

# *JohnEric W. Smith, Ph.D., CISSN, CSCS\*D*

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## **Professional Experience**

2024-Present **Department Head**

*Department of Kinesiology,  
Mississippi State University, Starkville, MS*

- Oversees a department of 21 full time faculty members, 5 staff members, 20 graduate assistants, and more than 1,100 undergraduate and graduate students
- Assist in the design of the new Kinesiology building
- Oversees of the departmental budget
- Oversees the building of the departmental course offerings

2019-Present **Associate Professor**

*Mississippi State University, Starkville, MS*

- Conducts research related to exercise performance and physiological responses to nutritional interventions
- Teaches graduate and undergraduate courses in Kinesiology
- Advises graduate and undergraduate students in their academic programs
- Oversees the course scheduling of Department of Kinesiology Graduate Teaching Assistants
- Oversees all physical activity classes taught through the Department of Kinesiology

2022-2024 **Laboratory Director**

*Human Energetic and Thermoregulation (HEaT) Laboratory,  
Mississippi State University, Starkville, MS*

- Oversees the research and functional capabilities of Human Energetics and Thermoregulation Laboratory

2023-2024 **Interim Department Head**

*Department of Kinesiology,  
Mississippi State University, Starkville, MS*

- Oversaw a department of 22 full time faculty members, 5 staff members, 20 graduate assistants, and more than 1,100 undergraduate and graduate students
- Assisted in the design of the new Kinesiology building
- Oversaw the departmental budget
- Oversaw the building of the departmental course offerings

- 2014-2023 **Laboratory Director**  
*Joseph A. Chromiak Applied Physiology Laboratory, Mississippi State University, Starkville, MS*
- Oversees the maintenance and functional capabilities of the Applied Physiology and Teaching Laboratory for the Department of Kinesiology
  - Preparation of graduate teaching assistants for delivery of the exercise physiology course's laboratory content
- 2016-2022 **Affiliated Faculty Researcher**  
*Human Performance Laboratory, Center of Advanced Vehicular Systems Mississippi State University, Starkville, MS*
- Oversees research related to physiological demands of law enforcement activities
  - Oversees research related to response time in law enforcement situations
- 2013-2019 **Assistant Professor**  
*Mississippi State University, Starkville, MS*
- Conducts research related to exercise performance and physiological responses to nutritional interventions
  - Teaches graduate and undergraduate courses in Kinesiology
  - Advises graduate and undergraduate students in their academic programs
  - Oversees the course scheduling of Department of Kinesiology Graduate Teaching Assistants
  - Oversees all physical activity classes taught through the Department of Kinesiology
- 2011-2013 **Associate Principal Scientist**  
*Gatorade Sports Science Institute (PepsiCo), Bradenton, FL*
- Director of a research facility and team with a primary responsibility of investigating the relationship between physiological and metabolic factors and sports performance in children and adolescents
  - Oversight of personnel and operations budget
  - Responsible for day-to-day partnership relations with IMG Academy
  - Oversight of \$35,000-\$50,000 student grant program providing funding to graduate students in exercise physiology
- 2010-2011 **Adjunct Instructor**  
*Benedictine University, Lisle, IL*
- Part-time instructor in the Biology Department

2008-2011 **Senior Scientist**  
*Gatorade Sports Science Institute (PepsiCo), Barrington, IL*

- Project leader primarily focused on research investigating impact of nutritional interventions on exercise performance with a special emphasis on the role of carbohydrate
- Oversight of \$35,000-\$50,000 student grant program providing funding to graduate students in exercise physiology

2004-2008 **Scientist**  
*Gatorade Sports Science Institute (PepsiCo), Barrington, IL*

- Research trial leader investigating the impact of nutritional interventions on exercise performance
- Oversight of \$35,000-\$50,000 student grant program providing funding to graduate students in exercise physiology

2001-2004 **Graduate Research Assistant**  
*Auburn University Thermal Lab, Auburn, AL*

- Served as both project leader and team member for research projects and athlete testing in the Thermal Laboratory under the guidance of an academic advisor

2001-2004 **Graduate Teaching Assistant/Instructor**  
*Auburn University Health and Human Performance Department, Auburn, AL*

- Instructor for undergraduate courses in the Exercise Science and Physical Education in Health and Human Performance Department

2000-2001 **Graduate Assistant**  
*Auburn University/Health Plus, Auburn, AL*

- Developed and lead group exercise sessions for disabled and elderly adults in care and assisted living facilities

**Education**

2023	M.S.	Nutrition	Mississippi State University	Starkville, MS
2008	Ph.D.	Exercise Science (Specialization in Exercise Physiology)	Auburn University	Auburn, AL
2003	M.S.	Exercise Science	Auburn University	Auburn, AL
2000	B.S.	Exercise Science	Auburn University	Auburn, AL

## Original Research (‡Mentored Student, \*Student)

1. S. Searles\*, J.R. Hood‡, M.R. Wood\*, M.L. Bello‡, **J.W. Smith**, and Z.M. Gillen. Sex-based comparisons of hamstrings-to-quadriceps ratio across the velocity spectrum. (In Review)
2. M.L. Bello‡, Z.M. Gillen, and **J.W. Smith** (2024) Changes in muscular strength following nine weeks of high- vs low-load resistance training. *Journal of Sports Medicine and Physical Fitness*. 64(5):439-445. DOI: 10.23736/S0022-4707.24.15569-7. PMID: 38385637
3. S. Talwar\*, B.M. Krings‡, J. Lamberth, and **J.W. Smith** (2024) The Effect of Stroboscopic Vision Training on Blind-folded Straight-line Walking. *International Journal of Exercise Science*, 17(1), 438-444. PMID: 38665163
4. K.E. Spring\*, C.C. Chen, M. B. Powell, **J.W. Smith**, K.K. Stratton, D.D. Wadsworth, and M.E. Holmes (2023) Impact of seated movement incorporation on middle school classroom physical activity levels and academic engagement. *Research Quarterly of Sport and Exercise*, 94(4), 1011-1019. DOI: 10.1080/02701367.2022.2100308. PMID: 36006695
5. M.L. Bello‡, D.A. Anglin‡, Z.M. Gillen, and **J.W. Smith** (2022) Comparison of wearable technology at quantifying power and muscle load of endurance runners against varying wind resistance. *International Journal of Kinesiology & Sports Science*, 10(2), 11. DOI: 10.7575/aiac.ijkss.v.10n.2p.11.
6. B.D. Shepherd‡, F.G. Price‡, B.M. Krings‡, and **J.W. Smith** (2022) Comparison of a continuous and discontinuous GXT in  $\dot{V}O_2$  in resistance trained and endurance trained males. *International Journal of Exercise Science*. 15(4):414-422. PMID: 35518364
7. **J.W. Smith**, M. Bello‡, and F.G. Price‡ (2021) A case-series observation of sweat rate variability in endurance trained athletes. *Nutrients*. 13(6):1807. DOI: 10.3390/nu13061807. PMID: 34073387.
8. B.M. Krings‡, B.D. Shepherd‡, J.C. Swain\*, A.J. Turner\*, H. Chander, H.S. Waldman‡, M.J. McAllister, A.C. Knight, and **J.W. Smith** (2021) Impact of fat grip attachments on muscular strength and neuromuscular activation during resistance exercise. *Journal of Strength and Conditioning Research*. 35(Suppl 1):S152-S157. DOI: 10.1519/JSC.0000000000002954. PMID: 30694963.
9. B.M. Krings‡, H.S. Waldman‡, B.D. Shepherd‡, M.J. McAllister, B.J. Fountain, J. Lamberth, and **J.W. Smith** (2021) The metabolic and performance effects of carbohydrate timing in resistance trained males undergoing a carbohydrate restricted diet. *Applied Physiology, Nutrition, and Metabolism*. 46(6):626-636. DOI: 10.1139/apnm-2020-0830. PMID: 33301383.

10. F.G. Price<sup>‡</sup>, A.J. Turner\*, **J.W. Smith**, B.M. Krings<sup>‡</sup>, H.S. Waldman<sup>‡</sup>, H. Chander, A.C. Knight, and M.J. McAllister (2020) The effects of high-intensity interval training on performance of Division I college 800/1500 m runners. *International Journal of Kinesiology & Sports Science*. 8(3). 28-35. DOI: 10.7575/aiac.ijkss.v.8n.3p.28.
11. K.E. Spring\*, M.E. Holmes, and **J.W. Smith** (2020) Longterm tennis participation and health outcomes. An investigation of “lifetime” activities. *International Journal of Exercise Science*. 13(7). 1251-1261. PMID: 33042385.
12. H.S. Waldman<sup>‡</sup>, **J.W. Smith**, J. Lamberth, B.J. Fountain, R.J. Bloomer, M.B. Butawan, M.J. McAllister (2020) A 28-day carbohydrate-restricted diet improves markers of cardiovascular disease in professional firefighters. *Journal of Strength and Conditioning Research*. 34(10). 2785-2792. DOI: 10.1519/JSC.0000000000003749. PMID: 32740289.
13. B.M. Krings<sup>‡</sup>, M.J. McAllister, B.D. Shepherd<sup>‡</sup>, H.S. Waldman<sup>‡</sup>, and **J.W. Smith** (2020) Effects of carbohydrate mouth rinsing on upper body resistance exercise performance. *International Journal of Sports Nutrition and Exercise Metabolism*. 30(1). 42-47. DOI: 10.1123/ijsnem.2019-0073. PMID: 31563122.
14. S.A. Basham\*, H.S. Waldman<sup>‡</sup>, B.M. Krings<sup>‡</sup>, J. Lamberth, **J.W. Smith**, and M.J. McAllister (2019) Effect of curcumin supplementation on exercise-induced oxidative stress, inflammation, muscle damage, and muscle soreness. *Journal of Dietary Supplements*. 17(4). 401-414. DOI: 10.1080/19390211.2019.1604604. PMID: 31025894.
15. H.S. Waldman<sup>‡</sup>, **J.W. Smith**, J. Lamberth, and M.J. McAllister (2019) A 28-day carbohydrate-restricted diet improves markers of cardiometabolic health and performance in professional firefighters. *Journal of Strength and Conditioning Research*. 33(12). 3284-3294. DOI: 10.1519/JSC.0000000000003354. PMID: 31469768.
16. Z. Shelly\*, E. Stewart\*, T. Fonville, R.F. Burch V, H. Chander, L. Strawderman, D. May, **J. Smith**, D. Carruth, and C. Bichey (2019) Helmet prototype response time assessment using NCAA Division 1 collegiate football athletes. *International Journal of Kinesiology & Sports Science*. 7(4). 53-65. DOI: 10.7575/aiac.ijkss.v.7n.4p.53.
17. M.J. McAllister, S.A. Basham\*, **J.W. Smith**, B.J. Fountain, B.M. Krings<sup>‡</sup>, and H.S. Waldman<sup>‡</sup> (2019) Effect of carbohydrate restriction on oxidative stress response to high intensity resistance exercise. *Translational Sports Medicine*. 2. 334-340. DOI: 10.1002/tsm2.98.
18. H. Chander, M. Holland, B.M. Krings<sup>‡</sup>, A.J. Turner\*, J.C. Swain\*, H.S. Waldman<sup>‡</sup>, A.C. Knight, M.J. McAllister, S.A. Basham\*, and **J.W. Smith** (2019) Effects of 7-

day ketone ingestion and a physiological workload on postural stability, cognitive, and muscular exertion measures in professional firefighters. *Safety*. 5(15). 1-11. DOI:10.3390/safety5010015.

