

Jeffrey S. Martin, Ph.D.*Curriculum Vitae*

CONTACT INFORMATION

Edward Via College of Osteopathic Medicine – Auburn Campus
 Department of Cell Biology and Physiology
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EDUCATION

- 2011 **Ph.D. - Health and Human Performance**
 University of Florida, College of Health and Human Performance; Gainesville, FL USA
 Dissertation: [Effects of enhanced external counterpulsation \(EECP\) on glycemic control and arterial function in patients with abnormal glucose tolerance](#)
- 2006 **M.Sc. - Clinical Exercise Physiology**
 Northeastern University, Bouvé College of Health Science; Boston, MA USA
- 2004 **B.Sc. - Movement Science**
 University of Pittsburgh, School of Education; Pittsburgh, PA USA

PROFESSIONAL APPOINTMENTS

- 2015-present **Chair, Associate Professor**
 Edward Via College of Osteopathic Medicine – Auburn Campus (VCOM-Auburn), Department of Cell Biology and Physiology, Auburn, AL USA
- 2015-present **Affiliate Associate Professor**
Director, Cardiovascular and Integrative Physiology Laboratory
Associate Director, Molecular and Applied Sciences Laboratory
 Auburn University, School of Kinesiology, Auburn, AL USA
- 2013-2015 **Assistant Professor**
 Quinnipiac University, School of Health Sciences, Department of Biomedical Sciences, Hamden, CT USA
- 2012-2013 **Program Director, Assistant Professor**
 Lasell College, Department of Athletic Training and Exercise Science, Newton, MA USA
- 2011-2012 **Post-Doctoral Research Fellow**
 University of Missouri, Department of Biomedical Sciences, Columbia, MO USA
 Primary Research: Muscle blood flow and capillary dynamics
 P.I.: M. Harold Laughlin, Ph.D.

TEACHING EXPERIENCE

VCOM-Auburn; Department of Cell Biology and Physiology
Courses Instructed and Directed

MED7125 Cellular Biochemistry and Nutrition ('15, '16, '17)
 MED7140 Cardiovascular and Pulmonary Systems ('16, '17)
 MED7147 Gastrointestinal and Renal Systems ('16, '17)

Additional Courses Directed

MED7130 Musculoskeletal System ('15, '16, '17)
 MED7151 Reproductive and Endocrine Systems ('16, '17)
 MED7155 Integumentary, Lymphatic and Hematologic Systems and Psychiatry ('17)

Quinnipiac University, Department of Biomedical Sciences
Courses Instructed and Directed

BMS 203 Medical Terminology (SP14, F14)
 BMS 302L Physiology of Human Performance Laboratory II (SP14)
 BMS 302L Physiology of Human Performance Laboratory I (F13, SP14)
 BMS 482 Directed Study - *External Counterpulsation and Sports Performance* (SU14)

Lasell College; Department of Athletic Training & Exercise Science
Courses Instructed and Directed

EXSC 107 Lifestyles and Human Behavior (SP13)
 EXSC 302 Exercise Physiology (F12)
 EXSC 302L Exercise Physiology Laboratory (F12)
 EXSC 305 Principles of Strength and Conditioning (SP06)
 EXSC 305L Principles of Strength and Conditioning Laboratory (F12)
 EXSC 390D Directed Research Study - *Efficacy of Pneumatic Compression for Exercise Performance and Recovery* (SP13)
 EXSC 410 Clinical Internship (SP13)
 EXSC 420 Clinical Internship II (SP13)
 EXSC 430 Exercise Science Capstone (SP13)

University of Florida; Department of Applied Physiology and Kinesiology
Courses Instructed

APK 4120 Clinical Exercise Physiology (SP10)

Northeastern University; Department of Health Sciences
Courses Instructed

CES U501 Exercise Physiology Laboratory (F04, SP05, F05, SP06)

FIELD EXPERIENCE

2012-2013 Strength & Conditioning Specialist; Lasell College – Athletic Department

2006-2007	Fitness and Cardiac Rehabilitation Director; Striar JCC (Presently the Old Colony YMCA), Stoughton, MA
2006	Adult Education Instructor; National Personal Training Institute, Waltham, MA
2006	Research Assistant: Nutrition, Exercise Physiology and Sarcopenia Lab; Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University, Boston, MA (Clinical Internship)
2005	Exercise Physiologist: Dedham Spine Center, New England Baptist Hospital, Dedham, MA (Clinical Internship)
2005	Exercise Physiologist: Preventative Cardiology, Boston Medical Center, Boston, MA (Clinical Internship)
2003-2004	Research Assistant; Endocrinology and Metabolism, University of Pittsburgh Medical Center; Pittsburgh, PA

PUBLICATIONS

Refereed Journal Articles

1. Haun CT, Roberts MD, Romero MA, Osburn SC, Healy JC, Moore AN, Mobley CB, Roberson PA, Kephart WC, Mumford PW, Goodlett MD, Pascoe DD, **Martin JS**. Concomitant external pneumatic compression treatment with consecutive days of high intensity interval training reduces markers of proteolysis. *European Journal of Applied Physiology*. In Press; PMID: [29075862](#)
2. Rodriquez-Hernandez M, **Martin JS**, Pascoe DD, Roberts MD, Wadsworth DW. Multiple short bouts of walking activity attenuate the blood glucose response in obese women. *Journal of Physical Activity and Health*. (Accepted/Forthcoming)
3. Moore AN, Haun CT, Kephart WC, Holland AM, Mobley CB, Pascoe DD, Roberts MD, **Martin JS**. Red spinach extract increases ventilatory threshold during graded exercise testing. *Sports*. 2017; 5: 80. DOI: [10.3390/sports5040080](#)
4. Haun CT, Mumford PW, Roberson PA, Romero MA, Mobley CB, Kephart WC, Anderson RG, Colquhoun RJ, Muddle TWD, Luera MJ, Mackey CS, Pascoe DD, Young KY, **Martin JS**, DeFreitas JM, Jenkins NDM, Roberts MD. Molecular, neuromuscular and recovery responses to light versus heavy resistance exercise in young men. *Physiological Reports*. 2017; 5: e13457. PMID: [28963127](#)
5. **Martin JS**, Mumford PW, Haun CT, Luera MJ, Muddle TWD, Colquhoun RJ, Freeney MP, Mackey CS, Roberson PA, Young KC, Pascoe DD, Defreitas JM, Jenkins NDM, Roberts MD. Effects of a pre-workout supplement on hyperemia following leg extension resistance exercise to failure with different resistance loads. *Journal of the International Society of Sports Nutrition*. 2017; 14: 38. PMID: [28959158](#)
6. Kephart WC, Mumford PW, Mao X, Romero MA, Hyatt HH, Zhang Y, Mobley CB, Quindry JC, Young KC, Beck DT, **Martin JS**, McCullough DJ, Augustino DD, Lowery RP, Wilson JM, Kavazis AN, Roberts MD. 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*. 2017; 9: 1019. PMID: [28914762](#)
7. Mobley CB, Haun CT, Roberson PA, Mumford PW, Romero MA, Kephart WC, Anderson RG, Vann CG, Osburn SC, Pledge CD, **Martin JS**, Young KC, Goodlett MD, Pascoe DD,

