

## *Curriculum Vitae*

### **Jon Stavres, PhD**

Assistant Professor

Miami University

Stavrejr@miamioh.edu

@Jstavres (all platforms)

### **EDUCATION / TRAINING**

Postdoctoral Training	2017-2019	Medicine, Penn State Hershey Heart and Vascular Institute, Penn State University College of Medicine <b>Research Mentor:</b> Lawrence I. Sinoway, MD
PhD	2017	Exercise Physiology, Kent State University Dissertation: <i>The feasibility of blood flow restriction training for people with motor-incomplete spinal cord injuries</i> <b>Research Mentor:</b> John McDaniel, PhD
MS	2014	Exercise Science, the Indiana University of Pennsylvania Thesis: <i>The effect of functional resistance training on resting metabolic rate in adult women</i> <b>Research Mentor:</b> Madeline P. Bayles, PhD
BS	2013	Exercise Science, the Indiana University of Pennsylvania

### **PROFESSIONAL EXPERIENCE**

Aug 2025- present	<b>Assistant Professor of Exercise Science</b> Department of Kinesiology, Nutrition, and Health Miami University, Oxford, OH
Aug 2021- Aug 2025	<b>Assistant Professor of Kinesiology (Tenure Track),</b> School of Kinesiology & Nutrition, the University of Southern Mississippi, Hattiesburg, MS
Jan 2020- Aug 2021	<b>Assistant Professor of Medicine (Non-Tenure),</b> Heart and Vascular Institute, Penn State University College of Medicine, Hershey, PA
Sep 2017- Dec 2019	<b>Postdoctoral Fellow,</b> Heart and Vascular Institute, Penn State University College of Medicine, Hershey, PA
Nov 2016- Sep 2017	<b>Intermittent Research Assistant,</b> Louis Stokes VA Medical Center, Cleveland, OH

## *Curriculum Vitae*

### **COURSES TAUGHT** (Undergrad- UG, Masters- MS, Traditional Setting- T, Online- O)

#### **Southern Mississippi**

KIN 402	Exercise Physiology II/Clinical Exercise Physiology (UG-T)
KIN 602	Advanced Exercise Testing & Prescription (MS-T)
KIN 706	Advanced Cardiovascular Physiology (MS-T)
KIN 601	Applied Physiology in Sport, Physical Activity, and Nutrition (MS-O)
KIN 701	Advanced Clinical Exercise Physiology (MS-O)
KIN 780	Graduate Seminar- Responsible Conduct of Research (PhD- T)

#### ***Guest Lectures at Southern Mississippi***

KIN 202	Introduction to Exercise Science
KIN 406	Physiology of Aging and Chronic Disease Management

#### **Walsh University**

BIO 209L	Anatomy & Physiology I- LAB (UG-T)
BIO 210L	Anatomy & Physiology II- LAB (UG-T)

#### **Kent State University**

DKS-FYE 10097	First Year Experience (UG-T)
EXSC 15010	Introduction to Exercise Science (UG-T)
EXSC 35075	Exercise Programming (UG-T)
EXSC 40612/50612	Exercise Leadership for the Older Adult (UG/MS-T)
EXSC 45080/55080	Physiology of Exercise - Writing Intensive (UG/MS-O)
EXSC 45065/55065	Exercise Testing (UG/MS-T)

### **FUNDING**

#### **Current Funding / Research Support**

##### *Implications of Exaggerated Metaboreflex Responses in Metabolic Syndrome*

Mississippi Center for Clinical and Translational Research | NIH

5U54GM115428-09 (SP5111-SB36)

Pilot Project Program

Amount Funded- \$59,200 (2024)

Role- PI

## *Curriculum Vitae*

*A Multi-Modal Approach to Improving Early Detection of Cardiometabolic Risk in Young Adults in Mississippi*

NIH | NIGMS

U54GM115428-08

Mississippi Center for Clinical and Translational Research Administrative Supplement Award

Amount funded- \$1,127,454 (2023-2024)

Project 2 amount- \$269,260

Role- Project 2 Lead Investigator (PI: J. Granger)

*The Effect of a Hip Flexion Feedback System for Exercise in Individuals with Osteoarthritis and Obesity*

American Heart Association

Amount funded- \$151,615 (2023-2025)

Role- Co-Investigator (PI: N. Oliveira)

*Sympathetic Control of Blood Pressure in Black and African American Individuals with Metabolic Dysfunction, and Influence of Acute Ketone Ester Administration*

NIH Division of Loan Repayment- NHLBI

2L60HL154357-02

Loan Repayment Program (LRP) (2023)

Award applied to outstanding student loans in return for a two-year service obligation

Role- PI / Awardee

### **Completed Grants / Funding**

*Effects of Acute Exercise on Sympathetically Mediated Blood Pressure Regulation*

University of Southern Mississippi

Aubrey Keith and Ella Gin Lucas Endowment for Faculty Excellence Award

Amount funded- \$5,000 (2021-2023)

Role-PI

*Cerebrovascular Responses to Acute Ketone Ester Administration: A Pilot Study*

University of Southern Mississippi- College of Education and Human Sciences

Interdisciplinary Project Grant

Amount funded- \$5,000 (2022-2023)

Role- PI (Co-PI A.J. Graybeal)

*Sympathetic Control of Skeletal Muscle Oxygen Transport in Peripheral Arterial Disease*

NIH Division of Loan Repayment- NHLBI

2L60HL154357

Loan Repayment Program (LRP) (2020)

Award applied to outstanding student loans in return for a two-year service obligation

Role- PI / Awardee

## *Curriculum Vitae*

### *A Double-Blind Randomized Placebo-Controlled Study on the Analgesic Properties of Amiloride in Exercise-Induced Skeletal Muscle Pain*

Penn State Hershey Department of Anesthesiology & Perioperative Medicine

Resource Allocation Panel (RAP) Research Grant

Amount funded- \$8,160 (2020)

