

NICHOLAS COKER, PHD, CSCS*D, CISSN

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Springfield, MA 01109

EDUCATION

- PhD** University of Central Florida, Exercise Physiology July 2020
Dissertation: Effect of Unaccustomed Eccentric Exercise on Motor Unit Firing Characteristics and the Contralateral Repeated Bout Effect
Advisor: Adam J. Wells, Ph.D.
- MS** Georgia Southern University, Kinesiology May 2016
Thesis: Relationship Between Stress-Recovery State and Running Performance in Men's Collegiate Soccer
Advisor: Adam J. Wells, Ph.D.
- BS** Georgia Southern University, Kinesiology May 2014

ACADEMIC APPOINTMENTS

- Springfield College**, Springfield, MA 2020-Present
Assistant Professor, Department of Exercise Science and Athletic Training
AEXS 319- Kinesiology/Biomechanics
AEXS 321- Kinesiology/Biomechanics Lab
AEXS 335- Measurement and Evaluation in Exercise Science
- University of Central Florida**, Orlando, FL 2016-Present
Graduate Teaching Associate, School of Kinesiology and Physical Therapy
PET 4312C- Applied Biomechanics
APK 4110C- Exercise Physiology
PET 3771- Principles of Strength and Conditioning
PET 4550C- Assessment and Evaluation in Exercise Science
PEM 2104- Personal Fitness
PET 4143- Current Issues and Trends in Exercise Science
- University of Central Florida**, Orlando, FL 2016-Present
Graduate Teaching Assistant, School of Kinesiology and Physical Therapy
PET 3361- Nutrition and Metabolism in Kinesiology
PET 4050C- Motor Development and Learning
PET 3771- Principles of Strength and Conditioning
PET 6515- Assessment and Evaluation in Sport and Exercise Science
PET 4552- Exercise Prescription for Special Populations

PUBLICATIONS

Manuscripts in Preparation

1. **Coker N**, Renziehausen J, Alberto A, Stock M, Clark M, Fukuda D, Wells A. (2020). Effect of Unaccustomed Eccentric Exercise on Motor Unit Firing Characteristics and the Contralateral Repeated Bout Effect. Being prepared for submission to: *European Journal of Physiology*.
2. **Coker N**, Johnson B, Wells A. (2020). Validity and Reliability of a Repeated Sprint Ability Assessment on a Curve3 non-motorized treadmill. Being prepared for submission to: *Journal of Strength and Conditioning Research*.

Journal Publications

1. Varanoske A, **Coker N**, Johnson B, Belity T, Wells A. (2020). Influence of muscle depth and thickness on ultrasound echo intensity of the vastus lateralis. *Acta Radiologica* (In press).
2. Wells A, Varanoske A, **Coker N**, Kozlowski G, Frosti C, Boffey D, Harat I, Jahani S, Gepner Y, Hoffman J. (2020). The effect of β -alanine supplementation on monocyte recruitment and cognition during a 24-h simulated military operation (SUSOP). *Journal of Strength and Conditioning Research* (e-pub ahead of print).
3. Varanoske A, **Coker N**, Johnson B, Belity T, Mangine G, Stout J, Fukuda D, Wells A. (2020). Muscle quality, as measured by ultrasound-derived echo intensity, does not affect changes in cross-sectional area of the vastus lateralis following recumbent rest. *Journal of Diagnostic Medical Sonography* (In press).
4. Clark N, Wells A, **Coker N**, Goldstein E, Herring C, Starling-Smith T, Varanoske A, Panissa V, Stout J, Fukuda D. (2020). The acute effects of thermogenic fitness drink formulas containing 140 mg and 100 mg of caffeine on energy expenditure and fat metabolism at rest and during exercise. *Journal of the International Society of Sports Nutrition*, 17(1), 10. <https://doi.org/10.1186/s12970-020-0341-4>.
5. Varanoske A, **Coker N**, Johnson B, Belity T, Mangine G, Stout J, Fukuda D, Wells A. (2019). Effects of rest position on morphology of the vastus lateralis and its relationship with lower-body strength and power. *Journal of Functional Morphology and Kinesiology* (E-pub ahead of print). doi:10.3390/jfmk4030064.
6. Gepner Y, Wells A, Gordon J, Arroyo E, **Coker N**, Fukuda D, Stout J. (2019). Differences in muscle oxygenation between young and middle-aged recreationally active men during high-volume resistance exercise. *Kinesiology* 51(1). <https://doi.org/10.26582/k.51.1.4>.

