

Samuel Louis Buckner, PhD

Department of Educational and Psychological Studies
Assistant Professor of Exercise Science
University of South Florida
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Education:

- University of Mississippi, Oxford, Mississippi** January 2015 – Present
Doctorate of Philosophy in Health and Kinesiology
- University of Nebraska- Lincoln, Nebraska** August 2013 – May 2014
Doctorate of Philosophy in Nutrition and Health Sciences
- Florida Atlantic University, Boca Raton, Florida** January 2012 – August 2013
Master of Science in Exercise Science & Health Promotion
- Temple University, Philadelphia, Pennsylvania** August 2007-May 2011
Bachelor of Science in Kinesiology
- Pompano Beach High School, Pompano Beach, Florida** May 2007

Work Experience:

- Assistant Professor of Exercise Science**
University of South Florida, Tampa, Florida August 2018- Present
- Department of Educational and Psychological Studies
-Director of USF Muscle Laboratory
- Graduate Research Assistant**
University of Mississippi, University, Mississippi January 2015- May 2018
- Health, Exercise Science and Recreation Management
-Research in Skeletal Muscle Physiology Lab
-Teach lecture course: Behavioral Aspects of Weight Management
- Adjunct Instructor**
Florida Atlantic University, Boca Raton, Florida August 2014- December 2014
- Department of Exercise Science and Health Promotion
-Activity Courses
- UN-L Doctoral Research Assistant** August 2013 – May 2014
-Department of Nutrition and Health Science
-Teach Ex. Phys and Ex. Testing Labs
- Research
- FAU Exercise Science Graduate Assistant** January 2012- August 2013
-Teach *Health and Fitness for Life* courses
-Schedule and oversee fitness and body composition tests
-Assist in research
-Conduct Body composition analysis for FAU sports teams

Fitness Assistant
Bocaire Country Club, Boca Raton, Florida September 2011- Present
-Group fitness and personal training

Intern Strength Coach
Florida Atlantic University, Boca Raton, Florida January 2011- May 2011
-Assistant strength coach for Men's Basketball
-Strength coach for Men's Golf

Tumbling/Gymnastics Coach
Star Gym Gymnastics, Boca Raton, Florida January 2004-May 2007
-Teach gymnastics levels 4-6

**Honors/
Awards:**

Elected "Student Representative" 2016- 2018
Southeastern ACSM, 2016 Regional Meeting

Received NSCA "Challenge Scholarship" 2015
-\$1500

Florida Atlantic University, College of Education
"Outstanding Exercise Science and Health
Promotion Graduate Student" 2012-2013

Temple University
-Dean's list 2007-2011

**Professional
Preparation:**

Attended:

American College of Sports Medicine Annual Meeting, 2018
Minneapolis, Minnesota

South Eastern American College of Sports Medicine Annual Meeting, 2018
Chattanooga, Tennessee

American College of Sports Medicine Annual Meeting, 2017
Denver, Colorado

South Eastern American College of Sports Medicine Annual Meeting, 2017
Greenville, South Carolina

American College of Sports Medicine Annual Meeting, 2016
Boston, Massachusetts

South Eastern American College of Sports Medicine Annual Meeting, 2016

Greenville, South Carolina

American College of Sports Medicine Annual Meeting, 2015
San Diego, California

American College of Sports Medicine Annual Meeting, 2014
Orlando, Florida

South Eastern American College of Sports Medicine Annual Meeting, 2013
Greenville, South Carolina

National Strength and Conditioning Annual Meeting, 2013
Las Vegas, Nevada

National Strength and Conditioning Annual Meeting, 2012
Providence, Rhode Island

Publications in Peer Reviewed Journals:

1. **Buckner, S.L.**, Dankel, S.J., Bell, Z.W., Abe, T., Loenneke, J. P. The association of hand grip strength and mortality: What does it tell us and what can we do with it? *Rejuvenation Research*. 2018 (In Press) .
2. Mouser, J. G., Mattocks, K. T., Dankel, S. J., **Buckner, S. L.**, Jessee, M. B., Bell, Z. W., ... & Loenneke, J. P. (2018). Very Low Load Resistance Exercise in the Upper Body with and without Blood Flow Restriction: Cardiovascular Outcomes. *Applied Physiology, Nutrition, and Metabolism*, (ja).
3. **Buckner, S.L.**, Dankel¹, S.J., Mattocks, K.T., Jessee, M.B., Mouser, J.G., Loenneke, J.P. The cardiovascular adaptations to repeated "Strength Snacks". *Trainology*. 7,2:21-XX
4. **Buckner, S.L.**, Dankel¹, S.J., Mattocks, K.T., Jessee, M.B., Mouser, J.G., Loenneke, J.P. The Affective and Behavioral Responses To Repeated "Strength Snacks". *Physiology International*. In Press.
5. Bell, Z. W., **Buckner, S. L.**, Jessee, M. B., Mouser, J. G., Mattocks, K. T., Dankel, S. J., ... & Loenneke, J. P. (2018). Moderately heavy exercise produces lower cardiovascular, RPE, and discomfort compared to lower load exercise with and without blood flow restriction. *European journal of applied physiology*, 1-8.
6. **Buckner, S. L.**, Dankel, S. J., Mouser, J. G., Mattocks, K. T., Jessee, M. B., & Loenneke, J. P. (2017). Chasing the Top Quartile of Cross-Sectional Data: Is it Possible with Resistance Training?. *Medical Hypotheses*. *Medical Hypotheses*, 108, 63-68.
7. Dankel, S. J., Mouser, J. G., Mattocks, K. T., Jessee, M. B., **Buckner, S. L.**, Bell, Z. W., ... & Loenneke, J. P. (2018). Changes in muscle size via MRI and ultrasound: Are they equivalent?. *Scandinavian journal of medicine & science in sports*, 28(4), 1467-1468.