19. M.J. McAllister, H.S. Waldman<sup>‡</sup>, S.A. Basham\*, B.M. Krings<sup>‡</sup>, **J.W. Smith**, H. Chander, and M. Holland (2019) Impact of ketone salt containing supplement on cardiorespiratory and oxidative stress response in firefighters exercising in personal protective equipment. *Asian Journal of Sports Medicine*. 10(1). E82404. DOI: 10.5812/asjism.82404.
20. M.J. McAllister, S.A. Basham\*, H.S. Waldman<sup>‡</sup>, **J.W. Smith**, J. Mettler, M. Butawan, and R. Bloomer (2019) Effects of psychological stress during exercise on markers of oxidative stress in healthy, trained men. *Physiology and Behavior*. 198, 90-95. DOI: 10.1016/j.physbeh.2018.10.013. PMID: 30342058.
21. M.J. McAllister, S.A. Basham\*, **J.W. Smith**, H.S. Waldman<sup>‡</sup>, B.M. Krings<sup>‡</sup>, J.A. Mettler, M.B. Butawan, and R.J. Bloomer (2018) Effects of environmental heat and antioxidant ingestion on blood markers of oxidative stress in professional firefighters performing structural fire exercises. *Journal of Occupational and Environmental Medicine*. 60(11). e595-e601. DOI: 10.1097/JOM.0000000000001452. PMID: 30252723.
22. M.J. McAllister, S.A. Basham\*, H.S. Waldman<sup>‡</sup>, **J.W. Smith**, M. Butawan, and R. Bloomer (2018) Effects of curcumin on the oxidative stress response to a dual stress challenge in trained men. *Journal of Dietary Supplements*. DOI: 10.1080/19390211.2018.1515142. PMID: 30580652.
23. B.M. Krings<sup>‡</sup>, B.L. Miller\*, A.C. Knight, H. Chander, M.J. McAllister, B.J. Fountain, and **J.W. Smith** (2018). Impact of occupational footwear during simulated workloads on energy expenditure. *Footwear Science*. 1-7. DOI: 10.1080/19424280.2018.1460623.
24. H.S. Waldman<sup>‡</sup>, B.M. Krings<sup>‡</sup>, F.G. Price<sup>‡</sup>, A.C. Knight, H. Chander, **J.W. Smith**, and M.J. McAllister (2018). Exogenous ketone salts do not improve cognitive responses after a high-intensity exercise protocol in healthy college-aged males. *Applied Physiology, Nutrition and Metabolism*. 43(7), 711-717 DOI: 10.1139/apnm-2017-0724. PMID: 29451991.
25. H.S. Waldman<sup>‡</sup>, B.J. Fountain, S.A. Basham\*, B.M. Krings<sup>‡</sup>, **J.W. Smith**, and M.J. McAllister (2018). Effects of a 15-day low carbohydrate, high fat diet in resistance trained males. *Journal of Strength and Conditioning Research*. 32(11), 3103-3111. DOI: 10.1519/JSC.0000000000002282. PMID: 29076962.
26. P.M. Cummings\*, H.S. Waldman<sup>‡</sup>, B.M. Krings<sup>‡</sup>, **J.W. Smith**, and M.J. McAllister (2018). Effects of fat grip training muscular strength and driving performance in

Division I male golfers. *Journal of Strength and Conditioning Research*. 32(1), 205-210. DOI: 10.1519/JSC.0000000000001844. PMID: 28195977.

27. **J.W. Smith**, B.M. Krings<sup>‡</sup>, B.D. Shepherd<sup>‡</sup>, H.S. Waldman<sup>‡</sup>, S.A. Basham\*, and M.J. McAllister (2018). Effects of carbohydrate and branched chain amino acid ingestion during upper-body resistance exercise on performance and post-exercise hormone response. *Applied Physiology, Nutrition and Metabolism*. 43(5), 504-509. DOI: 10.1139/apnm-2017-0563. PMID: 29244956.
28. J.A. Rountree<sup>‡</sup>, B.M. Krings<sup>‡</sup>, T.J. Peterson<sup>‡</sup>, A. Thigpen\*, M.J. McAllister, M.E. Holmes, and **J.W. Smith** (2017). Efficacy of carbohydrate ingestion during training on CrossFit performance. *Sports*. 5(61), 1-8. DOI: 10.3390/sports5030061. PMID: 29910421.
29. **J.W. Smith**, B.M. Krings<sup>‡</sup>, T.J. Peterson<sup>‡</sup>, J.A. Rountree<sup>‡</sup>, and R.B. Zak, M.J. McAllister (2017). Ingestion of an amino acid electrolyte beverage during resistance exercise does not impact fluid shifts into muscle or performance. *Sports*. 5(36), 1-9. DOI: 10.3390/sports5020036. PMID: 29910396.
30. B.M. Krings<sup>‡</sup>, T.J. Peterson<sup>‡</sup>, B.D. Shepherd<sup>‡</sup>, M.J. McAllister, and **J.W. Smith**. (2017) Effects of carbohydrate ingestion and carbohydrate mouth rinse and on repeated sprint performance. *International Journal of Sports Nutrition and Exercise Metabolism*. 27(3), 104-112. DOI: 10.1123/ijsnem.2016-0321. PMID: 2818250.
31. B.M. Krings<sup>‡</sup>, J.A. Rountree<sup>‡</sup>, M.J. McAllister, P.C. Cummings\*, T.J. Peterson<sup>‡</sup>, B.J. Fountain, and **J.W. Smith** (2016). Effects of acute carbohydrate ingestion on anaerobic exercise performance. *Journal of the International Society of Sports Nutrition*, 13(40), 1-11. DOI 10.1186/s12970-016-0152-9. PMID: 27843418.
32. M.J. McAllister, H.E. Webb, D.K. Tidwell, **J.W. Smith**, B.J. Fountain, M.W. Schilling, and R.D. Williams (2016). Exogenous carbohydrate reduces cortisol response from combined mental and physical stress. *International Journal of Sports Medicine*. 37(14), 1159-1165. DOI: 10.1055/s-0042-113467. PMID: 27716864.
33. J.M. Molloy, **J.W. Smith**, and D.D. Pascoe (2013). Age-related responses among adult males to a 14-day high intensity exercise-heat acclimation protocol. *International SportMed Journal*, 14(3): 103-118.
34. **J.W. Smith**, D.D. Pascoe, D.H. Passe, B.C. Ruby, L.K. Stewart, L.B. Baker, and J.J. Zachwieja (2013). Curvilinear dose-response relationship of carbohydrate (0-120 g·h<sup>-1</sup>) and performance. *Medicine and Science in Sports and Exercise*, 45(2): 336–341. DOI: 10.1249/MSS.0b013e31827205d1. PMID: 22968309.

35. **J.W. Smith**, J.J. Zachwieja, F. Péronnet, D. Massicotte, C. Lavoie, D.D. Pascoe (2010). Fuel selection and cycling endurance performance with ingestion of <sup>13</sup>C-glucose: Evidence of a carbohydrate dose-response. *Journal of Applied Physiology*, 108: 1520 – 1529. DOI: 10.1152/jappphysiol.91394.2008. PMID: 20299609.
36. K. Osterberg, J.J. Zachwieja, and **J.W. Smith** (2008). Benefits of carbohydrate and carbohydrate + protein for cycling time-trial performance. *Journal of Sports Sciences*, 26(3): 227 – 233. DOI: 10.1080/02640410701459730. PMID: 18074296.
37. **J.W. Smith**\*, J.M. Molloy\*, and D.D. Pascoe (2007). The influence of a compressive laminar flow body suit for use in competitive swimming. *The Journal of Swimming Research*, 17, 10-16.
38. J.M. Molloy\*, D.D. Pascoe, **J.W. Smith**\*, R.C. Purohit, and R.T. Herrick (2005). Hypothenar hammer syndrome: case report with clinical and infrared thermographic correlations. *Thermology International*, 15, 63-67.

