
◇ **Kevin Scott Heffernan, Ph.D. FACSM** ◇

CURRENT ACADEMIC AFFILIATION

Syracuse University (2011-)

Dean's Associate Professor
Department of Exercise Science
Director Human Performance Laboratory
Graduate Program Coordinator
ksheffer@syr.edu

EDUCATION AND TRAINING



Tufts Medical Center (2008-2011)

- ▶ Post-Doctoral Research Fellow (NIH T32)
- ▶ Division of Cardiology
- ▶ Molecular Cardiology Research Institute



Jean Mayer USDA Human Nutrition Research Center on Aging (2009-2011)

- ▶ Adjunct Research Scientist



University of Illinois at Urbana-Champaign (2004-2008)

- ▶ Ph.D. Kinesiology/Exercise Physiology



Teachers College, Columbia University (2001-2003)

- ▶ M.S. Applied Physiology and Nutrition - May 2003



University of Scranton (1997-2001)

- ▶ B.S. Exercise Science - May 2001

RESEARCH IMPACT

- h-Index = 32 (Scopus/Experts.syr.edu)
- h-Index = 43 (Google Scholar)
- i10-Index = 122 (Google Scholar)

CURRENT TEACHING RESPONSIBILITIES

PPE 295 – Introduction to Exercise Science

PPE 606 – Current Literature in Exercise & Sports Science

PPE 518 – Cardiac Rehabilitation

PPE 753 – Advanced Cardiovascular Exercise Physiology

SUMMER TEACHING (2016-)

PTSD and Stress Physiology – Undergraduate Student Veteran Research Training Program

Impact factors (range 1.4 – 25.2) † Indicates papers co-authored with Syracuse University Students

1. **Heffernan KS**, Stoner L, Meyer M, Loprinzi PD. Association between Estimated Pulse Wave Velocity and Cognitive Performance in Older Black and White Adults in NHANES. *Journal of Alzheimer's Disease*, In Press.
2. Jae SY, **Heffernan KS**, Kim HJ, Kunutsor SK, Fernhall B, Kurl S, Laukkanen JA. Impact of estimated pulse wave velocity and socioeconomic status on the risk of stroke in men: a prospective cohort study. *Journal of Hypertension*, 40(6): 1165-1169, 2022.
3. **Heffernan KS**, Stoner L, Stone K, Pagan-Lasalle P, Fryer S, Faulkner J, Meyer ML, Kucharska-Newton A, Zieff G, Paterson C, Matsushita K, Hughes TM, Tanaka H. Associations of estimated and measured carotid-femoral pulse wave velocity in older Black and White adults: findings from the Atherosclerosis Risk in Communities (ARIC) study. *Journal of Cardiovascular Aging*, 2(7) 2022.
4. Jae SY, Lee KY, Kim HJ, Kunutsor SK, **Heffernan KS**, Climie RE, Bunsawat K, Kang M. Separate and Joint Associations of Cardiorespiratory Fitness and Healthy Vascular Aging with Subclinical Atherosclerosis in Men. *Hypertension*, 79(7): 1445-1454, 2022.
5. Cilhoro B, Receno C, **Heffernan KS**, and DeRuisse L. Cardiovascular physiology and pathophysiology in Down Syndrome. *Physiology Research*, 71(1): 1-16, 2022.
6. Stone K, Fryer S, Faulkner J, Meyer ML, **Heffernan K**, Kucharska-Newton A, Zieff G, Paterson C, Matsushita K, Hughes TM, Tanaka H, Stoner L. Associations of lower-limb atherosclerosis and arteriosclerosis with cardiovascular risk factors and disease in older adults: The Atherosclerosis Risk in Communities (ARIC) study. *Atherosclerosis*, 340: 53-60, 2022.
7. Augustine JA, Lefferts WK, DeBlois JP, Barreria TV, Taylor BA, Liu K, **Heffernan KS**. Sex differences in cardiovascular adaptations in recreational marathon runners. *European Journal of Applied Physiology*, 121(12): 3459-3472, 2021.
8. Charry D, Richardson M, Xu J, **Heffernan KS**, Tanaka H, Churilla J. Total brachial artery reactivity and incident heart failure and heart failure sub-types: multi-ethnic study of atherosclerosis, *Heart and Vessels*, 37(3): 411-418, 2022.
9. Pagan Lasalle P, DeBlois J, Keller A, Stoner L, **Heffernan KS**. Central blood pressure and subclinical atherosclerotic risk in young Hispanic Women. *Ethnicity & Disease*, 31(4): 489-500, 2021.
10. Stone K, Fryer S, Faulkner J, Meyer ML, **Heffernan K**, Kucharska-Newton A, Zieff G, Paterson C, Stoner L. The aortic-femoral arterial stiffness gradient demonstrates good between-day reliability, *Hypertension Research*, 44(12): 1686-1688, 2021.
11. Jae SY, Kim HJ, Lee KH, Kunutsor SK, **Heffernan KS**, Choi YH, Kang M. Joint associations of obesity and cardiorespiratory fitness with coronary artery calcium composition: evidence for fat but fit? *Journal of Cardiopulmonary Rehabilitation*, 42(3): 202-207, 2022.
12. **Heffernan KS** and Loprinzi P. The Fitness-Fatness Index is inversely associated with vascular aging in U.S. adults: Findings from NHANES. *Korean Journal of Sports Medicine*, 39:95-101, 2021.
13. Stone K, Fryer S, Faulkner J, Meyer ML, **Heffernan K**, Kucharska-Newton A, Zieff G, Paterson C, Matsushita K, Hughes TM, Tanaka H, Stoner L. The aortic-femoral arterial stiffness gradient is

