# Nicholas Perry Greene 155 Stadium Dr 321E HPER Building Fayetteville, AR 72701 npgreene@uark.edu 479-575-6638

### Personal

Married to Elizabeth Sarah (July 9, 2005) Father of Amelia Noelle (December 8, 2009) and Abram Monroe (September 29, 2014)

#### Education

Postdoctoral Research Fellow Robert M. Berne Cardiovaso Charlottesville, VA Mentor: Zhen Yan, Ph.D.	Integrative Biology (Muscle and Cardiovascular Physiology) 201 sular Research Center, University of Virginia	10-2013
Doctor of Philosophy	Kinesiology (Exercise Physiology Emphasis)	2010
<i>v i v</i>	inesiology, Texas A&M University	
College Station, TX		
Mentor: Stephen F. Crouse,	Ph.D. and James D. Fluckey, Ph.D.	
Master of Science	Exercise Science	2005
Master of Science		2003
Columbia, SC	ence, University of South Carolina	
,	D. and J. Larry Durstine, Ph.D.	
Bachelor of Science	Exercise Science	2002
-	ence, University of South Carolina	
Columbia, SC		

# **Professional Experience**

2021-Present	Interim Director of the Exercise Science Research Center, Department of Health, Human
	Performance and Recreation, University of Arkansas, Fayetteville, AR
2019-Present	Associate Professor of Exercise Science, Department of Health, Human Performance and
	Recreation, University of Arkansas, Fayetteville, AR
2013-2019	Assistant Professor of Exercise Science, Department of Health, Human Performance and
	Recreation, University of Arkansas, Fayetteville, AR
2010-2013	Postdoctoral Fellow, Cardiovascular Research Center University of Virginia;
	Charlottesville, VA
2006-2010	Graduate Research Assistant, Department of Health & Kinesiology, Texas A&M
	University; College Station, TX
2004-2005	Graduate Research Assistant, Department of Exercise Science, University of South
	Carolina; Columbia, SC
2003-2005	Graduate Teaching Assistant, Department of Exercise Science, University of South
	Carolina; Columbia, SC

2003 Research Assistant, Department of Exercise Science, University of South Carolina; Columbia, SC

### **Professional Memberships**

American College of Sports Medicine, Fellow Member as of 2019 Central States Chapter of the American College of Sports Medicine American Physiological Society Society on Sarcopenia, Cachexia & Wasting Disorders Cancer Cachexia Society

### **Honors and Awards**

2021 College of Education and Health Professions George Denny STAR Award, University of Arkansas at Fayetteville

Award for: "outstanding performance in all the following areas: Service, Teaching, Mentoring/Advising, and Research."

- 2021 Department of Health, Human Performance and Recreation Outstanding Research Award, University of Arkansas at Fayetteville
- 2017 College of Education and Health Professions Significant Research Award, University of Arkansas at Fayetteville
- 2017 Department of Health, Human Performance and Recreation Outstanding Overall Faculty Award, University of Arkansas at Fayetteville
- 2017 Department of Health, Human Performance and Recreation Outstanding Research Award, University of Arkansas at Fayetteville
- 2016 SEC Faculty Travel Program, \$2,500. To visit and learn in the laboratory of Dr. James Carson at the University of South Carolina
- 2012 Individual Postdoctoral Fellowship Award, Atg6 in Protection Against Insulin Resistance, NIH F32 NRSA, 1F32DK095559-01A1, for more information see "Grants."
- 2010 Postdoctoral Fellowship, Basic Cardiovascular Research Training Grant, Robert M. Berne Cardiovascular Research Center, University of Virginia, Charlottesville, VA: NIHT32HL07284
- 2010 Student Research Manuscript Award, Third Place. Texas Chapter of the American College of Sports Medicine Annual Meeting, Houston, TX
   Title: High Volume Resistance Exercise Enhances PPARδ and PGC-1α Protein Expression, but not Mitochondrial Protein Synthesis in the Obese Zucker Rat.
   Authors: Nicholas P. Greene, Mats I. Nilsson, Stephen F. Crouse, James D. Fluckey.
- 2009 Student Research Presentation Award, Doctoral Category, Second Place. Texas Chapter of the American College of Sports Medicine Annual Meeting, Tyler, TX Title: Changes in PPARδ Protein Content following Acute Aerobic Exercise in Human Vastus Lateralis Muscle.

- 2009 Session and Taxonomy Winner Texas A&M University Graduate Student Council, 12<sup>th</sup> Annual Student Research Week.
   Title: Changes in PPARδ Protein Content following Acute Aerobic Exercise in Human Vastus Lateralis Muscle.
- 2008 Student Research Presentation Award, Doctoral Category, Third Place. Texas Chapter of the American College of Sports Medicine Annual Meeting, Odessa, TX Title: *Blood Lipids are not Altered Following Acute Treadmill Exercise in Sedentary, Obese Adults.*

### **Committees Served**

2009	Student Representative on search committee for Senior Professor and Director of the
	Sydney & J.L. Huffines Institute for Sports Medicine and Human Performance at Texas
	A&M University
2011	External Reviewer, evaluation committee for the Sydney & J.L. Huffines Institute for
	Sports Medicine and Human Performance at Texas A&M University
2013-	University of Arkansas, Department of Health, Human Performance and Recreation
	Graduate Seminar Committee
2013-	Member, various faculty and staff search committees in Exercise Science, College of
	Education and Health Professions, and Research Compliance at University of Arkansas
2014-	University of Arkansas, College of Education and Health Professions Scholarship
	Committee
2014-2017	University of Arkansas Program Review Committee
2017-	University of Arkansas Institutional Animal Care & Use Committee
2018-2021	American College of Sports Medicine Research Awards Committee
2019-	Vice Chair, University of Arkansas Institutional Animal Care & Use Committee
2019-2020	Chair, Exercise Science Faculty Search Committee
2020-2021	Chair, Exercise Science Faculty Search Committee

