

Curriculum Vitae

Darren Thomas Beck, Ph.D.

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Contact Information

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Education

2011-2013	Postdoctoral Fellow	Malcom Randall VA Medical Center, Gainesville, FL. Geriatric Research Education and Clinical Center (GRECC) (Applied Physiology / Pharmacology)
2010	Ph.D.	University of Florida, Gainesville, FL. Department of Applied Physiology and Kinesiology (Applied Physiology)
2002	B.S.	University of Delaware, Newark, DE. Department of Kinesiology and Applied Physiology (Exercise Physiology)

Professional Experience

2022-Present	<u>Chair of Cell Biology and Physiology</u> : Via College of Osteopathic Medicine, Auburn, AL.
2018-Present	<u>Associate Professor</u> : Via College of Osteopathic Medicine, Auburn, AL. Department of Cell Biology and Physiology
2015-2018	<u>Assistant Professor</u> : Via College of Osteopathic Medicine, Auburn, AL. Department of Cell Biology and Physiology
2015-Present	<u>Graduate Faculty</u> : Graduate School / School of Kinesiology, Auburn University, Auburn, AL.
2015-Present	<u>Associate Director</u> : Molecular and Applied Sciences Laboratory, School of Kinesiology, Auburn University, Auburn, AL.
2015-Present	<u>Research Scientist</u> : Cardiovascular and Integrative Physiology Laboratory, School of Kinesiology, Via College of Osteopathic Medicine, Auburn, AL.
2018-Present	<u>Research Scientist</u> : Molecular and Applied Physiology Laboratory, Pharmacy Research Building, Auburn University, Auburn, AL.
2013-2015	<u>Assistant Professor</u> : Department of Kinesiology, University of Rhode Island, Kingston, RI.
2013-2015	<u>Director</u> : Cardiovascular Diagnostic Learning Collaborative, Department of Kinesiology, University of Rhode Island, Kingston, RI.
2013-2015	<u>Graduate Faculty</u> : University of Rhode Island, Kingston, RI.

- 2011-2013 Postdoctoral Fellow: Malcom Randall VA Medical Center, Geriatric Research Education and Clinical Center (GRECC), Gainesville, FL.
- 2011-2013 Research Assistant Professor: University of Florida, Department of Orthopaedics and Rehabilitation, Orthopaedics and Sports Medicine Institute (OSMI), Gainesville, FL.
- 2012 Postdoctoral Instructor: University of Florida, Department of Applied Physiology and Kinesiology, College of Health and Human Performance, Gainesville, FL.
- 2005-2010 Predoctoral Fellow: University of Florida, Department of Applied Physiology and Kinesiology, College of Health and Human Performance, Gainesville, FL.
- 2006-2007 Adjunct Faculty: University of Florida, Department of Applied Physiology and Kinesiology, College of Health and Human Performance, Gainesville, FL.

Clinical Experience

- 2001 Exercise Physiologist: Cardiac Rehabilitation, Preventive Medicine and Rehabilitation Institute (PMRI) Christiana Care Health System, Wilmington, DE.
- 2000-2001 Cardiac Stress Technician: Cardiac Diagnostic Center, Cardiology Consultants P.A., Wilmington, DE.
- 2000 Exercise Physiologist: Pulmonary Functions Laboratory and Pulmonary Rehabilitation Christiana Care Health System, Christiana Hospital, Newark, DE.
- 1999-2000 Exercise Physiologist: CardioKinetics Inc., Preventative Medicine and Cardiac Rehabilitation, Newark, DE.

Honors & Awards

- 2020 Researcher of the Year - Via College of Osteopathic Medicine, Auburn, AL.
- 2013 Faculty Research Excellence Award - University of Rhode Island, Kingston, RI.
- 2010-2013 Associated Health Postdoctoral Fellowship - Office of Academic Affiliations Veterans Affairs Central Office, Washington, D.C.
- 2009-2010 NIH Predoctoral Training Grant Fellowship - Multidisciplinary Training Program in Hypertension, University of Florida Hypertension Center (T32 HL083810-03)
- 2005-2009 Predoctoral Fellowship - University of Florida Alumni Fellowship for Doctoral Studies, University of Florida, Gainesville, FL.
- 1999-2002 Academic Scholarship for Undergraduate Studies, University of Delaware, Newark, DE.

Publications

Refereed Research Publications:

Citations: 2000⁺; *h* Index: 24; i10 Index: 45

1. McAdam JS, Lyons KD, **Beck DT**, Haun CT, Romero MA, Mumford PW, Roberson PA, Young KC, Lohse KR, Roberts MD, Sefton JM. Whey protein supplementation effects on body composition, performance, and blood biomarkers during Army Initial Entry Training. *Frontiers in Nutrition*. 2022. PMID: *in press*

2. Vann CG, Sexton CL, Osburn SC, Smith MA, Haun CT, Rumbley MN, Mumford PW, Ferguson BK, Montgomery NT, Moore JH, Fox CD, Ruple BA, McKendry J, McLeod J, Bashir A, Beyers RJ, Brook MS, Smith K, Atherton PJ, **Beck DT**, McDonald JR, Gladden BL, Kaelin C, Young KC, Phillips SM, Roberts MD. Effects of High-Volume versus High-Load Resistance Training on Skeletal Muscle Growth and Molecular Adaptations. *Frontiers in Physiology*. 2022. PMID: *in press*
3. Yarrow JF, Wnek RD, Conover CF, Reynolds MC, Buckley KH, Kura JR, Sutor T, Otzel DM, Mattingly AJ, Aguirre JI, **Beck DT**, McCullough DJ. Bone loss after severe spinal cord injury coincides with reduced bone formation and precedes bone blood flow deficits. *Journal of Applied Physiology*. 2021. PMID: 34473574
4. Robinson JL, Yanes JA, Reid MA, Murphy JE, Busler JN, Mumford PW, Young KC, Pietrzkowski ZB, Hunter JH, **Beck DT**. Neurophysiological effects of whole coffee cherry extract in older adults with subjective cognitive impairment: A randomized, double-blind, placebo-controlled, cross-over pilot study. *Antioxidants*. 2021. PMID: 33498314
5. Sefton JM, Lyons KD, **Beck DT**, Haun CT, Romero MA, Mumford PW, Roberson PA, Young KC, Roberts MD, McAdam JS. Markers of bone health and impact of whey protein supplementation in Army initial entry training soldiers: a double-blind placebo-controlled study. *Nutrients*. 12(8) 2225. 2020. PMID: 32722609
6. Vann CG, Osburn SC, Mumford PW, Roberson PA, CD, Sexton CL, Johnson MR, Johnson JS, Shake J, Moore JH, Millevoi K, **Beck DT**, Badisa VLD, Mwashote BM, Ibeanusi V, Roberts MD. Skeletal muscle protein composition adaptations to 10 weeks of high-load resistance training in previously-trained males. *Frontiers in Physiology*. 11, 259. 2020. PMID: 32292355
7. Fox CD, Garner CT, Mumford PW, **Beck DT**, Roberts MD. Higher doses of a green tea-based supplement increase post-exercise blood flow following an acute resistance exercise bout in recreationally resistance-trained college-aged men. *Journal of the International Society of Sports Nutrition*. 17, 1-9. 2020. PMID: 32460790
8. Roberts MD, Young KC, Fox CD, Vann CG, Roberson PA, Osburn SC, Moore JH, Mumford PW, Romero MA, **Beck DT**, Haun CT, Badisa VLD, Mwashote BM, Ibeanusi V, Kavazis AN. An optimized procedure for isolation of rodent and human skeletal muscle sarcoplasmic and myofibrillar proteins. *Journal of Biological Methods*. 7(1), 2020. PMID: 32201709
9. Vann CG, Roberson PA, Osburn SC, Mumford PW, Romero MA, Fox CD, Moore JH, Haun CT, **Beck DT**, Moon JR, Kavazis AN, Young KC, Badisa VLD, Mwashote BM, Ibeanusi VM, Singh R, Roberts MD. Skeletal muscle myofibrillar protein abundance is higher in resistance-trained men, and aging in the absence of training may have an opposite effect. *Sports*. 8(1), 7, 2020. PubMed PMID: 31936810
10. McAdam JS, McGinnis KD, **Beck DT**, Haun CT, Romero MA, Mumford PW, Roberson PA, Young KC, Lohse K, Lockwood CM, Roberts MD, Sefton JM. Effect of whey protein supplementation on physical performance and body composition in Army initial entry training soldiers. *Nutrients*. 10(9), 1248, 2018. PMID: 30200582
11. Mumford PW, Kephart WC, Romero MA, Haun CT, Mobley CB, Osburn SC, Anderson RG, Patel RK, Healy JC, Moore A, Pascoe DC, Ruffin WC, **Beck DT**, Martin JS, Roberts MD, Young KC. Effects of 1-week betalain-rich beetroot concentrate supplementation on cycling performance and select physiological parameters. *European Journal of Applied Physiology*. 118(11):2465-2476, 2018. PMID: 30155761