Role- Co-Investigator (PI: V. Ruiz-Velasco)

### *Acute and Chronic Afferent Engagement: Sympathetic and End Organ Responses*

NIH/NHLBI

P01 HL134609 (year 4)

Amount Funded- \$1,870,043 (2020)

Role- Investigator (PI: L.I. Sinoway)

### *Cerebrovascular Structure and Function in Spinal Cord Injuries*

Craig H. Neilsen Foundation

Postdoctoral Fellowship Award

Approved Funding- \$150,000 (2019)

Role- PI (Co-Mentors: L.I. Sinoway, MD and D.R. Gater, MD-PhD)

\*Unused balance returned in December 2019 after promotion to faculty position

### *Partitioning the Contributors to Post-Exercise Hypotension: Elevated Muscular Work or Metabolism*

Kent State University College of Education Health and Human Services

Seed Grant

Amount funded- \$5,000 (2015)

Role- Co-Investigator (PI: J. McDaniel)

## **Submitted Proposals**

### *Southern Miss Graduate Training Education Center (GTEC)*

NIH | NHLBI

Jackson Heart Study Technical Center | RFP #75N92024R0261

Amount requested- \$17,035,846

Role- Co-Investigator (PI: J. Lemacks)

Status: *Under Review*

### *The Impact of Social Stress on the Physiological and Psychological Functioning of Adolescents*

Mississippi Center for Clinical and Translational Research | NIH

Pilot Project Program

Amount Requested- \$54,765

Role- Co-Investigator (PI: A. Kaeppler)

Status- *Under Review*

## *Curriculum Vitae*

### *Examining the Role of Perseverative Cognition in the Relationship Between Daily Stressors and Cardiovascular Reactivity*

University of Southern Mississippi- College of Education and Human Sciences

Interdisciplinary Project Grant

Amount requested- \$4,997 (2023-2024)

Role- Co-PI (PI: M. Renna)

Status- *Unfunded*

### *Examining the Cardiometabolic and Cardiorespiratory Outcomes of Metabolic Syndrome Phenotypes (ECCO-MSP)*

Mississippi Center for Clinical and Translational Research | NIH

Pilot Project Program

Amount Requested- \$40,000 direct costs (2022)

Role- PI

Status- *Unfunded*

## **PUBLICATIONS (\* Indicates corresponding author, † indicates student/trainee primary author)**

1. Graybeal AJ, Aultman RS, Brandner CF, Vallecillo-Bustos A, Compton AT, Swafford SH, Newsome TA, **Stavres J.** (2025). The effects of an oral ketone ester on appetite, food intake, and cognition in individuals with metabolic syndrome: A randomized, single-blind, placebo-controlled, matched pairs crossover trial. *Journal of Dietary Supplements*, 22(3), 382-400. DOI: 10.1080/19390211.2025.2473371.
2. **\*Stavres J**, Vallecillo-Bustos A, Parnell S, Aultman RS, Newsome TA, Swafford SH, Compton AT, Schimpf RC, Schmidt SN, Lee C, Graybeal AJ. (2025). Peripheral vasoconstriction is not elevated during hyperreactive responses to the cold pressor test: A cross-sectional study. *Frontiers in Physiology*, 16, DOI: 10.3389/fphys.2025.1532992.
3. †Newsome TA, Graybeal AJ, Aultman RS, Vallecillo-Bustos A, Brandner CF, Swafford SH, Compton AT, Parnell S, Schimpf R, Thorsen TA, Renna ME, **\*Stavres J.** (2025). Examining the use of a continuous marker of metabolic syndrome severity for detecting resting autonomic dysfunction in a multiracial sample of young adults. *Frontiers in Cardiovascular Medicine*, 12, 1-9. DOI: 10.3389/fcvm.2025.1508805.
4. Renna ME, Willbourne FN, Johal S, Fergerson AK, Behringer KF, Brandner CF, **Stavres J**, Graybeal AJ. (2025). Stress and anxiety are associated with increased metabolic syndrome risk among young adults living in the deep south. *Healthcare*, 12(4). DOI: 10.3390/healthcare13040359
5. Graybeal AJ, Swafford SH, Compton AT, Renna ME, Thorsen T, **Stavres J.** (2024). Predicting bone mineral content from smartphone digital anthropometrics: Evaluation of an existing application and the development of new prediction models. *Journal of Clinical Densitometry*, 28(1). DOI: <https://doi.org/10.1016/j.jocd.2024.101537>.

