposium, Arizona State University.
67. Rhea, M. R., & **Alderman, B. L.** (March, 2003). A meta-analysis of periodized and nonperiodized strength and power training programs. Poster presented at the annual Graduate Research Conference, Arizona State University East. Mesa, AZ.
68. **Alderman, B. L.**, Landers, D. M., Carlson, J., & Scott, J. R. (2002). Weight fluctuations at national wrestling tournaments: Effects by age, weight class, state, and success levels. *Medicine & Science in Sports & Exercise*, 34 (5), S193. Poster presented at the annual meeting of the American College of Sports Medicine. St. Louis, MO.
69. Rogers, T. J., **Alderman, B. L.**, & Landers, D. M. (2002). *Effects of life-event stress and hardiness on peripheral narrowing prior to competition*. Paper presented at the annual meeting of the North American Society for the Psychology of Sport and Physical Activity. Baltimore, MD.
70. Benham-Deal, T., & **Alderman, B. L.** (2001). Young children's physical activity: Does mother know best? *Medicine & Science in Sports & Exercise*, 33 (5), S145. Paper presented at the annual meeting of the American College of Sports Medicine. Baltimore, MD.

71. Deal, T. B., & Alderman, B. L. (2000). *The stability and tracking of young children's physical activity*. Paper presented at the annual meeting of the American College of Sports Medicine. Indianapolis, IN.

TEACHING

Undergraduate Courses Taught

- Exercise Psychophysiology (01:377:484, 3 cr., ~15-30 students); 100% responsibility. Fall semesters 2013-2018
- Exercise Psychology (01:377:455, 3 cr., 10 students); 100% responsibility. Summer semesters 2015-2017
- Research Methods in Exercise Science (01:377:480, 3 cr., ~10-15 students); Undergraduate Honors Seminar Director with 100% responsibility. Spring semesters, 2010-2018
- Independent Study in Exercise Science (01:377:362, 3 cr., ~10 students annually); 70% responsibility (shared mentorship with my doctoral students). Every semester, 2012-2017.
- Can Exercise Change Your Brain?, Byrne First Year Seminar (1 cr., 20 students); 100% responsibility. Spring semesters 2013-2017
- Exercise Testing and Prescription (01:377:410, 3 cr., ~80 students); 100% responsibility. Fall semesters 2010, 2011.
- Psychology of Sport and Exercise (01:377:301, 3 cr., ~15 students); 100% responsibility. Summer semester 2010.
- Exercise Testing and Prescription (01:377:410, 3 cr., ~100 students); 50% responsibility. Fall semester 2009.

Graduate Courses Taught

- Psychophysiology of Exercise (16:137:524, 3 cr., ~3-8 students); 100% responsibility. Fall semesters 2012, 2014-2017
- Research Methods in Exercise Science (16:572:505, 3 cr., ~5-10 students); 100% responsibility. Spring semesters 2013-2017

MENTORING AND ADVISING

Mentor/Supervisor

- | | |
|---------|---|
| Present | Anthony Bocchine, 3rd year Ph.D. student
Andrew Ude, 1st year Ph.D. student
Greg Pappas, 1st year Ph.D. student
Kelsey Piersol, 1st year Ph.D. student |
| 2019 | Christopher J. Brush, "Examining neural measures as treatment targets and predictors of change to exercise in depression." Ph.D., Department of Kinesiology and Health, Rutgers University; <i>Post-Doctoral Fellow, Department of Psychology, Florida State University</i> |
| 2016 | Ryan L. Olson, "Exercise as a neurobehavioral therapy for cognitive control deficits in major depressive disorder." Ph.D., Department of Nutritional Sciences, Rutgers University; <i>Assistant Professor, Department of Kinesiology, Health Promotion, and Recreation, University of North Texas</i> |

- 2009 Holly Schoch, "Aerobic fitness and cognitive functioning: A heart rate variability examination." M.S., Division of Kinesiology and Health, University of Wyoming.
- 2008 Bethany Young, "Examining aspects of motivation associated with exercise behaviors in older adults." M.S., Division of Kinesiology and Health, University of Wyoming.
- 2007 Anthony Schamber, "Coaches' beliefs regarding strategies for motivating athletes." M.S., Division of Kinesiology and Health, University of Wyoming. (Co-chair with Jayne Jenkins).