- Lockwood C, Roberts MD. Effects of whey, soy or leucine supplementation with 12 weeks of resistance training on strength, body composition, and skeletal muscle and adipose tissue histological attributes in college-aged males. *Nutrients*. 2017; 9: 972. PMID: [28869573](#)
8. Haun CT, **Martin JS**, Mizuguchi S, Kavanaugh AA, DeWeese BH, Stone MH, Gleason BH. Static jump test performance is related to back squat strength in athletes. *International Journal of Sports Science and Coaching*. 2017; 12(5): 653-660. DOI: [10.1177/1747954117727843](#)
 9. Romero MA, Mobley CB, Linden MA, Meers GM, **Martin JS**, Young KC, Rector RS, Roberts MD. Endurance training lowers ribosome density despite increasing ribosome biogenesis markers in rodent skeletal muscle. *BMC Research Notes*. 2017; 10: 399. PMID: [28800772](#)
 10. Mobley CB, Mumford PW, Kephart WC, Haun CT, Holland AM, Beck DT, **Martin JS**, Young KC, Anderson R, Patel R, Langston G, 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*. 2017; 8: 518. PMID: [28775694](#)
 11. Haun CT, Roberts MD, Romero MZ, Osburn SC, Langston GL, Anderson RG, Goodlett MD, Pascoe DD, **Martin JS**. Does external pneumatic compression treatment between bouts of overreaching resistance training sessions exert differential effects on molecular signaling and performance-related variables compared to passive recovery? An exploratory study. *PLoS ONE*. 2017; 12(6): e0180429. PMID: [28662152](#)
 12. Mobley CB, Mumford PW, McCarthy J, Miller M, Young KC, **Martin JS**, Beck DT, Lockwood CM, Roberts MD. Whey protein-derived exosomes increase protein synthesis and hypertrophy in C₂C₁₂ myotubes. *Journal of Dairy Science*. 2017; 100(1): 48-64. PMID: [28341051](#)
 13. Padilla J, Thorne PK, **Martin JS**, Rector RS, Akter S, Davis JW, Laughlin MH, Jenkins NT. Transcriptomic effects of metformin in skeletal muscle arteries of obese insulin-resistant rats. *Experimental Biology and Medicine*. 2017; 242(6): 617-624. PMID: [28114814](#)
 14. Holland AM, **Martin JS**, Mattson CD, Lohse K, Finn PR, Stager JM. A cross-sectional study of physical activity and arterial compliance: the effects of age and artery size. *Journal of the American Society of Hypertension*. 2017; 11(2): 92-100. PMID: [28089109](#)
 15. **Martin JS**, Kephart WC, Haun CT, McCloskey AE, Shake JJ, Mobley CB, Goodlett MD, Kavazis AN, Zhang L, Pascoe DD, Roberts MD. Impact of external pneumatic compression target inflation pressure on transcriptome-wide RNA expression in skeletal muscle. *Physiological Reports*. 2016; 4(220): e13029. PMID: [27884954](#)
 16. Haun CT, Kephart WC, Holland AM, Mobley CB, McCloskey AE, Shake JJ, Roberts MD, **Martin JS**. Differential vascular reactivity responses acutely following ingestion of a nitrate rich red spinach extract. *European Journal of Applied Physiology*. 2016; 116(11-12): 2267-2279. PMID: [27695978](#)
 17. Sardina PD, **Martin JS**, Dzieza WK, Braith RW. Enhanced external counterpulsation (EECP) decreases advanced glycation end products and proinflammatory cytokines in patients with non-insulin-dependent type II diabetes mellitus for up to 6 months following treatment. *Acta Diabetologica*. 2016; 53(5): 753-760. PMID: [27278477](#)
 18. Sardina PD, **Martin JS**, Avery JC, Braith RW. Enhanced external counterpulsation (EECP) improves biomarkers of glycemic control in patients with non-insulin-dependent type II

- diabetes mellitus for up to 3 months following treatment. *Acta Diabetologica*. 2016; 53(5): 745-752. PMID: [27179825](#)
19. **Martin JS**, Kephart WC, Mobley CB, Wilson TJ, Goodlett MD, Roberts MD. A single 60-min bout of peristaltic pulse external pneumatic compression transiently upregulates phosphorylated ribosomal protein s6. *Clinical Physiology and Functional Imaging*. 2017; 37(6): 602-609. PMID: [26769680](#)
 20. Roberts MD, Holland AM, Kephart WC, Mobley CB, Mumford PW, Lowery RP, Fox CD, McCloskey AE, Shake JJ, Mequita P, Patel RK, **Martin JS**, Young KC, Kavazis AN, Wilson JM. A putative low-carbohydrate ketogenic diet elicits mild nutritional ketosis but does not impair the acute or chronic hypertrophic responses to resistance exercise in rodents. *Journal of Applied Physiology*. 2016; 120(10): 1173-1185. PMID: [26718785](#)
 21. Kephart WC, Mobley CB, Thompson RM, Wachs TD, Fox CD, McDonald J, Arnold R, Nie B, Company J, **Martin JS**, Young KC, Moon JR, Pascoe DD, Roberts MD. Ten weeks of branched-chain amino acid supplementation improves select performance and immunological variables in trained cyclists. *Amino Acids*. 2015; 48(3): 779-789. PMID: [26553453](#)
 22. Mobley CB, Fox CD, Thompson RM, Healy JC, Santucci V, Kephart WC, McCloskey AE, Kim M, Pascoe DD, **Martin JS**, Moon JR, Young KC, Roberts MD. Comparative effects of whey protein versus L-leucine on skeletal muscle protein synthesis and markers of ribosome biogenesis following resistance exercise. *Amino Acids*. 2015; 48(3): 733-750. PMID: [26507545](#)
 23. **Martin JS**, Kreiger JD, Apicerno A. Effectiveness of a hybrid classroom in the delivery of medical terminology course content relative to a traditional classroom format. *Journal of the Scholarship of Teaching and Learning*. 2015; 15(5): 72-81. DOI: [10.14434/josotl.v15i5.13994](#)
 24. **Martin JS**, Friedenreich ZD, Borges AR, Roberts MD. Pre-conditioning with an external pneumatic compression device does not acutely improve repeated Wingate performance nor does it alter blood lactate concentrations during passive recovery compared with sham. *Applied Physiology, Nutrition and Metabolism*. 2015; 40(11): 1214-1217. PMID: [26489050](#)
 25. Laughlin MH, Padilla J, Jenkins NT, Thorne PK, **Martin JS**, Rector RS, Akter S, Davis JW. Exercise training causes differential changes in gene expression in diaphragm arteries and 2A arterioles of obese rats. *Journal of Applied Physiology*. 2015; 119(6): 604-616. PMID: [26183478](#)
 26. Laughlin MH, Padilla J, Jenkins NT, Thorne PK, **Martin JS**, Rector RS, Davis JW. Exercise-induced differential changes in gene expression among arterioles of skeletal muscles of obese rats. *Journal of Applied Physiology*. 2015; 119(6): 583-603. PMID: [26183477](#)
 27. Kephart WC, Mobley CB, Fox CD, Pascoe DD, Sefton JM, Wilson TJ, Goodlett MD, Sunderland KL, Kavazis AN, Roberts MD, **Martin JS**. A single bout of whole-leg, peristaltic pulse external pneumatic compression upregulates PGC-1 α mRNA and endothelial nitric oxide synthase protein in human skeletal muscle tissue. *Experimental Physiology*. 2015; 100(7): 852-864. PMID: [25982469](#)
 28. **Martin JS**, Borges AR, Beck DT. Peripheral conduit and resistance artery function are improved following a single, 1-h bout of peristaltic pulse external pneumatic compression. *European Journal of Applied Physiology*. 2015; 115(9): 2019-2029. PMID: [25981709](#)