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6. Graybeal AJ, Brandner CF, Compton AT, Swafford SH, Aultman RS, Vallecillo-Bustos A, **Stavres J.** (2024). Differences in metabolic syndrome severity and prevalence across nine waist circumference measurements collected from smartphone digital anthropometrics. *Clinical Nutrition ESPEN*, 64, 390-399. DOI: 10.1016/j.clnesp.2024.10.158
7. Brandner CF, Compton AT, Swafford SH, Aultman RS, Vallecillo-Bustos A, Newsome TA, Renna ME, Thorsen T, **Stavres J**, Graybeal AJ. Total and appendicular body composition comparisons between near-infrared reactance spectroscopy and dual energy x-ray absorptiometry. *Clinical Physiology and Functional Imaging*, 1-13. DOI: 10.1111/cpf.12914
8. Graybeal AJ, **Stavres J**, Swafford SH, Compton AT, McCoy S, Huye H, Thorsen T, Renna ME. (2024). The associations between depression and added and relative sugar consumption are mediated by emotional eating and craving control in multi-ethnic young adults. *Healthcare*, 12(19), 1-16. DOI: 10.3390/healthcare12191944.
9. †Parnell S, Graybeal AJ, Renna ME, \***Stavres J.** (2024). Preliminary evaluation of self-reported training volume as an adjunct measure of female athlete triad risk in division 1 collegiate female runners. *Journal of Functional Morphology and Kinesiology*, 9(4), 1-14. DOI: 10.339/jfmk9040179.
10. Fernandes IA, **Stavres J**, Hamaoka T, Ojikutu Q, Sabino-Carvalho J, Vianna L, Luck JC, Blaha C, Cauffman A, Dalton P, Herr MD, Ruiz-Velasco V, Carr Z, Janicki P, Cui J. (2024). Does a single oral administration of amiloride affect spontaneous baroreflex sensitivity and blood pressure variability in healthy young adults? *The Journal of Neurophysiology*, 13(3), 922-928. DOI: 10.1152/jn.00264.2024.
11. Graybeal AJ, Brandner CF, Wise HL, Henderson A, Aultman RS, Vallecillo-Bustos A, Newsome TA, Stanfield D, **Stavres J.** (2024). Near-infrared reactance spectroscopy-derived visceral adipose tissue for the assessment of metabolic syndrome in a multi-ethnic sample of young adults. *Journal of Human Biology*, 1-16. DOI: 10.1002ajhb.24141
12. \***Stavres J**, Vallecillo-Bustos A, Newsome TA, Aultman R, Brandner C, Graybeal AJ. (2024). Hemodynamic responses to the cold pressor test in individuals with metabolic syndrome: A case-control study in a multiracial sample of adults. *Journal of Human Hypertension*, 38(9), 655-662. DOI: 10.1038/s41371-024-00938-x.
13. †Vallecillo-Bustos A, Compton AT, Swafford SH, Renna M, Thorsen T, **Stavres J**, Graybeal AJ. (2024). The effect of postural orientation on body composition and total body water estimates produced by smartwatch bioelectrical impedance analysis: An intra- and inter-device evaluation. *Journal of Bioelectrical Impedance*, 15(1), 89-98. DOI: <https://doi.org/10.2478/joeb-2024-0010>.
14. Graybeal AJ, Compton AT, Swafford SH, Brandner CF, Thorsen T, Renna M, **Stavres J.** (2024). Measurements of abdominal obesity are associated with metabolic syndrome severity independent of hypertensive phenotype in White but not Black adults. *Journal of Racial and Ethnic Health Disparities*, [Accepted June 1<sup>st</sup>, 2024]. DOI: 10.1007/s40615-024-02051-8.

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15. **\*Stavres J**, Aultman RS, Brandner CF, Newsome TA, Vallecillo-Bustos A, Graybeal AJ. (2024). Fat-free mass is associated with exercise pressor responses, but not cold-pressor responses, in humans: Influence of Maximal Voluntary Contraction. *Frontiers in Sports and Active Living*, 6. DOI: 10.3389/fspor.2024.1352192.
16. Thorsen T, Oliveira N, Graybeal, AJ, **Stavres J**. Exploring gait velocity as a predictor of cardiometabolic disease risk in young adults. (2024). *Frontiers in Sports and Active Living*, 6. DOI: 10.3389/fspor.2024.1365717.
17. Mannozi J, Massoud L, **Stavres J**, Al-Hassan MH, O'Leary D. (2023). Autonomic function and metabolic syndrome components: Are the symptoms additive or multiplicative. *Journal of Clinical Medicine*, 3(13). DOI: 10.3390/jcm13030895.
18. **\*Stavres J**, Aultman RS, Newsome TA. (2023). Exercise pressor responses are exaggerated relative to force production during, but not following, thirty-minutes of rhythmic handgrip exercise. *European Journal of Applied Physiology*, 124(5). DOI: 10.1007/s00421-023-05390-2.
19. Graybeal AJ, Brandner CF, Compton AT, Swafford SH, Henderson A, Aultman RS, Vallecillo-Bustos A, **Stavres J**. (2023). Smartphone derived anthropometrics: Agreement between a commercially available smartphone application and its parent application intended for use at point-of-care. *Clinical Nutrition ESPEN*, 59,107-113. DOI: 10.1016/j.clnesp.2023.11.021.
20. Graybeal AJ, Brandner CF, Wise HL, Henderson A, Aultman RS, Vallecillo-Bustos A, Newsome TA, Stanfield D, & **Stavres J**. (2023). Associations between eating behaviors and metabolic syndrome severity in young adults. *Eating Behaviors*, 51, 2-6. DOI: 10.1016/j.eatbeh.2023.101821.
21. Graybeal AJ, Brandner CF, **Stavres J**. (2023). Paradoxical associations among bioelectrical impedance and cardiometabolic health parameters in young White and Black adults. *Medicine & Science in Sport & Exercise*, 56(3), 418-426. DOI: 10.1249/MSS.00000000000003321.
22. **\*Stavres J**, Aultman RA, Brandner CF, Newsome TA, Vallecillo-Bustos A, Wise HL, Henderson A, Stanfield D, Mannozi J, Graybeal AJ. (2023). Hemodynamic responses to handgrip and metaboreflex activation are exaggerated in individuals with metabolic syndrome independent of resting blood pressure, waist circumference, and fasting blood glucose. *Frontiers in Physiology*, 7(14). DOI: 10.3389/fphys.2023.1212775.
23. **\*Stavres J**, Faulkner B, Haynes H, Newsome T, Dearmon M, Ladner KR, Luck JC. (2023). Additive influence of exercise pressor reflex activation on Valsalva responses in White and Black adults. *European Journal of Applied Physiology*, 123(10), 2259-2270. DOI: 10.1007/s00421-023-05240-1.
24. Oliveira N, Keating CJ, Chiu CY, **Stavres J**. (2023). Increased hip flexion as an exercise modality for individuals with obesity. *European Journal of Applied Physiology*, 123(10), 2157-2165. DOI: 10.1007/s00421-023-05227-y.

