



CURRICULUM VITAE

Jeremy R. Townsend Ph.D., CSCS*D, CISSN

CONTACT INFORMATION

One University Park Dr.
Nashville, TN 37204
Phone: 615-966-5618
Email: jrtownsend@lipscomb.edu

EMPLOYMENT HISTORY

2016-Pres. Assistant Professor, Exercise and Nutrition Science Graduate Program
 College of Pharmacy and Health Sciences
 Lipscomb University

EDUCATIONAL BACKGROUND

2012-2016 University of Central Florida, Orlando, FL
 Ph.D. Exercise Physiology, 2016
 Dissertation: *Intramuscular TNF-alpha signaling in response to resistance exercise and recovery in untrained males.*

2010-2012 University of West Florida, Pensacola, FL
 M.S. in Exercise Science, 2012.
 Thesis: *Excess Post Exercise Oxygen consumption following multiple bouts of anaerobic exercise.*

2005-2010 Harding University, Searcy, AR
 B.S. Exercise Science 2010
 Ronald E. McNair Scholar
 Project Title: *The Effects of a Moderate Dose of Caffeine on HRV in Young Males*

CERTIFICATIONS

2011-pres CSCS*D - Certified Strength and Conditioning Specialist with Distinction
 National Strength and Conditioning Association

2019-pres. CISSN - Certified Sport Nutritionist
 International Society of Sports Nutrition

2018-pres. Certified X-Ray Technician
 State of Tennessee

2008-pres. CPR (American Red Cross, Current)

OTHER EXPERIENCE

2011-12 Lead Personal Trainer, Pensacourt Health Club. Pensacola, FL.

PUBLICATION IMPACT

Statistics as of September 2021

Google Scholar

H-index:	27
i10-index	55
Total citations:	2,139
Past 5-yr citation:	1,895

ResearchGate

H-index:	24 (24 excluding self-citations)
Total citations:	1,575
Publication reads:	50,859

Scopus

H-index:	20
Total citations:	1,052

SCHOLARLY CONTRIBUTIONS

Book Chapters

1. **Townsend JR.** (2019). Beta-Hydroxy-Beta-Methylbutyrate. In: Hoffman JR (Ed.) *Dietary Supplementation in Sport and Exercise: Evidence, Safety and Ergogenic Benefits*. Routledge Press: New York, NY.

Peer-Reviewed Scientific Publications

*Student Lead Author

**Corresponding author

Listed Newest to Oldest

1. Haynes JT*, **Townsend JR****, Aziz MA, Jones MD, Littlefield LA, Ruiz MD, Johnson KD, Gonzalez AM. Impact of Red Spinach Extract Supplementation on Bench Press Performance and Muscle Oxygenation in Resistance-Trained Males. *Sports* 9 (6), 77.
2. **Townsend JR****, Hart TL, Haynes JT, Woods CA, Toy AM, Pihera BC, Aziz MA, Zimmerman GA, Jones MD, Vantrease WC, Gonzalez AM. Influence of dietary nitrate supplementation on physical performance and body composition following offseason training in Division I athletes. *Journal of Dietary Supplements*. Published Online Ahead of Print.

3. **Townsend JR****, Vantrease WD, Jones MD, Sapp PA, Johnson KD, Beuning CN, Haase AA, Boot CM. (2020) Plasma Amino Acid Response to Whey Protein Ingestion Following 28-days of Probiotic (*Bacillus subtilis* DE111) Supplementation in Active Men and Women. *Journal of Functional Morphology and Kinesiology*. 6(1), 1.
4. **Townsend JR****, Jones MD, Morimune JE, Zimmerman GA, Hart TL. (2020) Effects of a Liquid or Capsule Multivitamin on Vitamin D Status in Active Males and Females. *Journal of Exercise and Nutrition*. 2640, 2572.
5. Mohr AE, Jäger R, Carpenter KC, Kerksick CM, Purpura M, Moussa A, **Townsend JR**, Lamprecht M, West NP, Black K, Gleeson M, Pyne DB, Wells SD, Arent SM, Smith-Ryan AE, Kreider RB, Campbell BI, Bannock L, Scheiman J, Wissent CJ, Pane M, Kalman DS, Arciero PJ, Antonio J. (2020) The Athletic Gut Microbiota. *Journal of the International Society of Sports Nutrition*. 17, 1-33.
6. Gonzalez AM, Church DD, **Townsend JR**, Bagheri R. (2020) Emerging Nutritional Supplements for Strength and Hypertrophy: An Update of the Current Literature *Strength and Conditioning Journal*. 42(5), 57-70.
7. **Townsend JR****, Morimune JE, Jones MD, Beuning CN, Haase AA, Boot CM, Heffington SH, Littlefield LA, Henry RH, Marshall AM, VanDusseldorp TA, Feito Y, Mangine GT. (2020). The Effect of ProHydrolase® on the Amino Acid and Intramuscular Anabolic Signaling Response to Resistance Exercise in Trained Males. *Sports*. 8 (1),13.
8. Vantrease WC*, **Townsend JR****, Sapp PA, Henry RN, Johnson KD. (2020). Maximal strength, muscle activation, and bar velocity comparisons between squatting with a traditional or safety squat bar. *The Journal of Strength & Conditioning Research*. 35, S1-S5.
9. Toohey JC*, **Townsend JR****, Johnson SB, Toy AM, Vantrease WC, Bender D, Crimi CC, Stowers KL, Ruiz MD, VanDusseldorp TA, Feito Y, Mangine GT. (2020) The effects of probiotic (*bacillus subtilis*) supplementation during offseason resistance training in female Division I athletes. *The Journal of Strength and Conditioning Research*. 34(11), 3173-3181.
10. Jäger R, Mohr AE, Carpenter KC, Kerksick CM, Purpura M, Moussa A, **Townsend JR**, Lamprecht M, West NP, Black K, Gleeson M, Pyne DB, Wells SD, Arent SM, Smith-Ryan AE, Kreider RB, Campbell BI, Bannock L, Scheiman J, Wissent CJ, Pane M, Kalman DS, Pugh JN, ter Harr JA, Antonio J. (2019) International society of sports nutrition position stand: Probiotics. *Journal of the International Society of Sport Nutrition*. 16(1), 62.
11. Banazek A*, **Townsend JR****, Bender D, Vantrease WC, Marshall AM, Johnson KD. (2019). The Effects of Whey vs. Pea Protein on Physical Adaptations Following 8-Weeks of High-Intensity Functional Training (HIFT): A Pilot Study. *Sports*, 7(1), 12.