# **Editorial Boards and Manuscript Review**

### Editorial Board Member

Journal of Applied Physiology Sport Medicine and Health Science Cells

### Reviewer

Journal of Applied Physiology, Diabetes, Autophagy, Journal of Cachexia, Sarcopenia and Muscle, Redox Biology, Ageing Research Reviews, International Journal of Obesity, Molecular and Cellular Endocrinology, Theranostics, Applied Physiology, Nutrition, and Metabolism, American Journal of Physiology, Journal of Physiology, Physiological Reports, European Journal of Nutrition, Plos ONE, Experimental Biology and Medicine, Nutrition Research, Journal of Applied Physiology, Journal of Endocrinology, Experimental Physiology, Acta Physiologica, Medicine and Science in Sports and Exercise, Cells, Physiological Genomics

### **Grants Review**

2017	NIH Skeletal Muscle Biology and Exercise Physiology Study Section - Early Career
	Reviewer October 12, 13, 2017
2017-2019	Sydney & J.L. Huffines Institute for Sports Medicine and Human Performance Student
	Grants Reviewer, Texas A&M University
2018, 2019	Arkansas Biosciences Institute Grants Review University of Arkansas at Fayetteville
	Division
2018, 2019	Chancellor's Discovery, Creativity, Innovation and Collaboration Fund Grants Review,
	University of Arkansas at Fayetteville
2020	NIH National Cancer Institute Special Emphasis Panel: ZCA1 RTRB - F (J1) RESEARCH
	ANSWERS TO NCI PROVOCATIVE QUESTIONS September 28, 2020
2021	NIH National Cancer Institute Special Emphasis Panel: ZCA1 SRB - F (M2) RESEARCH
	ANSWERS TO NCI PROVOCATIVE QUESTIONS February 16, 2021
2021	Arkansas Integrative Metabolic Research Center Pilot Project Award Committee

### **Research Grants**

Active

Title: Development of Targeted Approaches in Prevention of Cancer-Cachexia Principal Investigator: Nicholas P. Greene Co-Investigators: Tyrone A. Washington, Michael P. Wiggs, Timothy J. Muldoon, Christopher E. Nelson, Dustin Patterson Consultants: Jarrod A. Call, Wen-Juo Lo Agency: NIH NIAMS Period: July 1, 2020 – Jun 30, 2025 Type: NIH Research Project Grant R01, \$1,637,557.00, R01AR075794

Title: Mitochondrial Degeneration – the Root of Skeletal Muscle Atrophy Principal Investigator: Nicholas P. Greene Co-Investigators: Tyrone A. Washington, Walter Bottje, Byungwhi C. Kong, Michael P. Wiggs, Narasimhan Rajaram Agency: NIH NIAMS Period: July 1, 2017 – Jun 30, 2020 Type: R15 AREA Award, \$412,668.00, R15AR069913

Title: Arkansas Integrative Metabolic Research Center Principal Investigator: Kyle P. Quinn Role: Project Mentor Agency: NIH NIGMS Period: April 1, 2021-February 28, 2026 Type: Centers of Biomedical Research Excellence P20, 1P20GM139768-01, Total Award \$10,890,925.00

Title: Muscle Epigenetics in Cancer-Induced Cachexia Principal Investigator: Nicholas P. Greene Co-Investigators: Tyrone A. Washington, Kevin A. Murach Agency: Arkansas Bioscience Institute Period: July 1, 2021 – May 15, 2022 Type: ABI Biomedical Research Grants, \$56,687 Title: Sex Differences and Leucine Supplementation's Impact on Force Output During Cancer Cachexia Principal Investigator: Tyrone A. Washington Co-Investigators: Nicholas P. Greene Agency: Arkansas Bioscience Institute Period: July 1, 2021 – May 15, 2022 Type: ABI Biomedical Research Grants, \$30,000

Pending

Title: Single Cell RNA Sequencing Instrumentation Principal Investigator: Jeffrey C. Wolchok Co-Investigators: Nicholas P. Greene, Kevin A. Murach, Christopher E. Nelson Agency: National Institutes of Health Type: Basic Instrumentation Grant PAR-21-125, \$244,052

Title: Synergizing Regenerative and Immunotherapy Strategies to Enhance Muscle Recovery from Atrophy Principal Investigator: Jeffrey C. Wolchok Co-Investigators: Nicholas P. Greene, SubAward PI David Zaharoff (N.C. State) Agency: Department of Defense- Congressionally Directed Medical Research Programs Type: Peer Reviewed Medical Research Program, \$295,373

Title: Disproportionate Atrophy of Aged Skeletal Muscle by the Alpha Arrestins Principal Investigator: Bradley S. Gordon (Florida State University) Role: Consultant Agency: NIH NIA Type: R03, R03AG075383-01, \$148,664

Title: Synergizing Regenerative and Immunotherapy Strategies to Enhance Recovery from Muscle Injury Principal Investigator: Jeffrey C. Wolchok Co-Investigators: Nicholas P. Greene, Tyrone Washington, Jorge Almodovar-Montanez, Shahryar Ahmadi Agency: Department of Defense- Congressionally Directed Medical Research Programs Type: Peer Reviewed Medical Research Program, \$2,100,086

