

# STEPHEN JORDAN CARTER, Ph.D., ACSM-CPT

Postdoctoral Fellow  
Department of Nutrition Sciences  
Cancer Prevention and Control Training Program  
University of Alabama at Birmingham  
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[PubMed Listing](#)

## EDUCATION

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**Doctor of Philosophy**, Human Performance, The University of Alabama, May 2014

**Concentration:** Exercise/Cardiovascular Physiology

**Dissertation:** Oral Ingestion of Acetylsalicylic Acid on Skin Blood Flow and Local Sweat Rate during Heat Stress

Chair: Phillip A. Bishop, EdD

**Master of Science**, Exercise Science, Central Washington University, June 2010

**Concentration:** Exercise Physiology

Advisor: Vincent M. Nethery, PhD

**Bachelor of Arts**, Exercise Science, Willamette University, May 2006

**Senior Thesis:** Incidence of Hamstring Strain and the Role of Postural Deviations

Advisor: Peter A. Harmer, PhD

## CURRENT FUNDING

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- UAB Palliative Research Enhancement Project, an RCT pilot/feasibility investigation focused on enhancing cardio-metabolic health among a cohort of breast cancer survivors with limited mobility. Participants are exposed to 8 weeks (3x/week) of supervised exercise training under either normoxic or hypoxic conditions.
  - ClinicalTrials.gov Identifier: [NCT03029182](#)

## RESEARCH INTERESTS

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- Cardiovascular health and immune function from breast cancer diagnosis through survivorship
- Therapeutic utility of hypoxia- and/or heat-therapy as an adjunct of exercise to optimize physiologic adaptation in clinical populations (e.g., obesity, cancer, SCI)
- Health disparities among African American and European American women

## PROFESSIONAL EXPERIENCE

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2015 – present

Postdoctoral Fellow, Department of Nutrition Sciences, Cancer Prevention and Control Training Program, University of Alabama at Birmingham,  
Mentor(s): [Laura Q. Rogers, MD, MPH](#) and [Lyse A. Norian, PhD](#)

- Conducted an investigation aimed at determining the specific mechanisms whereby exercise-training mediates improvements in the perception of fatigue during activities of daily-living in breast cancer survivors
- Competency in measures of arterial stiffness, heart rate variability, accelerometry, serum/plasma processing, multivariate analyses/mediation

- 2014 – 2015: Postdoctoral Fellow, Department of Human Studies, Nutrition Obesity Research Center, University of Alabama at Birmingham, Mentor: [Gary R. Hunter, PhD](#)
- Contributed to an investigation testing the effects of high-intensity interval exercise on resting energy expenditure, insulin sensitivity, and blood pressure.
  - Co-taught graduate courses in exercise physiology
- 2011 – 2014: Graduate Teaching Assistant, Department of Kinesiology, College of Education, The University of Alabama
- Instructor of record for multiple lecture and activity courses
  - Competency in measures of laser-Doppler flowmetry, intra-dermal microdialysis, sweat rate sensitivity, whole-body passive heating, thermal microenvironment
- 2010 – 2011: ACSM Certified Personal Trainer, University Recreation Center, The University of Alabama
- Led individual/group personal training sessions including special populations (e.g., older adults, SCI)
  - Instruction competency in free weights, circuit training, and plyometrics
- 2007 – 2009: Graduate Teaching Assistant, Department of Nutrition, Exercise and Health Sciences, College of Education and Professional Studies, Central Washington University
- Instructor of record for multiple activity courses
  - Competency in measures using indirect calorimetry at rest and during graded exercise testing, anaerobic capacity, and lactate threshold assessment