8. **Buckner, S.L.**, Jessee, M.B., Dankel, S. J., Mouser, J. G., Mattocks, K. T., Loenneke, J. P. Comment on: "The General Adaptation Syndrome: A Foundation for the Concept of Periodization. *Sports Medicine*, 48(7) 1751-1753.
9. Abe, T., **Buckner, S. L.**, Mattocks, K. T., Jessee, M. B., Dankel, S. J., & Grant, J. (2018). Skeletal Muscle Mass and Architecture of the World's Strongest Raw Powerlifter: A Case Study. *Asian Journal of Sports Medicine*, 9(2).
10. Laurentino, G. C., Loenneke, J. P., Mouser, J. G., **Buckner, S. L.**, Counts, B. R., Dankel, S. J., ... & Teixeira, E. L. (2018). Validity of the Handheld Doppler to Determine Lower-Limb Blood Flow Restriction Pressure for Exercise Protocols. *Journal of strength and conditioning research*. In Press
11. Dankel, S. J., Mattocks, K. T., Jessee, M. B., **Buckner, S. L.**, Mouser, J. G., & Loenneke, J. P. (2017). Do metabolites that are produced during resistance exercise enhance muscle hypertrophy?. *European Journal of Applied Physiology*, 1-11.
12. **Buckner S.L.**, Jessee M.B., Dankel S.J., Mouser J.G., Mattocks K.T., Loenneke J.P. Comment on: "The General Adaptation Syndrome: A Foundation for the Concept of Periodization". *Sports Medicine*, 10.1007/s40279-018-0887-3.
13. Dankel, S. J., **Buckner, S. L.**, Jessee, M. B., Mouser, J. G., Mattocks, K. T., Abe, T., & Loenneke, J. P. (2017). Correlations Do Not Show Cause and Effect: Not Even for Changes in Muscle Size and Strength. *Sports Medicine*, 1-6.
14. Mouser, J. G., Jessee, M. B., Mattocks, K. T., Bell, Z. W., **Buckner, S. L.**, Dankel, S. J., ... & Loenneke, J. P. (2018). Blood flow restriction: Methods matter. *Experimental gerontology*, 104, 7-8.
15. Jessee, M. B., Mouser, J. G., **Buckner, S. L.**, Dankel, S. J., Mattocks, K. T., Abe, T., & Loenneke, J. P. (2018). Effects of load on the acute response of muscles proximal and distal to blood flow restriction. *The Journal of Physiological Sciences*, 1-11.
16. Mouser, J. G., Dankel, S. J., Mattocks, K. T., Jessee, M. B., **Buckner, S. L.**, Abe, T., & Loenneke, J. P. (2018). Blood flow restriction and cuff width: effect on blood flow in the legs. *Clinical physiology and functional imaging*.
17. Mattocks, K. T., Jessee, M. B., Mouser, J. G., Dankel, S. J., **Buckner, S. L.**, Bell, Z. W., ... & Loenneke, J. P. (2018). The Application of Blood Flow Restriction: Lessons From the Laboratory. *Current sports medicine reports*, 17(4), 129-134.
18. Jessee MB, Mattocks KT, **Buckner SL**, Dankel SJ, Mouser JG, Abe T, and JP Loenneke. "Mechanisms of Blood Flow Restriction: The New Testament." *Techniques in Orthopedics*. (In Press).