12. **Townsend JR****, Bender WD, Vantrease W, Hudy J, Huet K, Williamson C, Bechke E, Serafini P, Mangine GT. (2019) Isometric mid-thigh pull performance is associated with athletic performance and sprinting kinetics in division I men and women's basketball players. *The Journal of Strength and Conditioning Research*, 33(10), 2665-2673.
13. Partida S*, Marshall AC, Henry RN, **Townsend JR**, Toy A. (2018). Attitudes toward Nutrition and Dietary Habits and Effectiveness of Nutrition Education in Active Adolescents in a Private School Setting: A Pilot Study. *Nutrients*, 10(9), 1260.
14. **Townsend JR****, Bender D, Vantrease WC, Sapp PA, Toy AM, Woods CA, Johnson KD. (2018) Effects of Probiotic (*Bacillus subtilis* DE111) Supplementation on Immune Function, Hormonal Status, and Physical Performance in Division I Baseball Players. *Sports*. 6(3), 70.
15. Mangine GT, Redd MJ, Gonzalez AM, **Townsend JR**, Wells AJ, Jajtner AR, Beyer KS, Boone CH, La Monica MB, Stout JR, Fukuda DH, Ratamess NA, and Hoffman JR. (2018). Resistance training does not induce uniform adaptations to quadriceps. *PloS one*, 13(8), e0198304.
16. Sapp PA*, **Townsend JR****, Vantrease WC, Marshall AC, Johnson KD. (2018) The effects of dietary manipulations on ultrasound assessment of muscle size and quality. *Journal of Exercise and Nutrition*. 1 (4).
17. Jajtner AR, **Townsend JR**, Beyer, KS, Varanoske AN, Church DD, Oliveira LP, Herrlinger K, Radom-Aizik S, Fukuda DH, Stout JR, Hoffman JR. (2018). Resistance Exercise Selectively Mobilizes Monocyte Subsets: Role of Polyphenols. *Medicine and science in sports and exercise*, 50(11), 2231-2241.
18. Bender D*, **Townsend JR****, Vantrease WC, Marshall AC, Henry RN, Heffington SH, Johnson KD. (2018). Acute beetroot juice administration improves peak isometric force production in adolescent males. *Applied Physiology, Nutrition, and Metabolism*, 43(8), 816-821.
19. **Townsend JR****, Stout JR, Jajtner AR, Church DD, Beyer KS, Riffe JJ, Muddle TWD, Herrlinger KL, Fukuda DH, Hoffman JR. (2018). Polyphenol supplementation alters intramuscular apoptotic signaling following acute resistance exercise. *Physiological reports*, 6(2).
20. Mangine GT, Huet K, Williamson C, Bechke E, Sarafini P, Bender D, Hudy J, **Townsend JR**. (2018). A Resisted Sprint Improves Rate of Force Development During a 20-m Sprint in Athletes. *The Journal of Strength & Conditioning Research*, 32(6), 1531-1537.
21. Mangine GT, Gonzalez AM, **Townsend JR**, Wells AJ, Beyer KS, Miramonti AA, Ratamess NA, Stout JR, Hoffman JR. (2018). Influence of Baseline Muscle Strength And Size Measures On Training Adaptations In Resistance-Trained Men. *International Journal of Exercise Science*, 11(4), 198.
22. Wells AJ, Jajtner AR, Varanoske AN, Church DD, Gonzalez AM, **Townsend JR**, Boone CH, Baker KM, Beyer KS, Mangine GT, Oliveira LP, Fukuda DH, Stout JR, Hoffman JR. (2017). Post-resistance exercise ingestion of milk protein attenuates plasma TNF α and TNFr1 expression on monocyte subpopulations. *Amino acids*, 49(8), 1415-1426.

23. Beyer KB, Stout JR, Fukuda DH, Jajtner AR, **Townsend JR**, Church DD, Wang R, Riffe JJ, Muddle WD, Herrlinger K, Hoffman JR. (2017). Impact of Polyphenol Supplementation on Acute and Chronic Response to Resistance Training. *The Journal of strength and conditioning research*, 31(11), 2945.
24. Turley KR, Rivas JD, **Townsend JR**, Morton AB. (2017). Effects of caffeine on heart rate variability in boys. *Journal of Caffeine Research*, 7(2), 71-77.
25. Mangine GT, Hoffman JR, Wang R, Gonzalez AM, **Townsend JR**, Wells AJ, Jajtner AR, Beyer KS, Boone CH, Miramonti AA, LaMonica MB, Fukuda DH, Ratamess NA, and Stout JR. (2017). Exercise-induced hormone elevations are related to muscle growth. *The Journal of Strength & Conditioning Research*, 31(1), 45-53.
26. Jajtner AR, Hoffman JR, **Townsend JR**, Beyer KS, Varanoske AN, Church DD, Oliveira LP, Herlinger KA, Radom-Aizik S, Fukuda DH, Stout JR. (2016). The effect of polyphenols on cytokine and granulocyte response to resistance exercise. *Physiological reports*, 4(24).
27. Wells AJ, Hoffman JR, Jajtner AR, Varanoske AN, Church DD, Gonzalez AM, **Townsend JR**, Boone CH, Baker KM, Beyer KS, Mangine GT, Oliveira LP, Fukuda DH, Stout JR. (2016). The effect of post-resistance exercise amino acids on plasma MCP1 and CCR2 expression. *Nutrients*, 8 (7), 409.
28. **Townsend JR**, Stout JR, Jajtner AR, Church DD, Beyer KB, Oliveira LP, La Monica MB, Riffe JJ, Muddle TWD, Baker KM, Fukuda DH, Roberts MR, Hoffman JR. (2016). Resistance exercise increases intramuscular NF-kb signaling in untrained males. *European journal of applied physiology*, 116(11-12), 2103-2111.
29. Mangine GT, Hoffman JR, Wang R, Gonzalez AM, **Townsend JR**, Wells AJ, Jajtner AR, Beyer KS, Boone CH, Miramonti AA, LaMonica MB, Fukuda DH, Ratamess NA, and Stout JR. (2016). Resistance training intensity and volume affect changes in rate of force development in resistance-trained men. *European journal of applied physiology*, 116(11-12), 2367-2374.
30. Church DD, Hoffman JR, Mangine GT, Jajtner AR, **Townsend JR**, Gonzalez AM, Wells AJ, Beyer KS, Wang R, Boone CH, La Monica MB, Fukuda DH, Stout JR. (2016). Comparison of high-intensity vs. high-volume resistance training on the BDNF response to exercise. *Journal of applied physiology*, 121(1), 123-128.
31. Gonzalez AM, Hoffman JR, **Townsend JR**, Jajtner AR, Boone CH, Beyer KM, Wells AJ, Mangine GT, Robinson EH, Church DD, Oliveira LP, Fukuda DH, Stout JR. (2016). Intramuscular MAPK signaling following high volume and high intensity resistance exercise protocols in trained men. *European journal of applied physiology*, 116(9), 1663-1670.
32. Hoffman JR, Gepner Y, Stout JR, Hoffman MW, Ben-Dov D, Funk S, Daimont I, Jajnter AR, **Townsend JR**, Church DD, Shelef I, Avital G, Chen Y, Frankel H, Ostfeld I. (2016). β -Hydroxy- β -methylbutyrate attenuates cytokine response during sustained military training. *Nutrition research*, 36(6), 553-563.
33. Wells AJ, Hoffman JR, Jajtner AR, Varanoske A, Church DD, Gonzalez AM, **Townsend JR**, Beyer KS, Fukuda DH, Oliveira LP, and Stout JR. (2016). Monocyte recruitment after high-intensity and high-volume resistance exercise. *Medicine & Science in Sports & Exercise*, 48(6), 1169-1178.

34. **Townsend JR**, Hoffman JR, Fragala MS, Oliveira LP, Jajtner AR, Stout JR, Fukuda DH. (2016). A microbiopsy method for immunohistological and morphological analysis: a pilot study. *Medicine & Science in Sports & Exercise*, 48(2), 331-335.
35. Boone CH, Hoffman JR, Gonzalez AM, Jajtner AR, **Townsend JR**, Baker KM, Fukuda DH, Stout JR. (2016). Changes in plasma aldosterone and electrolytes following high-volume and high-intensity resistance exercise protocols in trained men. *The Journal of strength and conditioning research*, 30(7), 1917-1923.
36. Beyer KS, Fukuda DH, Boone CH, Wells AJ, **Townsend JR**, Jajtner AR, Gonzalez AM, Fragala MS, Hoffman JR, Stout JR. (2016). Short-term unilateral resistance training results in cross education of strength without changes in muscle size, activation, or endocrine response. *The Journal of Strength & Conditioning Research*, 30(5), 1213-1223.
37. Pruna GP, Hoffman JR, McCormack WP, Jajtner AR, **Townsend JR**, Bohner JD, LaMonica MB, Wells AJ, Stout JR, Fragala MS. (2016). Effect of acute L-Alanyl-L-Glutamine and electrolyte ingestion on cognitive function and reaction time following endurance exercise. *European journal of sport science*, 16(1), 72-79.
38. Gonzalez AM, Hoffman JR, Jajtner AR, **Townsend JR**, Boone CH, Beyer KS, Baker KM, Wells AJ, Church DD, Oliveira LP, Moon JR, Fukuda DH, Stout JR. (2015). Protein supplementation does not alter intramuscular anabolic signaling or endocrine response after resistance exercise in trained men. *Nutrition Research*, 35(11), 990-1000.
39. Mangine GT, Hoffman JR, Gonzalez AM, **Townsend JR**, Wells AJ, Jajtner AR, Beyer KS, Boone CH, Miramonti AA, Wang R, LaMonica MB, Fukuda DH, Ratamess m, and Stout JR. (2015). The effect of training volume and intensity on improvements in muscular strength and size in resistance-trained men. *Physiological reports*, 3(8).
40. Gonzalez AM, Hoffman JR, **Townsend JR**, Jajtner AR, Boone CH, Beyer KS, Baker KM, Wells AJ, Robinson EH, Church DD, Oliveira LP, Willoughby DS, Fukuda DH, Stout JR. (2015). Intramuscular anabolic signaling and endocrine response following high volume and high intensity resistance exercise protocols in trained men. *Physiological reports*, 3(7).
41. Bohner JD, Hoffman JR, McCormack WP, Scanlon TC, **Townsend JR**, Stout JR, Fragala, MS, Fukuda DH. (2015). Moderate altitude affects high intensity running performance in a collegiate women's soccer game. *Journal of human kinetics*, 47(1), 147-154.
42. Gonzalez AM, Hoffman JR, Wells AJ, Mangine GT, **Townsend JR**, Jajtner AR, Wang R, Miramonti AA, Pruna GJ, LaMonica MB, Bohner JD, Hoffman MW, Oliveira LP, Fukuda DH, Fragala MS, Stout, JR. (2015). Effects of time-release caffeine containing supplement on metabolic rate, glycerol concentration and performance. *Journal of sports science & medicine*, 14(2), 322.
43. **Townsend JR**, Hoffman JR, Fragala MS, Jajtner AR, Gonzalez AM, Wells AJ, Mangine GT, Fukuda DH, Stout JR. (2015). TNF- α and TNFR1 responses to recovery therapies following acute resistance exercise. *Frontiers in physiology*, 6, 48.