## **GRANT SUPPORT/PROPOSAL**

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- [In review] NIDDK P30DK056336 (Principal Investigator: Timothy R. Nagy)  
 Research Supplement to Promote Diversity in Health-related Research (Role: supplement candidate)  
 “Optimizing Cardio-Metabolic Health among African American Women with Hypoxic-Exercise Training: Randomized Pilot”  
Summary: a mentored experience to perform a hypoxic-exercise training intervention for the purpose of alleviating cardio-metabolic burdens among obese African American women. Emphasis is placed on characterizing the role of the nitrate-nitrite-NO pathway to support blood pressure regulation.
- 2015 – present UAB Center for Palliative Research and Supportive Care  
 Palliative Research Enhancement Project (PREP) (Role: Principal Investigator)  
 “Simulated-altitude as an adjunct to Optimize Aerobic Exercise in Obese Breast Cancer Survivors with Limited Ambulatory Function: Pilot Randomized Trial”  
Summary: evaluating the utility of hypoxic-exercise training to improve cardiovascular and metabolic health among breast cancer survivors with limited walking mobility.
- 2015 – present NCI R25CA047888 (Co-principal Investigators: Wendy Demark-Wahnefried and Karen M. Meneses)  
 Cancer Prevention and Control Training Program (Role: Postdoctoral Trainee)  
Summary: an interdisciplinary/team-based approach to foster the development of young researchers who have made a commitment to cancer prevention and control. Emphasis is placed on trainees gaining research competency and grant writing for the purpose of successfully launching an independent research career.
- 2014 – 2015 NIDDK T32DK062710 (Principal Investigator: David B. Allison)  
 UAB Nutrition Obesity Training Program (Role: Postdoctoral Trainee)  
Summary: university-wide interdisciplinary research center established to foster a multi-faceted approach to basic, clinical, and translational research. Particular emphasis is placed on understanding the causal factors underlying nutrition and obesity-related health problems.

- 2013 American College of Sports Medicine Predoctoral Student Research Grant  
 “Altered Skin Blood Flow and Heat Tolerance in Type 2 Diabetics” (Role: graduate student trainee)  
Summary: training study to apply the use of intermittent whole-body passive heat stress to support microvascular health and glucose control among individuals with type 2 diabetes (not funded).
- 2012 – 2013 UA Graduate Student Research Supplement  
 The Graduate School and Department of Kinesiology, The University of Alabama  
Summary: supplemental award to support graduate student research and professional development.

## **HONORS & AWARDS**

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- 2016 [Most Esteemed Postdoc Award](#), competitive honor among ≈250 postdoctoral scholars, awarded for publication/presentation productivity, University of Alabama at Birmingham
- 2015 [New Investigator Award](#), Environmental and Exercise Physiology Section, American Physiological Society, presented at Experimental Biology Conference, Boston, MA
- 2014 Poster Award, Center for Exercise Medicine Second Annual Symposium, University of Alabama at Birmingham, “Racial Differences in Erythropoietin and Hemoglobin Before and After Weight Loss in Women”
- 2014 Creativity is a Decision Award, Nutrition Obesity Research Center, University of Alabama at Birmingham, “Out of Thin Air: An Obesity Intervention through Hypoxic Inducible Factor Activation”
- 2014 Outstanding Doctoral Research Award, College of Education, The University of Alabama
- 2013 Finalist (top 15) Inaugural 3MT Competition, The University of Alabama, “Influence of Aspirin on Temperature Regulation in Humans”
- 2011 – 2014 Travel Award(s), The Graduate School and Department of Kinesiology, The University of Alabama

## **TEACHING EXPERIENCE**

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### **University of Alabama at Birmingham, College of Education, Department of Human Studies**

- KIN 638: Physiology of Exercise II (*co-taught; graduate-level*)
  - ✧ *Adept in altitude physiology, clinical exercise physiology, microgravity and temperature regulation*
- KIN 637: Physiology of Exercise I (*co-taught; graduate level*)
  - ✧ *Adept in cardiovascular physiology, pulmonary physiology, acid-base balance, bioenergetics*

### **The University of Alabama, College of Education, Department of Kinesiology**

- KIN 492: Physiology of Exercise Laboratory Component
- KIN 352: Psychology of Coaching
- KIN 199: Ecological Approach to Health and Wellness
- KIN 167: Running
- KIN 157: Beginning Weight Training
- KIN 103: Soccer
- KIN 101: Physical Conditioning

**Central Washington University, College of Education and Professional Studies, Department of Nutrition, Exercise and Health Studies**

- EXSC 351L: Human Physiology Laboratory Component (*co-taught*)
- EXSC 350L: Gross Anatomy Laboratory Component (*co-taught*)
- PEF 128: Gluteal and Abdominal Training
- PEF 115: Jogging
- PEF 112: Ski Conditioning
- PEAQ 114: Swim Conditioning
- PEAQ 113: Advanced Swimming