12. Haun CT, Mobley CB, Vann CG, Romero MA, Roberson PA, Mumford PW, Kephart WC, Healy JC, Romil KP, Osburn SC, **Beck DT**, Arnold RD, Nie BZ, Lockwood CM, Roberts MD. Soy protein supplementation is not adipogenic or estrogenic in college-aged men when combined with resistance training. *Scientific Reports*. 8(1) 11151, 2018. PMID: 30042516
13. Mumford PW, Romero MA, Mao X, Mobley CB, Kephart WC, Haun CT, Roberson PA, Young KC, Martin JS, **Beck DT**, Roberts MD. Cross-talk between androgen and Wnt signaling potentially contributes to age-related skeletal muscle atrophy in rats. *Journal of Applied Physiology*. 125(2):486-494, 2018. PMID: 29722624
14. Mobley CB, Haun CT, Roberson PA, Mumford PW, Kephart WC, Romero MA, Osburn SC, Vann CG, Young KC, **Beck DT**, Martin JS, Lockwood CM, Roberts MD. Biomarkers associated with low, moderate, and high vastus lateralis muscle hypertrophy following 12 weeks of resistance training. *Public Library of Science (PlosOne)*. 13(4) e0195203, 2018. PubMed PMID: 29621305
15. Phillips EG, Beggs LA, Ye F, Conover CF, **Beck DT**, Otzel DT, Ghosh P, Bassit AF, Borst SE, Yarrow JF. Effects of pharmacologic sclerostin inhibition or testosterone administration on soleus muscle atrophy in rodents after spinal cord injury. *Public Library of Science (PlosOne)*. 13(3), e0194440, 2018. PMID: 29579075
16. Romero MA, Mobley CB, Roberson PA, Haun CT, Kephart WC, Mumford PW, Healy JC, **Beck DT**, Young KC, Martin JS, Lockwood C, Roberts MD. Acute and chronic resistance training downregulates select LINE-1 retrotransposon activity markers in human skeletal muscle. *American Journal of Physiology - Cell Physiology*. 314(3):C379-C388, 2018. PMID: 29351416
17. Kephart WC, Mumford PW, Mao X, Romero MA, Hyatt HH, Zhang Y, Mobley CB, Quindry JC, Young KC, **Beck DT**, Martin JS, McCullough JD, D'Agostino D, Lowery RP, Wilson JM, Kavazis AN, Michael D. Roberts. The 1-week and 8-month effects of a ketogenic diet or ketone salt supplementation on multi-organ markers of oxidative stress and mitochondrial function in rats. *Nutrients*. 9(9):1019, 2017. PMID: 28914762
18. Mobley CB, Mumford PW, Kephart WC, Haun CT, Holland AM, **Beck DT**, Martin JS, Young KC, Anderson RG, Patel RK, Langston GL, Lowery RP, Wilson JM, Roberts MD. Aging in rats differentially affects markers of transcriptional and translational capacity in soleus and plantaris muscle. *Frontiers in Physiology*. 8:518, 2017. PMID: 28775694
19. Kendall KL, Hyde PN, Fairman CM, Hollaway KM, Mumford PW, Tribby AC, Falcone PH, Kimber D, Moon J, **Beck DT**, Roberts MD, Young KC. A randomized, double-blind, placebo-controlled trial to determine the effectiveness and safety of a thermogenic supplement in addition to an energy-restricted diet in apparently healthy females. *Journal of Dietary Supplements*. 14 (6), 653-666, 2017. PMID: 28388294
20. Mobley CB, Mumford PW, McCarthy JJ, Miller ME, Young KC, Martin JS, **Beck DT**, Lockwood CM, Roberts MD. Whey protein-derived exosomes increase protein synthesis in C2C12 myotubes. *Journal of Dairy Science*. 100(1), 48-64, 2017. PMID: 28341051
21. Dalbo VJ, Roberts MD, Mobley CB, Ballmann C, Kephart WC, Fox CD, Santucci VA, Conover CF, Beggs LA, Balazs A, Hoerr FJ, Yarrow JF, Borst SE, **Beck DT**. Testosterone and trenbolone enanthate increase mature myostatin protein expression despite increasing skeletal muscle hypertrophy and satellite cells number in rodent model. *Andrologia*. 49(3):e12622, 2017. PMID: 27246614
22. Delmonico MJ, **Beck DT**. The current understanding of sarcopenia: emerging tools and interventional possibilities. *American Journal of Lifestyle Medicine*. 11(2): 167-181, 2017. PMID: 30202329

23. Holland AM, Roberts MD, Mumford PW, Mobley CB, Kephart WC, Conover CF, Beggs LA, Balaez A, Otzel DM, Yarrow JF, Borst SE, **Beck DT**. Testosterone inhibits expression of lipogenic genes in visceral fat by an estrogen-dependent mechanism. *Journal of Applied Physiology*. 121(3):792-805, 2016. PMID: 27539493
24. Mobley CB, Kephart WC, Fox CD, Conover CF, Beggs LA, Otzel DM, Balaez A, Yarrow JF, Borst SE, **Beck DT**, Roberts MD. Effects of testosterone on markers of skeletal muscle ribosome biogenesis. *Andrologia*. 48(9):967-977, 2016. PMID: 26781353
25. Martin JS, Borges AR, **Beck DT**. Peripheral conduit and resistance artery function are improved following a single, 1-hour bout of peristaltic pneumatic compression. *European Journal of Applied Physiology*. 115: 2019-2029, 2015. PMID: 25981709
26. **Beck DT**, Casey DP, Martin JS, Sardina PD, Braith RB. Enhanced external counterpulsation reduces indices of central blood pressures and myocardial oxygen demand in patients with left ventricular dysfunction. *Clinical and Experimental Pharmacology and Physiology*. 42: 315-320, 2015. PMID: 25676084
27. Martin JS, Borges AR, Christy JB, **Beck DT**. Considerations for Sphygmocor radial artery pulse wave analysis measurement: Side selection and peripheral arterial blood pressure calibration. *Hypertension Research*. 38: 675-683, 2015. PMID: 25787040
28. Beggs LA, Ye F, Ghosh P, **Beck DT**, Conover CF, Balaez A, Miller JR, Philips EG, Zheng N, Williams AA, Aguirre JI, Wronski TJ, Bose PK, Borst SE, Yarrow JF. Sclerostin inhibition prevents spinal cord injury induced bone loss. *Journal of Bone and Mineral Research*. 30(4): 681-689, 2015. PMID: 25359699
29. **Beck DT**, Martin JS, Casey DP, Sardina PD, Avery JC, Braith RW. Enhanced external counterpulsation improves endothelial function and exercise capacity in patients with left ventricular dysfunction. *Clinical and Experimental Pharmacology and Physiology*. 41: 628-636, 2014. PMID: 24862172
30. **Beck DT**, Yarrow JF, Beggs LA, Otzel DM, Ye F, Conover CF, Miller JR, Balaez A, Combs SM, Leeper AM, Williams AA, Lachacz SA, Zheng N, Wronski YJ, Borst SE. Influence of aromatase inhibition on the bone protective effects of testosterone. *Journal of Bone and Mineral Research*. 29(11): 2405-2413, 2014. PMID: 24764121
31. Beggs LA, Yarrow JF, Conover CF, Meuleman JR, **Beck DT**, Morrow M, Zou B, Shuster JJ, Borst SE. Testosterone alters iron metabolism and stimulates red cell production independently of dihydrotestosterone. *American Journal of Physiology: Endocrinology and Metabolism*. 307(5): E456-461, 2014. PMID: 25074984
32. Ye F, McCoy SC, Ross HH, Bernardo JA, Beharry AW, Senf SM, Judge AR, **Beck DT**, Conover CF, Cannady DF, Smith BK, Yarrow JF, Borst SE. Transcriptional regulation of myotrophic actions by testosterone and trenbolone on androgen-responsive muscle. *Steroids*. 87: 59-66, 2014. PMID: 24928725
33. **Beck DT**, Martin JS, Gurovich AN, Nichols WW, Braith RW. Validity of a novel wristband tonometer for measuring central hemodynamics and augmentation index. *American Journal of Hypertension*. 27(7): 926-931, 2014. PMID: 24561655
34. Martin JS, **Beck DT**, Braith RW. Peripheral resistance artery blood flow in subjects with abnormal glucose tolerance is improved following enhanced external counterpulsation therapy. *Applied Physiology Nutrition and Metabolism*. 39(5): 596-599, 2014. PMID: 24766247