Title: Mechanisms of Enhanced Myogenesis with a Combined Immunotherapy and Regenerative Medicine Approach
Principal Investigator: Jeffrey C. Wolchok
Co-Investigators: Nicholas P. Greene, Tyrone Washington, Jorge Almodovar-Montanez, Seyed Ahmadi, David Zaharoff
Agency: NIH
Type: R01, \$2,445,705
Title: Locally Structured Tissue Engineering Scaffolds for Muscle Repair
Principal Investigator: Jeffrey C. Wolchok

Co-Investigators: Nicholas P. Greene, Yuchun Du; Tyrone Washington, Jamie Hestekin, Shahryar Ahmadi Agency: NIH

Type: R01, \$1,768,542

Title: Regenerative and Rehabilitative Strategies Following Volumetric Muscle Loss Injury
Principal Investigator: Tyrone A. Washington
Co-Investigators: Nicholas P. Greene, Jeffrey C. Wolchok
Consultant: Kevin A. Murach
Agency: NIH
Type: R15 Research Enhancement Award Program (REAP) for Health Professional Schools and Graduate
Schools PAR-19-134, \$434,256

Title: New Directions for the Etiology of Cancer Cachexia: The Muscle-Specific DNA Damage Hypothesis Principal Investigator: Kevin A. Murach, Cory M. Dungan Co-Investigators: Nicholas P. Greene Agency: NIH Type: R01 Stephen I. Katz Early Stage Investigator Research Project Grant PAR-21-038, FY1 \$634,214

### Past

Title: Center for Musculoskeletal Disease Research Principal Investigator: Charles O'Brien Role: Project Leader Project Title: Targeted Approaches in Cancer-Cachexia Agency: NIH NIGMS, Greene Project is Sub-Award from UAMS Type: Centers of Biomedical Research Excellence P20, 5P20GM125503 Greene Budget: \$100,000

Title: Investigations in Mechanisms of Onset in Muscle Wasting Principal Investigator: Nicholas P. Greene Co-Investigator: Tyrone A. Washington Agency: Agency: Arkansas Bioscience Institute Period: July 1, 2019- May 15, 2020 Type: ABI Biomedical Research Grants, \$34,942

Title: Purchase of Stimulation Equipment to Support Research in Muscle Biology Principal Investigator: Nicholas P. Greene Co-Investigators: Tyrone A. Washington, Jeffrey C. Wolchok, Sami Dridi, Jamie Baum, Kartik Balachandran Agency: Arkansas Bioscience Institute Period: July 1, 2018- May 15, 2019 Type: ABI Biomedical Equipment Grants, \$36,067

Title: Cancer Cachexia and Leucine Supplementation Principal Investigator: Tyrone A. Washington Co-Investigator: Nicholas P. Greene Agency: Arkansas Biosciences Institute Period: July 1, 2018- May 15, 2019 Type: ABI Biomedical Research Grants, \$42,800

Title: Skeletal muscle depletion of microRNA-16 is sufficient to induce insulin resistance Principal Investigator: Nicholas P. Greene Co-Investigators: Tyrone A. Washington, Jeffrey C. Wolchok Agency: Arkansas Bioscience Institute Period: July 1, 2017 – May 15, 2018 Type: ABI Biomedical Research Grants, \$23,000

Title: Regression of Rous Sarcoma Virus-Induced Tumors in Arkansas Regressor Chickens – Mechanisms and Implications for Tumor Treatment Principal Investigator: Nicholas Anthony Co-Investigators: Nicholas P. Greene, Sami Dridi Agency: Arkansas Bioscience Institute Period: \$50,000 Type: ABI Agricultural Research Grants, \$50,000

Title: microRNA-16 as a novel target in treatment of type 2 diabetes mellitus Principal Investigator: Nicholas P. Greene Agency: American College of Sports Medicine Period: July 1, 2016 – June 30, 2017 Type: ACSM Research Endowment, \$10,000

Title: Targeting Mitochondrial Health in the Prevention of Cancer-Cachexia-Induced Muscle Atrophy Principal Investigator: Nicholas P. Greene Co-Investigators: Tyrone A. Washington, Byung-Whi Kong Agency: Arkansas Biosciences Institute Period: July 1, 2016 – May 15, 2017 Type: ABI Biomedical Research Grants, \$18,000

Title: Anti-osteoporosis Treatment Utilizing Sclerostin Antibody and the Potential Detriment to Skeletal Muscle Health Principal Investigator: James D. Fluckey Co-Investigators: **Nicholas P. Greene** Agency: Texas A&M University College of Education and Human Development Period: January 1, 2015 – December 31, 2015 Type: Transforming Lives Research Grants, \$29,058

Title: Role of Orexin System in Hepatic Fat Metabolism Principal Investigator: Sami Dridi Co-Investigators: **Nicholas P. Greene**, Elizabeth S. Greene, Walter Bottje Agency: Arkansas Biosciences Institute Period: July 1, 2014 – May 18, 2015 Type: ABI Agricultural Research Grants, \$49,327

Title: Mitochondrial Degeneration in the Onset of Cancer-Cachexia Induced Muscle Atrophy Principal Investigator: Nicholas P. Greene Co-Investigators: Tyrone A. Washington, Byung-Whi Kong Agency: Arkansas Biosciences Institute Period: July 1, 2015 – May 16, 2016 Type: ABI Biomedical Research Grants, \$31,450

Title: Cancer Cachexia and Leucine Supplementation Principal Investigator: Tyrone A. Washington Co-Investigators: Nicholas P. Greene Agency: Arkansas Biosciences Institute Period: July 1, 2015- May 16, 2016 Type: ABI Biomedical Research Grants, \$55,598