29. **Martin JS**, Borges AR, Christy IV JB, Beck DT. Considerations for SphygmoCor radial artery pulse wave analysis: side selection and peripheral arterial blood pressure calibration. *Hypertension Research*. 2015; 38(10): 675-683. PMID: [25787040](#)
30. **Martin JS**, Friedenreich ZD, Borges AR, Roberts MD. Acute effects of peristaltic pneumatic compression on repeated anaerobic exercise performance and blood lactate clearance. *Journal of Strength and Conditioning Research*. 2015; 29(10): 2900-2906. PMID: [25756325](#)
31. Beck DT, Casey DP, **Martin JS**, Sardina PD, Braith RB. Enhanced external counterpulsation reduces indices of central blood pressure and myocardial oxygen demand in patients with left ventricular dysfunction. *Clinical and Experimental Physiology and Pharmacology*. 2015; 42(4): 315-320. PMID: [25676084](#)
32. Padilla J, Jenkins NT, Thorne PK, **Martin JS**, Rector RS, Davis JW, Laughlin MH. Identification of genes whose expression is altered by obesity throughout the arterial tree. *Physiological Genomics*. 2014; 46(22): 821-832. PMID: [25271210](#)
33. Beck DT, **Martin JS**, Casey DP, Avery JC, Sardina PD, Braith RW. Enhanced external counterpulsation improves endothelial function and exercise capacity in patients with ischaemic left ventricular dysfunction. *Clinical and Experimental Physiology and Pharmacology*. 2014; 41(9): 628-636. PMID: [24862172](#)
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. *Journal of Applied Physiology, Nutrition and Metabolism*. 2014; 39(5): 596-599. PMID: [24766247](#)
35. Beck DT, **Martin JS**, Nichols WW, Gurovich AN, Braith RW. Validity of a novel wristband tonometer for measuring central hemodynamics and augmentation index. *American Journal of Hypertension*. 2014; 27(7): 926-931. PMID: [24561655](#)
36. Jenkins NT, Padilla J, Thorne PK, **Martin JS**, Rector RS, Davis JW, Laughlin MH. Transcriptome-wide RNA sequencing analysis of rat skeletal muscle feed arteries. I. Impact of obesity. *Journal of Applied Physiology*. 2014; 116(8): 1017-1032. PMID: [24436298](#)
37. Padilla J, Jenkins NT, Thorne PK, **Martin JS**, Rector RS, Davis JW, Laughlin MH. Transcriptome-wide RNA sequencing analysis of rat skeletal muscle feed arteries. II. Impact of exercise training in obesity. *Journal of Applied Physiology*. 2014; 116(8): 1033-1047. PMID: [24408995](#)
38. 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, 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*. 2014; 306(4): E433-442. PMID: [24326421](#)
39. Beck DT, **Martin JS**, Casey DP, Braith RW. Exercise training improves endothelial function in resistance arteries of young prehypertensives. *Journal of Human Hypertension*. 2014; 28(5): 303-309. PMID: [24172292](#)
40. Jenkins NT, Padilla J, **Martin JS**, Crissey JM, Thyfault JP, Rector RS, Laughlin MH. Differential vasomotor effects of insulin on gastrocnemius and soleus feed arteries in the OLETf rat model: role of endothelin-1. *Experimental Physiology*. 2014; 99(1): 262-271. PMID: [23995100](#)

41. Crissey JM, Padilla J, Jenkins NT, **Martin JS**, Rector RS, Thyfault JP, Laughlin MH. Metformin does not enhance insulin-stimulated vasodilation in skeletal muscle resistance arteries of the OLETF rat. *Microcirculation*. 2013; 20(8): 764-775. PMID: [23879830](#)
42. Beck DT, Casey DP, **Martin JS**, Hudson MB, Braith RW. Exercise training improves endothelial function in young prehypertensives. *Experimental Biology and Medicine*, 2013; 238(4): 433-441. PMID: [23760009](#)
43. Beck DT, **Martin JS**, Casey DP, Braith RW. Exercise training reduces peripheral arterial stiffness and myocardial oxygen demand in young prehypertensive subjects. *American Journal of Hypertension*. 2013; 26(9): 1093-1102. PMID: [23736111](#)
44. Borsa PA, Larkin KA, **Martin JS**. Oral consumption of electrokinetically modified water attenuates muscle damage and improves post-exercise recovery. *Journal of Applied Physiology*. 2013; 114(12): 1736-1742. PMID: [23580602](#)
45. Roberts MD, Bayless DS, Childs TE, Company JM, Jenkins NT, Padilla J, **Martin JS**, Dalbo VJ, Booth FW, Rector RS, Laughlin MH. Elevated skeletal muscle irisin precursor FNDC5 mRNA in obese OLETF rats. *Metabolism*. 2013; 62(8) 1052-1056. PMID: [23498898](#)
46. **Martin JS**, Braith RW. Anti-inflammatory effects of enhanced external counterpulsation in subjects with abnormal glucose tolerance. *Journal of Applied Physiology, Nutrition and Metabolism*. 2012; 37(6): 1251-1255. PMID: [23057577](#)
47. Jenkins NT, Padilla J, Arce-Esquivel AA, Bayless DS, **Martin JS**, Leidy HJ, Booth FW, Rector RS, Laughlin MH. Effects of endurance exercise training, metformin, and their combination on adipose tissue leptin and IL-10 secretion in OLETF rats. *Journal of Applied Physiology*. 2012; 113(12): 1873-1883. PMID: [23019312](#)
48. **Martin JS**, Padilla J, Jenkins NT, Crissey JM, Bender SB, Rector RS, Thyfault JP, Laughlin MH. Functional adaptations in the skeletal muscle microvasculature to endurance and interval sprint training in the type 2 diabetic OLETF rat. *Journal of Applied Physiology*. 2012; 113(8): 1223-1232. PMID: [22923508](#)
49. Jenkins NT, **Martin JS**, Padilla J, Laughlin MH. Exercise-induced signals for vascular endothelial adaptations: implications for cardiovascular disease. *Current Cardiovascular Risk Reports*. 2012; 6(4): 331-346. PMID: [22844545](#)
50. Padilla J, Jenkins NT, Roberts MD, Arce-Esquivel AA, **Martin JS**, Laughlin MH, Booth FW. Differential changes in vascular mRNA levels between rat iliac and renal arteries produced by cessation of voluntary running. *Experimental Physiology*. 2013; 98(1): 337-347. PMID: [22709650](#)
51. Larkin KA, **Martin JS**, Zeanah EH, True JM, Braith RW, Borsa PA. Limb blood flow after class 4 laser therapy. *Journal of Athletic Training*. 2012; 47(2): 178-183. PMID: [22488283](#)
52. **Martin JS**, Beck DT, Aranda Jr. JM, Braith RW. Enhanced external counterpulsation improves peripheral artery function and glucose tolerance in subjects with abnormal glucose tolerance. *Journal of Applied Physiology*. 2012; 112(6): 868-876. PMID: [22194326](#)
53. **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*. 2011; 24(4): 415-420. PMID: [21233799](#)
54. **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*. 2010; 235(10): 1263-1268. PMID: [20719817](#)