35. Borst SE, Yarrow JF, Conover CF, Nseyo U, Meuleman JR, Lipinska J, Braith RW, **Beck DT**, Martin JS, Morrow M, Roessner S, Beggs LA, McCoy SC, Canady DF, Shuster JJ. Musculoskeletal and prostate effects of combined testosterone and finasteride administration in older hypogonadal men: A randomized, controlled trial. *American Journal of Physiology: Endocrinology and Metabolism*. 306(4): E433-442, 2014. PMID: 24326421
36. Yarrow JF, Conover CF, Beggs LA, **Beck DT**, Otzel DM, Baelez A, Combs SM, Miller JR, Aguirre IJ, Neuville KG, Wronski TJ, Bose PK, Borst SE. Testosterone dose-dependently prevents bone and muscle loss in rodents following spinal cord injury. *Journal of Neurotrauma*. 31(9): 834-845, 2014. PMID: 24378197
37. **Beck DT**, Martin JS, Casey DP, Braith RW. Exercise training improves endothelial function in resistance arteries of young prehypertensives. *Journal of Human Hypertension*. 28(5): 303-309, 2014. PMID: 24172292
38. Avery JC, **Beck DT**, Casey DP, Sardina PD, Braith RW. Enhanced external counterpulsation improves resistance artery blood flow in patients with coronary artery disease. *Applied Physiology Nutrition and Metabolism*. 39(3): 405-408, 2014. PMID: 24552391
39. Yarrow JF¹, **Beck DT**¹, Conover CF, Beggs LA, Goldberger BA, Borst SE. Invalidation of a commercially available human 5 α -dihydrotestosterone immunoassay. *Steroids*. 78(12-13):1220-1225, 2013. PMID: 24012740
40. **Beck DT**, Martin JS, Casey DP, Braith RW. Exercise training reduces peripheral arterial stiffness and myocardial oxygen demand in young prehypertensives. *American Journal of Hypertension*. 26(9): 1093-1102, 2013. PMID: 23736111
41. **Beck DT**, Casey DP, Martin JS, Emerson BD, Braith RW. Exercise training improves endothelial function in young prehypertensives. *Experimental Biology and Medicine*. 238(4):433-441, 2013. PMID: 23760009
42. Yarrow JF, Beggs LA, Conover CF, McCoy SC, **Beck DT**, Borst SE. Influence of androgens on circulating adiponectin in male and female rodents. *Public Library of Science (PlosOne)*. 7(10): e47315, 2012. PMID: 23071783
43. Braith RW, Casey DP, **Beck DT**. Enhanced external counterpulsation for ischemic heart disease: A look behind the curtain. *Exercise and Sports Science Reviews*. July; 40(3):145-152, 2012. PMID: 22407185
44. Martin JS, **Beck DT**, Aranda JM, Braith RW. Enhanced external counterpulsation (EECP) improves peripheral artery function and glucose tolerance in patients with abnormal glucose tolerance. *Journal of Applied Physiology*. 112(5):868-876, 2012. PMID: 22194326
45. Martin JS, Casey DP, Gurovich AN, **Beck DT**, Braith RW. Association of age with timing and amplitude of reflected pressure waves during exercise in men. *American Journal of Hypertension*. 24:4; 415-420, 2011. PMID: 21233799
46. Casey DP, Nichols WW, Conti CR, Choi CY, Khuddus MA, **Beck DT**, Braith RW. Effects of enhanced external counterpulsation on arterial stiffness and myocardial oxygen demand in patients with refractory angina pectoris. *American Journal of Cardiology*. 107:1466-1472, 2011. PMID: 21420062
47. Braith RW, Conti CR, Nichols WW, Choi CY, Khuddus MA, **Beck DT**, Casey DP. Enhanced external counterpulsation improves peripheral artery flow mediated dilation in patients with chronic angina: A randomized sham-controlled study. *Circulation*. 122:1612-1620, 2010. PMID: 20921442

48. Martin JS, **Beck DT**, Gurovich AN, Braith RW. The acute effects of smokeless tobacco on central aortic blood pressure and wave reflection characteristics. *Experimental Biology and Medicine*. 235(10): 1263-1268, 2010. PMID: 20719817
49. Adkisson EJ, Casey DP, **Beck DT**, Gurovich AN, Martin JS, Braith RW. Central, peripheral and resistance arterial reactivity: fluctuates during the phases of the menstrual cycle. *Experimental Biology and Medicine*. 235(1): 111-118, 2010. PMID: 20404025
50. Gurovich AN, **Beck DT**, Braith RW. Aortic pulse wave analysis is not a surrogate for central arterial pulse wave velocity. *Experimental Biology and Medicine*. 234(11):1339-44, 2009. PMID: 19657066
51. Braith RW, **Beck DT**. Resistance exercise: training and adaptation and developing a safe exercise prescription. *Heart Failure Review*. 13:69-79, 2008. PMID: 17932746
52. Casey DP, **Beck DT**, Braith RW. Progressive resistance training without volume increases does not alter arterial stiffness and aortic wave reflection. *Experimental Biology and Medicine*. 232(9): 1228-35, 2007. PMID: 17895531
53. Casey DP, **Beck DT**, Braith RW. Systemic plasma levels of nitrite/nitrate (NOx) reflect brachial flow-mediated dilation in young men and women. *Clinical and Experimental Pharmacology and Physiology*. 34(12):1291-3, 2007. PMID: 17973870

Invited Reviews:

1. Delmonico MJ, **Beck DT**. The current understanding of sarcopenia: emerging tools and interventional possibilities. *American Journal of Lifestyle Medicine*. 11(2): 167-181, 2017.
2. Braith RW, Casey DP, **Beck DT**. Enhanced external counterpulsation for ischemic heart disease: A look behind the curtain. *Exercise and Sports Science Reviews*. 40(3):145-152, 2012.
3. Braith RW, **Beck DT**. Resistance exercise: training and adaptation and developing a safe exercise prescription. *Heart Failure Review*. 13:69-79, 2007.

Book Chapters:

1. **Beck DT**. Common Medications. *ACSM's Guidelines for Exercise Testing and Prescription (10th Edition)*. American College of Sports Medicine. Riebe D, Ehrman J, Magal M, Liguori G (Eds.). Wolters Kluwer Health:Lippincott Williams & Wilkins. ISBN/ISSN: 9781496339065, 2017.
2. **Beck DT**. Electrocardiogram Interpretation. *ACSM's Guidelines for Exercise Testing and Prescription (10th Edition)*. American College of Sports Medicine. Riebe D, Ehrman J, Magal M, Liguori G (Eds.). Wolters Kluwer Health:Lippincott Williams & Wilkins. ISBN/ISSN: 9781496339065, 2017.

Manuscripts (in revision, review, or preparation):

1. Y Cai, **DT Beck**, D McCullough, P Chen, and F Li, Developing CuFe₂O₄-DDC nanoparticle for cancer treatment. *in review*
2. **Beck DT**, Vincent-Horta LM, Sanders DJ, McCullough DJ. Acute effects of external pneumatic compression on the aortic pressure waveform and central hemodynamics. *in review*

Scientific Abstracts:

1. Vann CG, Sexton CL, Osburn SC, Smith MA, Fox CD, Ferguson BK, Ruple BA, Haun CT, Young KC, **Beck DT**, Phillips SM, Roberts MD. Effects of high-load versus high-volume resistance training on muscle sarcoplasmic, actin, and myosin protein concentrations. VCOM Research Recognition Day, 2021.