19. Dankel SJ, Jessee MB, **Buckner SL**, Mouser JG, Mattocks KT, and JP Loenneke. "Are higher blood flow restriction pressures more beneficial when lower loads are used?" *Physiology International*. (In Press).
20. Mattocks, K. T., **Buckner, S. L.**, Jessee, M. B., Dankel, S. J., Mouser, J. G., & Loenneke, J. P. (2017). Practicing the Test Produces Strength Equivalent To Higher Volume Training. *Medicine and Science in Sports and Exercise*. (In Press)
21. **Buckner, S. L.**, Loenneke, J. P., & Loprinzi, P. D. (2017). Protein timing during the day and its relevance for muscle strength and lean mass. *Clinical Physiology and Functional Imaging*. (In Press)
22. Abe, T., **Buckner, S. L.**, Dankel, S. J., Jessee, M. B., Mattocks, K. T., Mouser, J. G., & Loenneke, J. P. (2018). Skeletal muscle mass in human athletes: What is the upper limit?. *American Journal of Human Biology*, e23102.
23. Abe, T., Dankel, S. J., **Buckner, S. L.**, Jessee, M. B., Mattocks, K. T., Mouser, J. G., ... & Loenneke, J. P. (2018). Differences in 100-m sprint performance and skeletal muscle mass between elite male and female sprinters. *The Journal of sports medicine and physical fitness*. (In Press)
24. Mouser, J. G., Laurentino, G. C., Dankel, S. J., **Buckner, S. L.**, Jessee, M. B., Counts, B. R., ... & Loenneke, J. P. (2017). Blood flow in humans following low-load exercise with and without blood flow restriction. *Applied Physiology, Nutrition, and Metabolism*, 42(11), 1165-1171.
25. **Buckner, S. L.**, Mouser, J. G., Dankel, S. J., Jessee, M. B., Mattocks, K. T., & Loenneke, J. P. (2017). The General Adaptation Syndrome: Potential misapplications to resistance exercise. *Journal of Science and Medicine in Sport*. (In Press)
26. Dankel, S. J., Mouser, J. G., Mattocks, K. T., Jessee, M. B., **Buckner, S. L.**, Bell, Z. W., ... & Loenneke, J. P. (2017). Changes in muscle size via MRI and ultrasound: Are they equivalent? *Scandinavian journal of medicine & science in sports*. (In Press)
27. Dankel, S. J., Mattocks, K. T., Mouser, J. G., **Buckner, S. L.**, Jessee, M. B., & Loenneke, J. P. (2017). A critical review of the current evidence examining whether resistance training improves time trial performance. *Journal of sports sciences*, 1-7.
28. Dankel SJ, Mouser JG, Jessee MB, Mattocks KT, **Buckner SL**, and JP Loenneke. "Post-exercise blood flow restriction attenuates hyperemia similarly in males and females." *European Journal of Applied Physiology* (In Press).
29. Dankel, S. J., **Buckner, S. L.**, Counts, B. R., Jessee, M. B., Mouser, J. G., Mattocks, K. T., ... & Loenneke, J. P. (2017). The acute muscular response to two distinct blood flow restriction protocols. *Physiology International*, 104(1), 64-76.
30. Mattocks, K. T., Jessee, M. B., Counts, B. R., **Buckner, S. L.**, Mouser, J. G., Dankel, S. J., ... & Loenneke, J. P. (2017). The effects of upper body exercise across different levels of blood flow

restriction on arterial occlusion pressure and perceptual responses. *Physiology & behavior*, 171, 181-186.

31. **Buckner, S. L.**, Dankel, S. J., Mattocks, K. T., Jessee, M. B., Mouser, J. G., Counts, B. R., ... & Loenneke, J. P. (2017). Differentiating swelling and hypertrophy through indirect assessment of muscle damage in untrained men following repeated bouts of resistance exercise. *European Journal of Applied Physiology*, 117(1), 213-224.
32. Counts, B. R., **Buckner, S. L.**, Mouser, J. G., Dankel, S. J., Jessee, M. B., Mattocks, K. T., & Loenneke, J. P. (2017). Muscle growth: To infinity and beyond? *Muscle & Nerve*. (In Press)
33. Jessee, M. B., Mattocks, K. T., **Buckner, S. L.**, Mouser, J. G., Counts, B. R., Dankel, S. J., ... & Loenneke, J. P. (2017). The acute muscular response to blood flow-restricted exercise with very low relative pressure. *Clinical Physiology and Functional Imaging*. (In Press)
34. **Buckner, S. L.**, Dankel, S. J., Counts, B. R., Jessee, M. B., Mouser, J. G., Mattocks, K. T., ... & Loenneke, J. P. (2017). Influence of cuff material on blood flow restriction stimulus in the upper body. *The Journal of Physiological Sciences*, 67(1), 207-215.
35. Dankel, S. J., Jessee, M. B., Mattocks, K. T., Mouser, J. G., Counts, B. R., **Buckner, S. L.**, & Loenneke, J. P. (2017). Training to fatigue: the answer for standardization when assessing muscle hypertrophy?. *Sports Medicine (Auckland, NZ)*, 47(6), 1021-1027.
36. **Buckner, S. L.**, Dankel, S. J., Mattocks, K. T., Jessee, M. B., Grant, M. J., & Loenneke, J. P. (2017). Muscle size and strength: another study not designed to answer the question. *European Journal of Applied Physiology*, 117(6), 1273.
37. **Buckner, S. L.**, Mouser, J. G., Jessee, M. B., Dankel, S. J., Mattocks, K. T., & Loenneke, J. P. (2017). What does individual strength say about resistance training status?. *Muscle & nerve*, 55(4), 455-457.
38. Mouser, J. G., Dankel, S. J., Jessee, M. B., Mattocks, K. T., **Buckner, S. L.**, Counts, B. R., & Loenneke, J. P. (2017). A tale of three cuffs: the hemodynamics of blood flow restriction. *European Journal of Applied Physiology*. (In Press)
39. Edwards, M. K., **Buckner, S. L.**, Loenneke, J. P., & Loprinzi, P. D. (2017). Association between sedentary behavior and normal-range lactate dehydrogenase activity. *Postgraduate Medicine*, 129(4), 484-487.
40. Dankel, S. J., Counts, B. R., Barnett, B. E., **Buckner, S. L.**, Abe, T., & Loenneke, J. P. (2016). Muscle adaptations following 21 consecutive days of strength test familiarization compared with traditional training. *Muscle & Nerve*. (In Press)
41. Dankel, S. J., **Buckner, S. L.**, Jessee, M. B., Mattocks, K. T., Mouser, J. G., Counts, B. R., ... & Loenneke, J. P. (2017). Can blood flow restriction augment muscle activation during high-load training?. *Clinical Physiology and Functional Imaging*. (In Press)
42. Mattocks, K. T., Jessee, M. B., Counts, B. R., **Buckner, S. L.**, Mouser, J. G., Dankel, S. J., ... & Loenneke, J. P. (2017). The effects of upper body exercise across different levels of blood flow restriction on arterial occlusion pressure and perceptual responses. *Physiology & Behavior*, 171, 181-186.