Title: Renovation of HPER Molecular Biology Laboratory Principal Investigators: **Nicholas P. Greene** and Tyrone A. Washington Agency: University of Arkansas College of Education and Health Professions Period: 2014 Type: Facilities Grant, \$175,000

Title: Loss of microRNA Control of Skeletal Muscle Metabolic and Growth Pathways in Insulin Resistance Principal Investigator: **Nicholas P. Greene** Co-Investigators: Tyrone A. Washington, Jeffrey C. Wolchok, Sami Dridi Agency: Arkansas Biosciences Institute Period: July 1, 2014 – May 18, 2015 Type: ABI Biomedical Research Grants, \$21,500

Title: Sarcopenic Obesity and Skeletal Muscle Regeneration Principal Investigator: Tyrone A. Washington Co-Investigators: **Nicholas P. Greene**, Jamie Baum, Walter Bottje Agency: Arkansas Biosciences Institute Period: July 1, 2014 – May 18, 2015 Type: ABI Biomedical Research Grants, \$55,805

Title: Atg6 in Protection Against Insulin Resistance Principal Investigator: **Nicholas P. Greene** Sponsor: Zhen Yan Agency: National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases Type: Ruth L. Kirkstein National Research Service Award (F32) Period: July 1, 2012 - June 30, 2013 Award Number: 1F32DK095559-01A1

Title: A Role for Skeletal Muscle in Blood Lipid and Lipoprotein Responses to Acute Exercise and Exercise Training, Potential Role for PPARδ Principal Investigator: **Nicholas P. Greene** Co-Investigator: Stephen F. Crouse Agency: Sydney & J.L. Huffines Institute for Sports Medicine and Human Performance Type: Graduate Student Research Grants, \$1,997.80, 2010

Title: Acute and Chronic Intracellular Responses to Concurrent Aerobic and Resistance Exercise as well as the Incorporation of Underwater Treadmill Running: A novel approach for minimizing the interference effect. Principal Investigator: Brad S. Lambert Co-Investigators: **Nicholas P. Greene**, Stephen F. Crouse Agency: National Strength and Conditioning Association Type: Doctoral Student Research Grant, \$9,960, 2009

Title: PPARs and Obesity: Potential Mechanisms for the Influence of Exercise on Metabolic Diseases Principal Investigator: **Nicholas P. Greene** Co-Investigator: Stephen F. Crouse Agency: Texas Chapter, American College of Sports Medicine Type: Student Research Development Awards, \$1,000, 2009 Title: Influence of Resistance Exercise on Lipid Metabolism in the Obese Zucker Rat Principal Investigator: **Nicholas P. Greene** Co-Investigator: Stephen F. Crouse Agency: Sydney & J.L. Huffines Institute for Sports Medicine and Human Performance Type: Graduate Student Research Grants, \$1,967, 2009

Title: Effect of Acute Exercise and Exercise Training on PPAR Expression in Human Skeletal Muscle, Possible Mechanisms for Changes in Blood Lipids Principal Investigator: **Nicholas P. Greene** Co-Investigator: Stephen F. Crouse Agency: Texas Chapter, American College of Sports Medicine Type: Student Research Development Awards, \$1,000, 2008

Title: Molecular Basis for the Lipid Response to Acute Exercise Principal Investigator: **Nicholas P. Greene** Co-Investigator: Stephen F. Crouse Agency: Sydney & J.L. Huffines Institute for Sports Medicine and Human Performance Type: Graduate Student Research Grants, \$2,000, 2008

# Mentorship

Junior Faculty Formal Mentorship

Isabelle Racine Miousse, Ph.D. Assistant Professor University of Arkansas for Medical Sciences Mentorship Role: Project Mentor for NIH sponsored Arkansas Integrative Metabolic Research Center

Rebekah Margaret Samsonraj, Ph.D. Assistant Professor University of Arkansas Mentorship Role: Project Mentor for proposed renewal of NIH sponsored Center for Muskuloskeletal Disease Research

# Postdoctoral Fellows

J. William Deaver, Ph.D., 2020-2021 current Postdoctoral Fellow Vanderbilt University Stavroula Tsitkanou, Ph.D., 2021-

Graduate Research Assistants Supervised

David E. Lee, Ph.D. 2018, current Postdoctoral Fellow Duke University

Jacob L. Brown, Ph.D. 2018, current Postdoctoral Fellow Oklahoma Medical Research Foundation Megan F. Rosa-Caldwell, Ph.D. 2020, current Postdoctoral Fellow Beth Israel Desconess Medical Cet

Megan E. Rosa-Caldwell, Ph.D. 2020, current Postdoctoral Fellow Beth Israel Deaconess Medical Center, Harvard Medical School

Lisa T. Jansen, Ph.D. 2019, current Postdoctoral Fellow Boston Children's Hospital, Harvard Medical School

Seongkyun Lim, Ph.D. Candidate

Francielly Morena da Silva, Ph.D. Student

Ana Regina Cabrera Ayuso, Ph.D. Student

Graduate Committee Chair (Current) Seongkyun Lim, Ph.D. Candidate Francielly Morena da Silva, Ph.D. Student Ana Regina Cabrera Ayuso, Ph.D. Student