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25. †Luck JC, Sica CT, Blaha C, Cauffman A, Vesek J, Eckenrode J, & \***Stavres J.** (2023). Agreement between multiparametric MRI (PIVOT), Doppler ultrasound, and near-infrared-spectroscopy based assessments of skeletal muscle oxygenation and perfusion. *Magnetic Resonance Imaging*, 96, 27-37. DOI: 10.1016/j.mri.2022.11.003. PMCID: PMC9789193.
26. Graybeal AJ, Brandner CF, Tinsley GM, Haynes H, **Stavres J.** (2022). Associations between visceral adipose tissue estimates produced by near-infrared spectroscopy, mobile anthropometrics, and traditional body composition assessments and estimates derived from dual-energy x-ray absorptiometry. *British Journal of Nutrition*, 1-11. DOI: 10.1017/S0007114522003488.
27. †Wright A, **Stavres J**, Galloway R, Donahue P, Sha Z, McCoy S. (2022). Aortic stiffness increases during prolonged sitting independent of intermittent standing or prior exercise. *European Journal of Applied Physiology*, 123(3). DOI: 10.1007/s00421-022-05079-y.
28. \***Stavres J**, Luck JC, Hamaoka T, Blaha C, Cauffman AE, Dalton PC, Herr MD, Ruiz-Velasco V, Carr Z, Janicki P, & Cui J. (2022). A 10mg dose of amiloride increases time to failure during blood-flow-restricted plantar flexion in healthy adults without influencing blood pressure. *American Journal of Physiology- Regulatory, Integrative and Comparative Physiology*, 323(6). DOI: 10.1152/ajpregu.00190.2022.
29. **Stavres J**, Wang JL, Sica CT, Blaha C, Herr M, Pai S, Cauffman A, Vesek J, Yang QX, & Sinoway LI. (2021). Diffusion tensor imaging indices of acute muscle damage are augmented after exercise in peripheral arterial disease. *European Journal of Applied Physiology*, 121(9), 2595-2606. DOI: 10.1007/s00421-021-04711-7.
30. †Fischer SM, McDaniel J, \***Stavres J.** The cardiometabolic responses to eccentric resistance exercise are attenuated compared to load matched concentric and traditional resistance exercise. (2021). *Journal of Exercise and Nutrition*, 4(1), 1-10.
31. **Stavres J**, Luck JC, Cauffman A, Pai S, Ducrocq G, & Sinoway LI. (2020). Central and peripheral modulation of exercise pressor reflex sensitivity after non-fatiguing work. *American Journal of Physiology- Regulatory, Integrative and Comparative Physiology*, 319(5), R575-R583, DOI: 10.1152/ajpregu.00127.2020.
32. Singer TJ, **Stavres J**, Elmer SJ, Kilgas MA, Pollock BS, Kearney SG, & McDaniel J. (2020). Knee extension with blood flow restriction: Impact of cuff pressure on hemodynamics. *European Journal of Applied Physiology*, DOI: 10.1007/s0042-019-04250-2.
33. **Stavres J**, Sica CT, Blaha C, Herr M, Wang JL, Pai S, Cauffman A, Vesek J, Yang QX, Sinoway LI. (2019). The exercise pressor reflex and active O<sub>2</sub> transport in peripheral artery disease. *Physiological Reports*, 7(20). DOI: 10.1481/phy2.14243.
34. \***Stavres J**, Fischer SM, & McDaniel J. (2019). Exaggerated post exercise hypotension following concentric but not eccentric resistance exercise: Implications for metabolism. *European Journal of Sport Science*, 19(7). DOI: 10.1080/17461391.2018.1564368.



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35. Kilgas MA, McDaniel J, **Stavres J**, Pollock BS, Singer TJ, & Elmer SJ. (2019). Limb blood flow and tissue perfusion during exercise with blood flow restriction. *European Journal of Applied Physiology*, 119(2). DOI: 10.1007/s00421-018-4029-2.
36. \***Stavres J**, Singer TJ, Brochetti A, Kilbane MJ, Brose SW, & McDaniel J. (2018). The feasibility of blood flow restriction exercise in incomplete spinal cord injured patients. *Physical Medicine & Rehabilitation*, 10(12). DOI: 10.1016/j.pmrj.2018.05.013.
37. Burns K, Pollock B, **Stavres J**, Kilbane M, Brochetti A, & McDaniel J. (2018). Passive limb movement intervals results in repeated hyperemic responses in those with paraplegia. *Spinal Cord*, 56(10), 940-948. DOI: 10.1038/s41393-018-0099-6.
38. \***Stavres J**, Zeigler M, & Bayles M. (2018). Six weeks of functional resistance training increases basal metabolic rate in sedentary adult women. *The International Journal of Exercise Science*, 11(2), 32-41
39. **Stavres J**, Gerhart HD, Glickman EL, Kim JH, & Seo YS. (2017). Cerebral oxygenation and perfusion during exercise and recovery in normobaric hypoxia. *Aerospace Medicine & Human Performance*, 88(10), 911-917. DOI: 10.3357/AMHP.4830.2017.
40. Seo YS, Gerhart H, **Stavres J**, Fennel C, Draper S, & Glickman E. (2017). Normobaric hypoxia and submaximal exercise effects on running memory and mood state in women. *Aerospace Medicine & Human Performance*, 88(7), 627-632. DOI: 10.3357/AMHP.4798.2017.

### **ABSTRACTS / PRESENTATIONS** (\*denotes senior author on student presentation)

1. Parnell S, Vallecillo-Bustos A, Aultman RS, Newsome TA, Swafford SH, Compton AT, Schimpf RC, Lee C, Graybeal AJ, \***Stavres J**. (April, 2025). *Combined cold pressor test and rhythmic handgrip responses in cold pressor test hyperreactors vs. normoreactors*. 2025- American College of Sports Medicine Annual Meeting, Atlanta, GA.
2. Parnell S, Vallecillo-Bustos A, Aultman RS, Newsome TA, Swafford SH, Compton AT, Schimpf RC, Lee C, Graybeal AJ, \***Stavres J**. (April, 2025). *Peripheral vasoconstriction responses to the cold pressor test in hyperreactors*. University of Southern Mississippi Graduate Student Symposium, 2025. Hattiesburg, MS.
3. Lee C, Parnell S, Schimpf RC, Schmidt SN, Aultman RS, Brandner CF, Vallecillo-Bustos A, Newsome TA, Swafford SH, Compton AT, Graybeal AJ, \***Stavres J**. (April, 2025). *Blood pressure responses during dynamic metaboreflex activation in metabolic syndrome*. University of Southern Mississippi Drapeau Center for Undergraduate Research Symposium, 2025. Hattiesburg, MS.