43. Ingram, J. W., Dankel, S. J., **Buckner, S. L.**, Counts, B. R., Mouser, J. G., Abe, T., ... & Loenneke, J. P. (2017). The influence of time on determining blood flow restriction pressure. *Journal of Science and Medicine in Sport*. (In Press)
44. Dankel, S. J., Mouser, J. G., Mattocks, K. T., Counts, B. R., Jessee, M. B., **Buckner, S. L.**, ... & Loenneke, J. P. (2016). The widespread misuse of effect sizes. *Journal of Science and Medicine in Sport*. 20(5) 446-450.
45. Dankel, S. J., Mattocks, K. T., Jessee, M. B., **Buckner, S. L.**, Mouser, J. G., Counts, B. R., ... & Loenneke, J. P. (2016). Frequency: The Overlooked Resistance Training Variable for Inducing Muscle Hypertrophy?. *Sports Medicine*, 5(47), 799-805.
46. **Buckner, S. L.**, Dankel, S. J., Mattocks, K. T., Jessee, M. B., Mouser, J. G., Counts, B. R., & Loenneke, J. P. (2016). The problem of muscle hypertrophy: revisited. *Muscle & Nerve*, 54(6), 1012-1014.
47. Counts, B. R., Rossow, L. M., Mattocks, K. T., Mouser, J. G., Jessee, M. B., **Buckner, S. L.**, ... & Loenneke, J. P. (2016). Let's talk about sex: where are the young females in blood flow restriction research?. *Clinical Physiology and Functional Imaging*. (In Press)
48. Dankel, S. J., Jessee, M. B., Mattocks, K. T., Mouser, J. G., Counts, B. R., **Buckner, S. L.**, & Loenneke, J. P. (2017). Training to fatigue: the answer for standardization when assessing muscle hypertrophy?. *Sports Medicine (Auckland, NZ)*, 47(6), 1021-1027.
49. Dankel, S. J., **Buckner, S. L.**, Jessee, M. B., Mattocks, K. T., Mouser, J. G., Counts, B. R., ... & Loenneke, J. P. (2016). Post-exercise blood flow restriction attenuates muscle hypertrophy. *European Journal of Applied Physiology*, 116(10), 1955-1963.
50. **Buckner, S. L.**, Dankel, S. J., Counts, B. R., Barnett, B. E., Jessee, M. B., Mouser, J. G., ... & Loenneke, J. P. (2016). Does the time of your health screening alter your "health"?. *International Journal of Cardiology*, 220, 524-526.
51. Counts, B. R., **Buckner, S. L.**, Dankel, S. J., Jessee, M. B., Mattocks, K. T., Mouser, J. G., ... & Loenneke, J. P. (2016). The acute and chronic effects of "NO LOAD" resistance training. *Physiology & Behavior*, 164, 345-352.
52. **Buckner, S. L.**, Jessee, M. B., Mattocks, K. T., Mouser, J. G., Counts, B. R., Dankel, S. J., & Loenneke, J. P. (2017). Determining Strength: A Case for Multiple Methods of Measurement. *Sports Medicine (Auckland, NZ)*, 47(2), 193-195.
53. **Buckner, S. L.**, Loprinzi, P. D., & Loenneke, J. P. (2016). Why don't more people eat breakfast? A biological perspective. *The American Journal of Clinical Nutrition*, 103(6), 1555-1556.
54. Mattocks, K.T., Dankel, S.J., **Buckner, S.L.**, Jessee, M.B., Counts, B.R., Mouser, J.G., ... & Loenneke, J.P. (2016). Periodization: What is it good for?. *Journal of Trainology*, 5(1), 6-12.
55. **Buckner, S. L.**, Dankel, S. J., Counts, B. R., Barnett, B. E., Jessee, M. B., Mouser, J. G., ... & Loenneke, J. P. (2016). Do rhythms exist in elbow flexor torque, oral temperature and muscle thickness during normal waking hours?. *Physiology & behavior*, 160, 12-17.