44. **Townsend JR**, Hoffman JR, Gonzalez AM, Jajtner AR, Robinson EH, Boone CH, Stout JR, Fragala MS, Fukuda DH. (2015). Effects of β -hydroxy- β -methylbutyrate free acid ingestion and resistance exercise on the acute endocrine response. *International journal of endocrinology*, 2015.
45. Gonzalez AM, Hoffman JR, **Townsend JR**, Jajtner AR, Wells AJ, Beyer KS, Willoughby DS, Oliveira LP, Fukuda DH, Fragala MS, Stout, JR. (2015). Association between myosin heavy chain protein isoforms and intramuscular anabolic signaling following resistance exercise in trained men. *Physiological reports*, 3(1).
46. Mangine GT, Fukuda DH, **Townsend JR**, Wells AJ, Gonzalez AM, Jajtner AR, Beyer KB, Bohner JD, La Monica MB, Hoffman JR, Fragala MS, Stout JR. (2015). Sprinting performance on the Woodway Curve 3.0 TM is related to muscle architecture. *European journal of sport science*, 15(7), 606-614.
47. McCormack WP, Hoffman JR, Pruna GP, Jajtner AR, **Townsend JR**, Stout JR, Fragala MS, Fukuda DH. (2015). Effects of L-alanyl-L-glutamine ingestion on one-hour run performance. *Journal of the American College of Nutrition*, 34(6), 488-496.
48. McCormack WP, Hoffman JR, Pruna GJ, Scanlon TC, Bohner JD, **Townsend JR**, Jajtner AR, Stout JR, Fragala MS, Fukuda DH. (2015). Reduced high-intensity-running rate in college women's soccer when games are separated by 42 hours. *International journal of sports physiology and performance*, 10(4), 436-439.
49. Stout JR, Fragala MS, Hoffman JR, Robinson EH, McCormack WP, **Townsend JR**, Jajtner AR, Emerson NS, Oliveira LP, Fukuda DH. (2015). C-terminal agrin fragment is inversely related to neuromuscular fatigue in older men. *Muscle & nerve*, 51(1), 132-133.
50. Wells AJ, Hoffman JR, Gonzalez AM, Beyer KS, Jajtner AR, **Townsend JR**, Oliveira LP, Fukuda DH, Fragala MS, Stout, JR. (2014). Effects of 28-days ingestion of a slow-release energy supplement versus placebo on hematological and cardiovascular measures of health. *Journal of the International Society of Sports Nutrition*, 11(1), 59.
51. Turley KR, Eusse P, Thomas M, **Townsend JR**, Morton AB. (2015). Effects of different doses of caffeine on anaerobic exercise in boys. *Pediatric exercise science*, 27(1), 50-56.
52. Mangine GT, Fukuda DH, La Monica MB, Gonzalez AM, Wells AJ, **Townsend JR**, Jajtner AR, Fragala MS, Stout JR, Hoffman JR. (2014). Influence of gender and muscle architecture asymmetry on jump and sprint performance. *Journal of sports science & medicine*, 13(4), 904.
53. Fragala MS, Jajtner AR, **Townsend JR**, Gonzalez AM, Wells AJ, Oliveira LP, Hoffman JR, Stout JR, Fukuda DH. (2015). Leukocyte IGF-1 receptor expression during muscle recovery. *Medicine & Science in Sports & Exercise*, 47(1), 92-99.
54. Fragala MS, Beyer KS, Emerson NS, Jajtner AJ, Boone CH, Pruna GJ, Bohner JD, **Townsend JR**, Stout, JR, Hoffman, JR, Oliveira, LP. (2014). Resistance exercise may improve spatial awareness and visual reaction in older adults. *The Journal of Strength & Conditioning Research*, 28(8), 2079-2087.

55. Robinson EH, Stout JR, Miramonti AA, Fukuda DH, Wang R, **Townsend JR**, Mangine GT, Fragala MS, Hoffman JR. (2014). High-intensity interval training and β -hydroxy- β -methylbutyric free acid improves aerobic power and metabolic thresholds. *Journal of the International Society of Sports Nutrition*, 11(1), 16.
56. Mangine GT, Hoffman JR, Wells AJ, Gonzalez AM, Rogowski JP, **Townsend JR**, Jajtner AR, Beyer KS, Bohner JD, Pruna GJ, Fragala MS, Stout JR. (2014). Visual tracking speed is related to basketball-specific measures of performance in NBA players. *The Journal of Strength & Conditioning Research*, 28(9), 2406-2414.
57. Gonzalez AM, Fragala MS, Jajtner AR, **Townsend JR**, Wells AJ, Beyer KS, Boone CH, Pruna GJ, Mangine GT, Bohner JD, Fukuda DH, Stout JR, Hoffman JR. (2014). Effects of β -hydroxy- β -methylbutyrate free acid and cold water immersion on expression of CR3 and MIP-1 β following resistance exercise. *American journal of physiology. Regulatory, integrative and comparative physiology*, 306(7), R483.
58. Jajtner AR, Fragala MS, **Townsend JR**, Gonzalez AM, Wells AJ, Fukuda DH, Stout JR, Hoffman JR. (2014). Mediators of Monocyte Migration in Response to Recovery Modalities following Resistance Exercise. *Mediators of Inflammation*, 23(3.0), 22-5.
59. Fragala MS, Fukuda DH, Stout JR, **Townsend JR**, Emerson NS, Boone CH, Beyer KS, Oliveira LP, Hoffman JR. (2014). Muscle quality index improves with resistance exercise training in older adults. *Experimental gerontology*, 53, 1-6.
60. Gonzalez AM, Stout JR, Jajtner AR, **Townsend JR**, Wells AJ, Beyer KS, Boone CH, Pruna GJ, Mangine GT, Scanlon TM, Bohner JD, Oliveira LP, Fragala MS, Hoffman JR. (2014). Effects of β -hydroxy- β -methylbutyrate free acid and cold water immersion on post-exercise markers of muscle damage. *Amino acids*, 46(6), 1501-1511.
61. Reardon D, Hoffman JR, Mangine GT, **Townsend JR**, Gonzalez AM, Jajtner AR, Wells AJ, Fukuda DH, Fragala MS, Stout JR. (2014). Do changes in muscle architecture affect post-activation potentiation? *Journal of sports science & medicine*, 13(3), 483.
62. Wells AJ, Fukuda DH, Hoffman JR, Gonzalez AM, Jajtner AR, **Townsend JR**, Mangine GT, Fragala MS, Stout JR. (2014). Vastus Lateralis exhibits non-homogenous adaptation to resistance training. *Muscle & nerve*, 50(5), 785-793.
63. Wells AJ, Hoffman JR, Beyer KS, Jajtner AR, **Townsend JR**, Gonzalez AM, Mangine GT, Robinson EH, Fragala MS, and Stout JR. (2014). Reliability of the dynavision™ d2 for assessing reaction time performance. *Journal of sports science & medicine*, 13(1), 145.
64. Mangine GT, Hoffman JR, Gonzalez, AM, Wells AJ, **Townsend JR**, Jajtner AR, McCormack WP, Robinson EH, Fragala MS, Fukuda DH, Stout JR. (2014). Speed, force, and power values produced from nonmotorized treadmill test are related to sprinting performance. *The Journal of Strength & Conditioning Research*, 28(7), 1812-1819.
65. Fragala MS, Jajtner AR, Beyer KS, **Townsend JR**, Emerson, NS, Scanlon, TC, Oliveira, LP, Hoffman, JR, Stout, JR. (2014). Biomarkers of muscle quality: N-terminal propeptide of type III procollagen and C-terminal agrin fragment