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4. Schimpf RC, Parnell S, Lee C, Schmidt SN, Aultman RS, Brandner CF, Vallecillo-Bustos A, Newsome TA, Swafford SH, Compton AT, Graybeal AJ, **\*Stavres J.** (April, 2025). *Influence of adiposity on tissue oxygenation responses to exercise in individuals with vs. without metabolic syndrome.* University of Southern Mississippi Drapeau Center for Undergraduate Research Symposium, 2025. Hattiesburg, MS.
5. Bubeck MS, **\*Stavres J.** (April, 2025). *Supplementation of magnesium glycinate: Testing the acute effects of magnesium glycinate on the stress levels of college students.* University of Southern Mississippi Drapeau Center for Undergraduate Research Symposium, 2025. Hattiesburg, MS.
6. Schmidt SN, Parnell S, Schimpf R, Lee C, Aultman RA, Brandner CF, Vallecillo-Bustos A, Newsome TA, Swafford SH, Compton AT, Graybeal AJ, **\*Stavres J.** (Feb 2025). *Orthostatic blood pressure changes are not different in metabolic syndrome despite impaired cardiovagal baroreflex sensitivity.* 2025 Southeastern Chapter of the American College of Sports Medicine Annual Meeting. Greenville, SC.
7. Lee C, Parnell S, Schimpf R, Schmidt SN, Aultman RA, Brandner CF, Vallecillo-Bustos A, Newsome TA, Swafford SH, Compton AT, Graybeal AJ, **\*Stavres J.** *Dynamic assessment of metaboreflex responses in metabolic syndrome.* 2025 Southeastern Chapter of the American College of Sports Medicine Annual Meeting. Greenville, SC.
8. **Stavres J,** Newsome TA, Aultman RA, Vallecillo-Bustos A, Brandner CF, Swafford SH, Compton AT, Graybeal AJ. (Feb 2025). *Resting autonomic function evaluated across a continuum of metabolic syndrome severity: A matched group comparison.* Southern Regional Meeting 2025, New Orleans, LA.
9. Compton AT, Swafford SH, Aultman RS, Brandner CF, Vallecillo-Bustos A, Newsome TA, **Stavres J,** Graybeal AJ. (Oct 2024). *Oral ketone ester supplementation improves working memory in adults independent of metabolic health status: A single-blind, placebo-controlled, matched-pairs, randomized crossover study.* FNCE Annual Meeting, Minneapolis, MN.
10. Swafford SH, Compton AT, **Stavres J,** Graybeal AJ. (Oct 2024). *Total, relative, and added sugar intakes are positively associated with depression, poor mental health, and mental health medication use in female, but not male, young adults.* FNCE Annual Meeting, Minneapolis, MN.
11. Aultman RS, Vallecillo-Bustos A, Newsome TA, Brandner CF, Graybeal AJ, **\*Stavres J.** (May 2024). *Exercise pressor responses but not cold pressor responses are influenced by fat-free mass.* Poster Presentation- 2024 American College of Sports Medicine Annual Meeting, Boston, MA.

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12. Vallecillo-Bustos A, Aultman RS, Newsome TA, Brandner CF, Graybeal AJ, **\*Stavres J.** (May 2024). *Hemodynamic responses to the cold pressor test in individuals with metabolic syndrome.* Poster Presentation- 2024 American College of Sports Medicine Annual Meeting, Boston, MA.
13. **Stavres J,** Aultman RS, Brandner CF, Vallecillo-Bustos A, Swafford S, Compton AT, Graybeal AJ. (May 2024). *The influence of exogenous ketosis on exercise pressor responses and cardiovagal baroreflex sensitivity in metabolic syndrome.* 2024 American College of Sports Medicine Annual Meeting, Boston, MA.
14. Parnell S, **\*Stavres J.** (April 2024). *Impact of training volume on female athlete triad risk score for female collegiate track and field athletes.* 2024 University of Southern Mississippi Undergraduate Symposium on Research and Creative Activity, Hattiesburg, MS.
15. Walker B, Aultman RS, Vallecillo-Bustos A, Newsome TA, Brandner CF, Compton AT, Swafford S, Graybeal AJ, **\*Stavres J.** (April 2024). *Influence of body position on blood pressure in metabolic syndrome.* 2024 University of Southern Mississippi Undergraduate Symposium on Research and Creative Activity, Hattiesburg, MS.
16. Vallecillo-Bustos A, Aultman RS, Newsome TA, Brandner CF, Graybeal AJ, **\*Stavres J.** (April 2024). *Hemodynamic responses to the cold pressor test in individuals with metabolic syndrome.* 2024 University of Southern Mississippi Graduate Research Symposium, Hattiesburg, MS.
17. Aultman RS, Vallecillo-Bustos A, Newsome TA, Brandner CF, Graybeal AJ, **\*Stavres J.** (April 2024). *Exercise pressor responses but not cold pressor responses are influenced by fat-free mass.* Poster Presentation- 2024 University of Southern Mississippi Graduate Research Symposium, Hattiesburg, MS.
18. Newsome TA, Aultman RS, Vallecillo-Bustos A, Compton AT, Safford S, Graybeal AJ, **\*Stavres J.** (April 2024). *The assessment of autonomic function in young adults with an elevated risk of metabolic syndrome.* Oral Presentation- 2024 University of Southern Mississippi Graduate Research Symposium, Hattiesburg, MS.
19. Compton AT, Swafford SH, **Stavres J,** Graybeal AJ. (April 2024). *Associations between metabolic syndrome severity and dietary intake in a multi-ethnic sample of young adults.* Mississippi Academy of Nutrition and Dietetics Annual Conference, Hattiesburg, MS.
20. Swafford SH, Compton AT, **Stavres J,** Graybeal AJ. (April 2024). *Vitamin D and calcium intake from dairy consumption are associated with reduced sleep disturbance, better sleep quality, and lower reliance on sleep-specific substances in young adults.* Mississippi Academy of Nutrition and Dietetics Annual Conference, Hattiesburg, MS.