#### Graduate Committee Member (Current)

Wesley Haynie, Ph.D. Candidate, Advisor Dr. Tyrone A. Washington Landen Saling, M.S. Student, Advisor Dr. Tyrone A. Washington Eleanor Schrems, M.S. Student, Advisor Dr. Tyrone A. Washington Megan Jones, Ph.D. Student, Advisor Dr. Michelle Gray Anthony Campitelli, Ph.D. Student, Advisor Dr. Michelle Gray Joshua Gills, Ph.D. Candidate, Advisor Dr. Michelle Gray Whitley Atkins, Ph.D. Candidate, Advisor Dr. Brendon McDermott Aidan Fiol, Ph.D. Student, Advisor Dr. Brendon McDermott Allison McFarland, M.S. Student, Advisor Dr. Christian Tipsmark Alison Ferver, Ph.D. Candidate, Advisor Dr. Sami Dridi

#### Completed Doctoral Committees Chaired

Megan E. Rosa-Caldwell, Ph.D. 2020 Dissertation: *Mitochondrial Contributions to Disuse Atrophy: Let's Talk about Sex* 

David E. Lee, Ph.D. 2018 Dissertation: *Mitochondrial mRNA Translation is Required for Maintenance of Oxidative Capacity* 

Jacob L. Brown, Ph.D. 2018 Dissertation: *Cancer-Induced Muscle Wasting* 

# Completed M.S. Committees Chaired

David E. Lee, M.S. 2015 Thesis: *Muscle specific microRNAs and metabolic control* 

Megan E. Rosa, M.S. 2016 Thesis: *Autophagy regulation after diet and exercise in non-alcoholic fatty liver disease* 

Thomas A. Blackwell, M.S. 2017 Thesis: *RNA sequencing in the development of cancer-cachexia* 

Kirsten Dunlap, M.S. 2018 Thesis: Comparative Plasma Proteomics in Muscle Atrophy Induced by Cancer Cachexia and Hindlimb Unloading

Noah Thomas, M.S. 2020 Thesis: *The role of Protein Degradation in Cancer Cachexia in Female Tumor Bearing Mice* 

Lauren Martinez, M.S. 2021 Thesis: Sex-Based Differences in ACVR2B and GRB10 Expression in Skeletal Muscle During Induced Cancer Cachexia and Disuse

Ana Regina Cabrera Ayuso, M.S. 2021 Thesis: A Time-course Characterization of Muscle Function and Mitochondrial Markers During Colorectal Cancer-induced Cachexia in Tumor-bearing Male Mice Completed Graduate Committees Served

Joshua Ragland, M.S. Advisor Dr. Tyrone A. Washington D. Layne Nixon, M.S. Advisor Dr. Stavros Kavouras Lemuel Brown, Ph.D. Advisor Dr. Tyrone A. Washington Cory Butts, Ph.D. Advisor Dr. Brendon McDermott Matthew Stone, Ph.D. Advisor Dr. Michelle Gray Zac Lewis, M.S., Advisor Dr. Stavros Kavouras Richard A. Perry, Ph.D. Advisor Dr. Tyrone A. Washington Lisa Jansen, Ph.D. Advisor Dr. Stavros Kavouras Hyun-Gyu Suh, Ph.D. Advisor Dr. Stavros Kavouras Ashley Binns, Ph.D. Advisor Dr. Michelle Gray Seeab Sahib, Ph.D. Advisor Dr. Ryan Tian Ashley Binns, Ph.D. Advisor Dr. Michelle Gray

Honors Undergraduate Theses Chaired

Haley N. McCarver, B.S. 2017 Thesis: *Muscle Oxidative Phenotype in the Progression of Cancer-Cachexia* 

Kyle W. Turner, B.S. 2018 Thesis: Changes in Hepatic Extracellular Matrix During the Development of Cancer-Cachexia in Mice

Sarah Ramey, B.S. 2018 Thesis: *Cancer Cachexia: Metabolic Changes that occur in Oxidative Capacity and Carbohydrate and Lipid Metabolism in the Liver* 

Maryam Mumtaz, B.S. 2019 Thesis: *The Relationship Between Oxidative Muscle Phenotype and Atrophy During Disuse* 

Madeline G. Amos, B.S. 2021 Thesis: Dysregulation of the Muscle Clock During the Development of Cancer Cachexia

Honors Undergraduate Theses Served

David Skinner, B.S. Whitney Muller, B.S. Guillermo Tellez, Jr., B.S. Poultry Science Tatiana Balis, B.S. Jessie Ludwig, B.S. Nathan Max, B.S. Whitney Muller, B.S. Michelle Tedrowe, B.S. Mackenzie Cale, B.S. Miriah Hadley, B.S. Monica Ziebart, B.S.

Mentored Student Awards

1. David E. Lee, Outstanding Masters Student in Exercise Science, College of Education and Health Professions, University of Arkansas, 2014.