- responses to resistance exercise training in older adults. *Journal of cachexia, sarcopenia and muscle*, 5(2), 139-148.
66. **Townsend JR**, Fragala MS, Jajtner AR, Gonzalez AM, Wells AJ, Mangine GT, Robinson EH, McCormack WP, Beyer KS, Pruna GJ, Boone CH, Scanlon TM, Bohner JD, Stout JR, and Hoffman JR. (2013). β -Hydroxy- β -methylbutyrate (HMB)-free acid attenuates circulating TNF- α and TNFR1 expression postresistance exercise. *Journal of applied physiology*, 115(8), 1173.
 67. **Townsend JR**, Stout JR, Morton AB, Jajtner AR, Gonzalez AM, Wells AJ, Mangine GT, McCormack WP, Emerson NS, Robinson EH, Hoffman JR, Fragala MS, and Cosio-Lima L. (2013). Excess Post-Exercise Oxygen Consumption (EPOC) Following Multiple Effort Sprint and Moderate Aerobic Exercise. *Kinesiology*. 45 (1):16 – 21.
 68. Jajtner, AR, Hoffman, JR, Scanlon, TC, Wells, AJ, **Townsend, JR**, Beyer, KS, Mangine, GT, McCormack, WP, Bohner, JD, Fragala, MS, Stout, JR. (2013) Performance and Muscle Architecture Comparisons between Starters and Non-Starters in NCAA Division I Women's Soccer. *Journal of Strength and Conditioning Research*. 27(9), 2355-2365.
 69. Gonzalez AM, Wells AJ, Hoffman JR, Stout JR, Fragala MS, Mangine GT, McCormack WP, **Townsend JR**, Jajtner AR, Emerson NS, Robinson EH. (2013). Reliability of the Woodway Curve™ non-motorized treadmill for assessing anaerobic performance. *Journal of Sports Science & Medicine*, 12:104-108.
 70. Wells AJ, Hoffman JR, Jajtner AR, Gonzalez AM, Mangine GT, **Townsend JR**, McCormack WP, Robinson EH, Emerson NS, Stout JR, Fragala MS. (2012) Phosphatidylserine and caffeine attenuate postexercise mood disturbance and perception of fatigue in humans. *Nutrition research*. 33(6): 464 – 72, 2013
 71. Turley KR, Rivas JD, **Townsend JR**, Morton AB, Kosarek JW, Cullum MG. (2012). Effects of caffeine on anaerobic exercise in boys. *Pediatric exercise science*, 24(2), 210-219.

Published Abstracts

1. **Townsend JR**, Freeman S, Jones MD, Morimune JE, Littlefield LA, Henry RN. 7 Days of L-Citrulline Supplementation Does Not Improve Functional Performance in Older Active Women. 2021 ISSN Annual Conference. Clearwater, FL.
2. **Townsend JR**, Haynes JT, Aziz MA, Jones MD, Littlefield LA, Ruiz MD, Johnson KD, Gonzalez AM. Impact of red spinach supplementation on bench press and cognitive performance in resistance-trained males. 2021 NSCA National Conference. Orlando, FL.
3. **Townsend JR**, Haynes JT, Aziz MA, Jones MD, Littlefield LA, Ruiz MD, Johnson KD, Gonzalez AM. Impact of dietary nitrate loading on muscle oxygenation during a fatiguing barbell bench press protocol. 2021 ACSM Annual Meeting. Virtual.
4. Hart TL, **Townsend JR**, Haynes JT, Woods CA, Toy AM, Phirea B, Aziz MA, Zimmerman GA, Jones MD, Vantrease WC, Gonzalez AM. Effect of Dietary Nitrate

Supplementation on Adaptations to 11-weeks of Off-season Training in Collegiate Athletes. 2021 ACSM Annual Meeting. Virtual.

5. **Townsend JR**, Morimune JE, Jones MD, Littlefield LA, Heffington SH, VanDusseldorp TA, Feito Y, Mangine GT. The effects of a protease enzyme blend on post-resistance exercise intramuscular anabolic signaling. ASN Nutrition 2020. Seattle, WA.
6. Morimune JE, **Townsend JR**, Jones MD, Beuning CN, Hase AA, Boot CM, Littlefield LA, Henry RN, Marshall AC, VanDusseldorp TA, Feito Y, Mangine GT. The effects of a protease enzyme blend on the amino acid response to resistance exercise. 2020 ACSM Annual Meeting. San Francisco, CA.
7. Jones MD, **Townsend JR**, Morimune JE, Littlefield LA, VanDusseldorp TA, Feito Y, Mangine GT. Acute protease supplementation does not alter the endocrine response to resistance exercise in trained males. 2020 ACSM Annual Meeting. San Francisco, CA.
8. Zimmerman GA, **Townsend JR**, Jones MD, Morimune J. Low-dose vitamin D supplementation does not prevent 25(OH) Vitamin D decline in college students. 2020 ACSM Annual Meeting. San Francisco, CA.
9. **Townsend JR**, Vantrease WC, Sapp PA, Henry RH, Johnson KD. Maximal strength, muscle activation, and bar velocity comparisons between squatting with a traditional or safety squat bar. NSCA National Conference 2019. Washington DC.
10. Church DD, Jajtner AR, **Townsend JR**, Beyer KS, La Monica MB, Oliveira LP, & Hoffman JR. Association between Muscle Carnosine Content and Changes in Muscle Cytokines following Lower-Body Resistance Exercise. 2019 ACSM Annual Meeting. Orlando, FL.
11. **Townsend JR**, LuAllen J, Vantrease WC, Jones MD, Toy AM, Hunter I, Johnson KD. Body composition changes following NFL combine preparation training. ACSM 2019 National Conference, Orlando, Florida.
12. Jones MD, **Townsend JR**, LuAllen J, Vantrease WC, Hunter I, Toy AM, Johnson KD. The influence of combine preparation training duration on NFL Combine or Pro Day performance. ACSM 2019 National Conference, Orlando, Florida.
13. **Townsend JR**, Bender D, Vantrease WC, Sapp PA, Toy AM, Woods C, Johnson KD. The effect of probiotic supplementation on markers of immune and endocrine status in Division I baseball players. 2018 ISSN Conference, Clearwater, FL.
14. Partida S, Marshall A, Henry R, Toy A, **Townsend JR**. Comparison of nutrition intervention techniques and their effectiveness on active high school and middle school students in a private school setting. 2018 SCAN Conference. Denver, CO.
15. Church DD, Hoffman JR, **Townsend JR**, Jajtner AR, Beyer KS, Oliveira LP, Fukuda DH, & Stout JR. Effect of Skeletal Muscle Carnosine Content on Apoptotic Signaling. 2018 Experimental Biology Conference. San Diego, CA.
16. Sapp PA, **Townsend JR**, Marshall AC, Johnson KD, Vantrease WC. The effect of dietary manipulations on ultrasonography derived measures of muscle architecture. 2018 SEACSM Annual Conference Chattanooga, Tennessee.