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21. **Stavres J**, Aultman RS, Brandner CF, Vallecillo-Bustos A, Newsome TA, Swafford S, Compton A, Graybeal AJ. (Feb 2024). *Influence of exogenous ketosis on exercise pressor responses and cardiovascular baroreflex sensitivity in metabolic syndrome*. Oral Presentation- 2024 Southeastern Chapter of the American College of Sports Medicine Annual Meeting, Greenville, SC.
22. Newsome TA, Aultman RS, Brandner CF, Vallecillo-Bustos A, Graybeal AJ, **\*Stavres J**. (Feb 2024). *Influence of hypertension, hyperglycemia, and obesity on metabolic syndrome related impairments in cardiovascular baroreflex sensitivity*. Oral Presentation- 2024 Southeastern Chapter of the American College of Sports Medicine Annual Meeting, Greenville, SC.
23. Aultman RS, Vallecillo-Bustos A, Newsome TA, Brandner CF, Graybeal AJ, **\*Stavres J**. (Feb 2024). *Exercise pressor responses but not cold pressor responses are influenced by fat-free mass*. Oral Presentation- 2024 Southeastern Chapter of the American College of Sports Medicine Annual Meeting, Greenville, SC.
24. Vallecillo-Bustos A, Aultman RS, Newsome TA, Brandner CF, Graybeal AJ, **\*Stavres J**. (Feb 2024). *Hemodynamic responses to the cold pressor test in individuals with metabolic syndrome*. Oral Presentation- 2024 Southeastern Chapter of the American College of Sports Medicine Annual Meeting, Greenville, SC.
25. **Stavres J**, Aultman RA, Brandner CF, Vallecillo-Bustos A, Henderson A, Wise HL, Newsome TA, Stanfield D, Graybeal AJ. (Oct 2023). *The contribution of fat-free mass to the regulation of exercise pressor responses in individuals with obesity*. Poster- 2023 Obesity Week Conference, Dallas, TX.
26. Graybeal AJ, Brandner CF, Aultman RA, Henderson A, Wise HL, Vallecillo-Bustos A, Newsome TA, Stanfield D, **Stavres J**. (Oct 2023). *Oral ketone esters suppress appetite in adults with metabolic syndrome: A randomized crossover trial*. Poster- 2023 Obesity Week Conference, Dallas, TX.
27. Stanfield D, Aultman RA, Newsome TA, Brandner C, Vallecillo-Bustos A, Wise HL, Henderson A, Graybeal AJ, **\*Stavres J**. (April 2023). *Oral glucose tolerance is significantly correlated to the sensitivity of blood pressure responses to muscular contractions, but not cold pressor activation*. (April 2023). Poster- 2023 USM Undergraduate Symposium on Research & Creative Activity, Hattiesburg, MS.
28. Vallecillo-Bustos A, Aultman RA, Newsome TA, Brandner C, Stanfield D, Wise HL, Henderson A, Graybeal AJ, **\*Stavres J**. (April 2023). *Influence of metabolic syndrome on resting cardiac autonomic tone: Evidence from heart rate variability and baroreflex sensitivity*. Poster- 2023 USM Undergraduate Symposium on Research & Creative Activity, Hattiesburg, MS.

## *Curriculum Vitae*

29. Faulkner B, Dearmon M, Ladner RL, Newsome TA, Aultman RA, \***Stavres J.** (Feb 2023). *Combined influence of posture and isometric handgrip on phase IIa responses to the Valsalva maneuver.* Poster- Southeastern Chapter of the American College of Sports Medicine Annual Meeting, Greenville, SC.
30. Newsome TA, Dearmon M, Ladner RL, Faulkner B, Aultman RA, \***Stavres J.** (Feb 2023). *Influence of isometric handgrip and body position on baroreflex sensitivity in Black and White adults.* Poster- Southeastern Chapter of the American College of Sports Medicine Annual Meeting, Greenville, SC.
31. Aultman RA, Dearmon M, Ladner RL, Faulkner B, Newsome TA, \***Stavres J.** (Feb 2023). *Influence of body position on Valsalva responses in young Black and African American adults.* Poster- Southeastern Chapter of the American College of Sports Medicine Annual Meeting, Greenville, SC.
32. **Stavres J,** Luck JC, Hamaoka T, Blaha C, Cauffman A, Herr M, Sarraf E, Farrag M, Janicki P, Sinoway LI, Ruiz-Velasco V, Cui J. (April 2022). *The effect of amiloride (10mg) on the blood pressure response to ischemic exercise: Preliminary observations.* Poster- Experimental Biology, Philadelphia, PA.
33. **Stavres J,** Sica CT, Blaha C, Cauffman A, Luck JC, Pai S, Wang JL, Vesek J, & Sinoway LI. (April 2021). *Agreement between MRI and NIRS based assessments of skeletal muscle oxygenation during reactive hyperemia.* Poster- Experimental Biology, virtual conference.
34. **Stavres J,** Wang J, Sica CT, Blaha C, Herr M, Pai S, Cauffman A, Vesek J, Luck JC, Yang QX, & Sinoway LI. *Acute muscle damage is augmented after exercise in PAD patients: Evidence from diffusion tensor imaging.* Abstract accepted for poster presentation at 2020 American College of Sports Medicine Annual Meeting in San Francisco, California. \*Meeting cancelled due to COVID-19 pandemic.
35. **Stavres J,** Sica CT, Blaha C, Herr M, Cauffman A, Pai S, Kim JK, Wang J, Yang QX, & Sinoway, LI. (April 2019). *Impaired post-occlusive reoxygenation and reperfusion in the lower legs of PAD patients.* Poster-Experimental Biology, Orlando, FL.
36. **Stavres J,** Sica CT, Blaha C, Herr M, Cauffman A, Pai S, Kim JK, Wang J, Yang QX, & Sinoway, LI. (April 2019). *Accelerated early oxygen kinetics in the medial gastrocnemius of PAD patients during light-intensity plantar flexion.* Poster-Experimental Biology, Orlando, FL.
37. **Stavres J,** Singer TJ, Kilbane M, Brochetti A, Brose S, & McDaniel J. (May 2018). *The feasibility of blood flow restriction exercise for individuals with incomplete spinal cord injuries.* Poster- Cleveland VA Medical Center Research Week, Cleveland, OH.
38. **Stavres J,** Singer TJ, & McDaniel J. (Nov 2017). *Effect of continuous BFR exercise on tissue oxygenation characteristics in incomplete spinal cord injured patients.* Oral-American College of Sports Medicine Mid-Atlantic Regional Chapter Annual Meeting, Harrisburg, PA.