- 2. Elizabeth K. McBee, Outstanding Undergraduate Student in Exercise Science, College of Education and Health Professions, University of Arkansas, 2015.
- 3. Megan E. Rosa-Caldwell, Outstanding Masters Student in Exercise Science, College of Education and Health Professions, University of Arkansas, 2016.
- 4. David E. Lee, ACSM Foundation Doctoral Student Research Grant, \$5,000. Title: *A Novel Mechanism* for Cardioprotection through Mitochondrial mRNA Translation Initiation. Awarded July 2017.
- 5. Sarah Ramey, Undergraduate Student Research Award, Central States Regional Chapter American College of Sports Medicine. Awarded October 2017.
- 6. Megan E. Rosa-Caldwell, Student Research Grant, \$1,000. Title: Autophagy Activation as a Novel Regulator for Improved Glucose Handling during Insulin Resistance: A Pilot Study. Awarded October 2017.
- 7. Megan E. Rosa-Caldwell, Central States American College of Sports Medicine PhD Student Research Award, 2016.
- 8. Megan E. Rosa-Caldwell, DuPont Student Travel Grant, \$500, Central States American College of Sports Medicine PhD Research Award, 2015.
- 9. Megan E. Rosa-Caldwell, Central States American College of Sports Medicine Masters Student Research Award, 2015.
- 10. David E. Lee, Central States American College of Sports Medicine Masters Student Research Award Finalist, 2015.
- 11. Megan E. Rosa-Caldwell, American Physiological Society Gastrointestinal & Liver Section Poster of Distinction, Experimental Biology, 2017.
- 12. Megan E. Rosa-Caldwell, Department of Health, Human Performance and Recreation Student Grant Award, \$2,000. Title: *Autophagy Activation as a Novel Regulator for Improved Glucose Handling during Insulin Resistance*. Awarded February 2018.
- 13. Megan E. Rosa-Caldwell, Experimental Physiology Early Career Author Runner Up. Award for published work: "Autophagy activation, not peroxisome proliferator-activated receptor  $\gamma$  coactivator 1 $\alpha$ , may mediate exercise-induced improvements in glucose handling during diet-induced obesity." Published in *Experimental Physiology*.
- 14. Megan E. Rosa-Caldwell, American College of Sports Medicine Charles M. Tipton Student Research Award, 2019.
- 15. Madeline G. Amos, Central States Chapter of the American College of Sports Medicine President's Cup Winner, October 2019.
- 16. Laruen Westervelt, Central States Chapter of the American College of Sports Medicine Outstanding Undergraduate Research Award, October 2019.

- 17. Seongkyun Lim, University of Arkansas Graduate Professional Student Congress Research Council Graduate Student Research Grant, \$1,500. Title: *Significance of miR-16 in Insulin sensitivity and muscle function in type 2 diabetes mellitus*, 2020.
- 18. Madeline G. Amos, University of Arkansas Seniors of Significance 2021.
- 19. Madeline G. Amos, Outstanding Undergraduate Student in Exercise Science, College of Education and Health Professions, University of Arkansas, 2021.
- 20. Madeline G. Amos, National Scholar Award Honorable Mention Recipient, American Kinesiology Association, 2021

### **Citation Indices and Related Links**

Google Scholar Researcher ID (Web of Knowledge) My NCBI Bibliography Research Gate ORCID

### Manuscripts (Impact Factors as of Summer 2020): My Bibliography

#### Original Research

- Megan E. Rosa-Caldwell, Seongkyun Lim, Wesley S. Haynie, Jacob L. Brown, David E. Lee, Kirsten R. Dunlap, Lisa T. Jansen, Tyrone A. Washington, Michael P. Wiggs, Nicholas P. Greene. Mitochondrial Aberrations during the Progression of Disuse Atrophy Differentially Affect Male and Female Mice. *Journal of Cachexia, Sarcopenia and Muscle* Accepted for Publication, August 25, 2021.
- Tyrone A. Washington, Richard A. Perry, Jr., John T. Kim, Wesley S. Haynie, Nicholas P. Greene, Jeffrey C. Wolchok. The effect of autologous repair and voluntary wheel running on force recovery in a rat model of volumetric muscle loss. *Experimental Physiology* 106(4):994-1004, 2021. PMID: 33600045. DOI: 10.1113/EP089207. Impact Factor = 2.969
- Megan E. Rosa-Caldwell, Seongkyun Lim, Wesley A. Haynie, Jacob L. Brown, J. William Deaver, Francielly Morena Da Silva, Lisa T. Jansen, David E. Lee, Michael P. Wiggs, Tyrone A. Washington, Nicholas P. Greene. Females may have exacerbated catabolic signaling response compared to males during development and progression of disuse atrophy. *Journal of Cachexia, Sarcopenia and Muscle*. Jun;12(3):717-730, 2021. PMID: 33675163. DOI: 10.1002/jcsm.12693. Impact Factor = 12.910
- Lemuel A. Brown, Richard A. Perry Jr., Wesley S. Haynie, David E. Lee, Megan E. Rosa-Caldwell, Jacob L. Brown, Nicholas P. Greene, Jeffrey C. Wolchok, Tyrone A. Washington. Moderators of skeletal muscle maintenance are compromised in sarcopenic obese mice. *Mechanisms of Ageing and Development*. 194:111404, 2021. PMID: 33249192. Impact Factor = 5.432
- Megan E. Rosa-Caldwell, Conner A. Benson, David E. Lee, Jacob L. Brown, Tyrone A. Washington, Nicholas P. Greene, Michael P. Wiggs. Mitochondrial function and protein turnover in the diaphragm are altered in LLC tumor model of cancer cachexia. *International Journal of Molecular Sciences*. 21(21):7841, 2020. PMID: 33105841. Impact Factor = 5.923