55. 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*. 2010; 235(1): 111-118. PMID: [20404025](#)

Manuscripts in Review/Preparation

56. 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. (In review; *AJP-Cell Physiology*).
57. Mumford PW, Romero MA, Mao X, Mobley CV, 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. (In review; *Journal of Applied Physiology*).
58. **Martin JS**, Martin AM, Mumford PW, Salom LP, Pascoe DD. Unilateral application of an external pneumatic compression therapy improves skin blood flow and vascular reactivity bilaterally. (In review; *Clinical Physiology and Functional Imaging*).
59. Colquhoun RJ, Muddle TWD, Magrini MA, Haun CT, Tomko PM, Vann CG, **Martin JS**, Young KC, DeFreitas JM, Roberts MD, Jenkins NDM. Muscle phenotype influences motor unit behavior of the vastus lateralis during maximal isometric contractions. (In preparation)
60. Mumford PW, Kephart WC, Romero MA, Haun CT, Mobley CB, Osburn SC, Anderson RG, Patel RK, Healy JC, Moore AN, Pascoe DD, Ruffin WC, Beck DT, **Martin JS**, Roberts MD, Young KC. Sub-chronic effects of betalain-rich beetroot concentrate supplementation on cycling performance and select physiological parameters. (In preparation).
61. Rector RS, Moore AN, Healy JC, Kephart WC, Roberson PA, Mumford PW, Hargrove MW, Pickich MB, Phillips CN, Roberts MD, **Martin JS**. Turmeric extract supplementation in a rodent model of NASH. (In preparation).
62. Kephart WC, Holland AM, Mobley CB, Mumford PW, Lowery RP, Fox CD, McCloskey AE, Shake JJ, Mesquita P, Patel RK, **Martin JS**, Young KC, Kavazis AN, Roberts MD, Wilson JM. Body composition and health effects of intermittent low carbohydrate ketogenic dieting as well as ketone salt supplementation in exercised rodents. (In preparation).
63. Beck DT, Vincent-Horta LM, Sanders DJ, **Martin JS**. Acute effects of sequential peristaltic external pneumatic compression on the aortic pressure waveform and central hemodynamics. (In preparation).

PROFESSIONAL PRESENTATIONS

Select Presentations at Professional Conferences

1. Moore MP, Cunningham R, Moore AN, Healy JC, Roberts MD, Rector RS, **Martin JS**. *Curcumin supplementation mitigates NASH development and progression in female Wistar rats*. American College of Sports Medicine Meeting. Medicine & Science in Sports and Exercise; June 2018.
2. Hargrove MW, Pickich MB, Phillips CN, Moore AN, Healy JC, Kephart WC, Roberson PA, Mumford PW, Roberts MD, **Martin JS**. *Therapeutic benefit of a turmeric extract in nutritionally and oxidatively induced rat model of non-alcoholic steatohepatitis*. Alabama Osteopathic Medical Association (ALOMA) Annual Emerald Coast Conference. July 2017.

3. Ruffin W, Mumford PW, Healy JC, Moore AN, Beck DT, **Martin JS**, Roberts MD, Young KC. *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) Annual Emerald Coast Conference. July 2017.
4. Leura MJ, Muddle TWD, Colquhoun RJ, DeFreitas JM, Haun CT, Mumford PW, Roberson PA, Pascoe DD, Feeney MP, Young KC, **Martin JS**, Roberts MD, Jenkins NDM. *Oxygenation of the vastus lateralis during high- versus low- load fatiguing leg extension exercise*. National Strength and Conditioning Association Annual National Conference; July 2017.
5. **Martin JS**, Mumford PW, Haun CT, Roberson PA, Colquhoun RJ, Feeney MP, Luera MJ, Mackey CS, Muddle TWD, Riffe JJ, Young KC, Pascoe DD, Defreitas JM, Jenkins NDM, Roberts MD. *Effects of a pre-workout supplement on hyperemia following leg extension resistance exercise at different intensities*. American College of Sports Medicine Meeting. Medicine & Science in Sports and Exercise; 49 (5S): 83. June 2017.
6. Haun CT, Romero MA, Osburn SC, Anderson RG, Goodlett MD, Pascoe DD, Roberts MD, **Martin JS**. *Performance-related and molecular effects of external pneumatic compression as an adjuvant to heavy voluminous resistance exercise*. American College of Sports Medicine Meeting. Medicine & Science in Sports and Exercise; 49 (5S): 682. June 2017.
7. Romero MA, Haun CT, Osburn SC, Langston GL, Anderson RG, Goodlett MD, Pascoe DD, Roberts MD, **Martin JS**. *Effects of external pneumatic compression treatment on ribosome biogenesis, hypertrophy and inflammation markers with resistance exercise*. American College of Sports Medicine Meeting. Medicine & Science in Sports and Exercise; 49 (5S): 501. June 2017.
8. Colquhoun RJ, Haun CT, Mumford PW, Roberson PA, Pascoe DD, Feeney MP, Young KC, **Martin JS**, Roberts MD, Muddle TWD, Riffe JJ, Luera MJ, Magrini MA, Mackey CS, Stock MS, Jenkins NDM, DeFreitas JM. *The effects of a muscle biopsy on motor unit firing properties*. American College of Sports Medicine Meeting. Medicine & Science in Sports and Exercise; 49 (5S): 612-613. June 2017.
9. 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*. American College of Sports Medicine Meeting. Medicine & Science in Sports and Exercise; 49 (5S): 338. June 2017.
10. Roberson PA, Kephart WC, Pledge C, Mumford PW, Huggins KW, **Martin JS**, Young KC, Lowery RP, Wilson JM, Roberts MD. *The physiological effects of 12-weeks of ketogenic dieting while cross-training*. American College of Sports Medicine Meeting. Medicine & Science in Sports and Exercise; 49 (5S): 275. June 2017.
11. Kephart WC, Mumford PW, Solorzano D, Osburn SC, Patel RK, Anderson RG, Healy JC, Moore A, **Martin JS**, Young KC, Lowery RP, Kavazis AN, Wilson JM, Roberts MD. *Effects of short-term ketogenic dieting or ketone salt supplementation on body mass, feed efficiency and lipogenic gene expression patterns in different fat depots*. American College of Sports Medicine Meeting. Medicine & Science in Sports and Exercise; 49 (5S): 440. June 2017.
12. Roberson PA, Kephart WC, Pledge C, Mumford PW, Huggins KW, **Martin JS**, Young KY, Lowery RP, Wilson JM, Roberts MD. *Effects of 12-week ketogenic dieting on body composition and performance variables in humans that cross-train*. Boshell Diabetes &