17. Vantrease WC, Bender D, **Townsend JR**, Johnson KD. How Does Air Displacement Plethysmography and Direct Segmental Bioelectrical Impedance Compare in a University Student Population? 2018 Southeast ACSM Annual Conference. Chattanooga, Tennessee.
18. Bender D, **Townsend JR**, Vantrease WC, Marshall AM, Henry RN, Heffington SH, Johnson KD. The effects of beetroot juice administration on physical performance during anaerobic exercise in young active males. FNCE 2017 National Conference. Chicago, Illinois.
19. **Townsend JR**, Toohey JC, Johnson SB, Crimi CC, Stowers KL, Bender WD, Vantrease WC, Toy AM, Ruiz MD, VanDusseldorp TA, Fieto Y, Mangine GT. The effect of probiotic supplementation on body composition, muscle thickness, and athletic performance in Division I collegiate athletes. 2017 International Society of Sports Nutrition Annual Conference. Phoenix, AZ.
20. Jajtner AR, Hoffman JR, **Townsend JR**, Beyer KS, Varanoske AN, Church DD, La Monica MB, Riffe JJ, Muddle TW, Oliveira LP, Herrlinger KA, Radom-Aizik S, Fukuda DH, Stout JR. Resistance Exercise and Polyphenol Supplementation elicits Unique Recruitment of Monocyte Subsets in Untrained Men. 2017 ACSM Annual Meeting. Denver, CO.
21. Church DD, Hoffman JR, Mangine GT, Jajtner AR, **Townsend JR**, Gonzalez AM, Beyer KS, Wang R, Boone CH, La Monica MB, Miramonti AA, Wells AJ, Fukuda DH, Stout JR. The Response of Leukemia Inhibitory Factor to High-Intensity and High-Volume Resistance Training in Trained Men. 2017 ACSM Annual Meeting. Denver, CO.
22. **Townsend JR**, Stout JR, Jajtner AR, Church DD, Beyer KS, La Monica MB, Riffe JJ, Muddle TWD, Oliveira LP, Herrlinger KA, Fukuda DH, Hoffman JR. Polyphenol Supplementation Attenuates Apoptotic Signaling Following Acute Resistance Exercise in Untrained Males. 2017 ACSM Annual Meeting. Denver, CO.
23. Coker NA, Wells AJ, Mangine GT, Church DD, Jajtner AR, **Townsend JR**, Beyer KS, Wang R, Fukuda DH, Stout JR, Hoffman JR. Comparison Between High-Intensity and High-Volume Resistance Training on the Acute Myokine Response in Resistance Trained Men. 2017 Experimental Biology Conference. Chicago, IL.
24. Wells AJ, Hoffman JR, Jajtner AR, Varanoske AN, Church DD, Gonzalez AM, **Townsend JR**, Boone CH, Baker KM, Beyer KS, Mangine GT, Oliveira LP, Fukuda DH, Stout JR. Post-Resistance Exercise Ingestion of Amino Acids Attenuates the Initial Increase in Plasma TNF α and TNFr1 Expression on Monocyte Subpopulations. 2017 Experimental Biology Conference. Chicago, IL.
25. Varanoske AN, Hoffman JR, Church DD, Jajtner AR, **Townsend JR**, Beyer KS, Oliveira LP, Fukuda DH, Stout JR. Effects of resting muscle carnosine content on the intramuscular antioxidant response to a bout of resistance exercise. University of Central Florida, Orlando, FL. 2017 Experimental Biology Conference Chicago, IL.
26. Jajtner AR, Hoffman JR, **Townsend JR**, Beyer KS, Varanoske AN, Church DD, Oliveira LP, Herrlinger KA, Radom-Aizik S, Fukuda DH, Stout JR. Polyphenol Supplementation does not change the Post-Resistance Exercise Circulating and Intramuscular TNF- α or TNFR1 Response on Monocyte Subsets. 2017 Experimental Biology Conference. Chicago, IL.

27. Mangine GM, Hoffman JR, Thomas G, Gonzalez AM, **Townsend JR**, Wells AJ, Jajtner AR, Beyer KS, Boone CH, Wang R, Miramonti AA, La Monica MB, Fukuda DH, Ratamess NR, Stout JR. Influence of Competitive Level and Position in American Rugby on Body Composition and Measures of Performance. 2016 NSCA Annual Meeting, New Orleans, LA.
28. Beyer KS, Stout JR, Fukuda DH, Jajtner AR, **Townsend JR**, Church DD, Herrlinger K, Hoffman JR. Supplementation with a proprietary polyphenol blend does not hinder resistance training adaptations while enhancing antioxidant capacity and muscle recovery. 2016 NSCA Annual Meeting, New Orleans, LA.
29. Baker KB, Hoffman JR, Jajtner AR, **Townsend JR**, Varanoske AN, Beyer KB, Boone CH, Fukuda DH, Stout JR. Effect of Muscle-Damaging Exercise on Circulating TNF- α and TNFR1 Expression in Monocytes and Neutrophils. 2016 ACSM Annual Meeting. Boston, MA.
30. Wells AJ, Hoffman JR, Jajtner AR, Varanoske AN, Church DD, Gonzalez AM, **Townsend JR**, Boone CH, Baker KM, Mangine GT, Oliveira LP, Fukuda DH, Stout JR. Monocyte Recruitment Following High-intensity and High-volume Resistance Exercise. 2016 ACSM Annual Meeting, Boston, MA.
31. Redd MJ, Fukuda DH, Mangine GT, Gonzalez AM, **Townsend JR**, Wells AJ, Jajtner AR, Beyer KS, Boone CH, La Monica MB, Wang R, Stout JR, Hoffman JR. Longitudinal Changes in Muscle Cross-Sectional Area following Different Resistance Training Programs in Resistance Trained Men. 2016 ACSM Annual Meeting. Boston, MA.
32. Church DD, Hoffman JR, Mangine GT, Jajtner AR, **Townsend JR**, Gonzalez AM, Wells AJ, Beyer KS, Wang R, Boone CH, La Monica MB, Fukuda DH, Stout JR. BDNF Concentrations are Elevated during Acute Resistance Exercise in Experienced, Resistance-Trained Men. 2016 ACSM Annual Meeting. Boston, MA.
33. Jajtner AR, Hoffman JR, Mangine GT, Church DD, **Townsend JR**, Beyer KS, Boone CH, Fukuda DH, Stout JR. Eight weeks of Resistance Training Reduces IL-15 Response to Acute Resistance Exercise in Trained Men. 2016 ACSM Annual Meeting, Boston MA.
34. **Townsend JR**, Stout JR, Jajtner AR, Church DD, Oliveira LP, Beyer KS, La Monica MB, Riffe JJ, Muddle TW, Wang R, Baker KB, Boone CH, Varanoske AN, Redd MJ, Fukuda DH, Hoffman JR. The Effects of Acute Resistance Exercise on Apoptotic Signaling in Untrained Males. 2016 ACSM Annual Meeting. Boston, MA.
35. **Townsend JR**, Stout JR, Jajtner AR, Church DD, Beyer KS, Oliveira LP, Fukuda DH, Hoffman JR. Intramuscular NF- κ B Signaling in Response to Resistance Exercise and Recovery in Untrained Males. 2016 Experimental Biology Conference. San Diego, CA.
36. Hoffman JR, Gepner Y, Stout JR, Hoffman MW, Ben-Dov D, Funk S, Daimont I, Jajnter AR, **Townsend JR**, Shelef I, Avital G, Chen Y, Frankel H, Ostfeld I. HMB Supplementation may Affect Cytokine and Inflammatory Response during High Intensity Combat Training. 2016 ACSM Annual Meeting. Boston, MA.
37. Gonzalez AM, Hoffman JR, **Townsend JR**, Jajtner AR, Boone CH, Beyer KS, Baker KM, Wells AJ, Mangine GT, Robinson EH, Church DD, Oliveira LP, Fukuda DH, Stout JR. MAPK signaling following high volume and high intensity resistance exercise protocols in trained men. 2016 ACSM Annual Meeting. Boston, MA.