Committee Member

- 2018 Min-Jeong Yang, Ph.D. candidate, Department of Psychology (Chair, Teresa Leyro)
- 2017 Cheng Li, Ph.D. candidate, Department of Nutritional Sciences (Chair, Debra Keenan Palmer)
- 2015 Tianyi Yu, Ph.D., Department of Molecular Biology and Biochemistry (Chair, Monica Driscoll)
- 2014 Christopher Wyckoff, M.B.S., Department of Exercise Science & Sport Studies
- 2014 Christy Hullings, "A scale to assess perceived barriers to physical activity among low-income high school students in New Jersey." M.S., Department of Nutritional Sciences
- 2013 Gina DiFeo, comprehensive/qualifying exam, Department of Psychology
- 2012 Daniel Curlik, "Gym rats aren't as stupid as you think: Physical training increases cell survival in the hippocampus." Ph.D., Department of Psychology, Rutgers University. (Chair, Tracey Shors).
- 2011 Jill Kittinger, "The quality of perceived relationships between parents and peers on youth physical activity." M.S., Department of Kinesiology and Health, University of Wyoming. (Chair, Tami Benham-Deal).
- 2011 Alisha May, "Parental social support and youth physical activity." M.S., Department of Kinesiology and Health, University of Wyoming. (Chair, Tami Benham-Deal).
- 2009 Chase Kistler, M.S., Division of Kinesiology and Health, University of Wyoming.
- 2009 Matthew Stults-Kolehmainen, "Physiological and psychological recovery from muscle disruption following resistance exercise: The impact of chronic mental stress and strain." Ph.D., Department of Kinesiology and Health Education, University of Texas at Austin. (Chair, John Bartholomew).
- 2008 Alisa Dean, M.S., Division of Social Work, University of Wyoming. (Chair, Gail Leedy).
- 2008 Samantha Silbaugh, M.S., Division of Kinesiology and Health, University of Wyoming. (Chair, Gary Werhonic).
- 2007 Jimmy Balta, M. S., Division of Kinesiology and Health, University of Wyoming. (Chair, Tami Benham-Deal).
- 2007 Sonja Herman, M.S., Division of Kinesiology and Health, University of Wyoming. (Chair, Derek Smith).
- 2007 Joi Thomas, M.S., Division of Kinesiology and Health, University of Wyoming. (Chair, Mark Byra).
- 2007 Carl Christensen, M.S., Division of Kinesiology and Health, University of Wyoming. (Chair, Gary Werhonic).
- 2007 Timothy Jonart, M.S., Division of Kinesiology and Health, University of Wyoming. (Chair, Gary Werhonic).

UNDERGRADUATE STUDENT COMMITTEES

Supervisor – Undergraduate Honors Research Projects (Current position)