7. Varanoske A, Wells A, Kozlowski G, Gepner Y, Frosti C, Boffey D, **Coker N**, Harat I, Hoffman J. (2018). Effects of β -alanine supplementation on physical performance, cognition, endocrine function, and inflammation during a 24-hour simulated military operation. *Physiological Reports*, 6(24). doi: 10.14814/phy2.13938.
8. **Coker N**, Varanoske A, Baker K, Hahs-Vaughn D, Wells A. (2018). Predictors of competitive success of national-level powerlifters: A multi-level analysis. *International Journal of Performance Analysis in Sport* 18(5): 796-805. <https://doi.org/10.1080/24748668.2018.1519751>.
9. Varanoske A, Hoffman J, Church D, **Coker N**, Baker K, Dodd S, Harris R, Oliveira L, Dawson V, Wang R, Fukuda D, Stout J. (2019). Comparison of sustained-release and rapid-release β -alanine formulations on changes in skeletal muscle carnosine and histidine content and isometric performance following a muscle-damaging protocol. *Amino Acids* 51(1): 49-60. <https://doi.org/10.1007/s00726-018-2609-4>.
10. **Coker N**, Wells A, Gepner Y. (2018). The effect of heat stress on measures of running performance and heart rate responses during a competitive season in male soccer players. *Journal of Strength and Conditioning Research* (E-pub ahead of print). doi: 10.1519/JSC.0000000000002441.
11. Varanoske A, Hoffman J, Church D, **Coker N**, Baker K, Dodd S, Oliviera L, Dawson V, Wang R, Fukuda D, Stout J. (2017). β -alanine supplementation elevates intramuscular carnosine content and attenuates fatigue in men and women similarly, but does not change muscle L-histidine content. *Nutrition Research* 48: 16-25. doi: 10.1016/j.nutres.2017.10.002
12. Varanoske A, Hoffman J, Church D, Wang R, Baker K, Dodd S, **Coker N**, Oliviera L, Dawson V, Fukuda D, Stout J. (2017). Influence of skeletal muscle carnosine content on fatigue during repeated resistance exercise in recreationally-active women. *Nutrients* 9(9): 988. doi: 10.3390/nu9090988.
13. Arroyo E, Wells A, Gordon J III, Varanoske A, Gepner Y, **Coker N**, Church D, Fukuda D, Stout J, Hoffman J. (2017). Tumor necrosis factor- α and soluble TNF- α receptor responses in young vs. middle-aged males following eccentric exercise. *Experimental Gerontology* 100: 28-35. doi: 10.1016/j.exger.2017.10.012.
14. Gordon J III, Hoffman J, Arroyo E, Varanoske A, **Coker N**, Gepner Y, Wells A, Stout J, Fukuda D. (2017). Comparisons in the recovery response from resistance exercise between young and middle-aged men. *Journal of Strength and Conditioning Research* 31(12): 3454-3462. doi: 10.1519/JSC.0000000000002219.
15. **Coker N**, Ake K, Griffin D, Rossi S, McMillan J, Wells A. (2017). Relationship between running performance and recovery-stress state in collegiate football players. *Journal of Strength and Conditioning Research* 31(8): 2131-2140. doi: 10.1519/JSC.0000000000001690.

16. Hyde P, Fairman C, **Coker N**, Kiely K, Purser C, Kendall K. (2016). Effect of nighttime multi-ingredient supplementation on markers of recovery in response to resistance exercise. *International Journal of Exercise Science* 9(4): 471-481.
17. Hyde P, Kendall K, Fairman C, **Coker N**, Yarbrough M, Rossi S. (2016). Utilization of B-mode ultrasound as a body fat estimate in collegiate football players. *Journal of Strength and Conditioning Research* 30(12): 3525-3530. doi: 10.1519/JSC.0000000000001447

Conference Presentations

1. **Coker N**, Clark N, Herring C, Starling-Smith T, Varanoske A, Goldstein E, Fukuda D, Wells A. (2019). Effects of thermogenic beverages with differing caffeine content on resting energy expenditure, respiratory exchange ratio, and lipid metabolism. Presented at: NSCA National Conference, Washington, D.C.
2. **Coker N**, Wells A, Mangine G, Church D, Jajtner A, Townsend J, Beyer K, Wang R, Fukuda D, Stout J, Hoffman J. (2017). Comparison between high-intensity and high-volume resistance training on the acute myokine response in resistance trained men. Presented at: Experimental Biology Annual Conference, Chicago, IL.
3. **Coker N**, Griffin D, Ake K, McMillan J, Rossi S, Wells A. (2016). Relationship between stress-recovery state and running performance in men's collegiate soccer. Presented at: National Strength and Conditioning Association National Conference, New Orleans, LA.
4. **Coker N**, Varanoske A, Baker K, Hahs-Vaughn D, Wells A. (2018). Predictors of competitive success of national-level powerlifters: a multi-level analysis. Presented at: National Strength and Conditioning Association National Conference, Indianapolis, IN.