2. Smith MA, Vann CG, Sexton CL, Osburn SC, **Beck DT**, McDonald JR, Roberts MD, Young KC. High-Volume and High-Intensity Resistance Training Effects on Upper-Leg Lean Tissue Mass and Muscle Cross-Sectional Area. VCOM Research Recognition Day, 2021.
3. Fox CD, Parry HA, Vann CG, Ruple BA, Osburn SC, Sexton CL, Moore JH, Smith MA, Ferguson BK, Mesquita PHC, **Beck DT**, Young KC, Kavazis AN, Phillips SM, Roberts MD. Skeletal muscle metabolic biomarker adaptations to high load versus high volume unilateral resistance training. VCOM Research Recognition Day, 2021.
4. **Beck DT**, Denney TS, Bashir A. Measurement of ATP turnover in the in vivo Heart at 7T. VCOM Research Recognition Day, 2021.
5. Jennifer L. Robinson JL, Julio A. Yanes JA, Meredith A. Reid MA, Jerry E. Murphy JE, Jessica N. Busler JN, Petey W. Mumford PW, Kaelin C. Young KC, Zbigniew J. Pietrkowski ZJ, Boris Nemzer B, **Beck DT**. Neurophysiological effects of whole coffee cherry extract in older adults with subjective cognitive impairment: A randomized, double-blind, placebo-controlled, cross-over pilot study. VCOM Research Recognition Day, 2021.
6. Vann CG, Sexton CL, Osburn SC, Smith MA, Fox CD, Ferguson BK, Ruple BA, Haun CT, Young KC, **Beck DT**, McDonald JR, Phillips SM, Roberts MD. Effects of high-load versus high-volume resistance training on muscle sarcoplasmic, actin, and myosin protein concentrations. *Med. Sci. Sports Exer.* 52(7), 828-829 2020.
7. Smith MA, Vann CG, Sexton CL, Osburn SC, **Beck DT**, McDonald JR, Roberts MD, Young KC. High-volume and high-intensity resistance training effects on upper-leg lean tissue mass and muscle cross-sectional area. *Med. Sci. Sports Exer.* 52(7), 19, 2020.
8. Sexton CL, Vann CG, Osburn SC, Smith MA, Rumbley MN, **Beck DT**, Young KC, Roberts MD. Effects of high-load and high-volume resistance training on maximal strength, peak torque, and mean torque, *Med. Sci. Sports Exer.* 52(7), 213-214, 2020.
9. Wang C, **Beck DT**, Li F McCullough JD, Chen P. Subtyping tumor cell-derived extracellular vesicles using Au@Ag core-shell nano-bipyramids biosensor for cancer diagnosis and treatment. VCOM Research Recognition Day, 2020.
10. Rice R, Clark C, Dunn K, Brisson P, **Beck DT**. Evaluation of medical student contributions to research investigations. VCOM Research Recognition Day, 2020.
11. Reynolds MC, Conover CF, Otzel DM, Wnek RD, Buckley KH, Flores M, Phillips EG, **Beck DT**, McCullough DJ, Yarrow JF. Does reduced blood flow affect the rate of muscle loss in rats post spinal cord injury? *Med. Sci. Sports Exer.* 51(6), 2019.
12. McAdam J, McGinnis K, **Beck DT**, Fruge A, Roberts MD, Sefton J. Effects of Nutritional Supplementation on Body Composition and Bio-markers during Army Initial Entry Training. *Med. Sci. Sports Exer.* 51(6), 93, 2019.
13. McAdam J, McGinnis K, **Beck DT**, Fruge A, Roberts MD, Sefton J. Evaluation of Dietary Intake and Training Volume During Army Initial Entry Training. *Med. Sci. Sports Exer.* 51(S), 2019.
14. Vann CG, Roberson PA, Osburn SC, Mumford PW, Romero MA, Fox CD, Moore JH, Haun CT, Kavazis AN, Badisa V, Mwashote BM, Ibeanusi VM, **Beck DT**, Moon JR, Young KC, Roberts MD. Skeletal muscle sarcoplasmic and myofibrillar proteomic comparisons between younger resistance-

trained versus untrained younger and older humans. International Society of Sports Nutrition (ISSN) Annual Conference, Las Vegas NV. 2019

15. Robinson JL, Yanes JA, Reid MA, Murphy JE, Busler JN, Mumford PW, Young KC, Pietrzakowski ZJ, Hunter JM, **Beck DT**. Neurophysiological effects of polyphenol-rich whole coffee cherry extract in older adults. Organization for Human Brain Mapping (OHBM) Annual Conference. Rome, Italy. 2019.
16. Haun CT, Mobley CB, Vann CG, Romero MA, Roberson PA, Mumford PW, Kephart WC, Healy JC, Patel RK, Osburn SC, **Beck DT**, Roberts MD. Soy Protein Supplementation is not Adipogenic or Estrogenic in Young Men When Combined with Resistance Training. Southeast American College of Sports Medicine Annual Conference. Chattanooga, TN. February 2018.
17. Ruffin W, Mumford P, Healey J, **Beck D**, Martin J, Roberts M, Young K. The effects of betalain-rich red beet concentrate supplementation on the acute inflammatory response induced by a bout of intense exercise. Alabama Osteopathic Medical Association (ALOMA) 27th Annual Conference, 2017.
18. McAdam J, McGinnis K, Munz B, Ory R, Nendze J, Gordon S, Devine J, Brown A, Bell K, Roberts MD, Haun C, Romero M, Mumford P, Roberson P, **Beck DT**, Lockwood C, Lohse K, Young KC, Sefton J. Evaluation of the effects of whey protein hydrolysate supplementation on performance, body composition, and health during Armor One Station Unit Training. VCOM Research Recognition Day, 2017.
19. McAdam J, McGinnis K, Munz B, Ory R, Nendze J, Gordon S, Devine J, Ourada J, Roberts MD, Haun C, Romero M, Mumford P, **Beck DT**, Neidert L, Lockwood C, Lohse K, Young KC, Sefton J. Impact of whey protein supplementation on fitness performance, body composition and injury rates in Army Initial Entry Soldiers. VCOM Research Recognition Day, 2017.
20. Mumford PW, Romero MA, Xuansong Mao, Mobley CB, Kephart WC, Haun CT, Roberson PA, Young KC, Martin JS, **Beck DT**, Roberts MD. Cross-talk between androgen and Wnt signaling potentially contributes to age-related skeletal muscle atrophy in rats. UAB Center for Exercise Medicine Fifth Annual Symposium. Birmingham, AL. Sep., 2017.
21. Mobley CB, Haun CT, Roberson PA, Mumford PW, Kephart WC, Romero MA, Osburn SC, Vann CG, Pledge C, Young KC, **Beck DT**, Lockwood CM, Roberts MD. Biomarkers associated with type II muscle fiber hypertrophy in response to resistance training in young, untrained males. UAB Center for Exercise Medicine Fifth Annual Symposium. Birmingham, AL. Sep., 2017.
22. Romero MA, Mobley CB, Roberson PA, Haun CT, Kephart WC, Mumford PW, Healy JC, **Beck DT**, Young KC, Martin JS, Lockwood CM, Roberts MD. Resistance exercise-mediated reductions in LINE-1 retrotransposon activity may drive increases in satellite cell activity in human skeletal muscle. UAB Center for Exercise Medicine Fifth Annual Symposium. Birmingham, AL. Sep., 2017.
23. Mumford PW, Mobley CB, Kephart WC, Romero MA, Haun CT, Mao X, Osburn SC, Young KC, **Beck DT**, Martin JS, Lowery RP, Wilson JM, Roberts MD. The relationship between serum testosterone and skeletal muscle Wnt signaling markers in 3-24-month old rats. *Med. Sci. Sports Exer.*, 49(S), 2017.
24. Mumford PW, Holland AM, Kephart WC, Lowery RP, Mobley CB, Patel RK, Newton A, **Beck DT**, Roberts MD, Wilson JM, Young KC. Effects of a ketogenic diet with exercise on serum markers of bone metabolism, IGF-1 and femoral bone mass in rats. *J International Society of Sports Nutrition*, 2016.