## Review Articles

1. F.G. Price<sup>‡</sup>, **J.W. Smith**, and S.P. Brown (2022). Educating with Captain America: Metabolic and nutritional considerations. *Advances in Physiology Education*, 46, 362-364. DOI:10.1152/advan.00103.2021. PMID: 35482993.
2. N.B. Tiller, J.D. Roberts, L. Beasley, S. Chapman, J.M. Pinto, L. Smith, M. Wiffin, M. Russell, S.A. Sparks, L. Duckworth, J. O'Hara, L. Sutton, J. Antonio, D.S. Willoughby, M.D. Tarpey, A.E. Smith-Ryan, M.J. Ormsbee, T.A. Astorino, R.B. Kreider, G.R. McGinnis, J.R. Stout, **J.W. Smith**, S.M. Arent, B.I. Campbell, and L. Bannock (2019). International Society of Sports Nutrition Position Stand: Nutritional recommendations for single-stage ultra-marathon; training and racing. *Journal of the International Society of Sports Nutrition*. 16:50, 1-23. DOI: 10.1186/s12970-019-0312-9. PMID: 31699159.
3. H.S. Waldman<sup>‡</sup>, B.M. Krings<sup>‡</sup>, **J.W. Smith**, and M.J. McAllister (2018). A shift towards a high-fat diet in the current metabolic paradigm: A new perspective. *Nutrition*. 46, 33-35. DOI: 10.1016/j.nut.2017.08.014. PMID: 29290352.
4. S.P. Brown, **J.W. Smith**, M.J. McAllister, and L.A. Joe (2017). Superhero physiology: The case of Captain America. *Advances in Physiology Education*, 41, 16-24. DOI:10.1152/advan.00106.2016. PMID: 28143818.
5. **J.W. Smith**, M.E. Holmes, and M.J. McAllister (2015). Nutritional considerations for performance in young athletes. *Journal of Sports Medicine*. Volume 2015, 1-13. e734649. DOI:10.1155/2015/734649. PMID: 26464898.



6. A.D. Karelis, **J.W. Smith**, D.H. Passe and F. Péronnet (2010). Carbohydrate Administration and Performance: What are the Potential Mechanisms Involved? *Sports Medicine*, 40(9): 747-763. DOI: 10.2165/11533080. PMID: 20726621.

## Book

1. **J.W. Smith** and M.L. Bello. Exercise Physiology Lab Manual. Kendall Hunt Publishing. (Fall 2024)

## Book Chapter

1. **J.W. Smith** (Fall 2024). Thermoregulation and Hydration. In J.W. Smith and M.L. Bello, Exercise Physiology Lab Manual. Kendall Hunt Publishing.
2. **J.W. Smith** and Z.M. Gillen. (2023) Performance Fitness, In S.P. Brown, Fundamentals of Kinesiology. 4<sup>th</sup> Ed. Kendall Hunt Publishing.
3. **J.W. Smith**. (2023) Sport Nutrition, In S.P. Brown, Fundamentals of Kinesiology. 4<sup>th</sup> Ed. Kendall Hunt Publishing.
4. **J.W. Smith** and Z.M. Gillen. (2021) Performance Fitness, In S.P. Brown, Fundamentals of Kinesiology. 3<sup>rd</sup> Ed. Kendall Hunt Publishing.
5. **J.W. Smith**. (2021) Sport Nutrition, In S.P. Brown, Fundamentals of Kinesiology. 3<sup>rd</sup> Ed. Kendall Hunt Publishing.
6. **J.W. Smith** (2020) Carbohydrate, In B.I. Campbell, NSCA's Guide to Sport and Exercise Nutrition. Human Kinetics.
7. **J.W. Smith** and A.E. Jeukendrup (2013) Performance Nutrition for Young Athletes, In D. Bagchi, S. Nair and C.K. Sen, Nutrition and Enhanced Sports Performance: Recommendations for Muscle Building. Academic Press.

## Patents

1. J.J. Zachwieja, M.A. Pirner, and J.W. Smith (2018). Methods of reducing blood lactate concentration. Patent: US 10130607
2. J.J. Zachwieja, M.A. Pirner, and J.W. Smith (2018). Methods of reducing blood lactate concentration. Patent: US 10105344

3. J.J. Zachwieja, M.A. Pirner, and J.W. Smith (2017). Methods of reducing blood lactate concentration. Patent: US 9693991
4. J.J. Zachwieja, M.A. Pirner, and J.W. Smith (2015). Methods of reducing blood lactate concentration. Patent: US 9198453

### **International Invited Presentations**

1. Performance Nutrition for Young Athletes. Presented at International Food Technologists Short Course, New Orleans, LA; June 2014.
2. Ergogenic Effect of Carbohydrate Ingestion During Exercise. Presented at KinGames, Hamilton, Ontario; March 2014.
3. Impact of Carbohydrate Ingestion during Exercise. Presented at the 1<sup>st</sup> International Sport Beverage Symposium, Sanshui, China; September 2010.
4. Keynote Speaker – *The Scientific Basis for Sports Drinks*. Presented at the 55<sup>th</sup> Annual International Society of Beverage Technologists Meeting, Savannah, GA; April 2008.

### **National Invited Presentations**

1. *Sweat Science*. Pioneer Water Management Health and Safety Meeting; Midland, TX (Virtual Presenter); July 2023
2. *Thermoregulation and Hydration*. University of Alabama Birmingham – Graduate/Undergraduate Sports Nutrition Class; Birmingham, AL; October 2022
3. *Exercise Science for the Endurance Athlete*. Track and Field and Cross-Country Coaches Association: Track & Field Academy; Virtual; July 2022
4. *Exercise Science for the Endurance Athlete*. Track and Field and Cross-Country Coaches Association: Track & Field Academy; Virtual; June 2021
5. *Carbohydrate Recommendations for Training*. International Society of Sports Nutrition Annual Conference; St. Petersburg, FL; June 2021
6. *From a Lost Student to Career Full of Experiences*. Lipscomb University – Graduate Sports Nutrition Class; Telepresence Nashville, TN; March 2021
7. *Exercise Science for the Endurance Athlete*. Track and Field and Cross-Country Coaches Association: Track & Field Academy; Virtual; August 2020

8. *Exercise Science for the Endurance Athlete*. Track and Field and Cross-Country Coaches Association: Track & Field Academy; Orlando, FL; December 2019
9. *Woman Strong*. Dymatize Advisory Meeting; Facebook Live Event; Dallas TX; January 2019
10. *Exercise Science for the Endurance Athlete*. Track and Field and Cross-Country Coaches Association: Track & Field Academy; San Antonio, TX; December 2018
11. *Thermoregulation and Hydration/Carbohydrate Needs During Exercise*. Florida State University – Graduate Sports Nutrition Class; Telepresence Tallahassee, FL; December 2018
12. *The Role of Carbohydrate in Training and Performance*. Athletic Nutrition Conference; Dallas TX; January 2017
13. *Daily and Acute Hydration and Muscle Pump/Performance*. Dymatize Advisory Summit; Dallas TX; January 2015
14. *Science of Sport*. NFL-Wharton Leadership Seminar; Philadelphia, PA; June 2013
15. *Carbohydrate: Dose Response*. ACSM Pre-Conference: Sports Nutrition All About Performance; Indianapolis, IN; May 2013
16. *Role of Carbohydrate During and Around Sport*. Detroit Lions Strength & Conditioning Clinic; Detroit, MI; March 2013
17. *Science of Sport*. NFL-Wharton Leadership Seminar; Philadelphia, PA; June 2012
18. *Translating Research to Practice*. Professional Football Strength and Conditioning Coaches; Indianapolis, IN; February 2012
19. *Translating Research to Practice*. Professional Football Athletic Trainers Society Annual Meeting; Indianapolis, IN; February 2012
20. *Importance of Nutrition and Hydration Around Activity Occasions*. National Football League Players Association Rookie Symposium; Bradenton, FL; August 2011
21. *The Role of Carbohydrate in the Active Occasion*. Collegiate Strength and Conditioning Coaches National Conference; Kansas City, MO; May 2011
22. *Importance of Hydration*. National Football League Rookie Symposium; Carlsbad, CA; June 2010

23. *Nutrition for Performance*. National Football League Players Association: Player Safety & Welfare Summit, Indianapolis, IN; April 2010
24. *Don't Sweat It: The Science of Hydration*. National Football League Players Association: Player Safety & Welfare Summit, Indianapolis, IN; April 2009
25. *Minimizing Dehydration in Football*. National Football League Rookie Symposium; Carlsbad, CA; July 2008
26. *Science of Exercise Nutrition and Hydration*. MetLife Cycling Team; Chicago, IL; October 2007
27. *Science of Exercise Nutrition and Hydration*. Vision Quest Cycling Team; Chicago, IL; August 2007
28. *Heat, Hydration, and Fuel*. Pittsburgh Steelers Training Camp; Latrobe, PA; August 2007
29. *Heat, Hydration, and Fuel*. Tampa Bay Buccaneers Mini-Camp; Tampa, FL; June 2007
30. *Science of Hydration*. Timex Triathlon Team Camp; Carefree, AR; April 2006
31. *Infrared Thermography in Sports Medicine*. Computerized Thermal Imaging User's Group Meeting; New Orleans, LA; March 2003.

## Published Abstracts

1. K. Hargrove<sup>‡</sup>, R.W. Allen<sup>‡</sup>, Z. Gillen, and **J.W. Smith**. Assessment of sweat rate and hydration status in youth cross-country runners in Mississippi. American College of Sports Medicine. June 2024.
2. M. Wood\*, J. Hood\*, M. Bello<sup>‡</sup>, **J. Smith**, Z. Gillen. Sex based comparisons of absolute and normalized isometric and isokinetic leg extension strength and power. *Journal of Strength and Conditioning Research*. 37(12):e671. July 2023.
3. **J.W. Smith**, S.P. Brown, M.L. Bello<sup>‡</sup>, A. Gallegos\*, and R.E. Baird. Impact of frequent sweet potato ingestion on gut microbiome, cholesterol, and exercise performance. *Medicine & Science in Sports & Exercise*. 55(9s):917. June 2023
4. M.L. Hargrove<sup>‡</sup>, M.E. Holmes, and **J.W. Smith**. Perceptions of fatigue among cross country athletes during races and various types of training sessions. *Medicine & Science in Sports & Exercise*. 55(9s):373. June 2023

5. M.L. Bello<sup>‡</sup>, A.N. Shilling<sup>‡</sup>, M.R. Wood<sup>\*</sup>, and **J.W. Smith**. Body composition changes after nine weeks of high- or low-load resistance training. *Medicine & Science in Sports & Exercise*. 55(9s):539-540. June 2023
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### **Non-Published Conference Presentations**