38. Mangine GT, Hoffman JR, Gonzalez AM, **Townsend JR**, Wells AJ, Jajtner AR, Beyer KS, Boone CH, Wang R, Miramonti AM, LaMonica MB, Fukuda DH, Witta E, Ratamess NC, Stout JR. The influence of exercise-induced hormonal elevation on muscle growth in resistance-trained men. 2015 NSCA National Conference. Orlando, FL.
39. Boone CH, Hoffman JR, Gonzalez AM, Jajtner AR, **Townsend JR**, Baker KM, Fukuda DH, Stout JR. Changes in plasma aldosterone and electrolytes following high-volume and high-intensity resistance exercise protocols in trained men. 2015 NSCA National Conference. Orlando, FL.
40. **Townsend JR**, Hoffman JR, Gonzalez AM, Jajtner AR, Church D, Fukuda DH, Stout JR. MAPK signaling in response to two different resistance exercise protocols in human skeletal muscle. 2015 NSCA National Conference. Orlando, FL.
41. Mangine GT, Hoffman JR, Gonzalez, **Townsend JR**, Wells AJ, Jajtner AR, Beyer KS, Boone CH, Miramonti AA, Wang R, LaMonica MB, Fukuda DH, Ratamess, and Stout JR. Influence of Training Volume And Intensity On Strength And Power Improvements In Experienced, Resistance-trained Men. 2015 ACSM Annual Meeting. San Diego, CA.
42. Turley KR, **Townsend JR**, Rivas JD, Morton AB, Kosarek JW, Cullum MG. Effects of Caffeine on Heart Rate Variability in Young Boys. 2015 ACSM Annual Meeting. San Diego, CA.
43. Jajtner AR, Hoffman JR, Fragala MS, **Townsend JR**, Gonzalez AM, Beyer KS, Wells AJ, Boone CH, Wang R, Robinson IV EH, Mangine GT, Oliveira LP, Fukuda DH, Stout JR. Increased proportion of lymphocytes expressing androgen and interferon-gamma receptors following high volume resistance exercise. 2015 ACSM Annual Meeting. San Diego, CA.
44. Gonzalez AM, Hoffman JR, **Townsend JR**, Jajtner AR, Wells AJ, Beyer KS, Willoughby DS, Oliveira LP, Fukuda DH, Fragala MS, Stout JR. Influence of myosin heavy chain protein isoforms on Akt/mTOR signaling and mRNA expression following resistance exercise in trained men. 2015 Experimental Biology Conference. Boston, MA.
45. Fragala MS, **Townsend JR**, Jajtner AR, Oliveira LP, Willoughby DS, Gonzalez AM, Wells AJ, Hoffman JR, Stout JR, Fukuda DH. Androgen Mediated Leukocyte Responses to Acute Resistance Exercise. Experimental Biology 2015, Boston MA.
46. **Townsend JR**, Fragala MS, Oliveira LP, Jajtner AR, Gonzalez AM, Wells AJ, Beyer KS, Stout JR, Fukuda DH, Hoffman JR. Immunohistological and Morphological Analysis from a Skeletal Muscle Microbiopsy. Experimental Biology 2015, Boston MA.
47. Hoffman JR, McCormack WP, Pruna GP, Jajtner AR, **Townsend JR**, LaMonica MB, Wells AJ, Stout, JR, Fragala MS, Fukuda DH. L-Alanyl-L-Glutamine Ingestion Improves Time to Exhaustion and Reaction Following Prolonged Endurance Exercise. ACSM Integrative Physiology Miami, Septemeber 2014.
48. Fragala MS, Jajtner AR, **Townsend JR**, Gonzalez AM, Wells AJ, Oliveira LP, Hoffman JR, Stout JR, and Fukuda DH. Leukocyte IGF-1 receptor expression during muscle recovery. 2014 NSCA National Conference. Las Vegas, NV.

49. Robinson EH, Stout JR, Miramonti AA, Fukuda DH, Wang R, **Townsend JR**, Mangine GT, Fragala MS, Hoffman JR. High-intensity interval training and beta-hydroxy-beta-methylbutyric free acid improves aerobic power and metabolic thresholds. International Society of Sports Nutrition National Conference. June 2014.
50. Gonzalez AM, Hoffman JR, Wells AJ, Mangine GT, **Townsend JR**, Jajtner AR, Wang R, Miramonti AA, Pruna GJ, LaMonica MB, Bohner JD, Hoffman MW, Oliveira LP, Fukuda DH, Fragala MS, Stout, JR. Pharmacokinetics of Caffeine Administered in a Time-Release Version vs. Regular Tablet Form. International Society of Sports Nutrition National Conference. June 2014.
51. **Townsend JR**, Stout JR, Hoffman JR, Gozalez AM, Jajtner AR, Wells AJ, Boone CH, Beyer KS, Mangine GT, Robinson EH, Pruna GJ, Bohner JD, Fragala MS, Fukuda DH. Acute Anabolic Response of β -hydroxy- β -methylbutyrate (HMB)-Free Acid Supplementation Following Heavy Resistance Exercise. International Society of Sports Nutrition National Conference. June 2014.
52. Wells AJ, Hoffman JR, Gonzalez AM, Beyer KB, Jajtner AR, **Townsend JR**, LaMonica M, Miramonti AA, Hoffman MW, Oliviera LP, Fukuda DH, Fragala MS, Stout JR. Examination of the Health and Safety Aspects of 28-Days of Ingestion of a Supplement Containing Slow-Release Caffeine. International Society of Sports Nutrition National Conference. June 2014.
53. Robinson EH, Fukuda DH, Stout JR, Wang R, Miramonti AA, **Townsend JR**, Mangine GT, Jajtner AR, Wells AJ, Gonzalez AM, McCormack WP, Bohner JD, LaMonica MB, Reardon D, Oliveira LP, Fragala MS, Hoffman JR. Gender-specific differences in the relationship between muscle morphology and neuromuscular economy. 2014 ACSM Annual Meeting. Orlando, FL.
54. Miramonti AA, Fukuda DH, Stout JR, Robinson EH, Wang R, Mangine GT, **Townsend JR**., Bohner JD, Fragala MS., Hoffman JR, Oliveira LP. Gender Differences In Anaerobic Working Capacity, But Not Critical Power, During An All-out Cycling Test. 2014 American College of Sports Medicine National Conference in Orlando, FL.
55. Wang R, Fukuda DH, Stout JR, Robinson EH, IV, Miramonti AA, **Townsend JR**, Mangine GT, Jajtner AR, Wells AJ, Gonzalez AM, McCormack WP, Bohner JD, Fragala MS, Hoffman JR. Evaluation of EMG Frequency Domain Changes during a Three-Minute Maximal Effort Cycling Test. 2014 American College of Sports Medicine National Conference in Orlando, FL
56. La Monica MB, Mangine GT, Gonzalez AM, Wells AJ, **Townsend JR**, Jajtner AR., Robinson EH, McCormack WP, Fukuda DH, Fragala MS, Stout JR, Hoffman JR. Bilateral Muscle Architecture Symmetry is Related to Greater Vertical Jump Power. 2014 American College of Sports Medicine National Conference in Orlando, FL
57. Bohner JD, Hoffman JR, McCormack WP, Scanlon TC, **Townsend JR**, Jajtner AR, Fukuda DH, Fragala MS, Stout JR.. The Effect of Altitude on Game Performance in Collegiate Soccer Players. 2014 American College of Sports Medicine National Conference in Orlando, FL
58. Boone CH, Beyer KS, Mangine GT, Gonzalez AM, **Townsend JR**, Fukuda DH, Stout JR, Hoffman JR, Fragala MS. Bilateral Differences in Muscle Morphology in Relation to Strength and Power in Untrained Young Men. 2014 American College of Sports Medicine National Conference in Orlando, FL