## *Curriculum Vitae*

39. **Stavres J**, Fischer S, & McDaniel J. (June 2017). *Post exercise hypotension and blood flow characteristics following eccentric and concentric exercise*. Poster-American College of Sports Medicine Annual Meeting, Denver, CO.
40. **Stavres J**, Fischer S, & McDaniel J. (April 2017). *Post exercise hypotension and blood flow characteristics following eccentric and concentric exercise*. Poster-Kent State University Graduate Student Symposium, Kent, OH.
41. **Stavres J**, Fischer S, & McDaniel J. (Nov 2016). *Post exercise hypotension and blood flow characteristics between eccentric and concentric exercise*. Poster-American College of Sports Medicine Mid-West Regional Chapter Annual Meeting, Fort Wayne, IN.
42. **Stavres J**, Gerhart H, Seo YS, Draper S, & Glickman E. (June 2016). *The relationship between cerebral blood flow characteristics and mathematical processing in normoxia and normobaric hypoxia*. Poster-American College of Sports Medicine Annual Meeting, Boston, MA.
43. **Stavres J**, Gerhart H, Draper S, Seo YS, & Glickman E. (April 2016). *Predictors of mathematical performance in normoxia and normobaric hypoxia*. Poster-31st Annual Graduate Student Symposium, Kent State University, Kent, OH.
44. **Stavres J**, Fischer S, Wisniewski J, & McDaniel J. (April 2016). *Post exercise hypotension and blood flow characteristics between eccentric and concentric exercise*. Oral-North East Ohio Exercise Science Conference, Cleveland State University, Cleveland, OH.
45. **Stavres J**, Pollock B, Burns K, Boka K, & McDaniel J. (Nov 2015). *Comparing cardiovascular responses between upper and lower body negative pressure stimulation*. Poster-American College of Sports Medicine, Mid-West Regional Chapter Annual Meeting, Fort Wayne, IN.
46. **Stavres J**, Zeigler M, Alman R, Sloniger M, & Bayles M. (June 2015). *The effect of resistance training on the resting metabolic rates of apparently healthy adult women*. Poster-American College of Sports Medicine Annual Meeting, San Diego, CA.
47. **Stavres J**, Pollock B, Burns K, Boka K, & McDaniel J. (April 2015). *The effect of lower body negative pressure on cardiovascular variables during handgrip exercise*. Oral-North East Ohio Exercise Science Conference, Youngstown State University, Youngstown, OH.
48. **Stavres J**, Zeigler M, Alman R, Sloniger M, & Bayles M. (Nov 2014). *The effect of functional resistance training on the resting metabolic rates of apparently healthy adult women*. Oral-American College of Sports Medicine, Mid Atlantic Regional Chapter Annual Meeting, Harrisburg, PA.

## **INVITED TALKS**

1. *Implications of Exaggerated Metaboreflex Responses in Metabolic Syndrome*. (June, 2025). Oral Presentation- **Mississippi Center for Clinical and Translational Research (MCCTR) Seminar**, Jackson, MS (virtual).

## *Curriculum Vitae*

2. *Expanding on the evaluation of metabolic syndrome risk among young adults in Mississippi.* (June 2024). Panel Presentation- **Mississippi Health Disparities Conference 2024**, Biloxi, MS.
3. *The contribution of fat-free mass to exercise pressor reflex sensitivity in individuals with obesity.* (Oct 2023). Early Career Lightning Talk, **Obesity Week Annual Meeting 2023**, Dallas TX.
4. *Seeing the forest through the trees: Addressing Autonomic Dysfunction and Metabolic Syndrome in Mississippi.* (Oct 2023). Physiology Seminar, **Wayne State University Dept. of Physiology**, Detroit, MI.
5. *The application of MRI in cardiovascular physiology: Research methods in clinical populations.* (March 2019). Joint talk with Dani Kim, PhD and Marcos Kuroki, MD-PhD. Noll Seminar, **Penn State University Dept. of Kinesiology**, State College, PA.