56. **Buckner, S. L.**, Loenneke, J. P., & Loprinzi, P. D. (2016). Single and combined associations of accelerometer-assessed physical activity and muscle-strengthening activities on plasma homocysteine in a national sample. *Clinical Physiology and Functional Imaging*. (In Press).
57. **Buckner, S. L.**, Loenneke, J. P., & Loprinzi, P. D. (2016). Cross-sectional association between normal-range lactate dehydrogenase, physical activity and cardiovascular disease risk score. *Sports Medicine*, 46(4), 467.
58. Jenkins, N. D. M., Housh, T. J., **Buckner, S. L.**, Bergstrom, H. C., Smith, C. M., Cochrane, K. C., ... & Cramer, J. T. (2016). Four weeks of high-versus low-load resistance training to failure on the rate of torque development, electromechanical delay, and contractile twitch properties. *Journal of Musculoskeletal & Neuronal Interactions*, 16(2), 135.
59. Jessee, M. B., **Buckner, S. L.**, Mouser, J. G., Mattocks, K. T., & Loenneke, J. P. (2016). Letter to the editor: Applying the blood flow restriction pressure: the elephant in the room. *American Journal of Physiology-Heart and Circulatory Physiology*, 310(1), H132-H133.
60. Ozaki, H., Loenneke, J. P., **Buckner, S. L.**, & Abe, T. (2016). Muscle growth across a variety of exercise modalities and intensities: contributions of mechanical and metabolic stimuli. *Medical Hypotheses*, 88, 22-26.
61. Jessee, M. B., **Buckner, S. L.**, Dankel, S. J., Counts, B. R., Abe, T., & Loenneke, J. P. (2016). The influence of cuff width, sex, and race on arterial occlusion: implications for blood flow restriction research. *Sports Medicine*, 46(6), 913.
62. **Buckner, S. L.**, Abe, T., Counts, B. R., Dankel, S. J., Barnett, B. E., & Loenneke, J. P. (2015). Muscle and fat mapping of the trunk: a case study. *Journal of Ultrasound*, 18(4), 399.
63. **Buckner, S. L.**, Loenneke, J. P., & Loprinzi, P. D. (2015). Lower extremity strength, systemic inflammation and all-cause mortality: Application to the “fat but fit” paradigm using cross-sectional and longitudinal designs. *Physiology & Behavior*, 149, 199-202.
64. Jenkins, N. D., Housh, T. J., **Buckner, S. L.**, Bergstrom, H. C., Cochrane, K. C., Hill, E. C., ... & Cramer, J. T. (2016). Neuromuscular adaptations after 2 and 4 weeks of 80% versus 30% 1 repetition maximum resistance training to failure. *The Journal of Strength & Conditioning Research*, 30(8), 2174-2185
65. Jenkins, N. D., Housh, T. J., **Buckner, S. L.**, Bergstrom, H. C., Cochrane, K. C., Smith, C. M., ... & Cramer, J. T. (2015). Individual Responses for Muscle Activation, Repetitions, and Volume during Three Sets to Failure of High-(80% 1RM) versus Low-Load (30% 1RM) Forearm Flexion Resistance Exercise. *Sports*, 3(4), 269-280.
66. Bergstrom, H. C., Housh, T. J., Cochrane, K. C., Jenkins, N. D., Zuniga, J. M., **Buckner, S. L.**, ... & Cramer, J. T. (2015). Factors underlying the perception of effort during constant heart rate running above and below the critical heart rate. *European Journal of Applied Physiology*, 115(10), 2231-2241.
67. **Buckner, S. L.**, Jenkins, N. D., Costa, P. B., Ryan, E. D., Herda, T. J., & Cramer, J. T. (2015). Comparing passive angle-torque curves recorded simultaneously with a load cell versus an isokinetic dynamometer during dorsiflexion stretch tolerance assessments. *Medical Engineering & Physics*, 37(5), 494-498.