59. Fragala MS, Stout JR, Fukuda DH, Hoffman JR, Oliveira LP, Emerson NS, Beyer KS, **Townsend JR**, Jajtner AR, Scanlon TC. Serological Biomarker Responses Following Resistance Training and Detraining in Older Adults. 2014 American College of Sports Medicine National Conference in Orlando, FL.
60. Gonzalez AM., Stout JR, Jajtner AR, **Townsend JR**, Wells AJ., Beyer KS, Boone CH, Pruna GJ, Mangine GT, Scanlon TM, Bohner JD., Oliveira LP, Fragala MS, Hoffman JR. Cold Water Immersion combined with β -Hydroxy- β -methylbutyrate Free Acid Improves Performance Recovery following Damaging Resistance Exercise. 2014 American College of Sports Medicine National Conference in Orlando, FL
61. Mangine GT, Hoffman JR, Wells AJ, Gonzalez AM, Rogowski J, **Townsend JR**, Jajtner AR, Beyer, Bohner JD, Pruna G, Fragala MS, Stout JR. Visual Tracking Speed Is Related To Basketball-specific Measures Of Performance In NBA Players. 2014 American College of Sports Medicine National Conference in Orlando, FL
62. McCormack WP, Fukuda DH, Pruna GP, Jajtner AR, **Townsend JR**, Lamonica MB, Hoffman JR, Fragala MS, Stout JR. Submaximal Neuromuscular Economy Displays Strong Relationship to Cardiorespiratory Fitness in Endurance Trained Men 2014 American College of Sports Medicine National Conference in Orlando, FL
63. Wells AJ, Fukuda DH, Hoffman JR, Gonzalez AM, Jajtner AR, **Townsend JR**, Mangine GT, Fragala MS, Stout JR, Vastus Lateralis Muscle Architecture Exhibits Non-homogeneous Adaptation to Resistance Training. 2014 American College of Sports Medicine National Conference in Orlando, FL
64. **Townsend JR**, Fragala MS, Jajtner AR, Gonzalez AM, Wells AJ, Mangine GT, Robinson EH, McCormack WP, Beyer KS, Pruna GJ, Boone CH, Bohner JD, Wang R, Fukuda DH, Stout JR, Hoffman JR. Neuromuscular Electrical stimulation Does Not Attenuate TNF- α Following Acute Heavy Resistance Training. 2014 American College of Sports Medicine National Conference in Orlando, FL.
65. Fragala MS, Jajtner AJ, Beyer KS, Wells AJ, **Townsend JR**, Emerson NS, Scanlon T, Stout JR, Oliveira LP, Hoffman JR. N-Terminal Propeptide of Type III Procollagen (P3NP) Responses to Resistance Exercise in Older Adults. Experimental Biology. Boston, MA, April 2013.
66. Wells AJ, Gonzalez AM, Mangine GT, Emerson NS, McCormack WP, Jajtner AR, **Townsend JR**, Scanlon TS, Robinson EH, IV, Stout JR, Hoffman JR, Fragala MS. The effects of a supplement designed to attenuate the adverse effects of fatigue. 2013 ACSM National Conference in Indianapolis, IN.
67. **Townsend JR**, Morton AB, Jajtner AR, Wells AJ, Gonzalez AM, McCormack WP, Robinson EH, IV, Mangine GT, Emerson NS, Stout JR, Fragala MS, Hoffman JR, Cosio-Lima L. Excess post-exercise oxygen consumption (EPOC) following multiple effort spring and moderate aerobic exercise. 2013 ACSM National Conference in Indianapolis, IN.
68. Jajtner AR, Mangine GT, Scanlon TC, Stout JR, **Townsend JR**, McCormack WP, Gonzalez AM, Wells AJ, Rogowski JP, Robinson EH, IV, Emerson NS, Fragala MS, Hoffman JR. Effect of lower-limb injury on ultrasonography measures of muscle quality and architecture in NBA players. 2013 ACSM National Conference in Indianapolis, IN.
69. Gonzalez AM, Wells AJ, Hoffman JR, Stout JR, Mangine GT, McCormack WP, Fragala MS, **Townsend JR**, Jajtner AR, Emerson NS, Robinson EH. Reliability of a

non-motorized treadmill for assessing anaerobic performance. 2013 ACSM National Conference in Indianapolis, IN.

70. Beyer KS, Fragala MS, Pruna GJ, Boone CH, Bohner JD, **Townsend JR**, Jajtner AR, Emerson NS, Stout JR, Hoffman JR, Oliveira LP. Resistance exercise training and cognitive function in older adults. 2013 ACSM National Conference in Indianapolis, IN.
71. Cosio-Lima LM, Morton AB, **Townsend JR**, Bell F. Cooling Devices and Their Efficacy on Military Performance Medicine & Science in Sports & Exercise (2012).
72. Morton AB, **Townsend JR**, Moore H, Cosio-Lima LM (2012). A comparison of EMG activity between dumbbell bench, barbell bench and vertical chest press. Medicine & Science in Sports & Exercise
73. Turley KR, Eusse P, Thomas M, **Townsend JR**, Morton AB, Phillips BL, Cullum M.G. (2011). Effect of different doses of caffeine on anaerobic performance in young boys. Medicine & Science in Sports & Exercise, 43(5).
74. Turley KR, **Townsend JR**, Rivas JD, Morton AB, Kosarek JW, Cullum M.G. (2010). Effect of caffeine on anaerobic performance in young boys. Medicine & Science in Sports & Exercise, 42(5).

Invited Talks & Oral Presentations

1. **Townsend JR**. Dietary Nitrates for Strength and Power Athletes. NSCA Southeast Regional Conference. 2021
2. **Townsend JR**. Probiotics for Sports Performance and Body Composition Optimization. NSCA 2020 National Virtual Conference. September 23rd, 2020.
3. **Townsend JR**. Probiotics in Sport: Implications for Health and Performance. NSCA Georgia State Clinic. Statesboro, GA. November 9th 2019
4. **Townsend JR**. Performance Probiotics? Evidence for Probiotic Supplementation in Athletes. International Society of Sport Nutrition – Kennesaw State University 2019 Nutrition and Training Conference. Kennesaw, GA.
5. **Townsend JR**. ISSN Data Blitz -The effect of probiotic supplementation on markers of immune and endocrine status in Division I baseball players. 2018 ISSN Conference, Clearwater, FL.
6. **Townsend JR**. Polyphenol Supplementation Attenuates Apoptotic Signaling Following Acute Resistance Exercise in Untrained Males. 2017 ACSM Annual Meeting. Denver, CO.
7. **Townsend JR**. Excess post-exercise oxygen consumption (EPOC) following multiple effort sprint and moderate aerobic exercise. 2013 ACSM National Conference in Indianapolis, IN.

8. **Townsend JR.** What's the speed limit? Genetics vs. Training. *Training & Nutrition for Young Athletes and Future Olympians Youth Symposium*. December 2012.
9. **Townsend JR.** The Effects of a Moderate Dose of Caffeine on HRV in Young Males. *Oklahoma State University Regional Research Symposium*. Feb 2010.

RESEARCH SUPPORT (Total: \$418,771; PI: \$132,378; Sub-I: \$286,393)

- 2020 Principal Investigator. Renaissance Periodization. Effect of gut microbiome on gastrointestinal function during resistance exercise in active males and females. \$5,000
- 2020 Sub-Investigator. National Watermelon Promotion Board. Effect of watermelon extract supplementation on skeletal muscle oxygenation and exercise performance. \$15,305
- 2018 Principal Investigator. Deerland Enzymes Inc. The Effect of ProHydrolase® on the Amino Acid, Intramuscular Anabolic Signaling, and Endocrine Response to Resistance Exercise in Trained Males. \$65,000.
- 2018 Principal Investigator. CoffeeBooster Inc. Effects of a liquid multivitamin (Coffee Booster®) in comparison to a capsule multivitamin on blood markers of vitamin status in healthy adults. \$31,500.
- 2017 Principal Investigator. Deerland Enzymes Inc. The Effect of a probiotic on Immune Function, Hormonal Status and Physical Performance in Division I Male Collegiate Athletes. \$25,000.
- 2017 Principal Investigator. Deerland Enzymes Inc. The effect of probiotic supplementation on body composition, muscle thickness, and athletic performance in Division I collegiate athletes. \$6,000.
- 2014 Sub-Investigator. Kemin Inc. The Effect of XSurge™ Supplementation on Skeletal Muscle Recovery to Acute Resistance Exercise. \$271,088.