25. Haun CT, Mumford PW, Hyde PN, Fairman CM, Kephart WC, **Beck DT**, Moon JR, Roberts MD, Kendall KL, Young KC. Effects of a popular women's thermogenic supplement during an energy-restricted high protein diet on changes in body composition and clinical safety markers. *J International Society of Sports Nutrition*, 2016.
26. Lee DC, Harrison T, Ball M, Richardson H, **Beck DT**, Anz A, Goodlett M. Range of motion in the interphalangeal joints of collegiate football players. 31st *Clinical Conference of the American Osteopathic Association of Sports Medicine (AOASM)*, Tempe, AZ. 2016.
27. **Beck DT**, Dalbo VJ, Mobley CB, Ballmann C, Kephart WC, Fox CD, Santucci VA, Conover CF, Beggs LA, Balaez A, Hoerr FJ, Yarrow JF, Borst SE, Roberts MD. Myostatin Protein and Muscle Fiber Cross-Sectional Area are Associated with Increased Muscle Satellite Cell Number in 10 Month Old Fisher 344 Rats Treated with Testosterone and Trenbolone Enanthate. *FASEB J.* 30:1014.7, 2016.
28. Mobley CB, Haun CT, Mumford PW, Kephart WC, Holland AM, Osburn SC, **Beck DT**, Martin JM, Young KC, Kavazis AN, Lowery R, Wilson JM, Roberts MD. Effects of aging on markers of ribosome biogenesis in fast- and slow-twitch skeletal muscle in rodents aged 3 to 24 months. *FASEB J.* 30:LB626, 2016.
29. Haun CT, Mumford PW, Mobley CB, Kephart WC, Holland AM, Osburn SC, **Beck DT**, Martin JM, Young KC, Kavazis AN, Lowery R, Wilson JM, Roberts MD. Markers of muscle protein synthesis and breakdown in slow-twitch skeletal muscle of rodents aged 3 to 24 months. *FASEB J.* 30:LB174, 2016.
30. Mumford PW, Mobley CB, Kephart WC, Haun CT, Holland AM, Osburn SC, **Beck DT**, Martin JM, Young KC, Kavazis AN, Lowery R, Wilson JM, Roberts MD. Markers of muscle protein synthesis and breakdown in fast-twitch skeletal muscle of rodents aged 3 to 24 months. *FASEB J.* 30:LB627, 2016.
31. Dalbo VJ, Roberts MD, Mobley CB, Ballmann C, Kephart WC, Fox CD, Santucci VA, Conover CF, Beggs LA, Balaez A, Hoerr FJ, Yarrow JF, Borst SE, **Beck DT**. Testosterone and trenbolone enanthate increase muscle hypertrophy and satellite cell number despite increasing myostatin protein expression in adult rodent muscle. *J Sci. Med. Sport.* 2016.
32. Kephart WC, Holland AM, Lowery RP, Mumford PW, Mobley CB, McCloskey AE, Shake JJ, Mesquita P, Young KC, Martin JS, **Beck DT**, McCullough DJ, Kavazis AN, Roberts MD, Wilson JM. Six weeks of a low carbohydrate diet with or without exercise favorably alters hepatic NF- κ B signaling and serum markers related to overall health in rats. *UAB Center for Exercise Medicine-Annual Symposium*, Birmingham, AL. 2015
33. **Beck DT**, Casey DP, Martin JS, Sardina PD, Braith RB. Enhanced external counterpulsation reduces indices of left ventricular wasted energy and myocardial oxygen demand in patients with left ventricular function and refractory angina. *FASEB J.* 29:952.11, 2015.
34. Vincent-Horta LM, Sanders DJ, Martin JS, **Beck DT**. Acute effects of external pneumatic compression on peripheral and central hemodynamics. *FASEB J.* 29:LB677, 2015.
35. Martin JS, Borges AR, Christy JB, **Beck DT**. Considerations for pulse wave analysis measurement: Side selection and peripheral arterial blood pressure calibration. *FASEB J.* 29:632.5, 2015.
36. Brooks CM, Kephart WC, Fox CD, Santucci VA, **Beck DT**, Yarrow JF, McCarthy JJ, Borst SE, Roberts MD. Differential effects of testosterone and trenbolone on skeletal muscle markers of ribosome biogenesis. *FASEB J.* 29:825.21, 2015.
37. **Beck DT**, Yarrow JF, Beggs LA, Otzel DM, Ye F, Conover CF, Miller JR, Balaez A, Combs SM, Borst SE. Influence of aromatase inhibitors on the bone protective effects of testosterone. *Med. Sci. Sports Exer.* 46(5S):440-441, 2014.

38. Beggs LA, Ye F, **Beck DT**, Otzel DM, Conover CF, Balaez A, Miller JR, Yarrow JF, Borst SE. Testosterone prevents bone loss in skeletally-mature male rats subsequent to spinal cord injury. *Med. Sci. Sports Exer.* 46(5S):441, 2014.
39. Martin JS, **Beck DT**, Braith RW, FACSM. Resistance arterial function following enhanced external counterpulsation therapy in persons with abnormal glucose tolerance. *Med. Sci. Sports Exer.* 46(5S):659, 2014.
40. Otzel DM, Conover CF, Beggs LA, **Beck DT**, Balaez A, Combs SM, Miller JR, Ye F, Aguirre JI, Neuville KG, Williams AA, Conrad BP, Gregory CM, Wronski TJ, Bose PK, Borst SE, Yarrow JF. Testosterone dose-dependently prevents bone and muscle loss in rodents following spinal cord injury. *Med. Sci. Sports Exer.* 46(5S):440, 2014.
41. Borst SE, Yarrow JF, Conover CF, Nseyo U, Meuleman JR, Lipinska JA, Braith RW, **Beck DT**, Martin JS, Morrow M, Roessner S, Beggs LA, McCoy SC, Cannady DF, Shuster JJ. Musculoskeletal and prostate effects of combined testosterone and finasteride administration in older hypogonadal men. *Med. Sci. Sports Exer.* 46(5S):439-440, 2014.
42. Yarrow JF, Beggs LA, Conover CF, Meuleman JR, **Beck DT**, Morrow M, Borst SE. Testosterone stimulates red cell production independent of dihydrotestosterone. *Med. Sci. Sports Exer.* 46(5S):402, 2014.
43. Ye F, McCoy SC, Ross HH, Bernardo JA, Beharry AW, Senf SM, Judge AR, **Beck DT**, Conover CF, Cannady DF, Smith BK, Yarrow JF, Borst SE. Transcriptional regulation of myotrophic actions by testosterone and trenbolone on androgen responsive muscle. *Med. Sci. Sports Exer.* 46(5S):440, 2014.
44. **Beck DT**, Yarrow JF, Beggs LA, Otzel DM, Ye F, Conover CF, Miller JR, Balaez A, Combs SM, Borst SE. Influence of aromatase inhibition on the bone protective effects of testosterone. *NEACSM*, Providence, RI, 2013.
45. **Beck DT**, Yarrow JF, McCoy SC, Beggs LA, Balaez A, Combs SM, Miller JR, Conover CF, Borst SE. The combined effects of anastrozole and testosterone or trenbolone on prostate and levator ani-bulbo cavernosus mass. *FASEB J.* 27:1150.5, 2013.
46. Beggs LA, **Beck DT**, Conover CF, Ye F, Combs SM, Miller JR, Balaez A, Neuville KG, Wronski TJ, Bose P, Borst SE, Yarrow JF. Testosterone treatment prevents spinal cord injury-induced bone loss in male rats. *FASEB J.* 27:941.4, 2013.
47. Ye F, McCoy SC, Yarrow JF, Conover CF, **Beck DT**, Beggs LA, Beharry AW, Judge AR, Ross HH, Borsa PA, Tillman MD, Conrad BP, Pingel JE, Wronski TJ, Johnson SE, Kristinsson HG, Borst SE. Effect of trenbolone enanthate on protein degradation in levator ani/bulbocavernosus (LABC) muscle in orchietomized rats. *FASEB J.* 27:939.15, 2013.
48. Balaez A, **Beck DT**, Yarrow JF, McCoy SC, Beggs LA, Combs SM, Miller JR, Conover CF, Borst SE. The effects of aromatase inhibition combined with testosterone or trenbolone administration on prostate and skeletal muscle mass. *AMSA*, Gainesville, FL. 2013.
49. Ye F, McCoy SC, Beharry AW, Senf SM, Judge AR, Ross HH, Bernardo JA, **Beck DT**, Beggs LA, Conover CF, Borst SE. Androgen-mediated skeletal muscle recovery involves a late transcriptional program in orchietomized male rats. *Neuromuscular Plasticity Symposium*, Gainesville, FL. 2013.
50. Balaez A, **Beck DT**, Yarrow JF, McCoy SC, Beggs LA, Combs SM, Miller JR, Conover CF, Borst SE. The combined effects of anastrozole and testosterone or trenbolone on prostate and levator ani-bulbo cavernosus mass. *FURC*, Gainesville, FL. 2013.