Metabolic Diseases 10th Annual Research Day; March 2017. ***Poster Competition Award Winner**

13. Haun CT, Romero MA, Osburn SC, Anderson RG, Goodlett MD, Pascoe DD, Roberts MD, **Martin JS**. *Performance-related and molecular effects of external pneumatic compression as an adjuvant to heavy voluminous resistance exercise*. UAB Center for Exercise Medicine – 4th Annual Symposium. September 2016. ***Poster Competition Award Winner**
14. Pascoe DD, Kennedy EH, West JB, Rego FMA, Roberts MD, **Martin JS**. *Bilateral thermal sympathetic response influences control leg during compression treatment*. 63rd Annual American College of Sports Medicine Meeting. Medicine & Science in Sports and Exercise; 48 (5S): 147. June 2016.
15. **Martin JS**, Haun CT, Kephart WC, Holland AM, Mobley CB, McCloskey AE, Shake JJ, Roberts MD. *The effects of a novel red spinach extract on graded exercise testing performance*. 63rd Annual American College of Sports Medicine Meeting. Medicine & Science in Sports and Exercise; 48 (5S): 189. June 2016.
16. **Martin JS**, Kephart WC, Haun CT, McCloskey AE, Shake JJ, Mobley CB, Goodlett MD, Zhang L, Roberts MD. *Analysis of Human Vastus Lateralis Skeletal Muscle Biopsy Samples Changes in Response to High and Low Inflation Pressures during Peristaltic Pulse External Pneumatic Compression Via Transcriptome-wide RNA Sequencing*. 99th Annual Experimental Biology Meeting. The FASEB Journal; 30(1S): 1b675. April 2016.
17. Haun CT, Mumford PW, Mobley CB, Kephart WC, Holland AM, Osburn SC, Beck DT, **Martin JS**, Young KC, Kavazis AN, Lowery RP, Wilson JM, Roberts MD. *Markers of muscle protein synthesis and breakdown in slow-twitch skeletal muscle of rodents aged 3 to 24 months*. 99th Annual Experimental Biology Meeting. The FASEB Journal; 30(1S): 1b174. April 2016.
18. Mumford PW, Mobley CB, Kephart WC, Haun CT, Holland AM, Osburn SC, Beck DT, **Martin JS**, Young KC, Kavazis AN, Lowery RP, Wilson JM, Roberts MD. *Markers of muscle protein synthesis and breakdown in fast-twitch skeletal muscle of rodents aged 3 to 24 months*. 99th Annual Experimental Biology Meeting. The FASEB Journal; 30(1S): 1b627. April 2016.
19. Mobley CB, Mumford PW, Kephart WC, Haun CT, Holland AM, Osburn SC, Beck DT, **Martin JS**, Young KC, Kavazis AN, Lowery RP, 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*. 99th Annual Experimental Biology Meeting. The FASEB Journal; 30(1S): 1b626. April 2016.
20. Holland AM, Kephart WC, Lowery RP, Mumford PW, Mobley CB, McCloskey AE, Shake JJ, Mesquita P, **Martin JS**, Kavazis AN, McCullough DJ, Roberts MD, Wilson JM. *Ketogenic versus Western and standard chow diets favorably alters fat deposition and serum biomarkers in rats*. International Society of Sports Nutrition 12th Annual Conference and Expo. Journal of the International Society of Sports Nutrition; 12(S1): 21. June 2015.
21. Kephart WC, Wachs TD, Thompson RM, Mobley CB, Fox CD, McDonald JR, Ferguson BS, Young KC, **Martin JS**, Company JM, Pascoe DD, Arnold RD, Moon JR, Roberts MD. *Ten weeks of branched chain amino acid supplementation improves select performance and immunological variables in trained cyclists*. International Society of Sports Nutrition 12th Annual Conference and Expo. Journal of the International Society of Sports Nutrition; 12(S1): 20. June 2015. ***Poster Competition Award Winner**

22. **Martin JS**, Friedenreich ZD, Borges AR. *Acute effects of peristaltic pneumatic compression on repeated anaerobic exercise performance and blood lactate clearance*. 62nd Annual American College of Sports Medicine Meeting. Medicine & Science in Sports and Exercise; 47 (5S): 376. May 2015.
23. Sardina PD, Avery JC, **Martin JS**, Braith RW. *Antiglycemic benefits of enhanced external counterpulsation in patients with type II diabetes*. 62nd Annual American College of Sports Medicine Meeting. Medicine & Science in Sports and Exercise; 47 (5S): 755. May 2015.
24. **Martin JS**, Borges AR, Christy JB, Beck DT. *Considerations for pulse wave analysis: Side selection and peripheral arterial blood pressure calibration*. 98th Annual Experimental Biology Meeting. The FASEB Journal; 29(1S): 632.5. April 2015.
25. **Martin JS**, Borges AR. *Acute effects of an external pneumatic compression device on local and systemic resistance vessel reactivity and limb blood flow*. 98th Annual Experimental Biology Meeting. The FASEB Journal; 29(1S): 643.5. April 2015.
26. Sardina PD, Avery JC, **Martin JS**, Braith RW. *Antiglycemic benefits of enhanced external counterpulsation in patients with type II diabetes mellitus*. 98th Annual Experimental Biology Meeting. The FASEB Journal; 29(1S): 805.5. April 2015.
27. Kephart WC, Mobley CB, Fox CD, Santucci VA, Wilson TJ, Goodlett MD, Sefton JM, Pascoe DD, Kavazis AN, Roberts MD, **Martin JS**. *Acute whole-leg pneumatic compression alters nerve growth factor mRNA and Akt-mTOR signaling in human skeletal muscle*. 98th Annual Experimental Biology Meeting. The FASEB Journal; 29(1S): 947.19. April 2015.
28. Beck DT, **Martin JS**, Casey DP, Sardina PD, Braith RW. *Enhanced external counterpulsation reduces indices of left ventricular wasted energy and myocardial oxygen demand in patients with left ventricular dysfunction and refractory angina*. 98th Annual Experimental Biology Meeting. April 2015. The FASEB Journal; 29(1S): 952.11. April 2015.
29. Vincent-Horta LM, Sanders DJ, **Martin JS**, Beck DT. *Acute effects of external pneumatic compression on peripheral and central hemodynamics*. 98th Annual Experimental Biology Meeting. The FASEB Journal; 29(1S): LB677. April 2015.
30. **Martin JS**, Beck DT, Braith RW. *Resistance arterial function following enhanced external counterpulsation in persons with abnormal glucose tolerance*. 61st Annual American College of Sports Medicine Meeting. Medicine & Science in Sports and Exercise; 46 (5S): 659. May 2014.
31. 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*. 61st Annual American College of Sports Medicine Meeting. Medicine & Science in Sports and Exercise; 46(5S): 439-440. May 2014.
32. Jenkins NT, Padilla J, Thorne PK, **Martin JS**, Rector RS, Davis JW, Laughlin MH. *Transcriptome-wide RNA sequencing analysis of rat skeletal muscle feed arteries: Impact of obesity*. 97th Annual Experimental Biology Meeting. The FASEB Journal; 28(1S): 1156.12. April 2014.
33. Padilla J, Jenkins NT, Thorne PK, **Martin JS**, Rector RS, Davis JW, Laughlin MH. *Transcriptome-wide RNA sequencing analysis of rat skeletal muscle feed arteries: impact of*