COURSES TAUGHT

Undergraduate courses

- Exercise Physiology Lab
- Assessment of Human Performance Lab
- Intro to Sport and Exercise Science
- Nutrition and Metabolism in Sport and Exercise
- Personal Training Methods
- Healthful Living
- Principles of Teaching Conditioning Exercises
- Strength and Conditioning Program Design

Graduate Courses

Applied Exercise Physiology
Current Issues & Trends in Sport and Exercise Science
Exercise & Nutrition Strategies I
Exercise & Nutrition Strategies II
Dietary and Nutritional Supplementation
Physiology of Muscular Development
Physiological Adaptations to Exercise Training
Exercise & Sport Nutrition
Advanced Strength and Conditioning Concepts
Thesis I
Thesis II
Independent Study

SERVICE

**Master's Student Thesis Committees
(Committee Chair in parentheses)***Completed*

Tricia Hart (Townsend)	2021
Grace Zimmerman (Littlefield)	2021
Drew Howerton (Townsend)	2020
Megan Jones (Littlefield)	2020
James T. Hildon IV (Townsend)	2020
Shameka Freeman (Townsend)	2019
Jaclyn Morimune (Townsend)	2019
Vishaka Vinod (Marshall)	2019
Natalie Mann (Marshall)	2019
Heidi Fahmy (Henry)	2019
William Vantrease (Townsend)	2018
Devon Roper (Townsend)	2018
Samantha Partida (Marshall)	2018
William Jones (Townsend)	2018
Dallas Karr (Robertson)	2018
Philip Sapp (Townsend)	2017
Amy Banaszek (Townsend)	2017
David Bender (Townsend)	2017
Jeremy Toohey (Townsend)	2017
Frankie Romeo (Johnson)	2016

Ongoing

Cristina Feliciano (Townsend)	2021
Natalie Grady (Townsend)	2022
Jonathan Wyatt (Ruiz)	2022

University Service

2021	Research Committee Member College of Pharmacy & Health Sciences Lipscomb University
2021	Devotional Speaker Faculty Opening Fall Meetings Lipscomb University
2021	Lipscomb Mentoring Network Lipscomb University
2021	Faculty Charge Spring Commencement Lipscomb University
2021	Student Scholars Symposium Presentation Judge Lipscomb University
2020	Cultural Humility Working Group Lipscomb Forward Initiative Lipscomb University
2019	Student Scholars Symposium Session Chair & Presentation Judge Lipscomb University
2019	Day of Service Group Leader Habitat for Humanity Lipscomb University
2019	IGNITE for Lipscomb Academy Students Department of Kinesiology, Lipscomb University
2019	Purple & Gold Banquet Faculty Representative Department of Kinesiology, Lipscomb University
2018-2020	DXA Body Composition In-service for 1 st year Pharmacy Students College of Pharmacy & Health Sciences, Lipscomb University
2018	4th Grade Health Science Discovery Leader Lipscomb Academy
2016-2021	Body Composition Testing and Analysis Lipscomb Athletics, Lipscomb University
2018	Hiring Committee Member for Kinesiology Faculty Member Department of Kinesiology, Lipscomb University

2018-2019	Environmental Health and Safety Committee Member Lipscomb University
2018	Bison Scholars Day Banquet Faculty Representative Department of Kinesiology, Lipscomb University
2017	Interim Graduate Program Director Exercise and Nutrition Science Graduate Program, Lipscomb University
2017	Tri-Star Health Care Academy Facilitator Department of Kinesiology, Lipscomb University
2017	Bison Scholars Day Banquet Faculty Representative Department of Kinesiology, Lipscomb University
2016-2017	Library and Technology Committee Member College of Pharmacy and Health Sciences, Lipscomb University
2016	Tri-Star Health Care Academy Facilitator Department of Kinesiology, Lipscomb University
2016	Bison Scholars Day Banquet Faculty Representative Department of Kinesiology, Lipscomb University

Professional Service

Begin Jan 2022	Editorial Board Member Journal of the International Society of Sports Nutrition Taylor & Francis
2021-Pres	Scholarship Committee Board Member NSCA Foundation National Strength and Conditioning Association
2021	Scientific Session Moderator National Strength and Conditioning Association Annual Conference, Orlando, FL.
2020-Pres	Advisory Board Member NSCA Tennessee State Chapter National Strength and Conditioning Association
2019	Guest Editor Special Issue: Nutrition Intervention in Exercise Sports
2019	Scientific Session Moderator National Strength and Conditioning Association Annual Conference, Washington D.C.

2017-2020	Grant Reviewer National Strength and Conditioning Association
2017-2019	Abstract Reviewer National Strength and Conditioning Association Annual Conference
2018-2021	Abstract reviewer Southeastern Chapter of the American College of Sports Medicine

Peer-reviewed Journal Reviewer

Journal of Applied Physiology
Journal of the International Society of Sports Nutrition
Journal of Strength and Conditioning Research
Applied Physiology, Nutrition, and Metabolism
American Journal of Clinical Nutrition
Journal of the American College of Nutrition
International Journal of Sport Nutrition and Exercise Metabolism
Kinesiology
Nutrients
Sports
Journal of Clinical Densitometry
Peer J
Journal of Applied Microbiology
Journal of Trainology
International Journal of Kinesiology & Sports Science

Professional Organization Memberships

2010-pres.	American College of Sports Medicine
2010-pres.	National Strength and Conditioning Association (NSCA)
2013-pres.	International Society of Sports Nutrition (ISSN)
2017-pres.	American College of Sports Medicine: Southeastern Chapter
2012-2015	American Physiological Society (APS)
2018-2019	American College of Nutrition (ACN)
2019-2020	American Society of Nutrition
2019-2020	Professionals in Nutrition for Exercise and Sport (PINES)

Other Service

2021-pres.	Agape Foster Care Family
2019-pres.	Meals on Wheels Volunteer
2018-pres.	Otter Creek Kid's Worship Leader
2016-pres.	Otter Creek Sunday School/Nursery Volunteer
2017-pre.	Room at the Inn Volunteer
2014	Orlando IMPACT Youth Football Coach

2008-09 Volunteer, Timothy Hill Children's' Ranch
2008 Volunteer, Special Olympics, Searcy AR
2005, 2007 Honduras Mission Campaign

CONSULTING

2014 Quest Diagnostics Biomarker Substantiation Writer
Sports & Human Performance Branch
Quest Diagnostics, Madison, NJ

HONORS AND AWARDS

2021 Cowart Faculty Excellence Award – Health Care
Lipscomb University
(\$5,000 award)

2021 Nominated for Terry J. Housh Young Investigator Award
National Strength and Conditioning Association
(Did not win award)

2019 Nominated for Terry J. Housh Young Investigator Award
National Strength and Conditioning Association
(Did not win award)

2017 University Award for Outstanding Dissertation
University of Central Florida
(\$1,500 award)

2017 Outstanding Dissertation Award
College of Education
University of Central Florida

2016 Martin Frank Diversity Travel Award
American Physiological Society
(\$1,800 award)

2015 MARC Mentored Travel Award
Federation of American Societies for Experimental Biology
(\$1,850 award)

2015 Martin Frank Diversity Travel Award
American Physiological Society
(\$1,800 Award)

2014 Minority Scholarship
National Strength and Conditioning Association
(\$1,000 award)

2014 University Award for Excellence in Graduate Student Teaching

	University of Central Florida (\$1,500 award)
2014	Excellence in Graduate Student Teaching College of Education University of Central Florida
2013-15	Graduate Travel Fellowship University of Central Florida (\$500 award each)
2013	MARC Mentored Travel Award Federation of American Societies for Experimental Biology (\$1,850 award)
2014-16	McKnight Doctoral Fellowship Florida Education Fund (\$24,000 total award)
2012-13	Ronald E. McNair Doctoral Fellowship University of Central Florida (\$34,000 total award)
2008-10	Ronald E. McNair Scholar Harding University

Student Honors and Awards (Townsend served as primary mentor)

2021	Tricia L. Hart Outstanding Poster Presentation Lipscomb Student Scholar Symposium
2019	Megan D. Jones Outstanding Poster Presentation Lipscomb Student Scholar Symposium
2017	David Bender Outstanding Abstract 2017 Food and Nutrition Conference and Expo (FNCE). Chicago, IL

Other Honors & Awards

2010-Present	Omicron Delta Kappa National Honorary Leadership Society Member
2009-2010	National Football Foundation –Hampshire Honor Society Inductee
2009	Team Captain, Harding University Football
2009	Lifter of the Year, Harding University Football
2008-2009	Leadership Council Member, Harding University Football

2006-2009	Gulf South Conference Academic Honor Roll
2006-2009	4-year Letter-winner, Harding University Football
2007	Dean's List, Harding University
2004	Team Captain, Schaumburg High School Football
2004	Mid Suburban League All-Conference Team
2004	Daily Herald All Area Football Team Honorary Mention