- blood pressure independent in older adults: the atherosclerosis risk in communities (ARIC) study. *Journal of Hypertension*, 39(12): 2361-2369, 2021.
14. Cook MD, Ling C, Grimm H, Adeyemo A, Aldokhayyil M, **Heffernan KS**, Fernhall B and Brown M. Primary African American endothelial cells exhibit endothelial dysfunction with an exacerbated inflammatory profile and blunted MMP-2 activity. *Artery Research*. 27 (1): 38-46, 2021.
 15. Gump B, **Heffernan KS**, MacKenzie J, Park A, Bendinskas K, Brann L, Atallah-Yunes N. Association of Sleep Quality with Left Ventricular Mass in 9-11 Year Old Children, *Psychosomatic Medicine*, 83(3): 265-273, 2021.
 16. Lima N, Hema K, Gerber B, **Heffernan KS**, Gump B, Lefferts WK. Physical activity is associated with lower pulsatile stress but not carotid artery stiffness in children. *Journal of Human Hypertension*, 36(3): 263-270, 2022.
 17. Jae SY, **Heffernan KS**, Kurl S, Kunutsor SK, Franklin BA, Savonen K, Laukkanen JA. Chronotropic incompetence and risk of stroke. *American Journal of Cardiology*, 143:46-50, 2021.
 18. †Hill DT, Petroni M, Larsen DA, Bendinskas K, **Heffernan KS**, Atallah-Yunes N, Parsons PJ, Palmer CD, MacKenzie JA, Collins MB, Gump BB. Linking metal (Pb, Hg, Cd) industrial air pollution risk to blood metal levels and cardiovascular functioning and structure among children in Syracuse, NY, *Environmental Research*, 193: 110557, 2021.
 19. Jae SY, Kunutsor SK, **Heffernan KS**, Kurl S, Laukkanen JA. Cardiorespiratory Fitness, Inflammation, and the Incident Risk of Pneumonia, *Journal of Cardiopulmonary Rehabilitation and Prevention*, 41(3): 199-201, 2021.
 20. Jae SY, **Heffernan KS**, Kurl S, Kunutsor SK, Laukkanen JA. Association between estimated pulse wave velocity and the risk of heart failure in middle-aged men, *Journal of Cardiac Failure*, S1071-9164(20): 31518-9, 2021.
 21. **Heffernan KS**, Jae SY, Loprinzi PD. Estimated pulse wave velocity is associated with residual-specific mortality: Findings from NHANES, *Journal of Hypertension*, In Press.
 22. **Heffernan KS**, Ranadive SR, Jae SY. Exercise as Medicine for COVID-19: on PPAR with emerging pharmacotherapy, *Medical Hypotheses*, In Press.
 23. †Lefferts WK, DeBlois J, Keller A, **Heffernan KS**. Age, sex, and the vascular contributors to cerebral pulsatility and pulsatile dampening. *Journal of Applied Physiology*, 129(5): 1092-1101, 2020.
 24. †DeBlois J, Lefferts W, **Heffernan KS**. Influence of sprint exercise on aortic pulse wave velocity and femoral shear patterns, *European Journal of Applied Physiology*, 120(12): 2635-2647, 2020.
 25. †Holmstrup M, Jensen B, Glasgow A, **Heffernan KS**. Sex differences in the association between PTSD symptoms with cardiac autonomic function and subclinical atherosclerotic risk, *Clinical Physiology and Functional Imaging*, 40(6): 390-398, 2020.
 26. Jae SY, **Heffernan KS**, Kurl S, Kunutsor SK, Laukkanen JA. Association between estimated pulse wave velocity and the risk of stroke in middle-aged men, *International Journal of Stroke*, In Press.
 27. †Karabinus J, DeBlois J, Keller A, Glasgow A, **Heffernan KS**. The Inverse Association of Muscular Strength with Carotid Extra-Media Thickness in Women, *International Journal of Sports Medicine*, In Press.

28. Jae SY, Kurl S, Kunutsor SK, **Heffernan KS**, Park JB, Laukkanen JA. Association between pulse pressure and the risk of sudden cardiac death in middle-aged men: A 26-year follow-up population-based study, *Mayo Clinic Proceedings*, 95(9): 2044-2046, 2020.
29. **Heffernan KS**, Michos E, Gump B. COVID-19 and cardiac injury: a cytokine storm approaches, *Journal of the American Medical Association (JAMA) Cardiology*, In Press.
30. **Heffernan KS**, Jae SY. Exercise as Medicine for COVID-19: An ACE in the hole, *Medical Hypotheses*, in Press.
31. Jae SY, **Heffernan KS**, Kurl S, Kunutsor SK, Park JB, Laukkanen JA. Association between estimated pulse wave velocity and the risk of cardiovascular events, *European Journal of Preventive Cardiology*, In Press.
32. **Heffernan KS**, Jae SY, Loprinzi PD. Association Between Estimated Pulse Wave Velocity and Mortality in U.S. Adults: A Prospective Cohort Study, *Journal of the American College of Cardiology (JACC)*, 75(15):1862-1864, 2020.
33. † **Heffernan KS**, Lefferts W. Glasgow A, Atallah-Yunes A, Gump B. Racial differences in left ventricular mass and wave reflection intensity in children, *Frontiers in Pediatrics:Cardiology*, 8:132, 2020.
34. † Spartano N, Lynk N, Moore LL, Cabral HJ, **Heffernan KS**, Dumas AK, Hruska B, Zajdel RA, Gump BB. A pragmatic approach to the comparison of wrist-based cutpoints of physical activity intensity for the MotionWatch8 accelerometer in children, *PLOS One*, In Press.
35. † Lefferts WK, Augustine J, Spartano N, Hughes W, Babcock M, Heenan B, **Heffernan KS**. Effects of whey protein supplementation on aortic stiffness, cerebral blood flow and cognitive function in community-dwelling older adults: findings from the ANCHORS A-Whey Clinical Trial. *Nutrients*, 12(4):1054, 2020.
36. Rosenberg AJ, Bunsawat K, Wee SO, Schroeder EC, Grigoriadis G, **Heffernan KS**, Fernhall B, Baynard T. Aging Reduces Cerebral Blood Flow Regulation Following an Acute Hypertensive Stimulus, *Journal of Applied Physiology*, 128(5): 1186-1195, 2020.
37. **Heffernan KS**, Barreira TV. Association of pulse pressure with aortic calcification: Findings from NHANES 2013-2014, *Journal of Clinical Hypertension*, 22(5): 879-885, 2020.
38. †**Heffernan KS**, Columna L, Prieto L, DeBlois J, Pagan P, Revolledo GP, Russo N, Barreira T. Home blood pressure assessment in children with Autism Spectrum Disorder: A feasibility study, *Artery Research*, 25(3): 145-149, 2019.
39. † Lefferts WK, DeBlois J, Soriano JE, Mann L, Rampuri Z, Herrington B, Thrall S, Bird J, Harman TS, Day TA, **Heffernan KS**, Brutsaert T. Preservation of neurovascular coupling to cognitive activity in anterior cerebrovasculature during incremental ascent to high altitude, *High Altitude Medicine and Biology*, 21(1): 20-27, 2020.
40. †DeRuisseau L, Receno C, Cunningham C, **Heffernan KS**. Heart rate, blood pressure and aortic stiffness in male Ts65Dn mice: a model to investigate cardiovascular responses in Down syndrome, *Physiological Reports*, 7(17): e14205, 2019.
41. †Receno CN, Liang C, Korol DL, Atalay M, **Heffernan KS**, Brutsaert T, DeRuisseau KC. Effects of prolonged dietary curcumin exposure on skeletal muscle biochemical and functional responses of aged male rats. *International Journal of Molecular Science*, 20(5): pii E1178, 2019.