51. **Beck DT**, Martin JS, Casey DP, Braith RW, FACSM. Exercise training reduces peripheral pulse wave velocity in young prehypertensives. *Med. Sci. Sports Exer.* 44(5):S1;410, 2012.
52. Braith RW, FACSM, Casey DP, Conti CR, Nichols WW, Choi CY, Khuddus MA, **Beck DT**. Enhanced external counter pulsation improves endothelial function in patients with left ventricular dysfunction. *Med. Sci. Sports Exer.* 44(5):S1;165. 2012.
53. Martin JS, **Beck DT**, Aranda JM, Braith RW, FACSM. Enhanced External Counterpulsation Improves Peripheral Artery Function, Redox Balance, and Insulin Resistance in Patients with Abnormal Glucose Tolerance. *Med. Sci. Sports Exer.* 44(5):S1;116-117, 2012.
54. Martin JS, **Beck DT**, Aranda JM, Braith RW. Enhanced external counterpulsation increases GLUT-4 protein expression, capillary density and glucose tolerance in subjects with abnormal glucose tolerance. *FASEB J.* 26:686.18, 2012.
55. **Beck DT**, Martin JS, Casey DP, Braith RW, FACSM. Exercise training improves endothelial function in young prehypertensives. *Med. Sci. Sports Exer.* 2012.
56. Avery JC, **Beck DT**, Casey DP, Conti CR, Nichols WW, Choi CY, Khuddus MA, Braith RW, FACSM. Enhanced external counter pulsation improves exercise capacity in patients with left ventricular dysfunction. *Med. Sci. Sports Exer.* 44(5):S1;165-166,2012.
57. **Beck DT**, Martin JS, Emerson BD, Casey DP, Braith RW FACSM. Resistance and endurance training improve endothelial function and vasoactive balance in young prehypertensives. *Med. Sci. Sports Exer.* 43(5):S1:2011.
58. Martin JS, **Beck DT**, Braith RW, FACSM. Enhanced external counterpulsation and glycemic control in CAD patients with type II diabetes mellitus. *Med. Sci. Sports Exer.* 43(5) S1;559-560, 2011.
59. **Beck DT**, Martin JS, Emerson BD, Casey DP, Braith RW. Exercise training improves endothelial function and vasoactive balance in young prehypertensives. *GSC Interdisciplinary Research Conference*, University of Florida, Gainesville, FL. 2011.
60. **Beck DT**, Casey DP, Nichols WW, Choi CY, Khuddus MA, Conti CR, Braith RW. Enhanced external counterpulsation improves redox balance and endothelial function in patients with refractory angina; *Med. Sci. Sports Exer.* 42(5): S1:121-122, 2010.
61. Martin JS, Casey DP, Gurovich AN, **Beck DT**, Braith RW. A prospective look at the impact of aging on central hemodynamics during exercise in men. *Med. Sci. Sports Exer.* 42(5): S1:308, 2010.
62. Gurovich AN, Martin JS, **Beck DT**, Casey DP, Braith RW. Myocardial energetics is altered in patients with coronary artery disease. *Med. Sci. Sports Exer.* 42(5): S1:541, 2010.
63. **Beck DT**, Casey DP, Nichols WW, Choi CY, Khuddus MA, Conti CR, Braith RW. Improvements in redox balance and endothelial function in patients with refractory angina after enhanced external counterpulsation therapy. *GSC Interdisciplinary Research Conference*, University of Florida, Gainesville, FL. 2010.
64. Martin JS, Casey DP, Gurovich AN, **Beck DT**, Braith RW. Central hemodynamics during exercise: The impact of aging across young, middle-aged and elderly men. *GSC Interdisciplinary Research Conference*, University of Florida, Gainesville, FL. 2010.
65. **Beck DT**, Gurovich AN, Martin JS, Nichols WW, Braith RW. Validation of a novel wristband tonometer used for applanation tonometry. *COM Research Conference*, University of Florida, Gainesville, FL. 2009.

66. Martin JS, **Beck DT**, Gurovich AN, Braith RW. The acute effect of smokeless tobacco on central hemodynamics. *GSC Interdisciplinary Research Conference, University of Florida, Gainesville, FL.* 2009.
67. Braith RW, Casey DP, **Beck DT**, Nichols WW, Choi CY, Khuddus MA, Conti CR. Peripheral endothelial function is a primary clinical target for enhanced external counterpulsation in patients with refractory angina. *Journal of the American College of Cardiology.* 53(10):S1:A300-A300, 2009.
68. **Beck DT**, Gurovich AN, Martin JS, Nichols WW, Braith RW. Validation of a novel wristband tonometer used for applanation tonometry. *GSC Interdisciplinary Research Conference, University of Florida, Gainesville, FL.* 2009.
69. Martin JS, **Beck DT**, Gurovich AN, Braith RW, FACSM. The acute effect of smokeless tobacco on central hemodynamics. *Med. Sci. Sports Exer.* 41(5): S1:70, 2009.
70. **Beck DT**, Gurovich AN, Martin JS, Nichols WW, Braith RW, FACSM. Validation of a novel wristband tonometer used for applanation tonometry. *Med. Sci. Sports Exer.* 41(5): S1:69-70, 2009.
71. Braith RW, FACSM, Conti RC, **Beck DT**, Nichols WW, Choi CY, Khuddus MA, Casey DP. Enhanced external counter pulsation improves arterial function in patients with chronic stable angina. *Med. Sci. Sports Exer.* 41(5): S1:53, 2009.
72. Gurovich AN, Casey DP, **Beck DT**, Braith RW, FACSM. Determination of central arterial pulse wave velocity from pulse wave analysis. *Med. Sci. Sports Exer.* 40(5): S1:91, 2008.
73. **DT Beck**, Casey DP, Braith RW. The relationship between body fat percentage and arterial wave reflection in young, healthy men and women. *Med. Sci. Sports Exer.* 40(5): S1:268, 2008.
74. Casey DP, Conti RC, Nichols WW, Khuddus MA, Choi CY, **Beck DT**, Braith RW. Enhanced external counterpulsation treatment decreases arterial stiffness and myocardial oxygen demand in patients with refractory angina. *GSC Interdisciplinary Research Conference, University of Florida, Gainesville, FL.* 2007.
75. Casey DP, **Beck DT**, Braith RW, FACSM. The relationship between brachial artery flow mediated dilation and plasma levels of nitrate/nitrite (NOx). *Med. Sci. Sports Exer.* 39(5): S1:427, 2007.
76. Braith RW, **Beck DT**, Casey DP. Effects of resistance exercise training on arterial function in young, healthy men and women. *Med. Sci. Sports Exer.* 38(11): S5, 2006.

Invited Presentations

1. *Research Retreat Panel Discussion – Anatomy of a Collaborative Proposal*, VCOM Annual College Wide Research Retreat, Hilton Head, SC, 2021
2. *VCOM Research Player Draft, Translational Research Leader*, VCOM Annual College Wide Research Retreat, Hilton Head, SC, 2021
3. *Form and Function of Skeletal Muscle*, Jack Hughston Memorial Hospital, Phenix City, AL, 2017.
4. *The Road Taken: BS to PhD*. Department of Kinesiology, College of Human Science and Services, University of Rhode Island, Kingston, RI, 2013.
5. *Enhanced External Counterpulsation, Exercise, Shear Stress and Vascular Aging*. Oak Hammock at the University of Florida, Department of Aging and Geriatric Research, University of Florida Institute on Aging, Gainesville, FL, 2013.

6. *Habitual Exercise and Vascular Aging: Never too late to start?* Gainesville Senior Recreation Center, Department of Aging and Geriatric Research, University of Florida Institute on Aging, Gainesville, FL, 2013.
7. *Extracardiac Effects of Enhanced External Counterpulsation in Symptomatic Patients with Cardiovascular Disease and Refractory Angina.* Department of Kinesiology, College of Human Science and Services, University of Rhode Island, Kingston, RI, 2013.
8. *Exercise and Heart Failure.* Department of Health Sciences, College of Health Profession, Central Michigan University, Mt. Pleasant, MI, 2012.
9. *Resistance and Endurance Exercise Training Improves Endothelial Function and Augmentation Index in Young Prehypertensives.* Department of Health Sciences, College of Health Profession, Central Michigan University, Mt. Pleasant, MI, 2012.
10. *Biostatistics and Research Design for the Clinician.* Geriatrics and Extended Care/ Geriatric Research Education and Clinical Centers (GRECC), North Florida/South Georgia Veterans Health System, Gainesville, FL, 2012.
11. *Testosterone and Heart Failure.* Geriatrics and Extended Care/ Geriatric Research Education and Clinical Centers (GRECC), North Florida/South Georgia Veterans Health System, Gainesville, FL, 2012.
12. *Vasoactive Pharmacotherapy.* Department of Applied Physiology and Kinesiology at the University of Florida, Gainesville, FL, 2012.
13. *Evaluations of Muscle Performance.* Department of Physical Therapy at the University of Florida, Gainesville, FL. Basic Clinical Skills II (PHT 6207C). Course for the degree of Doctor of Physical Therapy, 2012.
14. *Cardiac Pharmacotherapy.* Department of Applied Physiology and Kinesiology at the University of Florida, Gainesville, FL, 2012.
15. *Acute and Chronic Adaptations to Resistance Training.* Department of Physical Therapy at the University of Florida, Gainesville, FL. Basic Clinical Skills II (PHT 6207C). Course for the degree of Doctor of Physical Therapy, 2012.
16. *Flow Mediated Dilation (FMD) and Venous Occlusion Plethysmography (VOP): Protocol application.* Department of Applied Physiology and Kinesiology, University of Florida, Gainesville, FL, 2010.
17. *Cardiopulmonary Exercise Testing: Interpreting results.* Department of Cardiology, Florida Hospital, Orlando, FL, 2007. Continuing Medical Education (CME) credit approved course.
18. *Indications for Utilizing Cardiopulmonary Exercise Testing.* Department of Cardiology, Florida Hospital, Orlando, FL, 2007. Continuing Medical Education (CME) credit approved course.
19. *Body Composition Rules and Regulations for High School Wrestlers.* Delaware Interscholastic Athletic Association (DIAA) rules and regulations coaches and referees conference. Smyrna, DE, 2001.