68. Jenkins, N. D., Miller, J. M., **Buckner, S. L.**, Cochrane, K. C., Bergstrom, H. C., Hill, E. C., ... & Cramer, J. T. (2015). Test–retest reliability of single transverse versus panoramic ultrasound imaging for muscle size and echo intensity of the biceps brachii. *Ultrasound in Medicine & Biology*, 41(6), 1584-1591.
69. Jenkins, N.D.M, Housh, T.J., Cochrane, K.C., Bergstrom, H.C. Traylor, D.T., Lewis Jr, R.W., **Buckner, S.L.**, Schmidt, R.J., Johnson, G.O., Cramer, J.T. "Effects of anatabine and unilateral maximal eccentric isokinetic muscle actions on serum markers of muscle damage and inflammation." *European Journal of Pharmacology* (2014). 728, 161-166.
70. Jenkins, N. D., **Buckner, S. L.**, Baker, R. B., Bergstrom, H. C., Cochrane, K. C., Weir, J. P., ... & Cramer, J. T. (2014). Effects of 6 weeks of aerobic exercise combined with conjugated linoleic acid on the physical working capacity at fatigue threshold. *The Journal of Strength & Conditioning Research*, 28(8), 2127-2135.
71. Jenkins, N. D., **Buckner, S. L.**, Cochrane, K. C., Bergstrom, H. C., Palmer, T. B., Johnson, G. O., ... & Cramer, J. T. (2014). Age-related differences in rates of torque development and rise in EMG are eliminated by normalization. *Experimental Gerontology*, 57, 18-28.
72. Cochrane, K.C., Housh, T.J., Bergstrom, H.C., Jenkins, N.D.M., **Buckner, S.L.**, Johnson, G.O., R.W., Schmidt, R.J., Cramer, J.T. “Perceptual and physiological fatigue thresholds during cycle ergometry” *Applied Physiology Nutrition and Metabolism*. (Online) 2014.
73. Jenkins, N. D., **Buckner, S. L.**, Bergstrom, H. C., Cochrane, K. C., Goldsmith, J. A., Housh, T. J., ... & Cramer, J. T. (2014). Reliability and relationships among handgrip strength, leg extensor strength and power, and balance in older men. *Experimental Gerontology*, 58, 47-50.
74. Bergstrom, H. C., Housh, T. J., Cochrane, K. C., Jenkins, N. D., **Buckner, S. L.**, Goldsmith, J. A., ... & Cramer, J. T. (2015). Application of the Critical Heart Model to Treadmill Running. *The Journal of Strength & Conditioning Research*, 29(8), 2237-2248.
75. Jenkins, NDM., Housh, T.J., Cochrane, K.C., Bergstrom, H.C., Traylor, D.A., Lewis Jr, R.W., **Buckner, S.L.**, Schmidt, R.J., Johnson, G.O., Cramer, J.T., "Effects of anatabine and unilateral maximal eccentric isokinetic muscle actions on serum markers of muscle damage and inflammation." *European Journal of Pharmacology* 728 (2014): 161-166.
76. Jenkins, NDM., **Buckner, S.L.**, Cochrane, K.C., Bergstrom, H.C., Goldsmith, J.A., Weir, J.P., Housh, T.J., Cramer, J.T. "CLA Supplementation and Aerobic Exercise Lower Blood Triacylglycerol, but Have No Effect on Peak Oxygen Uptake or Cardiorespiratory Fatigue Thresholds." *Lipids* 49, no. 9 (2014): 871-880.
77. Bergstrom, H. C., Housh, T. J., Cochrane, K. C., Jenkins, N. D., **Buckner, S. L.**, Goldsmith, J. A., ... & Cramer, J. T. (2015). Application of the Critical Heart Model to Treadmill Running. *The Journal of Strength & Conditioning Research*, 29(8), 2237-2248.

Presentations/Abstracts:

1. Mouser JG, Laurentino GC, Scott J. Dankel, **Buckner SL**, Jessee MB, Counts BR, Mattocks KT, and JP Loenneke. "Blood Flow in Humans During Low-Load Exercise with and without Blood Flow Restriction." ACSM National Conference, June 2017, Denver, Colorado.
2. Loenneke JP, Dankel SJ, Jessee MB, **Buckner SL**, Mouser JG, and KT Mattocks. "Are Higher Blood Flow Restriction Pressures More Beneficial When Lower Loads Are Used?" ACSM National Conference, June 2017, Denver, Colorado.
3. Jessee MB, Mattocks KT, Counts BR, **Buckner SL**, Mouser JG, Dankel SJ, Laurentino GC, and JP Loenneke. The Acute Muscular Responses to Blood Flow Restricted Exercise Using Low and High Relative Pressures." ACSM National Conference, June 2017, Denver, Colorado.
4. Mattocks KT, Jessee MB, Counts BR, **Buckner SL**, Mouser JG, Dankel SJ, Laurentino GC, and JP Loenneke. "Effects of Different Levels of Blood Flow Restriction on Arterial Occlusion Pressure and Perceptual Responses." ACSM National Conference, June 2017, Denver, Colorado.
5. Dankel SJ, Jessee MB, **Buckner SL**, Mouser JG, Mattocks KT, and JP Loenneke. "Cardiovascular and Perceptual Responses to Various Blood Flow Restriction Pressures and Exercise Loads." ACSM National Conference, June 2017, Denver, Colorado.
6. **Buckner SL**, Dankel SJ, Mattocks KT, Jessee MB, Mouser JG, Counts BR, Laurentino GC, and JP Loenneke. "Differentiating Swelling and Hypertrophy Following Repeated Bouts of Resistance Exercise." ACSM National Conference, June 2017, Denver, Colorado.
7. **Buckner SL**. Differentiating Swelling and Hypertrophy Through Indirect Assessment of Muscle Damage in Untrained Men Following Repeated Bouts of Resistance Exercise. SEACSM Invited Presentation, February 2017, Greenville, South Carolina.
8. Counts BR, **Buckner SL**, Dankel SJ, Jessee MB, Mattocks KT, Mouser JG, Laurentino GC, and Loenneke JP. The Acute Response to No Load Exercise: Is it Sufficient? ACSM National Conference, May 2016, Boston, Massachusetts.
9. Barnett BE, **Buckner SL**, Dankel SJ, Counts BR, Jessee MB, Mouser JG, Halliday TM and Loenneke JP. Circadian Rhythms in Blood Glucose and Blood Pressure: Are they Reproducible? ACSM National Conference, May 2016, Boston, Massachusetts. .
10. Mouser JG, **Buckner SL**, Counts BR, Dankel SJ, Jessee MB, Mattocks KT, Laurentino GC, and Loenneke JP. Venous versus Arterial Blood Flow Restriction: The Impact of Cuff Width. ACSM National Conference, May 2016, Boston, Massachusetts.
11. Ingram JW, **Buckner SL**, Dankel SJ, Counts BR, Mouser JG, Abe T, Laurentino GC, and Loenneke JP. The influence of time on determining blood flow restriction pressure. ACSM National Conference, May 2016, Boston, Massachusetts.
12. Mattocks KT, **Buckner SL**, Dankel SJ, Counts BR, Jessee MB, Mouser JG, Laurentino GC, Abe T, and Loenneke JP. The Influence of Cuff Material on the Blood Flow Restriction Stimulus in the Upper Body. ACSM National Conference, May 2016, Boston, Massachusetts.