- 2018-Present Daniel Berkowitz, B.S. in Kinesiology, Honors project (in progress)
Krishna Desai, B.S. in Kinesiology, Honors project (in progress)
Moira McGevna, B.S. in Kinesiology, Honors project (in progress)
Kelly Annie Mercado, B.S. in Kinesiology, Honors project (in progress)
Aberra Naeem, B.S. in Kinesiology, Honors project (in progress)
Neil Patton, B.S. in Kinesiology, Honors project (in progress)
Vanessa Suntay, B.S. in Kinesiology, Honors project (in progress)
Allan Wong, B.S. in Kinesiology, Honors project (in progress)
- 2017-2018 Elizabeth Bowman, B.A. in Biological Sciences, Honors project (Medical Scribe)
Mauli Chothani, B.S. in Kinesiology, Honors project (D.P.T. student, Salus University)
Kevin Couch, B.S. in Kinesiology, Honors project (Graduate, Rutgers University)
Stefanie D'Arrigo, B.S. in Kinesiology, Honors project (M.D. student, Touro University)
Simrin Dhillon, B.S. in Kinesiology, Honors project (Graduate, Rutgers University)
Nicholas Dugan, B.S. in Kinesiology, Honors project (D.P.T. student, New York University)
Ebony Gilchrist, B.S. in Kinesiology, Honors project (Graduate, Rutgers University)
Matthew Gooden, B.S. in Kinesiology, Honors project (M.S. student, Tufts University)
Patrick Houry, B.S. in Kinesiology, Honors project (Graduate, Rutgers University)
Kristina Muniz, B.A. in Psychology, Honors project (Clinical Study Coordinator, Rutgers University)
- 2016 Andrea Banu, "Effects of exercise on neurocardiac responses to a sad mood induction in major depressive disorder."
- 2016 Ashley Fath, "Neurophysiological correlates of cognitive control during low-intensity cycling exercise."
- 2016 Kristen Teixeira, "Neural responses to emotional pictures following acute aerobic exercise."
- 2016 Rose Greenblatt, "The relationship between fitness and temporal dynamics of cognition in older adults using ERPs."
- 2016 Bella Bulsara, "Autonomic and behavioral responses to the emotional Stroop task in anxiety."
- 2016 Varsha Sarabudla, "Increased error-related brain activity in young adults with a history of sport-related concussion."
- 2016 Aneri Patel, "The effect of acute exercise on stress responses: A systematic review and meta-analysis."
- 2015 Grace Suttle, "The effects of an acute bout of aerobic exercise on reactivity to a sad mood induction."
- 2015 Taylor Mayweather, "Cardiorespiratory fitness and cognitive processing speed in older adults."
- 2015 Rebecca Noonan, "Physical activity, sedentary time, and executive function in middle-aged adults."
- 2015 Monika Jurgowska, "Aerobic fitness is associated with improved cognition in major depressive disorder."
- 2014 Albert Chang, "Fuel selection during low intensity walking." (M.D. student, St. George's University)

- 2014 Steven Osovsky, "Examining the dose-response relationship of resistance exercise on executive functions." (D.P.T. student, University of Delaware)
- 2014 Jamie McLean, "Cognitive function during low intensity walking in older adults: A treadmill workstation study." (D.P.T. student, Sacred Heart University)
- 2014 Aurora James-Palmer, "Neurocognitive benefits from long-term yoga practice." (D.P.T. student, Rutgers University-Newark)
- 2014 Alexis Cooper, "Concussion history and years of high-risk sport participation on cognitive control." (M.D. student, Thomas Jefferson University)
- 2014 Samantha Wong, "Does fitness moderate autonomic control in major depressive disorder?" (D.P.T. student, University of Delaware)
- 2014 Elana Rucker, "The effects of a treadmill workstation on select aspects of executive function." (D.P.T. student, Rutgers University-Stratford)
- 2014 Michael Noji, "The effect of exercise on the relationship between hose and gut microbial activities." (B.S. graduate, Rutgers University)
- 2014 Jenny Noel, "The time-course effects of acute resistance exercise on cognitive function." (B.S. graduate, Rutgers University)
- 2013 Christopher Brush, "Resistance exercise and cognitive function: Dose-response and time course effects." (Ph.D. student, Rutgers University)
- 2013 Valentina Gordon, "The neurophysiological and behavioral indices of cognitive control during cycling." (N.D. student, National College of Natural Medicine)
- 2013 Colleen Schreier, "Relations between aerobic fitness, trait anxiety, and cardiovascular responses to stress." (D.P.T. student, New York University)
- 2013 James Perucho, "The persistent neurocognitive effects of concussion severity among former athletes." (M.D. student, Rowan University)
- 2013 Roma Patel, "Neurocognitive function during acute exercise varies by exercise intensity." (M.P.H. student, Columbia University)
- 2013 Lisa Qian, "Response monitoring in obesity." (M.D. student, New York Medical College)
- 2013 Ricardo Couso, "Acute exercise and stress reactivity: A meta-analysis." (M.D. student, University of Pennsylvania)
- 2013 Megan O'Connell, "Attentional response to food images in relation to body mass index." (M.D. student, Rowan University)
- 2013 Aviv Alter, "The relationship between long-term yoga practice and neurocognitive function." (B.S. graduate, Rutgers University)
- 2013 Christian Pecoraro, "The effects of exercise on cognitive function: A meta-analytic review." (D.O. student, Rowan University)
- 2013 Darina Dinov, "Examining the effects of exercise and meditation on depressive symptoms." (Clinical Trials Assistant at Quintiles, San Diego, CA)
- 2013 Mariah Horvath, "The influence of binge drinking on athletic and cognitive performance." (M.M.S. student, Midwestern University (AZ))
- 2012 Ryan Lavell, "Neurocognitive and neurocardiac function in major depressive disorder." (B.S. graduate, Rutgers University)
- 2012 Rahed Mohammed, "The effect of mental and physical (MAP) training on depression and cognitive control." (M.D. student, Rowan University)
- 2012 Kathryn del Prado, "Neural responses to food images in lean, overweight, and obese individuals." (D.P.T. student, Columbia University)
- 2012 Kara Dods, "Neurophysiological correlates of attentional regulation in long-time yoga practitioners." (M.D./Ph.D. student, Virginia Commonwealth University)