Published Abstracts

1. Pagan J, Girts R, Harmon K, Rodriguez G, MacLennan R, Hernandez Sarabia J, **Coker N**, Carr J, Ye X, DeFreitas J, Stock M. Minimizing interpulse variability in corticospinal excitability: how many TMS pulses are optimal. Presented at the 2020 NSCA National Conference (virtual).
2. Harmon K, Girts R, Pagan J, Rodriguez G, MacLennan R, Hernandez Sarabia J, **Coker N**, Carr J, Ye X, DeFreitas J, Stock M. Test-retest reliability of corticospinal excitability and inhibition of an agonist-antagonist pair. Presented at the 2020 NSCA National Conference (virtual).

3. Wells A, Varanoske A, **Coker N**, Kozlowski G, Frosti C, Boffey D, Harat I, Gepner Y, Hoffman J. (2019). Beta-alanine (BA) supplementation positively impacts response inhibition during a simulated 24-hour sustained military operation (SUSOP). Presented at: NSCA National Conference, Washington, D.C.
4. Church D, Hoffman J, **Coker N**, Stock M, Boffey D, Herring C, Varanoske A, Frosti C, Starich T, Fukuda D, Stout J. (2019). Plasma BDNF is associated with 1-RM squat, but not motor unit properties. Presented at: NSCA National Conference, Washington, D.C.
5. Varanoske A, Wells A, Kozlowski G, Gepner Y, Frosti C, Boffey D, **Coker N**, Harat I, Hoffman J. (2019). Effects of β -alanine on performance, cognition, mood, endocrine function, and inflammation in simulated military operations. Presented at: Southeastern Chapter of the American College of Sports Medicine Annual Conference, Orlando, FL.
6. Church D, Hoffman J, **Coker N**, Stock M, Boffey D, Herring C, Varanoske A, Frosti C, Starich T, Fukuda D, Stout J. (2018). Relationships between short-term resistance training adaptations and brain-derived neurotrophic factor. Poster presentation. Presented at: National Strength and Conditioning Association National Conference, Indianapolis, IN.
7. Varanoske A, Wells A, Gepner Y, Kozlowski G, Frosti C, Harat I, Boffey D, **Coker N**, Hoffman J. (2018). Effects of a 24-hour simulated military operation and sleep deprivation on physical performance and cognitive function: a pilot study. Presented at: National Strength and Conditioning Association National Conference, Indianapolis, IN.
8. Gepner Y, Wells A, Gordon J III, Arroyo E, Varanoske A, **Coker N**, Fukuda D, Stout J, Hoffman J. (2018). Differences in muscle oxygenation between young and middle-aged recreationally active men during high-volume resistance exercise. Presented at: European College of Sport Science, Dublin, Ireland.
9. Kiely K, Rossi S, Kendall K, Hyde P, **Coker N**, Fairman C. (2016). Validation of B-mode ultrasound imaging as a body composition measurement in Division I football players. Presented at: National Strength and Conditioning Association National Conference, New Orleans, LA.
10. Hyde P, Fairman C, **Coker N**, Yarbrough M, Rossi S, Kendall K. (2015). Utilization of B-mode ultrasound as a body fat estimate in collegiate football players. Presented at: American College of Sports Medicine Annual Conference, San Diego, CA.
11. Hyde P, Fairman C, Beck J, Kiely K, **Coker N**, Yarbrough M, Phillips K, Kendall K. (2014). Utilization of non-invasive measures to evaluate eccentric exercise damage in an untrained population. International Society of Sports Nutrition Annual Conference, Clearwater, FL.

12. Kiely K, Colquitt G, **Coker N**, Li L, Kendall K, Vogel R. (2014). The effects of power training on individuals with cerebral palsy- preliminary results from a pilot study. American Public Health Association Annual Meeting, Washington, D.C.