13. Laurentino GC, Mouser JG, **Buckner SL**, Counts BR, Dankel SJ, Jessee MB, Mattocks KT, Loenneke JP, Tricoli V. The influence of cuff width on regional muscle growth: Implications for Blood Flow Restriction Training. ACSM National Conference, May 2016, Boston, Massachusetts.
14. Jessee MB, **Buckner S.L**, Dankel SJ, Counts BR, Abe T, and Loenneke JP. The Influence of Cuff Width and Sex on Arterial Occlusion: Implications for Blood Flow Restriction Research. ACSM National Conference, May 2016, Boston, Massachusetts.
15. Loenneke JP, **Buckner S.L**, Dankel SJ, Jessee MB, Counts BR, Mouser JG, Mattocks KT, Laurentino GC, and Abe T. The Influence of Cuff Material on the Acute Muscular Response to Blood Flow Restricted Exercise in the Upper Body. ACSM National Conference, May 2016, Boston, Massachusetts.
16. **Buckner S.L**, Dankel SJ, Counts BR, Barnett BE, Jessee MB, Mouser JG, Halliday TM, and Loenneke JP. The Influence of Circadian Rhythms on Upper Body Isometric Strength, Muscle Thickness and Body Temperature. ACSM National Conference, May 2016, Boston, Massachusetts.
17. Dankel SJ, Counts BR, Barnett BE, **Buckner S.L**, Abe T, Zourdos MC, and Loenneke JP. Muscle adaptation to 21 Straight Days of Elbow Flexor Exercise in Trained Individuals. ACSM National Conference, May 2016, Boston, Massachusetts.
18. **Buckner, S.L.**, et al. "Comparing passive angle–torque curves recorded simultaneously with a load cell versus an isokinetic dynamometer during dorsiflexion stretch tolerance assessments." *Medical engineering & physics* 37.5 (2015): 494-498. Presented at the American College of Sports Medicine National Annual Convention, Orlando, FL).
19. Switalla, J.R., Housh, T.J., Cochrane, K.C., Jenkins, N.D.M, **Buckner, S.L.**, Goldsmith, J.A., Schmidt, R.J., Johnson, G.O., Cramer, J.T, Bergstrom, H.C. Metabolic, cardiovascular, and perceptual responses during treadmill running severe intensity treadmill running: Limiting factors of exercise performance? (Presented at the National Strength and Conditioning Association Annual Convention, 2015, Orlando, FL).
20. Jenkins, N.D.M., Housh, T.J., Bergstrom, H.C., **Buckner, S.L.**, Cochrane, K.C., Hill, E.C., Smith, C.M., and Cramer, J.T. Muscle size, muscle strength, electromyography, mechanomyography, and voluntary activation during four weeks of high- vs. low-load resistance training. (Presented at the National Strength and Conditioning Association Annual Convention, 2015, Orlando, FL).
21. Bergstrom, H.C., Housh, T.J., Cochrane, K.C., Jenkins, N.D.M., **Buckner, S.L.**, Goldsmith, J.A., Schmidt, R.J., Johnson, G.O., and Cramer, J.T. Factors Underlying the Perception of Effort during Constant Heart Rate Running. *47(5S):785-788*, 2015. (Presented at the American College of Sports Medicine National Annual Convention, San Diego, CA).
22. Bergstrom, H.C., Housh, T.J., Cochrane, K.C., Jenkins, N.D.M., **Buckner, S.L.**, Goldsmith, J.A., Schmidt, R.J., Johnson, G.O., and Cramer, J.T. Sustainability, physiological, and perceptual

responses at the critical heart rate during treadmill running. (Presented at the National Strength and Conditioning Association National Annual Convention, 2014, Las Vegas, NV).