1. K. Hargrove<sup>‡</sup>, R.W. Allen<sup>‡</sup>, and **J.W. Smith**. Assessment of sweat rate and hydration status in youth cross-country runners in Mississippi. Southeast American College of Sports Medicine, 112. February 2024.
2. L. Smith\*, I.C. Macali\*, **J. Smith**, E.K. Lance, C. Aarhus, C. Taylor, J. Baker, S. Salisbury, and M.E. Holmes. Investigating the relationship between body composition, perceived stress, and life satisfaction in marching band members. Southeast American College of Sports Medicine, 126. February 2024.
3. S. Searles\*, J. Hood\*, M. Wood\*, M. Bello<sup>‡</sup>, **J. Smith**, and Z. Gillen. Sex-based comparisons of isometric and isokinetic hamstrings-to-quadriceps ratio and muscle size. Southeast American College of Sports Medicine, 143. February 2024.
4. I.C. Macali\*, L. Smith\*, **J. Smith**, E.K. Lance, C. Aarhus, C. Taylor, J. Baker, S. Salisbury, and M.E. Holmes. Health characteristics of marching band participation. Southeast American College of Sports Medicine, 179. February 2024.
5. M.R. Wood\*, Z. Gillen, and **J. Smith**. Ammonia inhalants do not improve fatigability during endurance exercise. Southeast American College of Sports Medicine, 191. February 2024.
6. A. Gallegis\*, **J.W. Smith**, R.E. Baird, and S.P. Brown. Daily prebiotic consumption of sweet potatoes shifts abundance of key gut microbiota connected to gut health. Association of Southeast Biologists, March 2024.
7. M.L. Bello<sup>‡</sup>, A.N. Shilling<sup>‡</sup>, M.R. Wood\*, and **J.W. Smith**. Body composition changes after nine weeks of high- or low- load resistance training. *Southeast American College of Sports Medicine*, February 2023.
8. M.R. Wood\*, M.L. Bello<sup>‡</sup>, Z.M. Gillen, and **J.W. Smith**. High- vs. low-load resistance training: comparing strength changes in the lower body. *Southeast American College of Sports Medicine*, February 2023.
9. **J.W. Smith**, D.H. Gomez, and K.E. Spring. Navigating SEACSM and beyond. *Southeast American College of Sports Medicine*, February 2022.

10. M.L. Bello<sup>‡</sup>, D.A. Anglin<sup>‡</sup>, H.A. Joseph, Z.M. Gillen, and **J.W. Smith**. Changes in body composition, muscle thickness, and strength following 9 weeks of high- or low-load resistance training. *International Society of Sports Nutrition*, June 2021.
11. M.L. Bello<sup>‡</sup>, D.A. Anglin<sup>‡</sup>, Z.M. Gillen, B.D. Shepherd<sup>‡</sup>, and **J.W. Smith**. Comparison of wearable technology at quantifying power and muscle load of endurance runners against varying wind resistance. *Southeast American College of Sports Medicine*, February 2021.
12. **J.W. Smith**. To sweet or not to sweet: Carbohydrate ingestion for athletes. *ISSN-Kennesaw State University Virtual Webinar*, October 2020.
13. C. Boyd and **J.W. Smith**. Nutrition Trends Question and Answer. *Mississippi National Strength and Conditioning Association State Clinic*, September 2020.
14. S. Talwar\*, **J. Smith**, and J. Lamberth. The effect of stroboscopic vision training on vision-restricted straight-line walking. *Midwestern American College of Sports Medicine*, November 2019.
15. C. Boyd and **J.W. Smith**. Sports Nutrition Question and Answer. *Mississippi National Strength and Conditioning Association State Clinic*, April 2019.
16. R. Realzola<sup>‡</sup>, **J.W. Smith**, M.E. Holmes, B.M. Krings<sup>‡</sup>, F. Price<sup>‡</sup>, and M.J. McAllister. Effects of acute carbohydrate supplementation on performance for female, Division I, collegiate cheerleaders. *Southwestern American College of Sports Medicine*, October 2018.
17. **J.W. Smith**. Rhabdomyolysis: causes and prevention. *Mississippi National Strength and Conditioning Association State Clinic*, April 2018.
18. B.D. Shepherd<sup>‡</sup>, B.M. Krings<sup>‡</sup>, P.L. Williamson<sup>‡</sup>, J.C. Swain\*, A.J. Turner\*, H.S. Waldman<sup>‡</sup>, H. Chander, M.J. McAllister, A.C. Knight, and **J.W. Smith**. Effects of grip diameter on muscle activity and performance during deadlift and bent-over row exercises. *Southeast American College of Sports Medicine*, February 2018.
19. F.G. Price<sup>‡</sup>, A.J. Turner, B.M. Krings<sup>‡</sup>, H.S. Waldman<sup>‡</sup>, H. Chander, A.C. Knight, M.J. McAllister, and **J.W. Smith**. Impact of high-intensity interval training on Division I college 800m/1500m runner's performance. *Southeast American College of Sports Medicine*, February 2018.
20. S.A. Basham\*, M.J. McAllister, **J.W. Smith**, and H.E. Webb. Effects of carbohydrate ingestion on blood catecholamine levels from combined mental and physical stress. *Southeast American College of Sports Medicine*, February 2017.

21. K.E. Wood\*, M.E. Holmes, and **J.W. Smith**. Impact of tennis participation on parameters of health. *Southeast American College of Sports Medicine*, February 2017.
22. **J.W. Smith**. Performance nutrition. *Mississippi National Strength and Conditioning Association State Clinic*, April 2016.
23. K.E. Wood\*, M.E. Holmes, K. Brocato, and **J.W. Smith**. Adolescent stress, coping resources, and health in high risk students participating in a studio based learning summer camp. *Southeast American College of Sports Medicine*, February 2016.
24. S.D. Pope‡, **J.W. Smith**, M.J. McAllister, D.J. Jordan‡, B. Wax, S.M. Xiques‡, and D.D. Pascoe. Wingate peak power is solely based on resistance and cadence. *Southeast American College of Sports Medicine*, February 2015.
25. D.D. Pascoe, **J.W. Smith**, J.M. Molloy, R. Good, J. Good, T. Breaux, and D.W. Pascoe. Physical conditioning of marching band members for improved performance. *Hawaii International Conference on Arts and Humanities Proceedings*, 4551-4552, January 2004.
26. D.W. Pascoe, J.M. Molloy, **J.W. Smith**, R. Good, J. Good, T. Breaux, and D.D. Pascoe. Band members' health and fitness status. *Hawaii International Conference on Arts and Humanities Proceedings*, 4548-4550, January 2004.
27. D.D. Pascoe, J.M. Molloy, **J.W. Smith**, R. Good, J. Good, T. Breaux, and D.E. Pascoe. Physical performance attributes of band members. *Hawaii International Conference on Arts and Humanities Proceedings*, 4553-4556, January 2004.

## University Presentations

Assessment of fitness and heat responses in marching band. Music Executives of the Southeastern Conference Annual Meeting. May 2024.

Office of Research and Economic Development and the Data Science Program (Mississippi State, MS) Data Science at MSU and Beyond: A Paradigm Shift – Sports Science. April 2023

Department of Biochemistry, Molecular Biology, Entomology, and Plant Pathology. (Mississippi State, MS) The Metabolism of Athletes and Superheroes. June 2020

Louisiana State University Kinesiology Group (Baton Rouge, LA). Science of Hydration. August 2008

Louisiana State University Kinesiology Group (Baton Rouge, LA). Life as an Exercise Scientist. August 2008

### University Student Presentations

1. M. Westbrook\*, T. Henderson\*, H.S. Waldman<sup>‡</sup>, **J.W. Smith**, and M.J. McAllister. Effect of Exogenous Ketone Salts on Oxidative Stress and Cardiovascular Responses in Firefighters Exercising in Personal Protective Equipment. *Mississippi State University Undergraduate Research Symposium AND Mississippi State University College of Education Research Forum*, April 2018.
2. G. McCarthy\*, B. Jones\*, H.S. Waldman<sup>‡</sup>, **J.W. Smith**, and M.J. McAllister. Impact of Environmental Heat and Antioxidant Supplementation on Markers of Oxidative Stress in Professional Firefighters. *Mississippi State University Undergraduate Research Symposium AND Mississippi State University College of Education Research Forum*, April 2018.
3. S.A. Basham\*, H.S. Waldman<sup>‡</sup>, B.M. Krings<sup>‡</sup>, **J.W. Smith**, and M.J. McAllister. Effect of curcumin supplementation on exercise-induced oxidative stress, inflammation, muscle damage, and muscle soreness. *Mississippi State University College of Education Research Forum*, April 2018.
4. P.L. Williamson<sup>‡</sup>, J.C. Swain\*, A.J. Turner\*, B.D. Shepherd<sup>‡</sup>, H.S. Waldman<sup>‡</sup>, B.M. Krings, H. Chander, M.J. McAllister, and **J.W. Smith**. Impact of grip diameter and resistance exercise on muscular performance. *Mississippi State University Undergraduate Research Symposium*, July 2017.
5. B.D. Shepherd<sup>‡</sup>, **J.W. Smith**, T.M. Garrison, and M.J. McAllister. Validation of a FITLIGHT shooting protocol to identify officer response to fatigue. *Mississippi State University Undergraduate Research Symposium*, July 2016.
6. S.A. Basham\*, M.J. McAllister, **J.W. Smith**, and H.E. Webb. Effect of carbohydrate ingestion on blood catecholamine levels from combines mental and physical stress. *Mississippi State University Undergraduate Research Symposium*, April 2016.
7. B.M. Krings<sup>‡</sup>, J.A. Rountree<sup>‡</sup>, M.J. McAllister, P.M. Cummings\*, T.J. Peterson<sup>‡</sup>, B.J. Fountain, and **J.W. Smith**. Effects of acute carbohydrate ingestion on strength and conditioning performance. *Mississippi State University Graduate Research Symposium*, April 2016.
8. B.M. Krings<sup>‡</sup>, S.D. Pope<sup>‡</sup>, J.A. Rountree<sup>‡</sup>, M.J. McAllister, **J.W. Smith**, and D.D. Pascoe. Reliability of a commercial power and speed analyzer to common field

and laboratory assessments of lower body peak power. *Mississippi State University College of Education Research Forum*, April 2016.