42. †Lassalle PP, Palamar AJ, DeBlois J, Lefferts WK, **Heffernan KS**. Effect of external compression on femoral retrograde shear and microvascular oxygenation in exercise trained and recreationally active young men, *European Journal of Applied Physiology*, 119(8):1809-1818, 2019.
43. †Lefferts WK, DeBlois JP, White CN, Day TA, **Heffernan KS**, Brutsaert TD. Changes in cognitive function and latent processes of decision-making during incremental ascent to high altitude, *Physiology and Behavior*, 201:139-145, 2019.
44. Zieff, G, Creuder D, Faulkner J, Fryer S, Hanson E, **Heffernan KS**, Stone K, Stoner L. The pressure-dependency of local measures of arterial stiffness, *The Journal of Hypertension*, 37(5): 956-963, 2019.
45. †Lefferts WK, DeBlois J, White C, **Heffernan KS**. Effects of acute aerobic exercise on cognition and constructs of decision-making in adults with and without hypertension, *Frontiers in Aging Neuroscience*, 11: 41, 2019.
46. †Columna L, Streete DA, Rocco-Dillon S, Hodge SR, Prieto L, Myers B, Barreira TV, **Heffernan KS**. Parents' intentions toward including their children with visual impairments in physical activities. *Disability and Rehabilitation*, 1-12: doi: 10.1016, 2019.
47. †Augustine JA, Lefferts WK, **Heffernan KS**. Sex differences in aortic stiffness and central hemodynamics following acute resistance exercise, *Artery Research*, 23: 52-55, 2018.
48. †Lefferts WK, DeBlois J, Barreira T, **Heffernan KS**. Neurovascular coupling during cognitive activity in adults with controlled hypertension, *Journal of Applied Physiology*, 125(6): 1906-1916, 2018.
49. †Lefferts WK, **Heffernan KS**. Cerebral hemodynamics and aneurysm formation: reflecting on pipeline embolization devices, *Interventional Neuroradiology*, 24(6): 631-634, 2018.
50. †Palmiere S, Wade M, DeBlois J, Lefferts WK, **Heffernan KS**. Aortic stiffness, central pulse pressure and cognitive function following acute resistance exercise, *European Journal of Applied Physiology*, 118(10): 2203-2211, 2018.
51. †Lefferts WK, DeBlois J, Gump B, **Heffernan KS**. Carotid artery stiffness and cerebral blood flow pulsatility in children, *Artery Research*, 22: 64-67, 2018.
52. Jae SY, **Heffernan KS**, Yoon ES, Kim HJ, Bunsawat K, Fernhall B. Metabolically healthy obesity and subclinical atherosclerosis in persons with spinal cord injury, *Journal of Rehabilitation Medicine*, 50(7): 613-618, 2018.
53. †Lefferts WK, DeBlois J, Receno C, Barreira T, Carhart R, Brutsaert T, **Heffernan KS**. Effects of Acute Aerobic Exercise on Arterial Stiffness and Cerebrovascular Pulsatility in Adults with and Without Hypertension, *Journal of Hypertension*, 36(8): 1743-1752, 2018.
54. **Heffernan KS**. What's the [particulate] matter with biomass fuel use: indoor air toxicants and central hemodynamic burden, *Heart* (invited editorial commentary), 104(18): 1478-1479, 2018.
55. †Augustine J, Nunenmacher K, **Heffernan KS**. Menstrual phase and the vascular response to acute resistance exercise, *European Journal of Applied Physiology*, 118(5): 937-946, 2018.
56. †**Heffernan KS**, Lefferts WK, Spartano NK, Augustine J, Hughes W, Jorgensen R, Gump B. Arterial stiffness and cerebral hemodynamic pulsatility during cognitive engagement in younger and older adults, *Experimental Gerontology*, 101: 54-62, 2018.

57. **Heffernan KS**, Columna L, Russo N, Myers B, Ashby C, Norris M, Barreira T. Body mass index, physical activity and arterial stiffness in children with Autism Spectrum Disorder: Preliminary Findings, *Journal of Autism and Developmental Disorders*, 48(2): 625-631, 2018.
58. †**Heffernan KS**, Lefferts WK, Yoon ES, Park SH, Lee YH, Jae SY. Carotid artery reactivity during sympathetic activation following acute resistance exercise, *Clinical Autonomic Research*, 27(6): 417-421, 2017.
59. Columna L, Hodge S, Dolphin M, Dillon S, Myers B, Street, D, Norris M, McCabe L, Barreira T, **Heffernan KS**. Physical Activity Participation among Families of Children with Visual Impairments and Blindness, *Disability and Rehabilitation*, 25: 1-9, 2017.
60. †Kim Y, Men SS, Liang C, Receno C, Brutsaert T, Korol DL, **Heffernan KS**, DeRuisseau K. Effects of long-term exposures to low iron and branched-chain amino acid containing diets on aging skeletal muscle, *Applied Physiology Nutrition and Metabolism*, 43(2): 165-173, 2018.
61. †Lefferts W, Sperry S, Jorgensen R, Kasprovicz A, Skilton MR, Figueroa A, **Heffernan KS**. Carotid artery stiffness, extra-media thickness and central adiposity in young adults, *Atherosclerosis*, 265: 140-146, 2017.
62. Schroeder EC, Ranadive SM, **Heffernan KS**, Jae SY, Fernhall B. The acute effect of maximal aerobic and isometric exercise on arterial stiffness in boys and men, *Artery Research*, 19:24-25, 2017.
63. †Lefferts W, Augustine J, Spartano N, Atallah-Yunes A, **Heffernan KS**, Gump B. Racial differences in aortic stiffness in children, *Journal of Pediatrics*, 180:62-67, 2017.
64. †Lefferts W, **Heffernan KS**, Barreira T. Association between pulsatile blood pressure and cognitive performance among older adults: insight from the National Health and Nutrition Examination Survey 1999-2002, *International Journal of Cardiology*, 223:981-984, 2016.
65. **Heffernan KS**. Carotid artery stiffness and cognition in Type 2 Diabetes: extracranial contribution to an intracranial problem? *Atherosclerosis* (invited editorial commentary) 253: 268-269, 2016.
66. Mendonca GV, Silva L, Pezarat-Correia P, Almeida ID, Vaz JR, **Heffernan KS**. The impact of aging on endurance and neuromuscular performance: the role of vascular senescence. *Sports Medicine*, 47(4):583-598, 2017.
67. †Spartano NL, **Heffernan KS**, Dumas AK, Gump BB. Accelerometer-determined physical activity and the cardiovascular response to mental stress in children. *The Journal of Science and Medicine in Sport*, 20(1):60-65, 2017.
68. †Babcock MC, Lefferts WK, **Heffernan KS**. Relation between exercise central hemodynamic response and resting cardiac structure and function in young healthy men. *Clinical Physiology and Functional Imaging*, 37(4):372-378, 2017.
69. Mendonca GV, Pezarat-Correia P, Vaz JR, Silva L, Almeida ID, **Heffernan KS**. The impact of exercise training on cardiovascular health and physical fitness in older adults. *Current Aging Science*, 9(4): 240-259, 2016.
70. †Lefferts WK, Babcock M, Tiss M, Ives SJ, White CN, Brutsaert T, **Heffernan KS**. Effect of hypoxia on cerebrovascular and cognitive function during moderate intensity exercise. *Physiology and Behavior*, 165:108-118, 2016.