- exercise in obesity*. 97th Annual Experimental Biology Meeting. The FASEB Journal; 28(1S): 1106.23. April 2014.
34. **Martin JS**, Laughlin MH. *Pneumatic compression acutely increases peripheral artery flow mediated dilation in compressed and non-compressed limbs*. 60th Annual American College of Sports Medicine Meeting. Medicine & Science in Sports and Exercise; 45 (5S): 37. May 2013.
35. Roberts MD, Cruthirds CL, Lockwood CM, Yang HT, **Martin JS**, Padilla J, Jenkins NT, Booth FW. *Dose dependent effects of acute oral ATP feeding on blood flow prior to, during and following leg kicking exercise in rats*. 12th International Function Food Center Conference, Functional Food Ingredients and Nutraceuticals in Chronic Disease: Science and Practice; December 2012.
36. Jenkins NT, Padilla J, **Martin JS**, Crissey JM, Thyfault JP, Rector RS, Laughlin MH. *Differential vasodilator effects of insulin between gastrocnemius and soleus muscle feed arteries: Role of endothelin-1*. American Physiological Society Intersociety meeting: The Integrative Biology of Exercise VI; October 2012.
37. Crissey JM, Padilla J, Jenkins NT, **Martin JS**, Thyfault JP, Laughlin MH. *Endurance or sprint interval exercise, and metformin treatment differently modify insulin-induced vasodilation in skeletal muscle arterioles of obese insulin resistant rats*. American Diabetes Association 72nd Scientific Sessions. Diabetes; 61(1A): LB5. June 2012.
38. **Martin JS**, Beck DT, Aranda Jr. JM, Braith RW. *Enhanced external counterpulsation improves peripheral artery function, redox balance, and insulin resistance in patients with abnormal glucose tolerance*. 59th Annual American College of Sports Medicine Meeting. Medicine & Science in Sports & Exercise; 44(5): S116. May 2012.
39. Beck DT, **Martin JS**, Casey DP, Braith RW. *Exercise training reduces peripheral pulse wave velocity in young prehypertensives*. 59th Annual American College of Sports Medicine Meeting. Medicine & Science in Sports & Exercise; 44(5): S409. May 2012.
40. Borsa, PA, Larkin KA, **Martin JS**. *R water consumption reduces muscle damage and improves recovery following resistance exercise*. 59th Annual American College of Sports Medicine Meeting. Medicine & Science in Sports & Exercise; 44(5): S420. May 2012.
41. **Martin JS**, Beck DT, Aranda Jr. JM, Braith RW. *Enhanced external counterpulsation (EECP) increases GLUT-4 protein expression, capillary density and glucose tolerance in patients with abnormal glucose tolerance*. 96th Annual Experimental Biology Meeting. The FASEB Journal. 2012; 26(Meeting Abstracts): 686.18. April 2012.
42. Jenkins NT, Padilla J, **Martin JS**, Rector RS, Thyfault JP, Perfield J, Booth FW, Laughlin MH. *Effects of endurance exercise training, metformin, and their combination on cytokine secretion in a rat model of type 2 diabetes (T2D)*. 96th Annual Experimental Biology Meeting. The FASEB Journal; 26(Meeting Abstracts): 1142.13. April 2012.
43. Padilla J, Jenkins NT, **Martin JS**, Crissey JM, Bender SB, Rector, RS, Thyfault JP, Laughlin MH. *Acetylcholine and insulin mediated vasodilation in feed arteries and arterioles of rat skeletal muscle of different fiber type composition*. 96th Annual Experimental Biology Meeting. The FASEB Journal; 26(Meeting Abstracts): 1142.20. April 2012.
44. **Martin JS**, Beck DT, Braith RW. *Enhanced external counterpulsation and glycemic control in CAD patients with type II diabetes mellitus*. 58th Annual American College of Sports Medicine Meeting. Medicine & Science in Sports & Exercise; 43(5): S559-560. May 2011.

45. Beck DT, **Martin JS**, Emerson BD, Casey DP, Braith RW. *Resistance and endurance training improves endothelial function and vasoactive balance in young prehypertensives*. 58th Annual American College of Sports Medicine Meeting. Medicine & Sciences in Sports & Exercise; 43(5): S91-92. May 2011.
46. **Martin JS**, Beck DT, Braith RW. *The influence of enhanced external counterpulsation therapy on glycemic control*. University of Florida Annual GSC Interdisciplinary Research Conference; Gainesville, FL. February 2011.* **Poster Competition Award Winner**
47. **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*. 57th Annual American College of Sports Medicine Meeting. Medicine & Science in Sports & Exercise; 42(5): S308. June 2010.
48. Gurovich AN, **Martin JS**, Beck DT, Casey DP, Braith RW. *Myocardial energetics is altered in patients with coronary artery disease*. 57th Annual American College of Sports Medicine Meeting. Medicine & Science in Sports & Exercise; 42(5): S541. June 2010.
49. **Martin JS**, Beck, DT, Gurovich AN, Braith, RW. *The acute effects of smokeless tobacco on central hemodynamics*. 56th Annual American College of Sports Medicine Meeting. Medicine & Science in Sports & Exercise; 41(5): S70. May 2009.
50. Beck DT, **Martin JS**, Gurovich AN, Braith, RW. *Validation of a novel wristband tonometer used for applanation tonometry*. 56th Annual American College of Sports Medicine Meeting. Medicine & Science in Sports & Exercise; 41(5): S69-70. May 2009.