9. J.A. Rountree<sup>‡</sup>, B.M. Krings<sup>‡</sup>, T.J. Peterson<sup>‡</sup>, A. Thigpen<sup>‡</sup>, M.J. McAllister, M.E. Holmes, and **J.W. Smith**. Efficacy of carbohydrate ingestion during short duration, high intensity, strength and conditioning training sessions. *Mississippi State University Graduate Research Symposium AND Mississippi State University College of Education Research Forum*, April 2016.
10. K.E. Wood\*, M.E. Holmes, K. Brocato, and **J.W. Smith**. Adolescent stress, coping resources, and health in high-risk students participating in a studio-based learning summer camp. *Mississippi State University Undergraduate Research Symposium AND Mississippi State University College of Education Research Forum*, April 2016.
11. S.D. Pope<sup>‡</sup>, **J.W. Smith**, M.J. McAllister, D.J. Jordan<sup>‡</sup>, B. Wax, S.M. Xiques<sup>‡</sup>, and D.D. Pascoe. Wingate peak power is solely based on resistance and cadence. *Mississippi State University College of Education Research Forum*, April 2016 **AND** *Mississippi State University Undergraduate Research Symposium*, July 2015.

## Support and Funding

The effects of percussive therapy on muscle function and recovery in males and females. Primary Investigate: Z.M. Gillen; Co-Investigators: **J.W. Smith** (2024). Therabody, Inc. Submitted/In Review - \$74,819.00.

Growing Convergence Research: Using Virtual Reality to Expand the Measurement of Fear of Criminal Victimization Primary Investigate: D. May; Co-Investigators: Z. Gillen, **J. Smith**, F. Chen, and L. Daigle (2024). National Science Foundation. Submitted/In Review - \$\$3,035,528.00.

BBIR Phase II: Cover-2: Hydration monitoring in athletes. Primary Investigate: Z.M. Gillen; Co-Investigators: D. Saucer, R. Burch, and **J.W. Smith** (2023). Onda Vision. Funded - \$79,999.00.

A real-life exposure to athletic training techniques during high heat conditions. Primary Investigator: **J.W. Smith** (2023). Mississippi State University's Center of Teaching and Learning - Otilie Schillig Teaching Special Teaching Projects Program. Not Funded - \$2,083.38.

Frequent sweet potato ingestion's influence on gut microbiome and health factors associated with 'Healthy People 2030'. Primary Investigator: R. Baird; Co-Investigators: **J.W. Smith**, M.E. Holmes, and M. Shankle (2022). State Research

Initiative, Mississippi Agriculture and Forestry Experiment Station. Not Funded - \$119,376.00.

Impacts of high- vs low-load resistance training on measures of muscle activation, strength, body composition, cortisol, and testosterone. Primary Investigator: **J.W. Smith**; Co-Investigator: Z.M. Gillen (2022). Strive Tech. Funded - \$1,238.10.

Impacts of high- vs low-load resistance training on measures of muscle activation, strength, body composition, cortisol, and testosterone. Primary Investigator: **J.W. Smith**; Co-Investigator: Z.M. Gillen (2020). Strive Tech. Funded - \$1,455.00.

Impacts of high- vs low-load resistance training on measures of muscle activation, strength, body composition, cortisol, and testosterone. Primary Investigator: **J.W. Smith**; Co-Investigator: Z.M. Gillen (2020). Strive Tech. Funded - Technology shorts and saliva analysis kit donations for research execution. value \$13,312.35.

Effect of dietary melatonin on oxidative stress biomarkers in performance horses after exercise. Primary Investigator: C.A. Cavinder; Co-Investigators: C.O. Lemley, T. Dinh, and **J.W. Smith** (2020). American Quarter Horse Foundation. Not Funded - \$27,446.00.

Effect of percussive therapy on recovery from eccentric exercise damage. Primary Investigator: **J.W. Smith**; Co-Investigators: Z.M. Gillen (2020). Theragun Inc. Not Funded - \$24,318.00.

Validation of new sports performance technology (Tsunami Bar) for use in collegiate and professional sports. Primary Investigator: R. Burch; Co-Investigators: H. Chander, L. Strawderman, **J. Smith** (2020). Mississippi State University – Office of Research and Economic Development: Undergraduate Research Program. Funded - \$2,000.00.

Effect of dietary melatonin on oxidative stress biomarkers in performance horses after exercise. Primary Investigator: C.A. Cavinder; Co-Investigators: C.O. Lemley, T. Dinh, and **J.W. Smith** (2020). Morris Animal Foundation. Not Funded - \$38,014.00.

RED FLAG, a cyber physical systems approach for the near Real-Time Detection of Fever, Lethargy, Arrhythmia, and other General health parameters. Primary Investigator: R.B. Green; Co-Investigators: J. Ball, C. Freeman, **J.W. Smith**, and R.F. Burch (2020). National Science Foundation. Not Funded - \$1,051,926.00.

Impact of sweet potato as a natural energy food prebiotic to improve health and endurance. Primary Investigator: **J.W. Smith**; Co-Investigators: R. Baird and M.



Shankle (2020). Mississippi Department of Agriculture and Commerce. Funded - \$34,788.45.

Efficacy of wearable technology at quantifying load of endurance runners against varying wind resistance. Primary Investigator: **J.W. Smith** (2019). Strive Tech, Inc. Funded - \$5,165.25.

Impact of daily potato ingestion on the gut microbiome and it's influence on the efficacy of carbohydrate ingestion during exercise. Primary Investigator: **J.W. Smith**; Co-Investigators: R. Baird and S.P. Brown (2019). Alliance for Potato Research and Education. Not Funded - \$197,979.00.

Future of work at the human-technology frontier: advancing cognitive and physical capabilities. Primary Investigator: C.L. Bethel; Co-Investigators: D.T. Anderson, J.E. Swan, G. Bradshaw, D.C. May, and **J.W. Smith** (2018). National Science Foundation. Not Funded - Up to \$2,396,627. (5 years)

Police force decisions: leveraging immersive virtual experiences and biopsychosocial methods to explore trait and state factors influencing officer aggression. Primary Investigator: R. Burch; Co-Investigators: D. Carruth, L. Strawderman, D.C. May, **J.W. Smith**, and C. Sinclair (2018). National Institute of Justice. Not Funded - \$1,999,633.00.

Efficacy of liposomal salts on rehydration. Primary Investigator: **J.W. Smith**; Co-Investigators: M.J. McAllister, and B.J. Fountain (2018). Einsof Biohealth. Not Funded - \$47,096.22.

Development and evaluation of VR tools for test & evaluation of user interfaces for evolving technologies in law enforcement. Primary Investigator: D. Carruth; Co-Investigators: S. Deb and **J.W. Smith** (2018). National Institute of Standards and Technology. Not Funded - \$1,697,827.

Assessment of law enforcement officer response to threat and non-threat stimuli. Primary Investigator: **J.W. Smith**; Co-Investigators: D.C May and R.F. Burch (2018). Simunitions donated rounds and conversion kits to the Starkville Police Department for research execution. value \$1,500.00.

Assessment of law enforcement officer response to threat and non-threat stimuli. Primary Investigator: **J.W. Smith**; Co-Investigators: D.C May and R.F. Burch (2017). Mississippi State University Cross-College Research Grant. Funded - \$2,000.00.

The importance of carbohydrate timing during high-intensity exercise training while consuming a low carbohydrate diet. Primary Investigator: B.M. Krings; Co-Investigator: **J.W. Smith** and M.J. McAllister (2017). Mississippi State University College of Education. Funded - \$1,094.00.

Influence of carbohydrate timing during a 4-week high intensity exercise training regimen on physiological responses to exercise, markers of health, and performance. Primary Investigator: **J.W. Smith**; Co-Investigator: M.J. McAllister (2017). Mississippi State University Office of Research and Economic Development. Funded - \$2,000.00.

Effects of human curcumin ingestion on blood antioxidant status and exercise induced muscle damage and inflammation: Primary Investigator: M. McAllister; Co-Investigator –**J.W. Smith** (2016). NOW Foods. Funded - \$15,653.00.

Effects of short-term high fat diet intervention and acute high intensity resistance training on blood markers of health and inflammation: Primary Investigator: M.J. McAllister; Co-Investigators – H.S. Waldman, B.M. Krings, **J.W. Smith** (2016). Mississippi State University Office of Research and Economic Development. Funded - \$2,130.00.

Effect of carbohydrate supplementation on resistance training performance and blood markers: Primary Investigator – **J.W. Smith**; Co-Investigator – M.J. McAllister (2016). Dymatize Nutrition, LLC. Funded - \$26,874.10.

Validation of a FitLight shooting protocol to identify officer response to fatigue: Primary Investigator – **J.W. Smith**; Co-Investigators – T. Garrison and M. McAllister (2016). Simunitions donated rounds and conversion kits to the Starkville Police Department for research execution. value \$1,500.00.

Validation of a FitLight shooting protocol to identify officer response to fatigue: Primary Investigator – **J.W. Smith** (2016). FitLight Sports. Funded - \$2,900.32.

Validation of a FitLight shooting protocol to identify officer response to fatigue: Primary Investigator – **J.W. Smith**; Co-Investigators – T. Garrison and M. McAllister (2016). CAVS Mississippi State University. Funded - \$10,000.00.

SEC Travel Grant – Primary Investigator – **J.W. Smith**; Co-Investigators – Megan Holmes (2015). Not Funded - \$2,000.00.

Impact of tennis participation on parameters of health: Primary Investigator – M.E. Holmes; Co-Investigators – **J.W. Smith** (2015). International Tennis Federation. Funded - \$5,000.00.

Effects of AminoPro supplement with varying levels of carbohydrate (1 part dextrose: 2 part sucrose) on strength and conditioning training performance: Primary Investigator – **J.W. Smith**; Co-Investigator – M. McAllister and B. Fountain (2015). Dymatize Nutrition, LLC. Funded - \$8,215.54.

Impact of ingesting AminoPro pre- and post-resistance training on hydration status, muscle damage, and muscle pump: Primary Investigator – **J.W. Smith**; Co-Investigators – M. McAllister and R. Zak (2015). Dymatize Nutrition, LLC. Funded - \$31,068.55.

Impact of glycine arginine alpha ketoisocaproic acid calcium on resistance performance: Primary Investigator – B. Wax; Co-Investigator – **J.W. Smith** (2014). Iovate Health Sciences International donated a research gift to the Department of Kinesiology. \$9,899.15.