**PEER-REVIEWED PUBLICATIONS**

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1. Hunter GR, Bryan DR, Borges JH, **Carter SJ**. Racial differences in relative skeletal muscle mass loss during diet induced weight loss. *Obesity*. (*in review*)
2. **Carter SJ**, Bryan DR, Neumeier WH, Glasser SP, Hunter GR. Serum tumor necrosis factor-alpha associates with myocardial oxygen demand and exercise tolerance in postmenopausal women. *International Journal of Exercise Science*. 2018. 11(2): 42-54. <https://digitalcommons.wku.edu/ijes/vol11/iss2/3>.
3. **Carter SJ**, Hunter GR, Norian LA, Turan B, Rogers LQ. Ease of walking associates with greater free-living physical activity and reduced depressive symptomology in breast cancer survivors: pilot randomized trial. *Supportive Care in Cancer*. 2017. December 14. [Epub ahead of print]. PMID: 29243165.
4. Hunter GR, Moellering DR, **Carter SJ**, Gower BA, Bamman MM, Hornbuckle LM, Plaisance EP, Fisher G. Potential causes of elevated REE following high-intensity interval exercise. *Medicine & Science in Sports & Exercise*. 2017. July 21. [Epub ahead of print]. PMID: 28737531.
5. Hunter GR, Plaisance EP, **Carter SJ**, Fisher G. Why high intensity is Not a Bad Word: Response to Gentil et al. letter. *Clinical Nutrition*. 2017. May 31. [Epub ahead of print]. PMID: 28602466.
6. **Carter SJ**, Plaisance EP, Fisher G, Fernandez JR, Gower BA, Hunter GR. Alterations in hemoglobin and serum 25-hydroxyvitamin D are related before and after weight loss independent of African admixture. *International Journal of Sport Nutrition and Exercise Metabolism*. 2017. 27(1): 59-66. PMID: 27203820.
7. Paulsen JA, Ptacek TS, **Carter SJ**, Morrow CD, Liu N, Kumar R, Hyndman L, Lefkowitz EJ, Rogers LQ. Gut microbiota composition associated with alterations in cardiorespiratory fitness and psychosocial outcomes among breast cancer survivors. *Supportive Care in Cancer*. 2017. 25(5): 1563-1570. PMID: 28064384.
8. Hunter GR, Plaisance EP, **Carter SJ**, Fisher G. Why Intensity is not a Bad Word: Optimizing Health Status at any Age. *Clinical Nutrition*. 2017. February 9. [Epub ahead of print]. PMID: 28214041.
9. **Carter SJ**, Herron RL, Rogers LQ, Hunter GR. Is "high-intensity" a bad word? *Journal of Physiotherapy*. 2016. 62(3): 175. PMID: 27320829.
10. Rogers LQ, Courneya KS, **Carter SJ**, Anton PM, Verhulst S, Vicari SK, Robbs RS, McAuley E. Effects of a multicomponent physical activity behavior change intervention on breast cancer survivor health status outcomes in a randomized controlled trial. *Breast Cancer Research and Treatment*. 2016. 159(2): 283-291. PMID: 27539586.
11. **Carter SJ**, Hunter GR, McAuley E, Courneya KS, Anton PM, Rogers LQ. Lower rate-pressure product during submaximal walking: a link to fatigue improvement following a physical activity intervention among breast cancer survivors. *Journal of Cancer Survivorship*. 2016. 10(5): 927-934. PMID: 27061740.