Other Invited Talks

1. “External Pneumatic Compression: Past, Present and Future”
Auburn University School of Kinesiology
July 18th, 2014
2. “Adaptations to Exercise”
Quinnipiac University - Department of Biomedical Sciences
March 17th, 2014
3. “Physical Activity across the Life Cycle”
Quinnipiac University – Frank H. Netter School of Medicine
Foundations of Medicine – Musculoskeletal and Integument Block
December 4th, 2013
4. “The REAL Benefits of Exercise and How to Get Started at Any Age”
City of Newton - Department of Senior Services; Newton Free Library
Lasell College’s Talk of Ages Seminar Series
January 17th, 2013
5. “Enhanced External Counterpulsation: Past, Present and Future”
Lasell College, Department of Athletic Training and Exercise Science
February 14th, 2012
6. “Effects of Enhanced External Counterpulsation (EECP) on Glycemic Control and Vascular Function in Patients with Abnormal Glucose Tolerance”
Washington University, School of Medicine
Department of Physical Therapy Seminar Series
May 2nd, 2011
7. “Physical Activity and Exercise”

Harvard University, Medical School
Preventative Medicine and Nutrition Tutorial
February 7th, 2006

8. “Physical Activity and Exercise”
Harvard University, Medical School
Preventative Medicine and Nutrition Tutorial
March 22nd, 2005

GRANTS AND CONTRACTS

Research Support Summary

Total extramural funds procured as PI/Co-PI to-date: \$1,232,081
Total additional extramural funds procured as critical Co-I to-date: \$337,561
Total proposed extramural funds as PI/Co-PI in review/processing: \$235,574

Grants/Contracts in Review

- | | |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2018-2019 | Extramural Contract: <i>Comparative effects of Dynamo and static compression socks on lower-limb circumference, soreness and blood flow in lymphedema patients</i>
Funding Agency: MAS Holdings
Role: PI
Proposed Total Costs (Direct + Indirect): \$55,238 [In review] |
| 2017-2018 | Extramural Contract: <i>Comparative effects of sub-chronic beet root vs. red spinach supplementation on pharmacokinetic, blood pressure, and exercise performance outcomes.</i>
Funding Agency: DolCas Biotech
Role: PI
Proposed Total Costs (Direct + Indirect): \$98,000 [In review] |
| 2017-2018 | Extramural Contract: <i>Sham-controlled investigation of three distinct compression modalities on peripheral circulation and markers of sports performance and recovery.</i>
Funding Agency: MAS Holdings
Role: PI
Proposed Total Costs (Direct + Indirect): \$74,836 [Intent to fund] |
| 2017-2018 | Extramural Contract: <i>A pilot study examining the effects of Dynamo on lower limb circumference in lymphedema patients</i>
Funding Agency: MAS Holdings
Role: PI
Proposed Total Costs (Direct + Indirect): \$7,500 [In review] |

Currently Funded Grants/Contracts

- | | |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2017-2020 | Extramural Grant: <i>The antiglycemic effects of a lower pressure external pneumatic compression device in type II diabetics: a molecular and applied investigation.</i>
Funding Agency: American Diabetes Association
Mechanism: Core Program – Innovative Clinical or Translational Science Award |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

- Role: PI
Total Costs (Direct + Indirect): \$566,003
- 2017-2019 Extramural Contract: *Efficacy of external counterpulsation (ECP) in the treatment of diabetic foot ulcer.*
Funding Agency: Renew Research
Role: PI
Proposed Total Costs (Direct + Indirect): \$185,640
- 2017-2018 Extramural Contract: *Comparative effects of NormaTec and an alternate device in the treatment of lymphedema.*
Funding Agency: NormaTec
Role: PI
Total Costs (Direct + Indirect): \$62,052

Funded Grants/Contracts Completed

- 2017 Extramural Contract: *Pilot study on the efficacy of Dynamo on augmenting circulation in sports and wellness applications.*
Funding Agency: MAS Holdings
Proposed Total Costs (Direct + Indirect): \$12,966
- 2016-2017 Extramural Contract: *The effects of curcumin on nutritionally induced non-alcoholic fatty liver disease and non-alcoholic steatohepatitis.*
Funding Agency: Dolcas Biotech
Role: PI
Total Costs (Direct + Indirect): \$129,560
- 2016-2017 Extramural Contract: *Effects of a novel plant extract on cycling performance, hemodynamics and markers of red blood cell physiology.*
Funding Agency: FutureCeuticals
Role: Co-PI (Other PI's: M. Roberts, K. Young)
Total Costs (Direct + Indirect): \$137,845
- 2016-2017 Extramural Contract: *The effects of a pre-workout supplement on markers of fiber recruitment and muscular fatigue*
Funding Agency: Maximum Human Performance
Role: Co-PI (Other PI: M. Roberts)
Total Costs (Direct + Indirect): \$15,139
- 2015-2017 Extramural Contract: *The role of target inflation pressures on skeletal muscle gene expression and the efficacy of a peristaltic pulse external pneumatic compression device as an adjuvant to exercise training.*
Funding Agency: NormaTec Industries
Role: PI
Total Costs (Direct + Indirect): \$30,596
- 2015-2017 Intramural Grant: *The role of target inflation pressures on skeletal muscle gene expression and the efficacy of a peristaltic pulse external pneumatic compression device as an adjuvant to exercise training.*
Funding Agency: VCOM
Role: PI
Total Costs (Direct + Indirect): \$30,318

- 2015-2016 Extramural Contract: *The effects of Red Spinach Extract on variables related to blood flow and exercise performance.*
Funding Agency: DoCas Biotech
Role: PI
Total Costs (Direct + Indirect): \$67,327
- 2015-2016 Extramural Contract: *Effect of a subchronic ketogenic diet on skeletal muscle anabolic and catabolic signaling as well as adipose tissue signaling*
Funding Agency: Sub-contract from University of Tampa
Role: Co-Investigator (PIs: J. Wilson, R. Lowery)
Total Costs (Direct + Indirect): \$105,000
- 2015-2016 Extramural Contract: *Age related changes in cardiac and skeletal muscle stem cells and their relation to functional outcomes.*
Funding Agency: Sub-contract from University of Tampa
Role: Co-Investigator (PIs: J. Wilson, R. Lowery)
Total Costs (Direct + Indirect): \$131,251
- 2014-2015 Extramural Contract: *Acute effects of NormaTec external pneumatic compression on anaerobic sports performance and recovery, vascular reactivity, and skeletal muscle gene expression*
Funding Agency: NormaTec Industries
Role: PI
Total Costs (Direct + Indirect): \$24,953
- 2014-2015 Intramural Grant: *Effects of a Commercially Available Limb Pneumatic Compression Device on Systemic Arterial Function*
Funding Agency: Quinnipiac University School of Health Sciences
Role: PI
Total Award: \$5,000
- 2014 Intramural Grant: *Acute Effects of a Commercially Available Lower Limb External Pneumatic Compression Device on Local and Systemic Resistance Arterial Reactivity and Blood Flow*
Funding Agency: Quinnipiac University Interdisciplinary Research & Scholarship Committee
Role: PI
Total Award (Direct + Indirect): \$6,000
- 2013 Intramural Grant: *Ultimate Strength Training Conference Day*
Funding Agency: Lasell College – Faculty Curricular Development Grant
Role: PI
Total Award: \$1,184
- 2013 Intramural Grant: *Health Initiatives for the College Environment*
Funding Agency: Lasell College – Faculty Curricular Development Grant
Role: PI
Total Award: \$500
- 2013 Intramural Grant: *Careers in Exercise Science*
Funding Agency: Lasell College – Faculty Curricular Development Grant
Role: PI
Total Award: \$500