**MENTORSHIP EXPERIENCE** (\*DCUR Eagle SPUR recipient, † Grad student hall of fame inductee, # Outstanding undergraduate / graduate student award recipient, ‡ Scholar Athlete of the Year Awardee)

Student Name	Institution	Degree	Role	Project Focus / Project Title
<b>Mordred Weathers</b>	USM	UG	Mentor	<i>Cardiovascular Dysfunction in Metabolic Syndrome</i>
<b>Rhett Schimpf‡</b>	USM	UG	Mentor / Supervisor	<i>Cardiovascular Dysfunction in Metabolic Syndrome</i>
<b>Sarah Parnell*#‡</b>	USM	UG / MS	Mentor / Honors Thesis Adviser / MS Thesis Chair	<i>Impact of Training Volume on Female Athlete Triad Risk Score for Female Collegiate Track and Field Athletes</i>
<b>Sophia Schmidt*</b>	USM	UG	Mentor / Honors Thesis Adviser	<i>Influence of Sugar-Containing vs. Non-Nutritive Sweetener Containing Energy Drink Consumption on Autonomic Function during Rest and Exercise</i>
<b>Carstell Lee</b>	USM	UG	Mentor / Honors Thesis Adviser	<i>Skeletal Muscle Oxygenation as a Practical Measure of Muscular Fitness</i>
<b>Meagan Bubeck*</b>	USM	UG	Mentor / Honors Thesis Adviser	<i>Supplementation of Magnesium Citrate: Testing the Acute Effects of Magnesium Citrate on the Stress Levels of College Students</i>
<b>Anabelle Vallecillo-Bustos</b>	USM	UG MS	Mentor	<i>Cardiovascular Dysfunction in Metabolic Syndrome   Use of NIRS in Research</i>
<b>Ryan Aultman†</b>	USM	UG MS	Mentor / MS Thesis Chair	<i>Evaluation of Peripheral Vascular Dysfunction in Young Adults with Increased Cardiometabolic Disease Risk</i>
<b>Ta'Quoris Newsome</b>	USM	MS	Mentor / MS Thesis Chair	<i>Evaluation of Autonomic Dysfunction in Young Adults with Increased Cardiometabolic Disease Risk</i>

## *Curriculum Vitae*

<b>Caleb Brandner#</b>	USM	MS	MS Thesis Committee Member	<i>Predictive Ability of a 3D Body Scanning Mobile Application for Metabolic Health Risk</i>
<b>Diavion Stanfield</b>	USM	UG	Internship Mentor	<i>Cardiovascular Dysfunction in Metabolic Syndrome</i>
<b>Havens Lane Wise</b>	USM	UG	Internship Mentor	<i>Cardiovascular Dysfunction in Metabolic Syndrome</i>
<b>Boluwatife Faremi</b>	USM	MS	MS Thesis Committee Member	<i>Characterization and Estimation of Muscle Pain Using Machine Learning</i>
<b>Marshall Dearmon</b>	USM	MS	Mentor	<i>Sympathetic Control of Blood Pressure and Blood Flow in Humans</i>
<b>Claire Holden</b>	PSU/HVI	UG	Internship Mentor	<i>Oxygen kinetics in the lower legs of PAD patients during reactive hyperemia: Preliminary data</i>
<b>John Eckenrode</b>	PSU/HVI	UG	Internship Mentor	<i>MRI Assessment of Muscle Perfusion</i>

## **REVIEWER**

### ***Journals***

- Journal of Physiology
- Hypertension
- Journal of Human Hypertension
- Experimental Physiology
- Frontiers in Medicine
- Frontiers in Nutrition
- Research Directs in Health Sciences
- Preventative Medicine Reports
- Scientific Reports
- European Journal of Applied Physiology
- BMC Musculoskeletal Disorders
- Journal of Clinical Medicine
- Physiological Reports
- Journal of Functional Morphology and Kinesiology
- Life
- Applied Sciences
- Research Quarterly for Exercise and Sport
- Journal of Spinal Cord Medicine
- Scandinavian Journal of Medicine and Science in Sports
- International Journal of Exercise Science
- American Journal of Physiology- Heart and Circulatory Physiology (with L.I. Sinoway)
- Journal of Applied Physiology (with J. McDaniel and L.I. Sinoway)
- Sports Medicine (with J. McDaniel)



## *Curriculum Vitae*

### **Grants**

- NIH | Mississippi INBRE Program Development Grant- March 2022

### **AWARDS**

- University of Southern Mississippi Athletics Faculty Member of the Year, 2024-2025
- Aubrey Keith and Ella Gin Lucas Endowment for Faculty Excellence- University of Southern Mississippi, 2022
- Outstanding Graduate Presentation - Northeast Ohio Exercise Science Conference, 2016
- Most Outstanding Presentation- Session 10, 32<sup>nd</sup> Annual Kent State Graduate Student Symposium, 2017

### **PROFESSIONAL MEMBERSHIP**

- American Physiological Society (APS)- Professional Member
- American Heart Association- Professional Member
- American College of Sports Medicine- National Member
- American College of Sports Medicine- Regional Member

### **SERVICE TO UNIVERSITY**

- University of Southern Mississippi Faculty Search Committee- Member (#7138)
- University of Southern Mississippi Institutional Review Board- Member (2022- present)
- University of Southern Mississippi School of Kinesiology and Nutrition Journal Club Organizer (2021-present)
- School of Kinesiology and Nutrition CORE Speaker Series- Chair / Organizer (2021-present)
- University of Southern Mississippi Faculty Search Committee- Member (2022-present; #765)
- School of Kinesiology and Nutrition Student Awards Committee- Member (2021-2022)
- University of Southern Mississippi Graduate School, Center for Faculty Development Workshop Facilitator- *Mentoring: Promoting Professional Development*

### **PROFESSIONAL DEVELOPMENT AND TEACHER EDUCATION**

- Mississippi Center for Clinical and Translational Research Mentoring Academy
- CIMER Mentor Training Workshop: “*Optimizing Mentoring Relationships*”
- USM Graduate School Workshop: “*Effective Graduate Student Mentorship Lunch and Learn Workshop*”
- Quality Matters Training for Online Course Delivery

### **MEDIA APPERANCES**

- USM News / Talon Magazine article- *NIH Awards \$800K to USM Faculty Studying Cardiometabolic Diseases*. Nov 2023.
- MCCTR Newsletter Vol 3 Issue 1- *MCCTR Investigator Spotlight: Pilot Projects Program Investigators*. Feb 2025.