12. **Carter SJ**, Goldsby TU, Fisher G, Plaisance EP, Gower BA, Glasser SP, Hunter GR. Systolic blood pressure response after high-intensity interval exercise is independently related to decreased small arterial elasticity in normotensive African American women. *Applied Physiology, Nutrition, and Metabolism*. 2016. 41(5): 484-490. PMID: 26953821.
13. Hunter GR, Fisher G, Neumeier WH, **Carter SJ**, Plaisance EP. Exercise training and energy expenditure following weight loss. *Medicine & Science in Sports & Exercise*. 2015. 47(9): 1950-1957. PMID: 25606816.
14. **Carter SJ**. Into “thinner” air: A novel strategy to improve clinical outcomes and support weight loss? *Journal of Obesity and Weight Loss Therapy*. 2015. 5(5): e118. <http://dx.doi.org/10.4172/2165-7904.1000e118>.
15. **Carter SJ**, Herron RL, Akers SZ, Bishop PA. Acetylsalicylic acid does not alter thermo-effector responses during mild, whole-body passive heat stress in young men. *International Journal of Hyperthermia*. 2015. 31(4): 319-324. PMID: 25697227.
16. Hunter GR, McCarthy JP, **Carter SJ**, Bamman MM, Gaddy ES, Fisher G, Katsoulis K, Plaisance EP, Newcomer BR. Muscle fiber type, Achilles tendon length, potentiation, and running economy. *Journal of Strength and Conditioning Research*. 2015. 29(5): 1302-1309. PMID: 25719915.
17. Zhang Y, **Carter SJ**, Schumaker RE, Negggers YH, Curtner-Smith MD, Richardson MT, Green JM, Bishop PA. Effect of caffeine on fluid balance during exercise-heat stress and recovery. *South African Journal of Sports Medicine*. 2014. 26(2): 43-47. <http://dx.doi.org/10.7196/SAJSM.513>.
18. Esco MR, Herron RL, **Carter SJ**, Flatt AA. Association of body composition and aerobic fitness on heart rate variability and recovery in Black men. *International Journal of Clinical Medicine*. 2013. 4: 532-538. <http://dx.doi.org/10.4236/ijcm.2013.412092>.
19. Del Pozzi AT, **Carter SJ**, Collins AB, Hodges GJ. Regional differences in the contribution of nitric oxide synthase to skin blood flow at forearm and lower leg sites. *Microvascular Research*. 2013. 90: 106-111. PMID: 24513281.
20. **Carter SJ**, Hodges GJ. Sensory and sympathetic nerve contributions during cutaneous vasodilator responses from a noxious stimulus. *Experimental Physiology*. 2011. 96(11): 1208-1217. PMID: 21890519.

## **MANUSCRIPTS IN PREPARATION**

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1. **Carter SJ**, Blackston JW, Hunter GR, Liu N, Lefkowitz EJ, Morrow CD, Rogers LR. Peak aerobic capacity in non-metastatic breast cancer survivors associates with intestinal microbial diversity independent of adiposity and free-living energy expenditure. *Medicine & Science in Sports & Exercise*.
2. Borges JH, **Carter SJ**, Bryan DR, Hunter GR. Diet-induced weight loss with and without exercise training does not differentially reduce intra-abdominal adipose tissue or cardiovascular disease risk. *Obesity*.
3. **Carter SJ**, Rogers LQ, Patel AH, Norian LN, Hunter GR. Free-living energy expenditure and hemodynamic responses during acute exercise: comparative analyses among obese and non-obese breast cancer survivors. *Supportive Care in Cancer*.
4. Neumeier WH, Goodner E, **Carter SJ**, Biasini F, Dhurandhar EJ, Meneer KS, Turan B, Pybus G, Hunter GR. Physiological determinants predictive of changes in energy intake following mental work. *Appetite*.

## BOOK CHAPTERS

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1. Rogers, L. Q., **Carter, S. J.**, Williams, G., and Courneya, K. S. Physical Activity: Benefits, Behavior Change, and Recommendations. In M. Feuerstein (Ed.), *Handbook of Cancer Survivorship, 2<sup>nd</sup> Edition*. Champaign, IL: Human Kinetics.