Influence of inertial load on cycling Wingate results: Primary Investigator – **J.W. Smith** (2014). Gatorade Sports Science Institute/PepsiCo, Inc. donated two used Velotron cycle ergometers to the Department of Kinesiology, value \$19,000.00.

Impact of carbohydrate ingestion during a strength and conditioning training session on exercise performance: Primary Investigator – **J.W. Smith**; Co-Investigator – B. Wax (2013). Gatorade Sports Science Institute. Not Funded - \$49,669.22.

Influence of asymmetrical loading on skeletal and soft tissue structures: Primary Investigator – J.M. Molloy; Co-Investigators – D.D. Pascoe and **J.W. Smith** (2002). Gatorade Sports Science Institute Student Grant. Funded - \$500.00.

Efficacy of body suits on reducing drag and oxygen cost during competitive swimming: Primary Investigator – **J.W. Smith**; Co-Investigators – D.D. Pascoe and J.M. Molloy (2001). TYR donated 12 Aquapel Bodysuits for research, value of \$2,640.00.

## Research Interests

### Thermoregulation/Hydration

- Individual variability in sweating response and adaptation
- Age related responses to exercise in hot, humid conditions

### Carbohydrate Metabolism

- Effect of ingestion rate and dose on the body's ability to oxidize exogenous carbohydrate and utilize macronutrients
- Impact of various ingredients on the body's ability to oxidize exogenous carbohydrate and utilize macronutrients

### Performance

- Physiological and metabolic assessment of athletes
- Effect of macronutrients and other ingredients on exercise/sports performance

## Teaching Experience

### Mississippi State University – Graduate Courses

EP 6153	Training Techniques for Exercise and Sport Lecture: 3 hours
EP 8203	Advanced Exercise Physiology Lecture/Lab: 3 hours
EP 8243	Cardiorespiratory Physiology Lecture/Lab: 3 hours
EP 8253	Doping and Supplements in Sport Lecture: 3 hours
EP 8263	Exercise Metabolism Lecture: 3 hours
EP 8283	Environmental Physiology Lecture: 3 hours
KI 8913	Seminar in Exercise Science Lecture: 3 hours
KI 8990	Special Topics: Advanced Exercise Physiology Lecture/Lab: 3 hours

### Mississippi State University – Undergraduate Courses

EP 3304	Exercise Physiology Lecture: 4 hours
EP 3313	Anatomical Kinesiology Lecture: 3 hours
EP 3663	Personal Fitness Training Lecture/Lab: 3 hours
EP 4113	Fitness Testing and Prescription Lecture/Lab: 3 hours
EP 4153	Training Techniques for Exercise and Sport Lecture: 3 hours
KI 1001	First Year Experience: Champion Athletes Lecture: 1 hour
PE 3313	Sports Physiology Lecture: 3 hours

Mississippi State University – Online Courses

- EP 3304            Exercise Physiology  
                          Lecture: 4 hours
- EP 4113            Fitness Testing and Prescription  
                          Lecture/Lab: 3 hours
- EP 4183            Exercise and Weight Control  
                          Lecture: 3 hours

Benedictine University – Undergraduate Courses

- BIOL 358           Exercise Physiology  
                          Lecture: 3 hours

Auburn University – Undergraduate Courses

- HLHP 1100        Wellness  
                          Lecture: 3 hours
- HLHP 3020        Scientific Foundations of Health and Human Performance  
                          Lecture: 4 hours (Team Taught: 1/3 semester)
- PHED 1230        Jogging  
                          Physical Education Course: 1 hour
- PHED 1340        Weight Training  
                          Physical Education Course: 1 hour
- PHED 1440        Softball  
                          Physical Education Course: 1 hour
- PHED 1540        Racquetball  
                          Physical Education Course: 1 hour
- PHED 1550        Tennis  
                          Physical Education Course: 1 hour

Auburn University – Teaching Assistant

- HLHP 7220        Lab Techniques (Teaching Assistant)  
                          Graduate Lab
- HLHP 3680        Exercise Physiology (Teaching Assistant)  
                          Undergraduate Lab

## Dissertation Committees

### Chair

McKenzie Hargrove. Department of Kinesiology, Mississippi State University, Proposed Graduation, May 2026.

Brandon Shepherd. Department of Kinesiology, Mississippi State University, (Currently ABD working for Gatorade Sports Science Institute)

Marissa Bello, *Impacts of high- vs low-load resistance training on measures of muscle activation, strength, body composition, cortisol, and testosterone*. Department of Kinesiology, Mississippi State University, May 2022 (Visiting Professor, Middle Tennessee State University)

Ffion Price, *In-season macronutrient intake of collegiate Division I female athletes*. Department of Kinesiology, Mississippi State University, December 2021 (Teacher, Newtown High School, Wales)

Hunter Waldman, (co-chair) *Effects of a thirty-day carbohydrate restricted diet on metabolic and performance markers in professional firefighters*. Department of Kinesiology, Mississippi State University, May 2019 (Assistant Professor, University of North Alabama)

Ben Krings, *The importance of carbohydrate timing during high-intensity training while consuming a low carbohydrate diet*. Department of Kinesiology, Mississippi State University, May 2018 (Assistant Professor, University of Wisconsin – Eau Claire)

### Member

Hannah Valigura, *Melatonin impact on oxidative stress in performance horses*. Department of Animal and Dairy Science, Mississippi State University, Proposed Graduation, May 2025

Russell Lowell, *Effects of an auditory versus visual stimulus on reaction and response time during countermovement jumps*. Department of Kinesiology, Mississippi State University, August 2024.

Richard Baird, *Metabolic profiling of firefighters with varying exercise and nutritional practices*. Department of Kinesiology, Mississippi State University, May 2022. (Professor, Mississippi State University)

Matthew McAllister, *Effect of carbohydrate supplement on cardiovascular and metabolic responses to dual concurrent stressors*. Department of Food Science,

Nutrition and Health Promotion, Mississippi State University, August 2015.  
(Assistant Professor, Texas State University)

Richard Laird, *Effect of concurrent sprint interval and resistance training on measures of strength, power, and aerobic performance*. School of Kinesiology, Auburn University, August 2013. (Associate Professor, McDaniel College)

## **Master's Thesis Committees**

### Chair

Rogelio Realzola, *Impact of carbohydrate ingestion on competitive cheerleading performance*. August 2018 (Baltimore Orioles and ROI Health)

Ffion Price, (co-chair) *Impact of HIIT training on middle distance athletes*. August 2017 (Teacher, Newtown High School, Wales)

Jaden Rountree, *Effect of carbohydrate ingestion during training on CrossFit performance*. August 2016 (Assistant Performance Dietitian, Florida State University)

### Member

Allie Brown, *Effects of Psychological Arousal and Relaxation on Muscle Performance, Activation, and Heart Rate Variability During Gross and Fine Motor Tasks*. Proposed Graduation, May 2025

Sean Servalish, *The effect of sublingual vitamin B-12 supplementation on visual reaction time*. Proposed Graduation, May 2023 (Assistant Sports Dietitian, Mississippi State University)

Steven Basham, *Effect of curcumin supplementation on exercise-induced oxidative stress, inflammation, and muscle damage*. May 2018 (Research Scientist at the Gatorade Sports Science Institute)

Hunter DeBusk, *Impact of high-top military boots on balance*. August 2016 (Associate Engineer, Applied Cognitive Sciences)

Chris Hill, *Influence of military workload on muscle exertion in two types of military footwear*. August 2016 (Assistant Professor, Northern Illinois University)

## **Master's Non-Thesis Committees**

### Chair

Liam Altuzar, May 2025

Ashlyn Kane, May 2025

Kya Davis, May 2025

Zachary Edwards, May 2025

Altman Biggs, May 2023

Rhett Hood, December 2022

Brighton Smith, August 2022

Megan San Filipo, August 2019  
(co-chair),

Hayes Salancy, May 2019

Aaron Phelps, May 2018

Brandon Shepherd, May 2018

Timothy Peterson, May 2017

Jenna Wooten, August 2016

Tyler Gregg, May 2016

Adam Thigpen, May 2016

Ben Thebaud, May 2016

Rees Grant, December 2014

### Member

Morgan Wood

Kenya Small

Sydney Graddy

Peyton Jenson

Philip Sutton

Laura VanHorn

Matthew Boone

Zarah Calvin

Patrick Cummings

Prakash Dandapani

Corey Daspit

Colin Diment

Austin Harris

Crystal Hill  
Tanner Lee

Tony Luczak

Korakot Simsiriwong

Sam Watt

Jonathan Wesson



## **Graduate Interns**

Abraham Joseph (University of Florida)

## **Undergraduate Interns**

Reese Allen

Peyton Williamson

Ash Dumas

Malik Barakat

Morgan Wood

Brandon Shepherd

Abbey Shilling (Stetson University)

Timothy Peterson

Derick Anglin

## **Recognized Graduate Students**

Marissa Bello, 2022 College of Education Outstanding Graduate Student.

Marissa Bello, 2022 Department of Kinesiology, Doctoral Student of the Year.

Marissa Bello, 2021 National Strength and Conditioning Association Women's Scholarship.

Ben Krings, 2018 College of Education Outstanding Graduate Student.

Hunter Waldman, 2018 Department of Kinesiology Outstanding Doctoral Student.

Ben Krings, 2017 Department of Kinesiology Outstanding Doctoral Student.

## **Recognized Undergraduate Research Students**

Derick Anglin, 2021 Department of Kinesiology Outstanding Undergraduate Student.

Scott D. Pope, 2015 College of Education Undergraduate Researcher of the Year.

## Lay Articles, Interviews, and Appearances

MSU Extension News (U.S.A.) Older adults at increased risk for heat-related illness. June 2024.

Huffington Post (U.S.A.) Is it too hot to run outside? Here is how to tell. June 2024.

PBS NewsHour (U.S.A.) Tips for staying safe in extreme heat. July 2023.

New York Times (U.S.A.) How to exercise when its humid. June 2023.

The Conversation (U.S.A.) It's cold! A physiologist explains how to keep your body feeling warm – Recirculated in Lay News. December 2022.