23. Cochrane, K.C., Housh, T.J., Bergstrom, H.C., Jenkins, N.D.M., **Buckner, S.L.**, Cramer, J.T., Johnson, G.O., and Schmidt, R.J.. Comparison of perceptual and physiological fatigue thresholds during cycle ergometry. (Presented at the National Strength and Conditioning Association National Annual Convention, 2014, Las Vegas, NV).
24. Jenkins, N.D.M., **Buckner, S.L.**, Goldsmith, J.A., Bergstrom, H.C., Cochrane, K.C., Housh, T.J., and Cramer, J.T. The effects of six weeks of moderate aerobic exercise combined with conjugated linoleic acid supplementation on peak oxygen uptake, gas exchange threshold, and respiratory compensation point. (Presented at the National Strength and Conditioning Association National Annual Convention, 2014, Las Vegas, NV).
25. Jenkins, N.D.M., **Buckner, S.L.**, Goldsmith, J.A., Bergstrom, H.C., Cochrane, K.C., Schmidt, R.J., Johnson, G.O., Housh, T.J., and Cramer, J.T. Reliability and comparisons of handgrip strength, leg extension muscle function, and balance. (Presented at the National Strength and Conditioning Association National Annual Convention, 2014, Las Vegas, NV).
26. Bergstrom, H.C., Housh, T.J., Cochrane, K.C., Jenkins, N.D.M., **Buckner, S.L.**, Baker, B., Schmidt, R.J., Johnson, G.O., and Cramer, J.T. Neuromuscular responses during continuous exercise at, above, and below critical power. 46(5S):668-677, 2014. (Presented at the American College of Sport Medicine Annual Convention, Orlando, FL).
27. Jenkins, N.D.M., **Buckner, S.L.**, Bergstrom, H.C., Cochrane, K.C., Palmer, T.B., Schmidt, R.J., Johnson, G.O., Housh, T.J., and Cramer, J.T. Age related differences in rates of torque development and rates of rise in electromyographic amplitude. 46(5S):456-461, 2014. (Presented at the American College of Sport Medicine Annual Convention, Orlando, FL).
28. **Buckner, S.L.**, Graves, BS. "A Comparison of body fat percentages among Exercise Science and Health Promotion students vs. Non-Exercise Science and Health Promotion students ages 20-29 at Florida Atlantic University" (Presented at the Florida Atlantic University College of Education Research Symposium, November 2012)

Grants

Intellectual Contributions

Loenneke JP. Principal Investigator (2017). "Have improper analyses cost us millions: reassessing inter-individual responses to exercise." National Institutes of Aging. \$300,000 (In Review).

Loenneke JP. Principal Investigator (2017). The muscular and vascular effects of very low loads with and without different levels blood flow restriction. American College of Sports Medicine \$10,000 (Not Funded).

Loenneke JP. Principal Investigator (2016). Does low load exercise in combination with blood flow restriction attenuate muscle damage and/or confer a protective effect to a subsequent bout of high load exercise in statin users? National Institutes of Aging. \$100,000 (Not Funded).

Loenneke JP. Principal Investigator (2015) Application Title: An Investigation into the Circadian rhythms of muscle function and balance in young and older adults? National Institutes of Aging. \$100,000 (Not Funded).

Mentorship

Jeremy Loenneke, PhD

The University of Mississippi (2014 – Present)

Barbara Sue Graves, PhD

Florida Atlantic University (2012-2016)

Service:

Southeastern American College of Sports Medicine Executive Board: Student Representative	2016-Present
University Of Mississippi, Exercise Science Department Chair Search Committee	2016-2017
American College of Sports Medicine Student Affairs Committee	2017- Present

External Peer Reviewer

Journal of Strength and Conditioning Research
Trainology

Other:

Schedule and oversee all outside testing in the Florida Atlantic University Department of Exercise Science and Health Promotion “Human Performance Lab” January 2012 – August 2013

Body Composition Testing for Teams and Individuals
Hydrostatic weighing, Ultrasound, Bod Pod

Blood Lactate Testing For Athletes and Individuals
VO₂Max/Submaximal testing

Equitest for Older Individuals
Assessment of Ocular, Vestibular and Somatosensory balance as well as gait analysis

Teach and Assist in “Practicum” at Florida Atlantic University

An Applied class that allows older individuals to come to Florida Atlantic University and receive exercise prescriptions from undergraduate students.

Activities &

Interest:

Member of Temple University Gymnastics club team Philadelphia, Pennsylvania	2009-2011
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Volunteer tumbling coach for Northeast Rebels
Oakland Park, Florida

2006- 2008

World Record Holder of “Most Consecutive 90 Degree Pushups”

Record Submitted to Guinness World Records

November 2012

Skills:

Computer: MS Words, Excel, PowerPoint, Mac and PC literate
Efficient with equipment utilized in applied physiology labs and
different methods of body composition.