## PROFESSIONAL ABSTRACTS

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1. **Carter SJ**, Rogers LQ, Bowles HR, Hunter GR. Muscle-tendon elasticity: friend or foe when measuring activity-related energy expenditure following exercise training. [Abstract]. American College of Sports Medicine Annual Meeting, Minneapolis, MN. June 2018. (*submitted*).
2. Borges JH, **Carter SJ**, Bryan DR, Hunter GR. Exercise training, fat distribution and weight loss. [Abstract]. Southeast Chapter of the American College of Sports Medicine Regional Meeting, Chattanooga, TN. February 2018. (*accepted*).
3. **Carter SJ**, Bryan DR, Neumeier WH, Glasser SP, Hunter GR. Tumor necrosis factor-alpha adversely influences myocardial oxygen demand and exercise tolerance in postmenopausal women. [Abstract]. American College of Sports Medicine Annual Meeting, Denver, CO. June 2017.
4. Hornbuckle LM, Gower BA, **Carter SJ**, Hunter GR. Long-term effects on cardiovascular disease risk factors after weight loss in overweight women. [Abstract]. American College of Sports Medicine Annual Meeting, Denver, CO. June 2017.
5. Paulsen JA, Ptacek TS, **Carter SJ**, Morrow CD, Liu N, Kumar R, Hyndman L, Lefkowitz EJ, Rogers LQ. Gut microbial composition associated with cardiorespiratory fitness, psychological factor changes among breast cancer survivors. [Abstract]. Society of Behavioral Medicine Annual Meeting & Scientific Sessions, San Diego, CA. April 2017.
6. **Carter SJ**, Hunter GR, McAuley E, Courneya, KS, Anton PM, Rogers LQ. Lower rate-pressure product during submaximal walking: a link to fatigue improvement following a physical activity intervention among breast cancer survivors. [Abstract]. American College of Sports Medicine Annual Meeting, Boston, MA. June 2016; 48:5.
7. Leatherwood MD, Herron RL, **Carter SJ**. Resting measures of cardiovascular autonomic control are not influenced by energy drink ingestion or postural changes in health adults. [Abstract]. Experimental Biology Meeting, San Diego, CA. The FASEB Journal, April 2016; 30(1): LB612.
8. **Carter SJ**, Goldsby TU, Fisher G, Plaisance EP, Gower BA, Glasser SP, Hunter GR. Exaggerated blood pressure response after high-intensity interval exercise is independently related to decreased small arterial elasticity in normotensive African American women. [Abstract]. Experimental Biology Meeting, San Diego, CA. The FASEB Journal, April 2016; 30(1): 1291.2.
9. Herron RL, **Carter SJ**, Collins AB, Leatherwood MD. Reliability of skin blood flow measures by laser-Doppler flowmetry. Experimental Biology Meeting, Boston, MA. [Abstract]. The FASEB Journal, March 2015; 29(1): LB675.
10. **Carter SJ**, Fisher G, Plaisance EP, Gower BA, Hunter GR. Improved insulin sensitivity following an acute bout of high-intensity interval exercise is race specific. [Abstract]. American College of Sports Medicine Annual Meeting, San Diego, CA. June 2015; 47:5.
11. Herron RL, **Carter SJ**, Akers SZ, Bishop PA. Aspirin ingestion does not influence local sweat responses during continuous exercise or passive recovery in the heat. [Abstract]. American College of Sports Medicine Annual Meeting, San Diego, CA. June 2015; 47:5.

12. Hunter GR, Fisher G, **Carter SJ**, Bamman MM, Moellering DR, Gower BA. Sleeping/resting energy expenditure is significantly increased following an acute bout of high-intensity interval exercise. [Abstract]. American College of Sports Medicine Annual Meeting, San Diego, CA. June 2015.
13. **Carter SJ**, Fisher G, Plaisance EP, Fernandez JR, Hunter GR. Race differences in erythropoietin, 25-hydroxyvitamin D, and hemoglobin before and after weight loss in women. [Abstract]. Experimental Biology Meeting, Boston, MA. The FASEB Journal, March 2015; 29(1): LB751.
14. Herron RL, Collins AB, **Carter SJ**, Mitchell JB, Bishop PA. Forearm skin blood flow responses to Kinesiology tape: a pilot study. [Abstract]. National Strength and Conditioning Annual Meeting, Las Vegas, NV. July 2013.
15. Mitchell JB, Herron RL, **Carter SJ**, Collins AB, Martinez AX, Baggett SA, Bishop PA. Lifting performance and indices of recovery 24 hours after exhaustive resistance training bouts in adolescent males. [Abstract]. National Strength and Conditioning Annual Meeting, Las Vegas, NV. July 2014.
16. Mitchell JB, Herron RL, **Carter SJ**, Hornsby JH, Bishop PA. Upper- and lower-body strength training recovery in male adolescent athletes. [Abstract]. American College of Sports Medicine Annual Meeting, Orlando, FL. May 2014; 46:5.
17. Ng J, Casey JC, Herron RL, **Carter SJ**, Katica CP, Wingo JE. Acute cooling does not attenuate the VO<sub>2</sub>max reduction associated with cardiovascular drift during heat stress. [Abstract]. American College of Sports Medicine Annual Meeting, Orlando, FL. May 2014; 46:5.
18. Herron RL, Collins AB, **Carter SJ**, Mitchell JB, Bishop PA. Skin blood flow response following repeated local heating. [Abstract]. Experimental Biology Meeting, San Diego, CA. The FASEB Journal, April 2014; 28(1): LB803.
19. **Carter SJ**, Herron RL, Akers SZ, Collins AB, Wingo JE. Aspirin ingestion does not alter the onset or slope of local sweat rate during whole-body passive heat stress. [Abstract]. Experimental Biology Meeting, San Diego, CA. The FASEB Journal, April 2014; 28(1): 1104.2.
20. Mitchell JB, Herron RL, **Carter SJ**, Hornsby JH, Bishop PA. Strength training recovery in adolescent athletes. [Abstract]. Southeast Chapter of the American College of Sports Medicine Regional Meeting, Greenville, SC. February 2014.
21. Casey JC, Ng J, Herron RL, **Carter SJ**, Katica, CP, Wingo JE. Acute cooling does not attenuate the VO<sub>2</sub>max reduction associated with cardiovascular drift during heat stress. [Abstract]. Southeast Chapter of the American College of Sports Medicine Regional Meeting, Greenville, SC. February 2014.
22. **Carter SJ**, Hodges GJ. Contributions of endothelial nitric oxide synthase, norepinephrine, and neuropeptide Y to local warming-induced cutaneous vasodilation in humans. [Abstract]. Experimental Biology Meeting, Boston, MA. The FASEB Journal, April 2013; 27(1): 1201.10.
23. Collins AB, **Carter SJ**, Del Pozzi AT, Hodges GJ. Hormone status does not alter noradrenergic sympathetic neurotransmitter involvement during local skin warming in young human females. [Abstract]. Experimental Biology Meeting, Boston, MA. The FASEB Journal, April 2013; 27(1): 1201.15.
24. Herron RL, **Carter SJ**, Williford HN, Esco MR. Association of body composition and aerobic fitness on heart rate variability and recovery in Black men. [Abstract]. National Strength and Conditioning Annual Meeting, Las Vegas, NV. July 2013.
25. Herron RL, **Carter SJ**, Williford HN, Esco MR. The relationship between fat-mass, fat-free mass, and heart rate variability. [Abstract]. National Strength and Conditioning Annual Meeting, Las Vegas, NV. July 2013.