- Seongkyun Lim, Kirsten R. Dunlap, Megan E. Rosa-Caldwell, Wesley S. Haynie, Lisa T. Jansen, Tyrone A. Washington, Nicholas P. Greene. Comparative plasma proteomics in muscle atrophy during cancercachexia and disuse: the search for atrokines. *Physiological Reports*. (19):e14608, 2020. PMID: 33063952. Impact Factor = N/A
- Megan E. Rosa-Caldwell, Seongkyun Lim, Wesley S. Haynie, Lisa T. Jansen, Lauren C. Westervelt, Madeline G. Amos, Tyrone A. Washington, Nicholas P. Greene. Altering aspects of mitochondrial quality to improve musculoskeletal outcomes in disuse atrophy. *Journal of Applied Physiology* 129(6):1290-1303, 2020. PMID: 32940556. Impact Factor = 3.531
- Megan E. Rosa-Caldwell, Lisa T. Jansen, Seongkyun Lim, Kirsten R. Dunlap, Wesley S. Haynie, Tyrone A. Washington, Nicholas P. Greene. Neither autophagy nor exercise training mode affect exerciseinduced beneficial adaptations in high fat-fed mice. *Sports Medicine and Health Science*. 2020 2(1):44-53. Impact Factor = N/A
- Megan E. Rosa-Caldwell, Jacob L. Brown, David E. Lee, Michael P. Wiggs, Richard A. Perry Jr., Wesley S. Haynie, Aaron R. Caldwell, Tyrone A. Washington, Wen-Juo Lo, Nicholas P. Greene. Hepatic Alterations During the Development and Progression of Cancer Cachexia. *Applied Physiology, Nutrition and Metabolism* 45(5):500-512, 2019. PMID: 31618604. Impact Factor = 2.665
- David E. Lee, Jacob L. Brown, Megan E. Rosa-Caldwell, Richard A. Perry Jr., Lemuel A. Brown, Wesley S. Haynie, Tyrone A. Washington, Narasimhan Rajaram, Nicholas P. Greene. Cancer-induced Cardiac Atrophy Adversely Affects Myocardial Redox State and Mitochondrial Oxidative Capacity. *Journal of Cachexia, Sarcopenia and Muscle Rapid Communications* 4(1):3-15, 2019. PMID: 33693448. Impact Factor = N/A
- Megan E. Rosa-Caldwell, Jacob L. Brown, Richard A. Perry Jr., Kevin L. Shimkus, Yasaman Sharazi-Fard, Lemuel A. Brown, Harry A. Hogan, James D. Fluckey, Tyrone A. Washington, Micheal P. Wiggs, Nicholas P. Greene. Regulation of Mitochondrial Quality Following Repeated Bouts of Hindlimb Unloading. *Applied Physiology, Nutrition and Metabolism*. 45(3):264-274, 2019. PMID: 31340136. Impact Factor = 2.665.
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# Reviews

- Seongkyun Lim, Jacob L. Brown, Tyrone A. Washington, Nicholas P. Greene. Development and Progression of Cancer Cachexia: Perspectives from Bench to Bedside. *Sports Medicine and Health Science* 2(4): 177-185, 2020. PMID: In process at NIHMS. https://doi.org/10.1016/j.smhs.2020.10.003. Impact Factor = N/A
- Megan E. Rosa-Caldwell\*, Dennis Fix\*, Tyrone A. Washington, Nicholas P. Greene. Muscle alterations in the development and progression of cancer-induced muscle atrophy: A Review. *Journal of Applied Physiology* 128(1):25-41, 2019. PMID: 31725360. Impact Factor = 3.531
- 3. Megan E. Rosa-Caldwell, Nicholas P. Greene. Muscle metabolism and atrophy: let's talk about sex. *Biology of Sex Differences*. 2019 10(1):43. PMID: 31462271. Impact Factor = 5.027. <u>Springer Nature Highlights (most popular articles from publisher in 2019)</u>.
- Nicholas P. Greene, Jacob L. Brown, Megan E. Rosa, David E. Lee, Thomas A. Blackwell, Tyrone A. Washington. Skeletal muscle insulin resistance as a precursor to Diabetes: Beyond glucoregulation. Review Article. *Current Diabetes Reviews*. 14(2):113-128, 2016. PMID: 27875947. Impact Factor = N/A

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- Zhen Yan, Vitor A. Lira, Nicholas P. Greene. Exercise-induced Regulation of Mitochondrial Quality. Exercise & Sport Sciences Reviews 40(3):159-64, 2012. PMID 22732425 <u>Manuscript featured on journal</u> <u>cover.</u> Impact Factor = 6.230

# Editorials and Other

- 1. J. William Deaver, Nicholas P. Greene. Emerging Mechanisms for Exercise Effects on Muscle Wasting and Anabolic Resistance. *Sports Medicine and Health Science*. 2(4):175-176, 2020. PMID: In process at NIHMS. https://doi.org/10.1016/j.smhs.2020.11.001. Impact Factor = N/A
- James D. Fluckey, Brad S. Lambert, Nicholas P. Greene, Kevin L. Shimkus, Jessica M. Cardin, Steven E. Riechman, Stephen F. Crouse. To D2O or not to D2O? What are the reasons we D2O it at all? *American Journal of Physiology Endocrinology and Metabolism* 308: E928-931. 2015. *Letter to the Editor*. PMID: 25980015. Impact Factor = 4.310

Average Impact Factor of all publications: 6.056 (Excludes articles in *Sports Med Health Sci* and *Physiol Rep* who do not yet have Impact Factors)