PROFESSIONAL EXPERIENCE

Contributing Writer	2018
Bodybuilding.com	
Maintain your gains with HMB	
Top 5 benefits of Vitamin D	
4 underrated benefits of testosterone	
4 supplements to maximize your gains from protein	
L-Citrulline or citrulline malate? N.O. contest!	
5 ways to make caffeine more effective	
Top 4 supplements for getting bigger faster	
The 4 best caffeine-free supplement ingredients to boost your workout	
Which form of creatine is right for you?	
How to taper for a powerlifting meet	
The case for pre-workout protein	
The top 3 supplements for gaining mass	
How polyphenols can help you burn fat and enhance recovery	
Your expert guide to vitamin C	
Your expert guide to zinc	
Transform your energy drink into a powerhouse pre-workout	

HONORS, AWARDS, AND GRANTS

Honors and Awards

2020 Equipment Donation Initiative Recipient	2020
De Luca Foundation	
Graduate Dean's Dissertation Completion Fellowship	2020
University of Central Florida	
Challenge Scholarship Recipient	2019
National Strength and Conditioning Association	
Graduate Teaching Associate	2016-Present
University of Central Florida	
Graduate Teaching Assistant	2016-Present
University of Central Florida	

Nicholas Coker, PhD, CSCS*D, CISSN

Graduate Research Assistant Georgia Southern University	2014-2016
HOPE Scholarship	2010-2014
John W. Youtsey Memorial Scholarship Hemophilia of Georgia	2012
Dean's List Georgia Southern University	2010-2014
President's List Georgia Southern University	2012
President's List Georgia Southern University	2014

Grant Applications

Coker N, Wells A. Inflammatory and neuromuscular response to repeated bouts of resistance exercise in trained and untrained males. Co-investigator. National Strength and Conditioning Association (2018) **\$14,921.05** [Not funded]

Coker N, Wells A. Oral melatonin supplementation and the inflammatory response to exercise. Co-investigator. National Strength and Conditioning Association (2017) **\$13,218.00** [Not funded]

PROFESSIONAL TRAINING

Certified Strength and Conditioning Specialist National Strength and Conditioning Association	2017
Certified Sports Nutritionist (CISSN) International Society of Sports Nutrition	2015
CPR/AED American Red Cross	2017
Phebotomy Course Certificate Avalon Medical Educators	2018
Advanced Quantitative Methodologies in Educational and Human Sciences University of Central Florida	2018

PROFESSIONAL AFFILIATIONS

American College of Sports Medicine	2014-Present
American College of Sports Medicine (Southeast chapter)	2014-Present
National Strength and Conditioning Association	2014-Present
International Society of Sports Nutrition	2014-Present
Society for Transparency, Openness, and Replication in Kinesiology	2019-Present
International Society of Electromyography and Kinesiology	2020-Present

PROFESSIONAL SERVICE

College of Health Professions and Sciences , University of Central Florida Student Advisory Council Doctoral Program Representative	2018
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Peer-Reviewed Articles for:

Journal of Strength and Conditioning Research

LABORATORY TECHNIQUES

Laboratory Assessments

- Surface Electromyography
 - Signal Acquisition and analysis within Delsys EMGworks suite
 - Delsys Trigno Avanti system
 - Delsys Bagnoli system
- Muscular strength/power assessment
 - Biodex dynamometer
 - AMTI Accupower force plate
 - Resistance exercise
- Body composition assessment
 - Bod Pod
 - Inbody 770 Bioelectrical Impedance Analyzer
 - Skinfold thickness assessment
- Musculoskeletal ultrasound
- Metabolic assessment
 - Parvomedics TrueOne 2400 Metabolic cart
 - Cosmed K5 Metabolic cart
- Anaerobic capacity assessment
- Signal processing and analysis in MATLAB

Nicholas Coker, PhD, CSCS*D, CISSN

Biochemistry Techniques

Phlebotomy
Blood processing
ELISA

COMMUNITY SERVICE

USA Powerlifting

Scoring Manager

15 th Annual Florida Collegiate State Championships, Orlando, FL	2018
Sunshine State Championship, Orlando, FL	2018
7 th Annual Central Florida Open Championships, Orlando, FL	2018
2 nd Annual Orlando Open Championships, Orlando, FL	2018

Spotter/Loader

Special Olympics Florida State Fall Classic, Lake Buena Vista, FL	2018
Georgia Spring Open, Savannah, GA	2014
Georgia Winter Classic & Single Ply Invitational, Warner Robins, GA	2014

Hemophilia of Georgia

Camp Counselor

Camp Wannaklot, Rutledge, GA	2013
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PROFESSIONAL REFERENCES

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Education Complex, Room 320J
12494 University Blvd.
Orlando, FL 32816
Email: adam.wells@ucf.edu
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Matt S. Stock, PhD
University of Central Florida
Health and Public Affairs Building I, Room 258
12805 Pegasus Dr.
Orlando, FL 32816
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