26. Collins AB, **Carter SJ**, Del Pozzi AT, Hodges GJ. Norepinephrine but not neuropeptide Y is involved in the cutaneous vasodilator response in young human females. [Abstract]. Experimental Biology Meeting, San Diego, CA. The FASEB Journal, March 2012; 26(1): LB751.
27. Del Pozzi AT, **Carter SJ**, Collins AB, Hodges GJ. Regional differences in noradrenergic and nitric oxide involvement in the cutaneous vasodilator responses to local heating. [Abstract]. Experimental Biology Meeting, San Diego, CA. The FASEB Journal, March 2012; 26(1): LB752.
28. **Carter SJ**, Del Pozzi AT, Collins AB, Hodges GJ. The involvement of nitric oxide synthase in the die-away phenomenon during prolonged local skin heating. [Abstract]. Experimental Biology Meeting, San Diego, CA. The FASEB Journal, March 2012; 26(1): LB753.
29. **Carter SJ**, Hodges GJ. Sensory and sympathetic nerve contributions to the cutaneous vasodilator responses to a noxious heat stimulus. [Abstract]. Experimental Biology Meeting, Washington, D. C. The FASEB Journal, March 2011; 25(1): LB481.
30. Pritchett KL, Bishop PA, Pritchett RC, Green JM, Katica CP, **Carter SJ**. Acute effects of chocolate milk and a commercial recovery beverage on post-exercise muscle damage and endurance cycling performance. [Abstract]. American College of Sports Medicine Annual Meeting, Seattle, WA. May 2009.

## PROFESSIONAL MEMBERSHIPS

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|                |  |
|----------------|--|
| 2012 – present | Southeast Chapter of the American College of Sports Medicine |
| 2011 – present | American Physiological Society                               |
| 2010 – present | American College of Sports Medicine                          |

## CERTIFICATIONS

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|----------------|--|
| 2010 – present | American College of Sports Medicine Certified Personal Trainer |
| 2007 – present | American Heart Association CPR/AED                             |

## PROFESSIONAL SERVICE

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### Journal Review (ad hoc):

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|--------|--|
| 2017 – | American Journal of Physiology: Regulatory, Integrative and Comparative Physiology |
| 2016 – | Obesity Research and Clinical Practice   |
| 2016 – | PLoS One   |
| 2016 – | Journal of Physical Activity & Health  |
| 2016 – | European Journal of Cancer Care  |
| 2016 – | Journal of Sports Sciences   |
| 2016 – | Clinical and Experimental Pharmacology and Physiology                              |
| 2014 – | Obesity  |
| 2014 – | Journal of Strength and Conditioning Research                                      |
| 2013 – | Journal of Medicine and Science in Sport   |