71. †Augustine JA, Yoon ES, Choo J, **Heffernan KS**, Jae SY. The relationship between cardiorespiratory fitness and aortic stiffness in women with central obesity, *The Journal of Women's Health*, 25(7): 680-686, 2016.
72. †Lefferts W, Hughes W, Brutsaert T, White C, **Heffernan KS**. Effect of Acute Nitrate Supplementation on Neurovascular Coupling and Cognitive Performance in Hypoxia, *Applied Physiology Nutrition and Metabolism*, 41(2): 133-141, 2016.
73. †Lefferts WK, Hughes W, **Heffernan KS**. Effect of acute nitrate ingestion on central hemodynamic load in hypoxia. *Nitric Oxide*, 52: 49-55, 2016.
74. †Augustine JA, Lefferts WK, Brann L, Dowthwaite JN, Brutsaert TD, **Heffernan KS**. Subclinical atherosclerotic risk in endurance-trained premenopausal amenorrheic women. *Atherosclerosis* 244: 15-164, 2016.
75. Avolio A, Chirinos JA, Cockcroft JR, **Heffernan KS**, Lakatta EG, McEniery C, Mitchell GF, Najjar SS, Nichols WW, Schiffrin EL, Townsend RR, Urbina EM, Weber T, Wilkinson IA. An American Heart Association Scientific Statement on Arterial Stiffness: Recommendations for improving and standardizing vascular research, *Hypertension*, 66(3): 698-722, 2015.
76. White C, Vanderdrift L, **Heffernan KS**. Social isolation, cognitive decline and cardiovascular disease risk with aging, *Current Opinion in Psychology*, 5: 18-23, 2015.
77. †Lefferts WK, Hughes W, **Heffernan KS**. Effect of acute high intensity resistance exercise on optic nerve sheath diameter and ophthalmic artery blood flow pulsatility, *The Journal of Human Hypertension*, 29(12): 744-748, 2015.
78. †Lefferts WK, Hultquist E, **Heffernan KS**, Fehling P, Smith DS. Vascular and central hemodynamic changes following exercise-induced hyperthermia, *Vascular Medicine*, 20(3): 222-229, 2015.
79. †Babcock MC, Lefferts WK, Hughes W, Leyer B, Fitzgerald K, Redmond JG, **Heffernan KS**. Acute effects of high intensity cycling exercise on carotid artery hemodynamic pulsatility, *European Journal of Applied Physiology*, 115(5): 1037-1045, 2015.
80. †**Heffernan KS**, Spartano NL, Augustine JA, Lefferts WK, Hughes WE, Mitchell GF, Jorgensen RS, Gump BB. Carotid artery stiffness and hemodynamic pulsatility during cognitive engagement: A pilot investigation, *American Journal of Hypertension*, 28(5): 615-622, 2015.
81. Jae SY, Kurl S, Laukkanen JA, Choi YH, Park WH, Bunsawat K, **Heffernan KS**, Fernhall B, Kang SM, Park JB. Usefulness of the blood pressure rise prior to exercise stress testing to predict the risk of future hypertension in normotensive men. *American Journal of Cardiology*, 114(8): 1238-1242, 2014.
82. †Spartano NL, Lefferts WK, Augustine JA, Gump BB, **Heffernan KS**. The relationship between carotid intima-media thickness and carotid blood pressure reactivity to mental stress. *Atherosclerosis*, 236(2): 227-229, 2014.
83. †Hughes W, Spartano NL, Lefferts WK, Augustine JA, **Heffernan KS**. Sex differences in noninvasive estimates of left ventricular pressure energetics but not myocardial oxygen demand in young adults. *Artery Research*, 8(4): 197-204, 2014.
84. Volpe GE, **Heffernan KS**, Imai C, Mangili A, Kuvin JT, Wanke CA. High fat meals do not impair postprandial endothelial function in HIV-infected men. *AIDS Research and Human Retroviruses*, 30(9): 881-887, 2014.

85. Park SH, Yoon ES, Lee YH, Kim CH, Bunsawat K, **Heffernan KS**, Fernhall B, Jae SY. Effects of acute active video games on endothelial function following a high-fat meal in overweight adolescents. *Journal of Physical Activity and Health*, 12(6):869-874, 2015.
86. †Augustine JA, Tarzia BJ, Kasprovicz AG, **Heffernan KS**. Effect of a single bout of resistance exercise on arterial stiffness following a high fat meal. *International Journal of Sports Medicine*, 35(11) 894-899, 2014.
87. †Lefferts WK, Augustine JA, **Heffernan KS**. Resistance exercise-mediated increases in carotid artery stiffness do not affect cerebral blood flow pulsatility. *Frontiers in Physiology*, 19; 5:101, 2014.
88. Lee YH, Yoon ES, Park SH, **Heffernan KS**, Lee C, Jae SY. Relationship between arterial stiffness and cognitive function is mediated by physical fitness in patients with chronic stroke. *Journal of Rehabilitation Medicine*, 46(5) 413-417, 2014.
89. †**Heffernan KS**, Kasprovicz AG, Tarzia BJ, Davies JE, Casey DP. Sex differences in peripheral augmentation index and arterial reservoir pressure during upper limb postural shifts. *Physiology Journal*, 971906, 2014.
90. †Spartano NL, Augustine JA, Lefferts WK, Hughes WE, Redmond JG, Martin ED, Kuvin JT, Gump BB, **Heffernan KS**. Arterial stiffness as a non-invasive tissue biomarker of cardiac target organ damage. *Journal of Current Biomarker Findings*, 2014:4, 23-34, 2014.
91. Jae SY, **Heffernan KS**, Fernhall B, Park WH, Choi YH. Cardiorespiratory fitness and incident metabolic syndrome in middle aged men. *Annals of Human Biology*, PMID 24180292, 2014.
92. Yan Y, Ranadive S, **Heffernan KS**, Lane A, Kappus, R, Cook M, Wu PT, Sun P, Harvey I, Woods JA, Wilund KR, Fernhall B. Hemodynamic and arterial stiffness differences between African-Americans and Caucasians following maximal exercise. *American Journal of Physiology: Heart and Circulatory Physiology*, 306: H60-68, 2014.
93. †**Heffernan KS**, Lefferts WK, Tarzia BJ, Kasprovicz AG, Thijssen D, Brutsaert T. Manipulation of arterial stiffness, wave reflections and retrograde shear rate in the femoral artery using lower limb external compression. *Physiological Reports*, 1(2):e00022. 2013.
94. †**Heffernan KS**, Lefferts WK and Augustine JA. Hemodynamic correlates of late systolic flow velocity augmentation in the carotid artery. *International Journal of Hypertension*, 920605, 2013.
95. Jae SY, Kurl S, Laukkanen KS, **Heffernan KS**, Choi YH, Park JB. Higher blood hematocrit predicts incident hypertension in men. *Journal of Hypertension*, 32:245-250, 2014.
96. †**Heffernan KS**, Lefferts WK. A new exercise central hemodynamics paradigm: time for reflection or expansion? *Hypertension*, 62(5): e35.
97. Kappus RM, Fahs CA, Smith D, Horn GP, Agiovlasitis S, Rossow L, Jae SY, **Heffernan KS**, Fernhall B. Obesity, Overweight and Arterial Function in Young Otherwise Apparently Healthy Men. *American Journal of Hypertension*, 27(4): 628-634, 2014.
98. †**Heffernan KS**, Tarzia BJ, Kasprovicz AG, Lefferts WK, Hatanaka M, Jae SY. Self-reported sitting time is associated with higher pressure from wave reflections independent of physical activity levels in healthy young adults. *American Journal of Hypertension*, 26(8) 1017-23, 2013.
99. Jae SY, Yoon ES, Jung SJ, Park SH, Kim BS, **Heffernan KS**, Fernhall B. Effect of cardiorespiratory fitness on acute inflammation induced increases in arterial stiffness in older adults. *European Journal of Applied Physiology*, 113(8) 2159-2166, 2013.

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101. Warner PW, Al-Quthami A, Brooks EL, Kelley-Hedgepeth A, Patvardhan E, Kuvin JT, **Heffernan KS**, Huggins GS. Augmentation index and aortic stiffness in bicuspid aortic valve patients with non-dilated proximal aortas. *BMC Cardiovascular Disorders*, 13:19; 2013.
102. Morrison S, **Heffernan KS**, Jae SY, Fernhall B, Sosnoff JJ. Aging, hypertension and physiologic tremor: the contribution of the cardiobalistic impulse to tremorgenesis in older adults. *Journal of the Neurological Sciences*, 326 (1-2): 68-74; 2013.
103. **Heffernan KS**, Wanke CA, Dong K, Warner PJ, Anskat PE, Karas RH, Kuvin JT. Racial differences in central hemodynamic burden in men with HIV. *Ethnicity and Disease*, 23(2): 217-222; 2013.
104. Cook MD, **Heffernan KS**, Ranadive S, Woods JA, Fernhall B. Effect of resistance exercise training on biomarkers of vascular function and oxidative stress in young African American and Caucasian men, *Journal of Human Hypertension*, 27(6): 388-392; 2013.
105. **Heffernan KS**, Yoon ES, Sharman JE, Davies J, Shih YT, Chen CH, Fernhall B, Jae SY. Resistance exercise training reduces arterial reservoir pressure in older adults with hypertension and pre-hypertension. *Hypertension Research*, 36(5): 422-427; 2013.
106. **Heffernan KS**, Manini T, Hsu FC, Blair SN, Nicklas BJ, Kritchevsky SB, Newman AB, Church TS, Sutton-Tyrrell K, Haskell W, Fielding RA. Pulse pressure is associated with long-distance gait speed in community-dwelling older adults: findings from the LIFE-P study *PLoS One*, 7(11); 2013.
107. **Heffernan KS**, Hau C, Chale A, Cloutier GJ, Phillips EM, Warner P, Nickerson H, Reid KF, Kuvin JT, Fielding RA. Systemic vascular function is associated with muscular power in older adults. *Journal of Aging Research*, 2012:386387; 2012.
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MENTORED SU STUDENT PEER-REVIEWED PUBLISHED ABSTRACTS / STUDENT CONFERENCE PRESENTATIONS