- 2012 Intramural Grant: *Efficacy of Pneumatic Compression for Exercise Performance and Recovery*
Funding Agency: Lasell College – Faculty Research Grant
Role: PI
Total Award: \$500
- 2011-2012 Postdoctoral Fellowship Grant (NIH T32-AR048523): *Exercise & Health Integration from Molecule to Patient*
Funding Agency: NIH – Arthritis and Skeletal Muscle and Skin Disease
Role: Postdoctoral Research Fellow/Trainee (P.I.: R. Terjung)
Total Award: \$50,000 (estimated)
Comments: Competitive award from internal institutional committee for 1-year postdoctoral salary and benefits
- 2011 Extramural Contract/Sub-Contract: *The Effects of r Water on Restoring Muscle Function after Eccentric Resistance Exercise*
Funding Agency: Revaesio Corporation
Role: Sub-contracted Co-investigator (P.I.: P. Borsa)
Total Award: \$101,310
Comments: Sub-contract: \$7,500 (estimated)

Select Non-funded Grant/Contract Applications

- 2015 Extramural Grant: *The antiglycemic effects of a lower pressure external pneumatic compression device in type II diabetics: a molecular and applied investigation.*
Funding Agency: American Diabetes Association
Role: PI
Proposed Total Costs (Direct + Indirect): \$555,263
- 2011 Extramural Award: *The Role of Vascular and Skeletal Muscle Adaptations in Type II Diabetes*
Funding Agency: NIH Clinical Research LRP
Role: Trainee/PI
Total Award Requested: \$44,467
Comments: Withdrawn
- 2010 Extramural Grant: *Antiglycemic Effects of EECP in Type 2 Diabetes Mellitus*
Funding Agency: AHA Greater Southeast Affiliate Grant-in-Aid
Role: Co-PI
Total Award Requested: \$165,000
Comments: Not scored

HONORS AND AWARDS

- 2017 Faculty Member of the Block; VCOM-Auburn, Block 5: Gastrointestinal and Renal Systems
- 2017 Scientific Poster Presentation Award Winner, Boshell Diabetes & Metabolic Diseases 10th Annual Research Day
- 2016 Scientific Poster Presentation Award Winner, UAB Center for Exercise Medicine Annual Symposium.

2015	Poster Presentation Award Winner, International Society of Sports Nutrition Annual Conference
2014	Quinnipiac University Interdisciplinary Program for Research and Scholarship (QUIP-RS) Award
2011-2012	Post-doctoral fellowship (NIH T32-AR048523); Department of Biomedical Sciences, University of Missouri
2011	Scientific Poster Presentation Award Winner; University of Florida Interdisciplinary Research Conference
2011	Herman W. Schnell Graduate Scholarship, Department of Applied Physiology and Kinesiology, University of Florida
2007-2011	Alumni Fellowship for Doctoral Students, University of Florida
2010	David and Linda McCaughey Endowed Graduate Scholarship, Department of Applied Physiology and Kinesiology, University of Florida
2007	Grinter Fellowship for Graduate Students, Department of Applied Physiology and Kinesiology, University of Florida

PROFESSIONAL SERVICE

Reviewer for Scholarly Journals

American Journal of Hypertension
American Journal of Physiology: Regulatory, Integrative and Comparative Physiology
Applied Physiology, Nutrition and Metabolism
Circulation
Clinical Interventions in Aging
European Journal of Applied Physiology
International Journal of Environmental Research and Public Health
Journal of Applied Physiology
Journal of Human Hypertension
Journal of Sports Sciences
Journal of Strength and Conditioning Research
Lung
Mayo Clinic Proceedings
Medicine and Science in Sports and Exercise
Plant Foods for Human Nutrition
Sports
Sports Medicine
The Lancet
Tobacco Induced Diseases

Professional Organization Memberships

2016-present American Diabetes Association
 2016-present Boshell Diabetes and Metabolic Diseases Research Program
 2015-present Southeast Chapter of the American College of Sports Medicine
 2011-present American Physiological Society

2008-present American College of Sports Medicine
 2005-present National Strength and Conditioning Association
 2013-2015 New England Chapter of the American College of Sports Medicine

UNIVERSITY/DEPARTMENTAL SERVICE

Edward Via College of Osteopathic Medicine

2017-present Appointment, Promotion, and Tenure (APT) Committee Member (College-wide)
 2017-present Via Research Recognition Day Program Development Committee Member (Auburn Campus)
 2017-present Student Doctor of the Year (SDoY) Committee Member (Auburn campus)
 2016-present Annual Research Retreat Planning Committee Member (College-wide)
 2015-present Student Promotion Board Committee Member (Auburn campus)
 2015-present Curriculum and Assessment Committee Member (Auburn campus)
 2015-present Faculty Senate Member (Auburn campus)
 2015-2017 Campus Faculty Senate Chair (Auburn campus)
 2015-2017 VCOM Faculty Senate Co-Chair (College-wide)

Quinnipiac University

2014-2015 Strategic Planning Facilitator/Director, Department of Biomedical Sciences
 2013-2015 Research and Scholarship Committee Member, School of Health Sciences
 2013-2015 Quinnipiac Writing across the Curriculum (QUWAC) Committee Member, Quinnipiac University
 2013-2015 QUWAC Professional Development and Research Sub-Committee Member
 2013-2015 QUWAC Biennial Conference Program Sub-Committee Member
 2013-2014 Academic Standing Committee, Department of Biomedical Sciences
 2013-2014 Information Technology/Public Relations Committee, Department of Biomedical Sciences

Lasell College

2012-2013 General Education Working Group Member, Lasell College
 2013 Assistant Professor of Exercise Science Search Committee Member, Department of Athletic Training and Exercise Science

PROFESSIONAL CERTIFICATIONS

2005-present Certified Strength and Conditioning Specialist (#200525719)
 National Strength and Conditioning Association (NSCA)
 2002-present Basic Life Support (#165501391782)
 American Heart Association
 2008-2012 DEXA/Basic X-Ray Machine Operator License (#BMO68895)
 State of Florida Department of Health