Grants and Awards (awarded) \$4,538,428

2021	REACT Innovations <i>Extracorporeal Magnetic Innervation Therapy to Reduce Pain and Accelerate Return to Play Following Lower Extremity Injuries</i> Co-PIs: DT Beck, PhD, MD Goodlett, MD, PG Brolinson, DO	\$59,500
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2021	<p>VCOM Research Eureka Accelerator Program (REAP) <i>Targeted Drug Delivery of a Novel Selective Liver Receptor Agonist for Preventing Liver Fibrosis</i> Co-PIs: R Amin, PhD, F Li, PhD, DT Beck, PhD, Danielle McCullough, PhD, Co-Is: T Denney, PhD, A Bashir, PhD, R Beyers, PhD, C Goldsmith, PhD</p>	\$40,000
2021	<p>VCOM/College of Veterinary Medicine (One Health Grant) <i>Regulation of luteinizing hormone to prevent cognitive decline of reproductive senescence and Alzheimer's Disease – Year 2</i> Co-PIs: DT Beck, PhD, DR Martin, PhD Co-Is: HJ Baker, DVM, MN Reed, PhD, B Akingbemi, DVM, PhD, D Yan, PhD</p>	\$41,877
2020	<p>VCOM/College of Veterinary Medicine (One Health Grant) <i>Regulation of luteinizing hormone to prevent cognitive decline of reproductive senescence and Alzheimer's Disease</i> Co-PIs: DT Beck, PhD, DR Martin, PhD Co-Is: HJ Baker, DVM, MN Reed, PhD, B Akingbemi, DVM, PhD, D Yan, PhD</p>	\$50,000
2020	<p>VCOM/Auburn University Biomedical Engineering (VCOM AUBE) Research Grant <i>A high-density lipoprotein cholesterol nanoparticle mimic for the early detection and treatment of prostate cancer</i> Co-PIs: JD McCullough, PhD, A David, PhD Co-Is: DT Beck, PhD</p>	\$50,432
2019	<p>VCOM's Research Eureka Accelerator Program (REAP) <i>Iatrogenic cardiac and skeletal muscle metabolic dysfunction in patients with breast cancer after combined chemotherapy and radiation treatment</i> Co-PIs: DT Beck, PhD, TS Denney, PhD, A Bashir, PhD</p>	\$50,080
2019	<p>VCOM/Auburn University Biomedical Engineering (VCOM AUBE) Research Grant <i>Novel engineered nanoparticle based drug delivery and biosensing assay system for in vivo prostate cancer treatment and monitoring</i> Co-PIs: JD McCullough, PhD, P Chen, PhD Co-Is: DT Beck, PhD, F Lee, PhD</p>	\$50,000
2018-2021	<p>Presidential Awards for Interdisciplinary Research (PAIR) <i>Center for Neuroscience (CNS)</i> Co-PIs: V Suppiramaniam, PhD, MN Reed, PhD Role: Co-Investigator Co-Is: A Kaddoumi, PhD, P Panizzi, PhD, R Amin, PhD, D Martin, PhD, A Kisselev, PhD, J Shen, PhD, B Smith, PhD, C Newland, PhD, R Arnold, PhD, M El-Sheikh, PhD, R Hansen, PhD, T Moore, PhD.</p>	\$725,000

2018-2021	Presidential Awards for Interdisciplinary Research (PAIR) <i>Extra-virgin olive oil prevents MCI conversion to Alzheimer's disease</i> PI: A Kaddoumi, PhD Role: Co-Investigator Co-Is: TS Denney, PhD, G Deshpande, PhD, R Beyers, PhD, JL Robinson, PhD, A Kirby, PhD, N Merner, PhD.	\$300,000
2018-2021	Presidential Awards for Interdisciplinary Research (PAIR) <i>Development of the AU-NASH (Auburn University-Non-Alcoholic Steatohepatitis) Research Program</i> PI: Rajesh H Amin, PhD Role: Co-Investigator Co-Is: RD Arnold, PhD, TS Denney, PhD, Adil Bahir, PhD, MD Roberts, PhD, JD McCullough, PhD.	\$300,000
2016	FutureCeuticals <i>Neurophysiological effects of whole coffee fruit concentrate in older adults with mild cognitive impairment: A fMRI Investigation</i> Role: Principal Investigator Co-PIs: JL Robinson. PhD Collaborators: TS Denney, PhD, N Salibi, PhD	\$94,257
2016	American Diabetes Association <i>The antiglycemic effects of a lower pressure external pneumatic compression device on type II diabetics: a molecular and applied investigation</i> Role: Co-Investigator PI: JS Martin, PhD Co-I: MD Roberts, PhD	\$566,003
2016	University of Tampa and Human Longevity <i>Effects of a subchronic ketogenic diet on skeletal muscle anabolic and catabolic signaling and adipose tissue signaling</i> Role: Co-PI PI: MD Roberts, PhD Co-PIs: KC Young, PhD, JS Martin, PhD	\$105,000
2016	University of Tampa and Human Longevity <i>Effects of aging and nutrition on systemic stem cell content and physiological systems</i> Role: Co-PI PI: MD Roberts, PhD Co-PIs: KC Young, PhD, JS Martin, PhD	\$246,000
2016	NormaTec <i>Comparative effects of NormaTec and an alternate device in the treatment of lymphedema</i> Role: Co-Investigator PI: JS Martin, PhD Co-I: A Langley, DO, M Sanders, DO	\$43,025
2014	Champlin Foundations Grant <i>Cardiovascular Diagnostic Learning Collaborative</i> Role: Principal Investigator Co-PIs: D Reibe, PhD, SK Brown, DPT, CP MacDonnell, PharmD, and AN Jackson, PharmD.	\$214,275

2011-2013	Associated Health Postdoctoral Fellowship. Office of Academic Affiliations Veterans Affairs Central Office, Washington, D.C. <i>The effects of aromatase inhibition and testosterone administration on prostate, bone, adipose and skeletal muscle in the orchiectomized male rat</i> Role: Principal Investigator Co-PI: SE Borst, PhD	\$86,759
2009-2010	T32 Predoctoral Fellowship. (NIH training grant 5T32HL083810-03). Predoctoral training period 2009 – 2010 (Multidisciplinary Training Program in Hypertension). University of Florida Hypertension Center, University of Florida, Gainesville, FL. <i>Endothelial function and arterial stiffness in young prehypertensives</i> Role: Predoctoral Fellow PI: CM Baylis, PhD	\$61,270
2006-2009	National Institutes of Health (NIH-HLBI-RO1-HL077571-01) <i>Effects of Enhanced External Counterpulsation (EECP) on Arterial Function</i> Role: Predoctoral Fellow PI: RW Braith, PhD	\$1,191,250
2005-2009	University of Florida Alumni Fellowship for Doctoral Studies. Department of Applied Physiology and Kinesiology, College of Health and Human Performance, University of Florida, Gainesville, FL. Role: Predoctoral Fellow	\$263,700

Grants and Awards (unfunded) \$5,904,695

2021	National Football League Players Association (NFLPS) Joint Committee on Pain Management <i>Extracorporeal Magnetic Innervation Therapy to Reduce Pain and Accelerate Return to Play Following Lower Extremity Injuries</i> Co-PIs: DT Beck, PhD, MD Goodlett, MD, PG Brolinson, DO Collaborators: J Edison, DO, M Rogers, DO, JL Robinson, PhD, S Scher, MSPT, ATC, Zoe Foster, MD, K Anderson, MD	\$250,000
2021	Center for Clinical and Translational Science (CCTS) Modulation of Luteinizing Hormone to Prevent Cognitive Decline of Menopause PI: DR Martin, PhD CO-Is: DT Beck, PhD, MN Reed, PhD, HJ Baker, DVM	\$60,000
2021	National Football League Players Association (NFLPS) Joint Committee on Pain Management <i>Alternatives to Opioids: Effects of Pain and Performance</i> Co-PIs: DT Beck, PhD, MD Goodlett, MD, Co-Is: JL Robinson, PhD, TS Denney, PhD, MD Roberts, PhD	\$1,000,000
2021	FutureCeuticals <i>Effects of Whole Coffee Fruit Cherry Concentrate and B Vitamin Complex on Brain Derived Neurotrophic Factor</i> Role: Principal Investigator Co-PIs: JL Robinson. PhD	\$125,000
2021	VCOM Research Eureka Accelerator Program (REAP) <i>Novel Pharmacotherapeutic Target for Cardioprotection Against Myocardial Infarction Damage in Diabetics</i> Co-PIs: DT Beck, PhD, R Amin, PhD, JD McCullough, PhD	\$50,000