*Student research award winner

1. *Resnick S, Fridley E, Mutambudzi M, **Heffernan KS**. The Effect of Habitual Exercise on Older Adults' Mental Health During the COVID-19 Pandemic. *Mid-Atlantic Regional Chapter of the American College of Sports Medicine*, 2021.
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6. Arcidiacono D, Lefferts W, Gump B, **Heffernan KS**. Physical activity mediates the relationship between body mass index and carotid extra media thickness in children. *American College of Sports Medicine Meeting*, 2021.
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50. *Nunemacher K, Augustine J, Lefferts W, Barreira T, **Heffernan, KS**. Physical Activity Mediates the Relationship Between Sleep Quality and Vascular Health in Older Adults. *Mid-Atlantic Regional Chapter of the American College of Sports Medicine*, 2015.
51. *Babcock M, Lefferts W, **Heffernan KS**. Acute Effects of High-Intensity Exercise on Femoral Artery Stiffness and Shear Patterns. *Mid-Atlantic Regional Chapter of the American College of Sports Medicine*, 2015.
52. *Augustine J, Nunemacher K, **Heffernan KS**. Menstrual Cycle Phase and the Vascular Response to Acute Resistance Exercise. *Mid-Atlantic Regional Chapter of the American College of Sports Medicine*, 2015.
53. Lefferts W, Babcock M, Tiss M, White CN, Brutsaert T, **Heffernan KS**. Effect of hypoxia on cerebrovascular and cognitive function during exercise. *Mid-Atlantic Regional Chapter of the American College of Sports Medicine*, 2015.

54. *Lefferts W, Hughes W, **Heffernan KS**. Effect of acute dietary nitrate supplementation on central hemodynamic load in hypoxia. *North American Artery Society Meeting*, 2015.
55. Augustine J, Lefferts W, Spartano N, Hughes W, Gump G, **Heffernan KS**. Physical function, cognitive function and aortic stiffness in older adults. *American College of Sports Medicine Meeting*, 2015.
56. *Lefferts W, Hughes W, Brutsaert T, White C, **Heffernan KS**. Effect of nitrate supplementation on cognitive function and neurovascular coupling in hypoxia. *American College of Sports Medicine Meeting*, 2015.
57. Babcock M, Lefferts W, **Heffernan KS**. Relation between exercise central hemodynamic load and resting cardiac structure and function in young men. *Mid-Atlantic Regional Chapter of the American College of Sports Medicine*, 2014.
58. Nunemacher K, Augustine J, Benevento E, Columna L, Luke M, Russo N, Lowmy T, Ingram E, **Heffernan KS**. Social inclusion, movement and cardiovascular disease risk in adults with intellectual disabilities. *American College of Sports Medicine Meeting*, 2015.
59. *Augustine J, Lefferts W, Spartano N, Hughes W, Gump G, **Heffernan KS**. Physical function, cognitive function and aortic stiffness in older adults. *Mid-Atlantic Regional Chapter of the American College of Sports Medicine*, 2014.
60. *Lefferts W, Hughes W, White C, Brutsaert T, **Heffernan KS**. Effect of acute nitrate ingestion on cognitive function and neurovascular coupling at high altitude. *Mid-Atlantic Regional Chapter of the American College of Sports Medicine*, 2014.
61. *Babcock M, Lefferts W, **Heffernan KS**. Relation between exercise central hemodynamic load and resting cardiac structure and function in young men. *Mid-Atlantic Regional Chapter of the American College of Sports Medicine*, 2014.
62. Augustine J, Lefferts W, Martin E, Spartano N, **Heffernan KS**. Vascular function in exercise-trained women. *American College of Sports Medicine Meeting*, 2014.
63. Hughes W, Spartano N, Lefferts W, Augustine J, **Heffernan KS**. Sex differences in noninvasive estimates of myocardial oxygen demand and left ventricular pressure energetics. *American College of Sports Medicine Meeting*, 2014.
64. Lefferts WK, Augustine JA, **Heffernan KS**. Acute resistance exercise and the cerebrovasculature: differential effects on pressure and flow pulsatility. *American College of Sports Medicine Meeting*, 2014.
65. Spartano N, Augustine J, Lefferts W, Hughes W, Martin E, Gump B, **Heffernan KS**. Physical activity is associated with attenuated carotid blood pressure reactivity during mental stress. *American College of Sports Medicine*, 2014.
66. Martin E, Augustine J, Spartano N, Lefferts W, **Heffernan KS**. Body fat, pulsatile load and arterial stiffness in non-obese women. *American College of Sports Medicine Meeting*, 2014.
67. Redmond JG, Babcock MC, Leyer B, Fitzgerald K, Lefferts WK, Hughes W, **Heffernan KS**. Relation of body composition to anaerobic power in Division I women's ice hockey players. *American College of Sports Medicine Meeting*, 2014.
68. Babcock MC, Leyer B, Fitzgerald K, Lefferts WK, Hughes W, Redmond JG, **Heffernan KS**. No sex differences in carotid artery stiffness and blood flow pulsatility following high intensity exercise. *American College of Sports Medicine Meeting*, 2014.

69. Fitzgerald K, Babcock MC, Hughes W, Lefferts WK, Leyer B, Redmond JG, **Heffernan KS**. Aortic wave reflections are associated with anaerobic power production in young adults. *American College of Sports Medicine Meeting*, 2014.
70. *Augustine J, Lefferts W, Martin E, Spartano N, **Heffernan KS**. Vascular function in exercise-trained women. *Mid-Atlantic Regional Chapter of the American College of Sports Medicine*, 2013.
71. Hughes W, Spartan N, Lefferts W, Augustine J, **Heffernan KS**. Sex differences in arterial stiffness and left ventricular pressure energetics. *Mid-Atlantic Regional Chapter of the American College of Sports Medicine*, 2013.
72. Martin E, Augustine J, Spartano N, Lefferts W, **Heffernan KS**. No association between body fat and arterial stiffness in non-obese women. *Mid-Atlantic Regional Chapter of the American College of Sports Medicine*, 2013.
73. Spartano N, Augustine J, Lefferts W, Hughes W, Martin E, Gump B, **Heffernan KS**. Carotid blood pressure reactivity is associated with carotid intima-media thickness independent of central adiposity. *Mid-Atlantic Regional Chapter of the American College of Sports Medicine*, 2013.
74. Lefferts W, Augustine J, **Heffernan KS**. Resistance exercise, carotid artery stiffness and cerebral blood flow pulsatility. *Mid-Atlantic Regional Chapter of the American College of Sports Medicine*, 2013.
75. *Kasprovicz A, Tarzia B, Davies J, Casey D, **Heffernan KS**. Sex Differences in the Hemodynamic Response to Reductions in Radial Artery Transmural Pressure with Arm Elevation; *Mid-Atlantic Regional Chapter of the American College of Sports Medicine*, 2012.
76. *Tarzia B, Kasprovicz A, Lefferts W, **Heffernan KS**. Physical activity, sedentary behavior and blood pressure in young adults; *Mid-Atlantic Regional Chapter of the American College of Sports Medicine*; 2012.
77. *Augustine J, Tarzia B, Kasprovicz A, **Heffernan KS**. Vascular function following a high fat meal with resistance exercise; *Mid-Atlantic Regional Chapter of the American College of Sports Medicine*, 2012.
78. Lefferts W, Hultquist E, **Heffernan KS**, Fehling P, Smith DS. Vascular changes following exercise-induced hyperthermia; *Mid-Atlantic Regional Chapter of the American College of Sports Medicine*, 2012.