The Guardian (U.S.A./International) Wholesome soup, night walks and wearable sleeping bags: how to prepare for winter and even embrace it. October 2022.

The Conversation (U.S.A.) Hot and getting hotter – 5 essential reads on high temps and human bodies. August 2022.

Harvard Public Health Magazine (U.S.A.) Extreme heat threatens health in India and elsewhere. February 2022.

Morning Wave in Busan (South Korea) Human health & extreme heatwave. July 2021.

Scientific American (U.S.A.) Why extreme heat is so dangerous. July 2021.

The Conversation (U.S.A.) Knowing how heat and humidity affect your body can help you stay safe during heat waves. July 2021.

CNN Health (U.S.A./International) 25 ways to stay warm this winter that won't break the bank. January 2021.

The Guardian (U.S.A./International) Cold as ice? How to stay warm without whacking up the heating. January 2021.

BBC Science Focus (U.K.) A scientist's guide to life: How to stay warm. December 2020.

Health Unfiltered Podcast (U.S.A.) Cold Weather Physiology. November 2020.

Mississippi State TV (U.S.A.) True Leaders: 'Normal' human body temperature. October 2020.

Mississippi State TV (U.S.A.) Forward: Department of Kinesiology highlight. September 2020.

The Conversation (U.S.A.) 'Normal' human body temperature is a range around 98.6 F – a physiologist explains why. June 2020.

Men's Journal (U.S.A.) Cold Truths. December 2019.

Lay Dam Bike Ride Pre-Event Meeting (U.S.A.) Nutrition for Performance. April 2019.

The Conversation (U.S.A.) It's cold! A physiologist explains how to keep your body feeling warm. January 2019.

SECU (U.S.A.) SEC Faculty Travel Grant Visit Leads to Study on Hydration. June 2015.

Gatorade Television Commercial (U.S.A.) "Everything to Prove". Debuted January 2013.

NFL.com Web Series (U.S.A.) Everything to Prove. September 2012. Act I Episodes 1 and 2, Act II Episodes 1 and 2, Act III Episode 1 and 2, Act V Episode 2. September 2012.

Men's Health (U.S.A.). Cam Newton's Top-Secret Nutrition Plan. July 2012.

Gatorade Television Commercial (U.S.A.) "Greatness". Debuted July 2012.

ESPN Magazine (U.S.A.) Zoom: Panthers QB Cam Newton with the Gatorade Sports Science Institute's Kortney Dalrymple and JohnEric Smith. July 2012.

ABC 7 Sarasota (U.S.A.). Testing human limits in Bradenton. June 2012.

Sarasota Herald Tribune (U.S.A.). Behind the gates at IMG Academies, Gatorade tests top athletes. May 2012.

Washington Post (U.S.A.). Taking the measure of Robert Griffin III. April 2012.

U.S.A. Football (U.S.A.). Experts warn against caffeinated energy drinks for young athletes. April 2012.

Wired.com (U.S.A.). Gatorade Quenches Its Thirst to Build Better Athletes. February 2012.

FoxSports (U.S.A.). Training Like NFL Prospect: GSSI Testing. January 2012.

Globo TV (Brazil). Mano Menezes visits one of the world's most modern training center in Florida. February 2012.

Bloomberg Business Week (U.S.A.). Gatorade Goes Back to the Lab. November 2011.

Associated Press (U.S.A.). Dwyane Wade submits to Gatorade tests. November 2011.

U.S.A. Football (U.S.A.). Coaches, Families Need to Watch Hydration Levels as Well. August 2011.

U.S.A. Football (U.S.A.). Facts and Figures for Hydrating on the Field. April 2010.

Stack TV (U.S.A.). Supplements. October 2009.

U.S.A. Football (U.S.A.). Importance of Hydration in Cool Weather. September 2009.

U.S.A. Football (U.S.A.). Importance of Hydration in Warm Weather. June 2009.

Runners' World (U.K.). Sports Drinks: When and how much? November 2007.

Albany Times Union (U.S.A.). 5, 4, 3, 2, 1... Go Nancy, Go! May 2006.

### **Professional Committee and Advisory Positions**

2015-Present	National Strength and Conditioning Association Mississippi Advisory Board
2020-2023	American College of Sports Medicine Communications and Public Information Committee
2020-2023	American College of Sports Medicine Internal and External Communication Sub-Committee
2019-2022	National Strength and Conditioning Association State Director
2015-2020	Dymatize Nutrition Advisory Board
2009-2013	USA Football's Football and Wellness Committee (USA Football)

## Professional Service

2023	Moderator	Athlete Engineering Summit - Breakout
2023	Reviewer	Southeast American College of Sports Medicine Annual Meeting Abstract Selection Reviewer
2023	Reviewer	Southeast American College of Sports Medicine Annual Meeting Student Poster Award Reviewer
2020	Host	National Strength and Conditioning Association Mississippi State Clinic
2019	Host	National Strength and Conditioning Association Mississippi State Clinic
2018	Host	National Strength and Conditioning Association Mississippi State Clinic
2018	Mentor	Southeast American College of Sports Medicine Undergraduate FASEB Dream Program
2018	Reviewer	Southeast American College of Sports Medicine Annual Meeting Abstract Selection
2017	Reviewer	Southeast American College of Sports Medicine Annual Meeting Abstract Selection
2017	Host	National Strength and Conditioning Association Mississippi State Clinic
2017	Moderator	Southeast American College of Sports Medicine Annual Meeting Tutorial Session
2016	Judge	Southeast American College of Sports Medicine Annual Meeting Doctoral Student Poster Competition
2012	Judge	Southeast American College of Sports Medicine Annual Meeting Doctoral Student Poster Competition

## Journal Editor

Special Edition Guest Editor. *Frontiers in Nutrition*. Carbohydrates for Performance, Recovery and Training. 2021.

## **Book Reviewer**

R. Wildman, B.S. Miller, and C. Wilborn. (2018), Chapter 8: Water, Hydration, and Exercise. *Sports and Fitness Nutrition*, 3<sup>rd</sup> edition. Kendall Hunt.

J.A. Potteiger. (2017). Chapter 11: Equipment and Assessment in Exercise Science. *ACSM's Introduction to Exercise Science*, 3<sup>rd</sup> edition. LWW.

## **Peer-Reviewer for Journals**

*Practical Gastroenterology*

*Journal of Functional Morphology and Kinesiology*

*International Journal of Sports Physiology and Performance*

*Beverages*

*Comprehensive Reviews in Food Science and Food Safety*

*International Journal of Exercise Science*

*International Journal of Sport Nutrition and Exercise Metabolism*

*Journal of the International Society of Sports Nutrition*

*The Journal of Sports Medicine and Physical Fitness*

*Nutrients*

*Sports*

*Sports Medicine*

*Strength and Conditioning Journal*

*Applied Physiology, Nutrition and Metabolism*

*International SportMed Journal*

*Journal of Athletic Enhancement*

*Scandinavian Journal of Medicine & Science in Sports*

*The Scientific Pages of Sports Medicine*

**University Service**

2023-Present	Health Science Research Taskforce
2022-Present	College of Education Recruitment Committee
2022-Present	College of Education Data Science Committee
2019-Present	Faculty Research Advisory Committee
2018-Present	Department of Kinesiology Executive Council
2015-Present	Graduate Faculty Level 1
2021-2024	College of Education Box Council
2022-2023	College of Education Box Council Chair
2022-2023	Department of Music Assistant Professor Search Committee
2021-2023	General Education Program Task Force
2018-2023	Department of Kinesiology Exercise Science Curriculum Coordinator
2022-2023 2019-2020	Department of Kinesiology Promotion and Tenure Committee
2016-2023	Department of Kinesiology Graduate Committee
2014-2023	Department of Kinesiology Laboratory Chair
2014-2023	Department of Kinesiology Laboratory Committee
2013-2023	Department of Kinesiology Exercise Science Curriculum Committee
2022	Department of Music Department Head Search Committee
2021-2022	College of Education Associate Professor Promotion and Tenure Committee
2019-2022	University Instructional Improvement Committee

2021	Department of Education Psychology Clinical Professor Search Committee
2021	Spring Faculty Senate Round Table
2020-2021	College of Education Dean Search Committee
2018-2021	Bodybuilding and Physique Club Faculty Advisor
2014-2020	College of Education Research Committee
2013-2020	Department of Kinesiology Sports Studies Curriculum Committee
2018-2019	Department of Education Psychology Department Head Search Committee
2018-2019	Department of Kinesiology MSU Meridian Clinical Professor Search Committee Chair
2013-2016	College of Education Diversity Committee
2015-2016	Community Emergency Response Team Member
2015-2016	Bulldog Toastmaster's University Club Co-Advisor
2013-2015	Graduate Faculty Level 2
2013-2014	Mississippi State Golf Institute Advisory Board
2001-2004	Band Physiologist (Auburn University Marching Band)

### **Service to the Community and Outreach**

Tupelo ComicCon (Tupelo, MS). The Science of Super Powers Panel with Dr. Stanley Brown, Dr. Randy Wagner, and Dr. JohnEric Smith. April 2017.

Starkville High School Track and Field (Starkville, MS). Exercise Physiology Roundtable with Dr. Megan Holmes, Dr. Neil Johannsen, and Dr. JohnEric Smith. May 2015.

Georgia Power: Plant Wansley (Roopville, GA). Whys and How of Hydration. December 2013.



Pendleton High School Science Classes (Bradenton, FL). The Role of Science in the Study of Athletes. February 2012.

St. Anne's Elementary School Kindergarten (Barrington, IL) Experiences in Africa. March 2007.

Barrington Employee Resource Network (BERN) (Barrington, IL) Personal and Scientific Takeaways from the Sahara Desert. January 2007.

Benedictine University Kinesiology Group (Lisle, IL). The Science Behind Proper Exercise Hydration. April 2006

Auburn University Volleyball Camp (Auburn, AL). Nutrition, Training, and Body Composition. July 2004.

Cannon Street Elementary School (LaGrange, GA). Thermography and Exercise Physiology. May 2004.

Cary Wood Elementary School 5<sup>th</sup> grade (Auburn, AL). Thermography and Exercise Physiology. March 2004.