- 2012 Janelle Liu, "Obesity and cognition: The relationship with impulsivity." (D.P.T. student, Rutgers University-Newark)
- 2012 Andrea Kwok, "Neuroelectric indices of cognitive control during cycling: Dose-response effects." (D.P.T. student, University of Delaware)
- 2012 Samuel Sperling, "The effects of a 8-week mental and physical training intervention on depressive symptoms in MDD" (M.S.W. student, University of Pennsylvania)
- 2012 Maggie Townsend, "The impact of concussion and at-risk sport participation on neurocognitive function." (D.P.T. student, Rutgers University-Stratford)
- 2012 Priyanka Gianchandani, "Disruptions in autonomic function in major depressive disorder"(M.S. graduate, Rowan University)
- 2011 Samuel Paul, "The relation of aerobic fitness to cognitive function and heart rate variability" (M.D. student, University of California-San Diego)
- 2011 Marcus Hughes, "The association between daily physical activity and academic performance in children" (M.D. student, Rutgers New Jersey Medical School)
- 2011 Kieran Hunt, "Aerobic fitness and attention regulation in long-term yoga practitioners" (B.S. graduate, Rutgers University)
- 2011 Brendan Glackin, "EEG asymmetry in major depressive disorder" (D.P.T. student, University of Maryland)
- 2011 Walter Fortson, "Exploring the association between positive affect and exercise in women with Anorexia" (M.Phil. graduate, University of Cambridge, UK) **2012 Truman Scholar**
- 2011 Nick Maroldi, "Cardiovascular and autonomic responses to stress: Influence of fitness." (D.P.T. graduate, Columbia University)
- 2011 Mustafa Jafri, "Behavioral and cardiovascular responses during cognitive testing: Effects of aerobic fitness." (D.O. student, Rowan University)
- 2011 Jshade Evans, "The role of motivational style, life stress, and HRV in predicting overtraining." (D.P.T. student, University of Delaware)
- 2011 Morgan Gralla, "The contribution of physical education to daily physical activity and cognition." (M.S. graduate, University of South Carolina) **voted best undergraduate research project, American Alliance for Health, Physical Education, Recreation and Dance, 2012.**
- 2011 Geoffrey Casimir, "Neurocardiac alterations in depression: The influence of mental and physical training." (M.D. student, Vanderbilt University)
- 2010 Anthony Delli Paoli, "Relationship between body image concerns, exercise motivation, and behavior: A self-determination perspective." (Ph.D. student, Michigan State University)
- 2010 James Sacca, "Cognitive function during low intensity walking: A test of the treadmill work station." (M.D. student, Rutgers New Jersey Medical School)
- 2010 Mary Anne Royal, "Aging, fitness, and telomere length." (Senior Lab Technician, Rutgers University-DLS)
- 2010 Patrick Dolan, "Aerobic fitness and cardiovascular reactivity and recovery to psychological stressors: A meta-analysis." (Personal Trainer, NJ)
- 2010 Arielle Saltzman, "Validating objective physical activity monitors within a physical education setting." (M.P.E., Montclair State University)
- 2010 Daniel O'Sullivan, "Effects of music on performance and perceived exertion among recreational swimmers." (M.D. student, University of Virginia)
- 2010 Diana Mattina, "Cognitive function during low intensity walking: A test of the treadmill work station." (D.P.T. graduate, University of Medicine and Dentistry of New Jersey)