MENTORED SU STUDENT RESEARCH GRANTS

1. Kailee Coonan - Syracuse Office of Undergraduate Research and Creative Engagement (SOURCE) award (\$5,000) *Exercise-induced bronchoconstriction and cardiovascular disease risk in female athletes* (2020)
2. Isabel Reedy – Syracuse Office of Undergraduate Research and Creative Engagement (SOURCE) award (\$5,000) *Effects of Anxiety and Depressive Symptomology on Subclinical Cardiovascular Disease Risk in Young Women* (2020)
3. Brandon Fascia – Syracuse Office of Undergraduate Research and Creative Engagement (SOURCE) award (\$5,000) *Dietary nitrates to improve cerebral hemodynamics and cognitive performance in adults with a history of concussion* (2019)

4. Allison Keller - Howard C. and Ethel G. Allen Educational Fund (\$1,800) *Cardiovascular Function and Postural Control in Young Adults* (2018)
5. Jacob DeBlois - Joan N. Burstyn Endowed Fund for Collaborative Research in Education (\$3,500) *Cardiorespiratory Fitness, Arterial Stiffness and Hemostatic Factors in Military Veterans with PTSD* (2017)
6. Wesley Lefferts - American Heart Association Pre-doctoral Fellowship (\$52,000) *Effect of aerobic exercise on cognitive and cerebrovascular function in hypertensive adults* (2016)
7. Jacqueline Augustine – Sydney W. Young Student Research Grant and SOE Creative Research Grant (\$3,700) *Sex Differences in Cardiovascular Adaptations to Extreme Endurance Exercise* (2016)
8. Wesley Lefferts - American College of Sports Medicine Student Research Grant (\$5,000) *Effect of aerobic exercise on cognitive and cerebrovascular function in hypertensive adults* (2016)
9. Wesley Lefferts - Joan N. Burstyn Endowed Fund for Collaborative Research in Education (\$2,400) *Effects of exercise on biomarkers of brain function at high altitude* (2015)
10. Wesley Lefferts - American College of Sports Medicine Student Research Grant (\$5,000) *Dietary Nitrates, Hypoxic Cerebrovascular Response and Cognitive Function in Young Men* (2014)
11. Jacqueline Augustine - Joan N. Burstyn Endowed Fund for Collaborative Research in Education (\$2,000) *The effect of resistance exercise on vascular function following a high fat meal* (2011)

FIRST AUTHORED PUBLISHED ABSTRACTS / CONFERENCE PRESENTATIONS

**Oral communication † Symposium*

1. †**Heffernan KS**. Arterial stiffness and central hemodynamics: a primer for the exercise scientist. *American College of Sports Medicine Meeting*, 2015.
2. **Heffernan KS**, Spartano NL, Lefferts WK, Augustine JA, Hughes WE, Gump BB. Arterial stiffness and pressure from wave reflections during cognitive challenge in children and adults, *American College of Sports Medicine Meeting*, 2014.
3. ***Heffernan KS**, Lefferts WK, Tarzia BJ, Kasprowicz AG, Thijssen D, Brutsaert T. Arterial stiffness and shear rate patterns in the femoral artery during lower limb reductions in transmural pressure. *American College of Sports Medicine Meeting*, 2013.
4. **Heffernan KS**, Sharman JE, Davies J, Yoo E, Fernhall B, Jae SY. Effect of resistance exercise training on arterial reservoir pressure in older adults with hypertension and pre-hypertension. *American College of Sports Medicine Meeting*, 2012.
5. ***Heffernan KS**, Kuvin JT, Karas RH, Preston IR, Hill NS, Roberts KE. Peripheral Vascular Endothelial Function and the Pulmonary Blood Pressure Response to Exercise in Pulmonary Hypertension. *American College of Sports Medicine Meeting*, 2011.
6. **Heffernan KS**, Kuvin JT, Karas RH, Preston IR, Hill NS, Roberts KE. Peripheral Vascular Endothelial Function and the Pulmonary Blood Pressure Response to Exercise in Pulmonary Hypertension. *American Thoracic Society Annual International Conference*, 2011.

7. †**Heffernan KS**, Arterial Stiffness: A primer for the clinical cardiologist, *American College of Cardiology Conference*, 2011.
8. **Heffernan KS**, Manini T, Blair SN, Hsu FC, Nicklas BJ, Kritchevsky SB, Newman AB, Church TS, Sutton-Tyrrell K, Haskell W, Karas RH, Kuvin JT, Fielding RA. Pulse pressure is associated with long-distance gain speed in community-dwelling older adults: findings from the LIFE-P study. *American Heart Association Scientific Sessions*, 2010.
9. **Heffernan KS**, Maron M, Patvardhan E, Karas RH, Kuvin JT. Arterial elastance is associated with exercise capacity in patients with hypertrophic cardiomyopathy. *American College of Sports Medicine Annual Conference*, 2010.
10. **Heffernan KS**, Maron M, Patvardhan E, Karas RH, Kuvin JT. Elevated peripheral augmentation index and pulse wave amplitude in hypertrophic cardiomyopathy. *American College of Cardiology Conference*, 2010.
11. **Heffernan KS**, Maron M, Patvardhan E, Karas RH, Kuvin JT. Elevated pulse pressure is associated with an abnormal blood pressure response to exercise in hypertrophic cardiomyopathy. *American College of Cardiology Conference*, 2010.
12. **Heffernan KS**, Karas RH, Kuvin JT, Lee MK, Choi YH, Jae SY. Higher prevalence of carotid atherosclerosis in men with low HDL-cholesterol is not related to cardiorespiratory fitness or inflammation. *American College of Cardiology*, 2010.
13. **Heffernan KS**, Rudym D, Kuvin JT, Karas RH, Miskulin D, Perrone R, Sarnak M, Menon V. Vascular function and vascular inflammation in polycystic kidney disease. *American Heart Association Scientific Sessions*, 2009.
14. **Heffernan KS**, Suryadevara R, Mooney P, Karas RH, and Kuvin JT. Extended release niacin therapy improves HDL-cholesterol but not vascular endothelial function in smokers, *International Symposium on Atherosclerosis*, 2009.
15. **Heffernan KS**, Patvardhan E, Karas RH, and Kuvin JT. Association between exercise capacity and vascular endothelial function in chronic smokers, *International Symposium on Atherosclerosis*, 2009.
16. **Heffernan KS**, Fahs CA, Jae SY, Iwamoto GA, Wilund KR, Woods JA and Fernhall B. The effect of resistance training on vascular function and central blood pressure in African American men, *American College of Sports Medicine Annual Conference*, 2009.
17. **Heffernan KS**, Suryadevara R, Mooney P, Karas RH, Kuvin JT. The effect of beta-blockers on ambulatory arterial stiffness index and wave reflection in patients with hypertension. *The American College of Cardiology Annual Scientific Sessions*, 2009.
18. **Heffernan KS**, Jae SY and Fernhall B. Racial differences in vascular function are not mediated by inflammation, cardiorespiratory fitness or body fat. *American Heart Association Scientific Sessions*, 2008.
19. ***Heffernan KS**, Fahs CA, Shinsako KK, Sosnoff JJ, Jae SY and Fernhall B. Fractal Properties Of Heart Rate Following Resistance Training: Chaotic Times Call For Chaotic Measures. *American College of Sports Medicine Annual Conference*, 2008.
20. **Heffernan KS**, Fahs CA, Jae SY, and Fernhall B. Resistance exercise training improves heart rate recovery in young men. *American Heart Association Scientific Sessions*, 2007.