Ethel Kight Elementary School (LaGrange, GA). Thermography and Exercise Physiology. October 2003.

Cary Wood Elementary School 5<sup>th</sup> grade (Auburn, AL). Thermography and Exercise Physiology. May 2003.

Cannon Street Elementary School (LaGrange, GA). Thermography and Exercise Physiology. April 2003.

Auburn University Swim Coach Clinic (Auburn, AL). Physiology of Swim Training. January 2003.

Auburn Rotary Club (Auburn, AL). Infrared Thermography: Asset for Exercise Physiology and Sports Medicine. November 2002.

Ethel Kight Elementary School (LaGrange, GA). Thermography and Exercise Physiology. October 2002.

Cary Wood Elementary School 5<sup>th</sup> (Auburn, AL). Thermography and Exercise Physiology. April 2002.

Auburn University Band Majorettes and Flag Corp (Auburn, AL). Exercise and Fitness. October 2001.

## Professional Conferences Attended

June 2023	International Society of Sports Nutrition Annual Meeting	Fort Lauderdale, FL
June 2023	American College of Sports Medicine Annual Conference	Denver, CO
February 2023	Southeast American College of Sports Medicine	Greenville, SC
July 2022	National Strength and Conditioning Association Annual Conference	New Orleans, LA
June 2022	American College of Sports Medicine Annual Conference	San Diego, CA
February 2022	Southeast American College of Sports Medicine	Greenville, SC
July 2021	National Strength and Conditioning Association Annual Conference	Orlando, FL
June 2021	International Society of Sports Nutrition Annual Meeting	St. Petersburg, FL
June 2021	American College of Sports Medicine Annual Conference	Virtual
March 2021	Council for the Accreditation of Educator Preparation (CAEP) Spring Conference	Virtual
October 2020	International Society of Sports Nutrition-Kennesaw State University Virtual Webinar	Virtual
September 2020	National Strength and Conditioning Association: Virtual Sessions	Virtual
September 2020	Mississippi National Strength and Conditioning Association Clinic	Virtual
May 2020	American College of Sports Medicine Annual Conference	Virtual
May 2019	American College of Sports Medicine Annual Conference	Orlando, FL

April 2019	Mississippi National Strength and Conditioning Association Clinic	Starkville, MS
March 2019	International Society of Sports Nutrition-Kennesaw State University Nutrition and Training Conference	Kennesaw, GA
January 2019	International Society of Sports Nutrition-GAINZ Conference	Dallas, TX
May 2018	American College of Sports Medicine Annual Conference	Minneapolis, MN
April 2018	Mississippi National Strength and Conditioning Association Clinic	Starkville, MS
February 2018	Southeast American College of Sports Medicine	Chattanooga, TN
June 2017	American College of Sports Medicine Annual Conference	Denver, CO
April 2017	Mississippi National Strength and Conditioning Association Clinic	Starkville, MS
February 2017	Southeast American College of Sports Medicine	Greenville, SC
January 2017	International Society of Sports Nutrition and Dymatize Athletic Nutrition Conference	Dallas, TX
July 2016	National Strength and Conditioning Association Annual Conference	New Orleans, LA
June 2016	American College of Sports Medicine Annual Conference	Boston, MA
April 2016	Mississippi National Strength and Conditioning Association Clinic	Hattiesburg, MS
February 2016	Southeast American College of Sports Medicine	Greenville, SC
July 2015	National Strength and Conditioning Association Annual Conference	Orlando, FL

January 2015	Dymatize Advisory Board Meeting	Dallas, TX
June 2014	International Food Technologists - Short Course	New Orleans, LA
May 2014	American College of Sports Medicine Annual Conference	Orlando, FL
May 2013	American College of Sports Medicine Annual Conference	Indianapolis, IN
February 2013	Southeast American College of Sports Medicine	Greenville, SC
May 2012	American College of Sports Medicine Annual Conference	San Francisco, CA
April 2012	Gatorade, IMG and Under Armour Technology Conference	Bradenton, FL
June 2011	American College of Sports Medicine Annual Conference	Denver, CO
August 2010	Dartfish Users Group Conference	Colorado Springs, CO
June 2010	American College of Sports Medicine Annual Conference	Baltimore, MD
October 2009	Midwest American College of Sports Medicine Annual Conference	St. Charles, IL
May 2009	American College of Sports Medicine Annual Conference	Seattle, WA
July 2008	Gatorade Sports Science Institute Summer Conference	Huntington Beach, CA
July 2008	National Strength and Conditioning Association Annual Conference	Las Vegas, NV
May 2008	American College of Sports Medicine Annual Conference	Indianapolis, IN
April 2008	International Society of Beverage Technologists	Savannah, GA
July 2007	Gatorade Sports Science Institute Summer Conference	Vail, CO

May 2007	American College of Sports Medicine Annual Conference	New Orleans, LA
February 2007	Southeast American College of Sports Medicine Conference	Charlotte, NC
October 2006	Chicago Marathon Conference	Chicago, IL
September 2006	American College of Sports Medicine on Integrative Physiology of Exercise	Indianapolis, IN
June 2006	American College of Sports Medicine Annual Conference	Denver, CO
February 2006	Southeast American College of Sports Medicine Conference	Charlotte, NC
June 2005	Gatorade Sports Science Institute Summer Meeting	Chicago, IL
June 2005	American College of Sports Medicine Annual Conference	Nashville, TN
January 2005	Southeast American College of Sports Medicine Conference	Charlotte, NC
December 2004	Gatorade Sports Science Institute Sports Medicine Review Winter Board Meeting	Miami, FL
June 2004	American College of Sports Medicine Annual Conference	Indianapolis, IN
April 2004	American Academy of Thermology Conference	Auburn, AL
January 2004	Southeast American College of Sports Medicine Conference	Atlanta, GA
May 2003	American College of Sports Medicine Annual Conference	San Francisco, CA
April 2003	Computerized Thermal Imaging User Groups Meeting	New Orleans, LA
January 2003	Southeast American College of Sports Medicine Conference	Atlanta, GA
November 2002	American Academy of Thermology Conference	Orlando, FL

November 2002	Alabama State Association for Health, Physical Education, Recreation, and Dance Annual Conference	Birmingham, AL
May 2002	American College of Sports Medicine Annual Conference	St. Louis, MO
January 2002	Southeast American College of Sports Medicine Conference	Atlanta, GA
June 2001	American Academy of Thermology Conference	Auburn, AL
May 2001	American College of Sports Medicine Annual Conference	Baltimore, MD
January 2001	Southeast American College of Sports Medicine Conference	Columbia, SC

### **Consulting**

2003	Aluminet	Effect of aluminum weave material on reducing thermal load
2003	TYR	Effect of TYR Thermal wear in maintaining temperature in youth swimmers
2001	Zero-G	Effect of backpack load on peripheral blood flow

### **Volunteer Experience**

2021-Present	Scouts BSA Troop 14 Assistant Scoutmaster (Scouts BSA)
2020-Present	Scouts BSA Troop 14 Committee Member (Scouts BSA)
2022	Scouts BSA Troop 142 Committee Member (Scouts BSA)
2019-2020	Cub Scout Pack 14 Assistant Cubmaster (Boy Scouts of America)
2015-2020	Cub Scout Pack 14 Committee Member (Boy Scouts of America)
2017-2019	Cub Scout Pack 14 Cubmaster (Boy Scouts of America)
2016-2017	Cub Scout Pack 14 Assistant Cubmaster (Boy Scouts of America)
2016-2017	Vice President (West Union Homeowners Association)

2015-2016	Kickball Assistant Coach (Starkville Parks and Recreation)
2015	Baseball Head Coach (Starkville Baseball Association)
2014-2015	Watch D.O.G.S. (Sudduth Elementary School)
2014	Kickball Head Coach (Starkville Parks and Recreation)
1999-2002	CPR and First Aid Instructor (Lee County, American Red Cross)
1998-2000	Student Athletic Trainer (Auburn University): worked primarily with track & field, cross-country, football, and tennis

### **Organizations**

2019-Present	Professionals in Nutrition for Exercise and Sport	Member
2019-Present	International Society of Sports Nutrition	Member
2001-Present	National Strength and Conditioning Association	Member
2001-Present	American College of Sports Medicine Environmental Physiology Special Interest Group Nutrition Special Interest Group	Member
2001-Present	Southeast American College of Sports Medicine	Member
2007-2010	Toastmasters 2008-2009 President  2007-2008 Sergeant at Arms	Member
2003-2004	American Academy of Thermology	Member
2002-2003	Alabama State Association of Physical Health Education Recreation and Dance	Member
2000-2004	Health and Human Performance Student Alliance 2002-2003 Student Council Member	Member
2000-2001	Auburn Alumni Association (ALUM)	Member
1999-2000	Auburn Sports Medicine Association	Member
1998-2000	Aerobics and Fitness Association of America	Member

## Current Licenses/Certifications

2020	Wilderness First Aid	Emergency Care and Safety Institute
2019	Certified Sports Nutritionist from the International Society of Sports Nutrition	International Society of Sports Nutrition
2018	Certified Strength and Conditioning Specialist with Distinction (CSCS*D)	National Strength and Conditioning Association
2015	Blood Borne Pathogens	Mississippi State University
2014	Introduction to Laboratory Safety	Mississippi State University
2011	DEXA enCORE™ Operator Training	GE Healthcare
2006	Certified BodPod Technician	BodPod
2003	Thermography Technician	American Academy of Thermology
2002	Certified Strength and Conditioning Specialist (CSCS)	National Strength and Conditioning Association

## Awards and Honors

2022	Order of the Arrow - Inductee	Scouts BSA
2017	Nominated (not elected) Executive Committee - Member at Large	Southeast American College of Sports Medicine
2012	PepsiCo Astonishing Research Award	PepsiCo
2009	Advanced Leader Bronze	Toastmaster International
2008	Competent Leader	Toastmaster International
2008	Competent Communicator	Toastmaster International
2006	PepsiCo Keystone Award	PepsiCo
2002	Outstanding Masters Student	Health and Human Performance Department; Auburn University
1994	Eagle Scout	Boy Scouts of America (Scouts BSA)