- 2010 Joseph Mason, "Effects of attentional association and dissociation on affective responses to aerobic exercise." (M.B.S. graduate, Rutgers University)
- 2010 Laura Freneaux, "The effects of acute exercise on cardiovascular stress responses: A meta-analytic review." (D.P.T. student, University of Medicine and Dentistry of New Jersey)
- 2010 Matthew Varca, "The influence of resistance exercise at different intensities on affective responses."
- 2008 Maria Long, "Parental influence on youth physical activity: Comparing parent-child perceived competencies and participation motives." NSF EPSCoR Research Fellowship
- 2007 Alisa Harnish, "The effects of physiological arousal and cognitive anxiety on performance: Revisiting the Inverted-U Hypothesis." McNair Scholars Summer Research Program
- 2007 Karen Cody, *Parental influence on youth physical activity*. NSF EPSCoR Summer Research Fellowship. *Relationships between parent and child physical activity*. NSF EPSCoR Summer Research Fellowship.

Member

- 2014 Michael Noji, "The effect of exercise on the relationship between host and gut microbial activities", (B.S. graduate, Rutgers University)

SERVICE

PUBLIC AND PROFESSIONAL COMMUNITY SERVICE

Public Engagement

Integrating Scientific Findings into the Lives of University Students and Local Communities. Dr. Alderman and Dr. Shors (co-investigators on the MAP project) have organized a program on campus to engage university students in neuroscientific research on brain function and cognitive health. Students are educated about the scientific rationale for the mental and physical skill (MAP) training on brain function (i.e., increasing cell production through physical exercise and neuronal survival through mental training, Curlik and Shors, 2013). Students participate in the MAP training program twice a week for 8 weeks. This program is interdisciplinary, involving numerous departments, academic and athletic organizations. It is currently being offered to about 20-30 students a semester, but we plan to offer it to many more with funding, as well as offering it to members of the local community. The program was recently featured online in a video presentation (<http://www.youtube.com/watch?v=Iw1JtDWts4Y>).

National Professional Service

Psychology of Sport and Exercise, Associate Editor, 2017-present; Editorial Board member, 2014-present

Journal of Sport and Exercise Psychology, Editorial Board member, 2015-present

Annals of Behavioral Medicine, Editorial Board member, 2013-present

American College of Sports Medicine, member, 2001-present

American Alliance for Health, Physical Education, Recreation, and Dance, member, 2005, 2011

North American Society for the Psychology of Sport and Physical Activity, member, 2005-2008, 2011-present

Society for Neuroscience, member, 2004, 2012

Society for Psychophysiological Research (SPR), member, 2008, 2012-present

Reviewer for the non-Fellow authored/sponsored abstracts for the 2018 American College of Sports Medicine Annual Meeting, World Congress on Exercise is Medicine and World Congress on the Basic Science of Muscle Hypertrophy and Atrophy.

Ad-Hoc Peer Reviewer

Pediatrics, 2016

Pediatric Exercise Science, 2016

Journal of Strength & Conditioning Research, 2015

Frontiers in Psychology, 2014

Developmental Science, 2014

PLoS ONE, 2013-2015

Neuropsychologia, 2013-2015

Psychophysiology, 2007, 2014-2015

Brain Research Reviews, 2007

Journal of Behavioral Medicine, 2008, 2012-2015

Journal of Aging and Physical Activity, 2007, 2012-2014

Psychology of Sport & Exercise, 2013-2015

Biological Psychology, 2007, 2014

Journal of Sport and Exercise Psychology, 2006-2015

Sports Medicine, 2012, 2014

Journal of Physical Activity and Health, 2012

Research Quarterly for Exercise and Sport, 2007, 2013-2014

Preventive Medicine, 2010-2015

American Journal of Preventive Medicine, 2010, 2011, 2015

Journal of Sports Sciences, 2008, 2012, 2014

Comparative Exercise Physiology, 2010-2014

Sport, Exercise, and Performance Psychology, 2012-2014

Journal of Teaching in Physical Education, 2012

International Journal of Environmental Research and Public Health, 2011, 2013

Journal of Food and Nutritional Disorders, 2013

Services to the University

Department of Kinesiology and Health

Vice Chair, 2016-present

Chairperson:

- Graduate Program Coordinator, Kinesiology and Applied Physiology M.B.S. graduate program, 2011-present (appointed)
- Director, Department of Kinesiology and Health Undergraduate Honors research program, 2009-present