21. **Heffernan KS**, Jae SY, Echols G, Lepine N, and Fernhall B. African American Men Have Attenuated Reductions in Peripheral Artery Stiffness Following Exercise. *American College of Sports Medicine Annual Conference, 2007*.
22. **Heffernan KS**, Edwards DG, Rossow L, Jae SY, and Fernhall B. Mechanical compression reduces regional arterial stiffness *ACSM Conference on Integrative Physiology of Exercise, 2006*.
23. **Heffernan KS**, Jae SY, Kelly EE, and Fernhall B. Arterial stiffness following repeated Valsalva maneuvers: implications for resistance exercise *American College of Sports Medicine Annual Conference, 2006*.
24. **Heffernan KS**, Collier SR, Kelly EE, Schmitt L, Tobin M, and Fernhall B. Arterial Stiffness and Baroreflex Sensitivity Following Acute Resistance versus Aerobic Exercise. *American College of Sports Medicine Annual Conference, 2005*.
25. **Heffernan KS**, Baynard T, Gouloupoulou S, Giannopoulou I, Collier SR, Figueroa A, and Fernhall B. Alterations in baroreflex sensitivity do not explain attenuated responses to sympathoexcitation in Down Syndrome. *American College of Sports Medicine Annual Conference, 2004*.

CO-AUTHORED PUBLISHED ABSTRACTS

Over 100 – available upon request

INVITED BOOK CHAPTERS

1. G. Pierce, K. Davey and **K.S. Heffernan**. Exercise, Arterial Stiffness and Central Hemodynamic Pulsatility. In: *Arterial Stiffness and Pulsatile Hemodynamics in Health and Disease*; Eds J.A. Chirinos. 2020
2. W. Nichols, **K.S. Heffernan** and J.A. Chirinos. Overview of the normal structure and function of the macrocirculation and microcirculation. In: *Arterial Disorders*; Eds G. Mancia. 2015
3. B. Fernhall and **K.S. Heffernan**. Resistance Training Strategies for Individuals With Mental Retardation. In: *Resistance Training for Special Populations*; A.M. Swank Eds. 2012
4. **K.S. Heffernan**. Exercise stress testing in asymptomatic patients and its relation to subclinical atherosclerotic disease. In: *Asymptomatic Atherosclerosis: Detection, Treatment, and Monitoring*; Eds. M Naghavi et al. 2010

RESEARCH SUPPORT/GRANTS FUNDED

(15 OTHERS SUBMITTED AS PI UNFUNDED - INFORMATION AVAILABLE UPON REQUEST)

1. National Institutes of Health (P30 supplement, \$28,000) – Project Director
Estimated Arterial Stiffness as a Predictor of Cognitive Decline and Dementia in Older Adults: Findings from the Health and Retirement Study (2022)
2. Lerner Center for Public Health Promotion Faculty Fellow (\$25,000) - PI
Estimating Cardiovascular Age in the Community: We are only as old as our Arteries (2020-2022)
3. CUSE Grant Program (\$21,000) – PI
Race/ethnic variation in vascular aging trajectories and mortality risk: Insight from the Health and Retirement Study (2020-2022)
4. National Institutes of Health (R21, \$426,640) – co-I

- Heart and vascular responses across the lifespan in TS65DN mice, a mouse model of Down Syndrome (2020 - 2022)*
5. National Science Foundation (REU, \$273,000) – PI
Training diverse undergraduate teams of veterans and non-veterans to conduct trauma research with veterans (2019-2022)
 6. Syracuse University Equipment Grant (\$35,900) – PI
May I please have a new Bod Pod – mine broke (2019)
 7. National Institutes of Health (R03, \$150,000) – PI
Race, Arterial Stiffness and Cognitive Function (2017-2021)
 8. Dairy Research Institute, Dairy Management Inc (\$350,000) - PI
Whey protein, vascular function and cognition in older adults (2012-2016)
 9. National Institutes of Health (R01, \$1,200,000.00) – co-I
Environmental Toxicants, Race and Cardiovascular Disease Risk in Children (2013-2017)
 10. Welch Allyn (\$8,000 equipment support in the form of two ambulatory BP monitors) – PI
24-hour central hemodynamic load in young military veterans with and without PTSD (2016-2017)
 11. School of Education Internal Grant Competition (\$3,000) – PI
Cardiovascular health in children with Autism Spectrum Disorder (2016-2017)
 12. Syracuse University Seed Grant (\$1,000) – PI
External Compression to Improve Circulation and Enhance Recovery from Exercise (2015- 2016)
 13. Syracuse University Seed Grant (\$7,500) – co-I
“Honestly, I’m Sweating!”: Exploring Physiological Responses to Clinical Simulations (2015-2016)
 14. National Institutes of Health (P30 supplement, \$30,000) – Project Director
Social isolation, physical inactivity and vascular function in older adults (2013-2014)
 15. NIH- Center for AIDS Research (\$40,000) –PI
Racial differences in vascular function in patients with HIV (2010)
 16. Tufts Clinical and Translational Sciences Institute (\$30,000) – Co-I
The effect of genetic variants on the relation between fatty liver and cardiovascular disease risk in HIV infection (2009)
 17. American College of Sports Medicine Foundation Research Grant (\$10,000) – PI
The effect of combined resistance training and whey protein supplementation on vascular function and inflammation in mobility-limited older adults (2009)
 18. American Heart Association Pre-doctoral Fellowship (\$52,000) – PI
Vascular and Neuro-Inflammatory Modulations Following Resistance Training in African American Males (competitive renewal 2007-2008)
 19. American Heart Association Pre-doctoral Fellowship (\$26,000) – PI
Vascular and Neuro-Inflammatory Modulations Following a Resistance-Training Intervention in African American Males (2006-2007)
 20. The Roger Morse Outstanding Graduate Student Award (\$2500) – PI
Neuro-immune Correlates of Vascular Function Following Resistance Training in Young African American Men (2007)
 21. American College of Sports Medicine Student Research Grant (\$5000) – PI
Resistance Training and Arterial Function in African American Males (2005)