2020	<p>VCOM/College of Veterinary Medicine (One Health Grant) <i>Exploration of the combined effect of oncolytic virus and CAR T cell therapy in osteosarcoma</i> Co-PIs: JD McCullough, PhD, P Agarwal, PhD Co-Is: DT Beck, PhD, BF Smith, VMD, PhD</p>	\$50,000
2019	<p>VCOM Research Eureka Accelerator Program (REAP) <i>Reduced frataxin levels increase mitochondrial iron dyshomeostasis exacerbating ischemia reperfusion injury in diabetic heart mouse model</i> Co-PIs: DT Beck, PhD, R Amin, PhD</p>	\$50,000
2018	<p>National Dairy Council <i>The effects of exosome-enriched versus exosome-depleted milk protein on prostate cancer prognosis in rodents</i> PI: JD McCullough, PhD Role: Co-Investigator CO-Is: MD Roberts, PhD, J Zempleni, PhD</p>	\$191,480
2017	<p>United States Special Operations Command (USSOCOM) <i>Use of Heart Rate Variability to Predict Readiness and Improve Training and Performance in Special Operations Forces (SOF) Operators</i> Co-PIs: JM Sefton, PhD, MD Roberts, PhD, A Gupta, PhD, JL Robinson, PhD Role: Co-Principal Investigator</p>	\$699,570
2017	<p>National Science Foundation <i>Research Traineeship (NRT) Innovations in Graduate Education (IGE) Understanding the Brain (UtB): Enhancing graduate neuroscience education</i> PI: JL Robinson, PhD Role: Co-Investigator</p>	\$490,926
2017	<p>Department of Defense – Congressional Directed Medical Research Programs <i>Novel MRI biomarkers to quantify PTSD in combat veterans and direct future treatment</i> PI: DT Beck, PhD Co-Investigators: JL Robinson, PhD; MAJ JE Murphy, MS</p>	\$287,000
2015	<p>American Diabetes Association <i>The antiglycemic effects of a lower pressure external pneumatic compression device on type II diabetics: a molecular and applied investigation</i> PI: JS Martin, PhD Role: Co-Investigator</p>	\$494,589
2015	<p>Medtronic <i>Efficacy of sequential peristaltic pulse external pneumatic compression (PEPC) for improved free-living glycemic control in patients with type 2 diabetes mellitus.</i> PI: JS Martin, PhD Role: Co-Investigator</p>	\$13,990
2014	<p>Research Proposal Development Grant University of Rhode Island Division of Research and Economic Development <i>Effects of aromatase inhibition on testosterone induced gene expression in adipose tissue of F344 rats</i> PI: DT Beck, PhD</p>	\$15,000

2014	Faculty Career Enhancement Grant University of Rhode Island Division of Research and Economic Development <i>Acute effects of a commercially available limb pneumatic compression device on systemic arterial function</i> PI: DT Beck, PhD	\$15,000
2014	Federal Research Priorities (State of Rhode Island) University of Rhode Island Division of Research and Economic Development <i>Cardiovascular effects of testosterone administration in hypogonadal men</i> PI: DT Beck, PhD	\$1,276,000
2013	BLR&D CDA-2 (Grant-11349490) Office of Research Development (ORD) <i>Testosterone replacement to improve cardiac function in rat heart failure model</i> PI: Darren T. Beck, Ph.D. Co-Investigators: SA Bercelli, MD, PhD, SE Borst, PhD, LF Ferreira, PhD, and CY Choi, MD.	\$977,600
2008	American Heart Association Predoctoral Fellowship. <i>Effects of resistance training on arterial function in prehypertensives</i> PI: DT Beck Co-PI: RW Braith, PhD	\$43,540

Editorial Board Membership

Associate Editor for Journal of Sport and Human Performance

Ad Hoc Reviewer

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Hypertension
Journal of Applied Physiology
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Journal of Neuroscience Research
Journal of Sport and Human Performance
Journal of Strength and Conditioning Research
Lung
Medicine and Science in Sport and Exercise
Neurotrama Reports
Nutrients

Professional Society Membership

American Physiological Society
American College of Sports Medicine
New England Region American College of Sports Medicine
Southeast Region American College of Sports Medicine
American Heart Association
The Planetary Society

Graduate Student Mentor

- 2020 Doctoral Dissertation Committee Member: Chris G. Vann, M.S., School of Kinesiology, Auburn University, Auburn, AL.
- 2019 Doctoral Dissertation Committee Member: Petey W. Mumford, M.S., School of Kinesiology, Auburn University, Auburn, AL.
- 2018 Doctoral Dissertation Committee Member: Jerry E. Murphy, M.S., Department of Psychology, Auburn University, Auburn, AL.
- 2017 Doctoral Dissertation Committee Member: Wesley C. Kephart, M.S., School of Kinesiology, Auburn University, Auburn, AL.
- 2015 Masters Thesis Committe Member: Lisa Vincent-Horta, B.S., Department of Kinesiology, University of Rhode Island, Kingston, RI.
- 2014 Masters Degree Major Advisor: Michael Babatunde, B.S., Department of Kinesiology, University of Rhode Island, Kingston, RI.
- 2014 Masters Thesis Committee Chair: Sean Krueger, B.S., Department of Nutrition and Food Sciences, University of Rhode Island, Kingston, RI.

Undergraduate Student Mentor

- 2015 Undergraduate Directed Research Study: Jack A. Goldman, Department of Biological Sciences, University of Rhode Island, Kingston, RI.
- 2015 Undergraduate Directed Research Study: Adam J. Rokicki, Department of Kinesiology, University of Rhode Island, Kingston, RI.
- 2014 Undergraduate Directed Research Study: John B. Christy, Department of Kinesiology, University of Rhode Island, Kingston, RI.

Academic Committee Service

- 2022 Voting Member – OMS 1 and OMS 2 Promotion Board
- 2021-present Co-Chair – VCOM College Wide Faculty Senate
- 2021-present Committee Member: Dean's Council and Dean's Administrative Committee
- 2021-present Committee Member: VCOM Appointment, Promotion and Tenure Committee
- 2021-present Chair: VCOM Faculty Senate.
- 2021-present Committee Member: Diversity Committee – VCOM Auburn.
- 2018-present Chair: Professional Ethics and Standards Board, VCOM-Auburn.
- 2019-present Chair: Neuroscience Grand Rounds.
- 2017-present Chair: VCOM Auburn Research Day.

- 2018-present Committee Member: VCOM Research Retreat Planning Committee
- 2018-present Founding Member: Center for Neuroscience Initiative, Harrison School of Pharmacy, Auburn University.
- 2018-present Committee Member: Student Professional Development, VCOM-Auburn.
- 2018-present Boshell Faculty Member: Boshell Diabetes and Metabolic Diseases Research Program, Auburn University.
- 2014-2015 Committee Member: Department of Kinesiology Graduate Program, University of Rhode Island, Kingston, RI.
- 2014-2015 Founding Director: Exercise Science Student Organization, University of Rhode Island, Kingston, RI.
- 2014 Department of Kinesiology Representative: Ad Hoc Gateways to Completion (G2C) Task Force for Chemistry (CHM 103), University of Rhode Island, Kingston, RI.
- 2003-2004 Graduate Student Representative: University of Delaware Faculty Senate, Committee for Student and Faculty Honors, University of Delaware, Newark, DE.
- 2001-2003 Committee Member: Exercise Science Department Steering Committee, Delaware Technical and Community College, Wilmington, DE.

Community Service

- 2021 Local Fundraiser: St. Jude Children's Research Hospital
- 2021 Volunteer: COVID-19 Vaccine Clinic, East Alabama Medical Center, Auburn, AL.
- 2016-Present Volunteer Instructor: Science Matters Summer Academy for Elementary Students, College of Sciences and Mathematics (COSAM), Auburn University, Auburn, AL.
- 2016-Present Participant/Donor: Johnny Ray Century for Parkinson's Disease, Auburn, AL.
- 2016 Participant/Donor: Bo Bikes Bama 5th Annual Alabama State Fundraiser, Auburn, AL.
- 2015 Participant/Donor: Breast Cancer Awareness Community Bicycle Ride, Auburn, AL.
- 2015 VCOM-Auburn Representative: Phenix City Public Schools Community Health and Wellness Expo, Central Activity Center, Phenix City, AL.
- 2015-2020 Volunteer: Boy Scouts of America, Saugahatchee District, Troup 354, Auburn, AL.
- 2010 Volunteer (Carpentry and Design): ABC's Extreme Makeover-Home Edition, Wagstaff Family home build, Gainesville, FL.
- 2005-2008 Volunteer: American Heart Association, Alachua County, Gainesville, FL.
- 2001-2003 Volunteer: Special Olympics of Delaware, Newark, DE.
- 1999-2000 Volunteer: Brennen School, Delaware Autism Program, Newark, DE.