### Obesity and Energetics Offerings (weekly contributor):

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| 2014 – 2016 | University of Alabama at Birmingham; Nutrition Obesity Research Center |
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F1000 Associate Faculty Member: nomination from Senior Faculty Member, David B. Allison, Ph.D.  
Diabetes & Endocrinology



## F1000 Recommendation

Allison DB, **Carter SJ**. F1000Prime Recommendation of [Gatterer H et al., Normobaric intermittent hypoxia over 8 months does not reduce body weight and metabolic factors – a randomized, single blind, placebo-controlled study in normobaric hypoxia and normobaric sham hypoxia. *Obesity Facts*. 2015. 8(3): 200-209.] In F1000Prime, 25 October 2015; doi: 10.3410/f.725782868.793509630. [link](#)

## **INVITED/PROFESSIONAL PRESENTATIONS**

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- Fall 2017      **Carter SJ**. Breast Cancer Survivorship: Implications for Exercise Training. Presented at Indiana University Bloomington for the Department of Kinesiology in the School of Public Health. Bloomington, IN.
- Fall 2017      **Carter SJ**. Clinical Exercise Physiology and the Contemporary Undergraduate Exercise Science Student: What are the Possibilities? Department of Exercise and Nutrition Science (EXNS 190), University of Montevallo, Montevallo, AL.
- Summer 2017      **Carter SJ**. Exercise and Physical Activity: Rethinking Contemporary Paradigms. Presented at the McWane Science Center for the Center for Community Outreach Development (BioTeach), University of Alabama at Birmingham, Birmingham, AL.
- Spring 2017      Rogers LQ, **Carter SJ**. Exercise and Cancer, Co-chair for Thematic Poster Session, American College of Sports Medicine Annual Conference, Denver, CO.
- Spring 2017      **Carter SJ**. Optimizing Physical Activity with Simulated-Altitude in Breast Cancer Survivors. Presented at the North Central Alabama Susan G. Komen Lunch & Learn. Homewood, AL.
- Summer 2016      **Carter SJ**. Cardiovascular Physiology: Implications for Exercise Prescription. Presented at the McWane Science Center for the Center for Community Outreach Development (BioTeach), University of Alabama at Birmingham, AL.
- Spring 2016      **Carter SJ**. Simulated-Altitude as an Adjunct to Optimize Aerobic Exercise in Obese Breast Cancer Survivors with Limited Ambulatory Function: Pilot Randomized Trial. Presented at University of Alabama at Birmingham Center for Palliative and Supportive Care Center Scholars Meetings, Birmingham, AL.
- Spring 2016      **Carter SJ**. Systolic Blood Pressure Response after High-Intensity Interval Exercise is Independently Related to Decreased Small Arterial Elasticity in Normotensive African American women. Presented at the Experimental Biology Annual Conference, San Diego, CA.
- Summer 2015      **Carter SJ**. and Rogers L. Q. Exercise after Breast Cancer Diagnosis: A Translational Perspective. Presented at the 2<sup>nd</sup> Monday's Research Meeting for the Department of Nutrition Sciences at the University of Alabama at Birmingham. Birmingham, AL.
- Spring 2015      **Carter SJ**. Improved Insulin Sensitivity following an Acute Bout of High-Intensity Interval Exercise is Race Specific. Presented at the American College of Sports Medicine Annual Conference, San Diego, CA.
- Spring 2014      Collins AB, **Carter SJ**. Exercise in the Heat: A Female Perspective. Presented at the Alabama State Alliance of Health Physical Education Recreation and Dance (ASAHPERD) Meeting, Gulf Shores, AL.
- Spring 2014      Mitchell JB, **Carter SJ**. The Winding Road to Recovery: Current Knowledge of Adolescent Recovery from Exercise. Presented at the Alabama State Alliance of Health Physical Education Recreation and Dance (ASAHPERD) Meeting, Gulf Shores, AL.

- Winter 2014      **Carter SJ.** Effects of Aspirin on Temperature Regulation during Passive Whole-body Heat Stress in Humans. Presented at the Georgia Prevention Center, Augusta University, Augusta, GA.
- Fall 2013        **Carter SJ.** Influence of Acetylsalicylic Acid on Skin Blood Flow and Local Sweat Rate during Heat Stress. Presented at the University of Alabama at Birmingham Larry Mayes Research Society Meeting, Tuscaloosa, AL.
- Fall 2013        Herron RL, **Carter SJ.** Youth Resistance Training: Current Issues and Recommendations. Presented at the Alabama State Alliance of Health Physical Education Recreation and Dance (ASAHPERD) Meeting, Birmingham, AL.
- Spring 2013     Herron RL, **Carter SJ.** The Heat is On: Improving Safety and Performance in Alabama Heat. Presented at the Alabama State Alliance of Health Physical Education Recreation and Dance (ASAHPERD) Meeting, Gulf Shores, AL.