22. The Benjamin Massey Memorial Research Grant (\$1000) – PI
Resistance Training and Vascular Function in African American Males (2005)
23. Gatorade Sport Science Institute (\$500) – PI
Acute Resistance Exercise and Arterial Stiffness (2005)
24. Life Fitness (\$5000) – Co-PI
Mechanisms of Resistance Exercise-Induced Post Exercise Hypotension (2004)
25. Sydney Young Research Scholarship (\$400) – PI
Arterial and Autonomic Correlates of Resistance Exercise-Induced Post Exercise Hypotension (2004)
26. Pinnacle/Bodyonics Student Sports Nutrition Grant (\$1000) – PI (2003)

HONORS/AWARDS

- ▶ SU Graduate School Excellence in Graduate Education Faculty Recognition Award (2021)
- ▶ American College of Sports Medicine- Fellow (2020)
- ▶ North American Artery Society – Young Investigator Award (2013)
- ▶ American College of Sports Medicine- New Investigator Award (2010)
- ▶ Cardinal Spellman HS, Bronx NY – Most Likely to Stop, Collaborate and Listen (1997)

GENERAL UNIVERSITY SERVICE

- Syracuse University, Institutional Review Board (2012-2020)
- Syracuse University, Institutional Review Board co-chair (2020 -)
- Syracuse University, Interdisciplinary Neuroscience Faculty (2014 -)
- Aging Studies Institute Research Member (2012-)
- Strategic Plan Oversight Committee - Veterans and Military Families Working Group (1 year)
- Other committees, lots of committees, so many committees (2016 -)
- Neuroscience Search Committee (1)
- Exercise Science Search Committee (5)
 - Chair (2)
- SOE Teaching Committee (2012, 2014)
- SOE Diversity Committee (2016-2019)

TEACHING-RELATED SERVICE

- Exercise Science Graduate Program Research Coordinator (2015-)
- Exercise Science Learning Community Faculty Representative (2019-)
- Exercise Science Leadership Scholars Faculty Representative (2019-)
- WHEEL (Exercise Science) Club Faculty Sponsor (2020 -)

PROFESSIONAL SERVICE AND MEMBERSHIP (2011-)

- American College of Sports Medicine (ACSM)
 - ✓ President for the Mid-Atlantic Regional Chapter (2018-2020)
- American College of Sports Medicine (ACSM)
 - ✓ Regional executive board member (2013-)
- North American ARTERY Society

- ✓ Organizing board member
- ✓ Conference planning committee
- National Physical Activity Society (NPAS)

EXTERNAL GRANT REVIEWER (2011-)

- American Heart Association – Clinical behavioral study section
- American College of Sports Medicine
- National Institutes of Health – *ad hoc*
- National Science Foundation – *ad hoc*

ADDITIONAL GRANT REVIEW SERVICES (AD HOC)

- Dairy Research Institute
- National Health and Medical Research Council of Australia
- Natural Sciences and Engineering Research Council of Canada
- Swiss National Science Foundation
- Towson University – School of Emerging Technologies

INVITED SEMINAR SPEAKER (2013-)

- East Stroudsburg University – *Cardiovascular Research in the Human Performance Lab* (2021)
- SU Fisher Center – *The Science of Fitness* (2018)
- University of Mississippi – *Resistance Exercise and Vascular Health* (2018)
- University of Waterloo – *Central hemodynamics and neurovascular coupling* (2018)
- South Carolina University- *Exercise, Aging and Neurovascular Coupling* (2016)
- Michigan State University – *Premature vascular and cognitive aging: role for exercise* (2016)
- University of Virginia – *Racial differences in vascular function: exercise and the brain* (2016)
- University of Oklahoma – *Arterial stiffness, central hemodynamics and exercise* (2016)
- UMass-Amherst – *Exercise, Arterial Stiffness and the Aging Brain* (2015)
- Syracuse University Neuroscience Research Day – *Vascular aging and the Brain* (2015)
- Columbia University – *Exercise as Vascular Medicine* (2015)
- Michigan Technological University – *Resistance exercise, stiff arteries and the brain* (2014)
- University of Missouri – *Arterial stiffness, cerebral blood flow and cognitive function* (2014)
- University of Illinois-Chicago – *Arterial stiffness and cerebral blood flow during cognitive engagement: neurovascular coupling or the odd couple* (2013)
- University of Scranton – *Allow myself to introduce...myself: my exercise science journey and life after 'kegs and eggs'* (2013)

INVITED CONFERENCE KEYNOTE SPEAKER

- Human Anatomy and Physiology Society
 - *Integrating measures of vascular function into teaching* (2020)*
- North American Artery Society
 - *Heart rate variability for clinical risk assessment* (2020)*
- North American Artery Society

- *Dietary nitrates and cerebrovascular health (2019)*
- North American Artery Society
 - *Race, Health Disparities, and Vascular Health (2017)*
- International Sport Science Congress and the Korean Society of Exercise Physiology
 - *Resistance Exercise and Vascular Health (2017)*
- 14th International Conference on Long-Term Complications of Treatment of Children and Adolescents for Cancer – Sponsored by St. Jude Children’s Hospital
 - *Exercise to Delay Vascular Aging (2015)*

**canceled*

INVITED (AD HOC) JOURNAL REVIEWER/EDITORIAL SERVICE (SINCE 2011)

Acta Physiologica,
American Journal of Cardiology,
American Journal of Clinical Nutrition,
American Journal of Hypertension,
American Journal of Physical Medicine and Rehabilitation,
American Journal of Physiology: Heart and Circulatory Physiology,
American Journal of Physiology: Regulatory, Integrative and Comparative Physiology,
Applied Physiology Nutrition and Metabolism,
Arteriosclerosis Thrombosis and Vascular Biology,
Atherosclerosis,
Autonomic Neuroscience,
Biology of Sex Differences,
BMC Cardiovascular Disorders
Brain Behavior and Immunity,
British Journal of Clinical Pharmacology,
British Journal of Nutrition,
British Journal of Sports Medicine,
Cardiovascular Diabetology,
Clinical Cardiology,
Clinical Physiology and Functional Imaging,
Drug Design Development and Therapy,
Echocardiography,
Ethnicity & Disease,
European Journal of Applied Physiology,
Experimental Gerontology,
Experimental Physiology,
Frontiers in Cardiovascular Medicine,
Gender Medicine,
Hypertension,
Hypertension Research,

International Journal of Sports Medicine,
International Journal of Sports Physiology and Performance,
International Journal of Therapy and Rehabilitation,
International Journal of Vascular Medicine,
Journal of Aging and Health,
Journal of Aging Research,
Journal of the American College of Cardiology
Journal of the American Dietetic Association,
Journal of the American Society of Hypertension,
Journal of Applied Physiology,
Journal of Cardiovascular Electrophysiology
Journal of Gerontology,
Journal of Human Hypertension,
Journal of Inflammation Research,
Journal of Physical Activity and Health,
Journal of Science and Medicine in Sports,
Journal of Nutrition,
Journal of Sport and Health Science,
Journal of Sports Medicine,
Journal of Sports Rehabilitation,
Journal of Strength and Conditioning Research,
Journal of Vascular Research,
Kidney International,
Measurement in Physical Education & Exercise,
Medical Science Monitor,
Medicine and Science in Sports and Exercise,
Neuroendocrinology,
Nutrition Journal,
Nutrition Metabolism & Cardiovascular Disease,
Nutrition Research,
Obesity,

Pediatric Exercise Science,
Physiology and Behavior,
PLoS One,
Psychophysiology,
Reproductive Sciences,
Research Quarterly in Physical Activity
Scandinavian Journal of Medicine & Science in
Sports,
Scientific Reports,
Vascular Health and Risk Management,
Vascular Medicine