## **STUDENT MENTORSHIP**

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- Summer 2017    Whitney J. Smith, Cancer Research Experiences for Students (CaRES Internship), Department of Nutrition Sciences, School of Health Professions, University of Alabama at Birmingham, Project: *Natural Killer Cells following Graded Exercise Testing in Breast Cancer Survivors.*
- Summer 2017    J. Walker Blackston, Cancer Research Experiences for Students (CaRES Internship), Department of Nutrition Sciences, School of Health Professions, University of Alabama at Birmingham, Project: *Alpha Diversity Metrics and Cardiorespiratory Fitness in Breast Cancer Survivors.*
- 2016 – present   Akshar H. Patel, Undergraduate (B.S.), Department of Clinical and Diagnostic Sciences, School of Health Professions Honors Program, University of Alabama at Birmingham, anticipated graduation 2018
- 2013 – 2014     Saier Z. Akers, Undergraduate (B.S.), Department of Kinesiology, College of Education, The University of Alabama, graduated 2014, current medical student University of Alabama at Birmingham

## **STUDENT COLLABORATIONS**

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1. Diggs MD, **Carter SJ**, Bryan DR, Borges JH, Hunter GR. Race-specific retention of skeletal muscle following weight loss with and without exercise training. UAB Center for Exercise Medicine 5<sup>th</sup> Annual Symposium, Birmingham, AL. September 2017.
2. Muhammad JN, Smith WJ, **Carter SJ**, Norian LA, Brown DA, Hunter GR, Oster RA, Rogers LQ. Simulated-altitude study in breast cancer survivors. UAB Cancer Research Experiences for Students, Birmingham, AL. July 2017.
3. **Carter SJ**, Goldsby TU, Fisher G, Plaisance EP, Gower BA, Glasser SP, Hunter GR. Exaggerated systolic blood pressure response after high-interval exercise is related to decreased small arterial elasticity in normotensive African American women. UAB Center for Exercise Medicine 3<sup>rd</sup> Annual Symposium, Birmingham, AL. September 2015.
4. **Carter SJ**, Plaisance EP, Goss AM, Fisher G, Fernandez JR, Gower BA, Hunter GR. Racial differences in erythropoietin and hemoglobin before and after weight loss in premenopausal women. UAB Center for Exercise Medicine 2<sup>nd</sup> Annual Symposium, Birmingham, AL. October 2014.
5. Robinson A, Heldman A, Casey JC, Ng J, Herron RL, **Carter SJ**, Katica CP, Wingo JE. Effect of acute fan cooling on maximal oxygen uptake during heat stress. Undergraduate Research and Creative Activity Annual Conference. The University of Alabama, Tuscaloosa, AL. 2014.

6. **Carter SJ**, Herron RL, Akers SZ, Wingo JE. Acute aspirin ingestion does not alter the onset or slope of local sweat rate during passive heat stress. UAB Center for Exercise Medicine 1<sup>st</sup> Annual Symposium, Birmingham, AL. October 2013.
7. Herron RL, **Carter SJ**, Akers SZ, Flatt AA, Williford HN, Esco MR. Association of body composition and aerobic fitness on heart rate variability and recovery in Black men. UAB Center for Exercise Medicine 1<sup>st</sup> Annual Symposium, Birmingham, AL. October 2013.
8. Jones TMV, **Carter SJ**, Herron RL, Wingo JE. Effect of acute fan cooling on maximal oxygen uptake during heat stress. Undergraduate Research and Creative Activity Annual Conference. The University of Alabama, Tuscaloosa, AL. 2013.

#### **ADDITIONAL WORKS**

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1. **Carter, S. J.** "[Espargaro Closing the CRT Gap](#)" contribution prepared for Crash.net (UK-based motorsports website) in June 2013.
2. **Carter, S. J.** "[Current State and Future of MotoGP: Results](#)" contribution prepared for Crash.net (UK-based motorsports website) in April 2012.
3. **Carter, S. J.** "[Current State and Future of MotoGP: Survey](#)" contribution prepared for Crash.net (UK-based motorsports website) in March 2012.