# **Invited Presentations**

- 1. Nicholas P. Greene. Development of muscle atrophy: differences by sex and myopathologies. York University Muscle Health Research Center Seminar Series. March 19, 2021.
- 2. Nicholas P. Greene. Exploring Mechanisms in the Onset of Cancer-Cachexia. University of Arkansas for Medical Sciences Center for Musculoskeletal Disease Research Lecture Series. July 24, 2020.
- 3. Nicholas P. Greene. Development of Cancer-Induced Wasting Insights with Potential for Preventative Therapies. University of Arkansas College of Education and Health Professions CLASS Session October 17, 2018.
- 4. Nicholas P. Greene\*, James A. Carson, James D. Fluckey, Bradley S. Gordon. Emerging Mechanisms for Exercise Effects on Muscle Wasting and Anabolic Resistance. Symposium presented at ACSM's 65<sup>th</sup> Annual Meeting Minneapolis, MN May 29-June 2, 2018. \*Session Chair
  - a. Understanding Muscle gp130 Receptor's Role in Cancer-induced Muscle Wasting: Interactions with Sex and Exercise. *James A. Carson*, FACSM. University of South Carolina, Columbia, SC.
  - b. Mitochondrial Degeneration as a Precursor to Muscle Wasting. *Nicholas P. Greene*. University of Arkansas, Fayetteville, AR.
  - c. Anabolism and DEPTOR: Meet mTOR's Ball and Chain. *James D. Fluckey*. Texas A&M University, College Station, TX.
  - d. The Role of REDD1 in the Regulation of Nutrient and Muscle Contraction Induced Muscle Protein Synthesis. *Bradley S. Gordon*. Florida State University, Tallahassee, FL.
- 5. Nicholas P. Greene. Mitochondrial Degeneration and the Progression of Cancer Cachexia. Presented at University of South Carolina Department of Exercise Science Seminar Series February 10, 2017.
- 6. Nicholas P. Greene, Tyrone A. Washington, Philip Gallagher. Skeletal muscle wasting an update from bench to countermeasures. Symposium to be presented at Annual Meeting of the Central States Regional Chapter of the American College of Sports Medicine 2016. October 2016.
  - a. Dr. Greene presented: Mitochondrial degeneration precedes muscle wasting in cancer-cachexia

- 7. Nicholas P. Greene. Mitochondrial Degeneration The Onset of Cancer-Cachexia? Presented at Arkansas Bioscience Institute Annual Symposium 2016, Little Rock, AR Sept 13, 2016.
- 8. Nicholas P. Greene. Dysregulation of Mitochondrial Quality Control in Obesity and Insulin Resistance. Presented at Texas A&M University Department of Health & Kinesiology Seminar Series September 2015.
- 9. Stephen F. Crouse, **Nicholas P. Greene**, Brad S. Lambert. Aquatic Treadmill Exercise: Physiologic costs and training benefits for overweight and obese men and women. Presented at annual meeting of the Southeastern Chapter of the American College of Sports Medicine, February 12, 2010.

### Abstracts Presented at Institutional, Regional, National, and International Meetings

- Seongkyun Lim, Megan E. Rosa-Caldwell, Wesley S. Haynie, Lisa T. Jansen, Kirsten R. Dunlap, Francielly Morena da Silva, J. William Deaver, Michael Wiggs, Tyrone A. Washington1, Nicholas P. Greene. (2020) Alterations in mitochondrial turnover during the development of cancer cachexia in tumorbearing female mice. 13th International Conference on Cachexia. Sarcopenia and Wasting Diseases, Virtual Conference.
- 2. Seongkyun Lim, Megan E. Rosa-Caldwell, Wesley S. Haynie, David E. Lee, Tyrone A. Washington1, Nicholas P. Greene. (2020) Knockout of miR-16 impairs muscle contractility and mitochondrial integrity in a sex-dependent manner. 2020 Integrative Physiology of Exercise conference, Virtual conference.
- 3. Seongkyun Lim, Megan Rosa-Caldwell, Wesley Haynie, David Lee, Tyrone Washington and Nicholas Greene. (2020). Genetic Deletion of MicroRNA-16 In Muscle Results in Impaired Insulin Sensitivity & Exercise Capacity. 2020 American College of Sports Medicine Annual Meeting, San Francisco, CA.
- 4. J. William Deaver, Megan E. Rosa-Caldwell, Wesley A. Haynie, Seongkyun Lim, Jacob L. Brown, Francielly Morena Da Silva, Kirsten R. Dunlap, Lisa T. Jansen, David E. Lee, Michael P. Wiggs, Tyrone A. Washington, Nicholas P. Greene. (2020). Early Differential Responses by Sex to Hindlimb-Unloading Induced Muscle Atrophy. Sarcopenia, Cachexia, and Wasting Disorders
- 5. Francielly Morena da Silva, Seongkyun Lim, Megan E. Rosa-Caldwell, Wesley S. Haynie, Lisa T. Jansen, Kristen R. Dunlap, J. William Deaver, Michael Wiggs, Tyrone A. Washington, Nicholas P. Greene. Alterations in Extracellular Matrix Integrity During Early Stages of Cancer Cachexia in Tumor-bearing Female Mice. (2020). Sarcopenia, Cachexia, and Wasting DisordersWestervelt, L. C., Lim, S., Rosa-Caldwell, M. E., Haynie, W. S., Dunlap, K. R., Jansen, L. T., Wiggs, M. P., Washington, T. A., Greene, N. P., Central States American College of Sports Medicine Regional Meeting, "Mitochondrial health during the development of cancer cachexia in female mice.," Central States American College of Sports Medicine. (October 2019).
- Amos, M. G., Rosa-Caldwell, M. E., Haynie, W. S., Dunlap, K. R., Lim, S., Jansen, L. T., Brown, J. L., Lee, D. E., Washington, T. A., Wiggs, M. P., Greene, N. P., Central States American College of Sports Medicine Regional Meeting, "Oxidative metabolism during the time-course of disuse atrophy in male and female mice.," Central States American College of Sports Medicine. (October 2019).
- Lim, S., Lee, D. E., Rosa-Caldwell, M. E., Brown, J. L., Washington, T. A., Greene, N. P., American College of Sports Medicine Annual Meeting, "Inhibition of mir16 in vitro decreases glucose uptake and insulin signaling.," American College of Sports Medicine. (May 2019).

- Rosa-Caldwell, M. E., Jansen, L. T., Lim, S., Dunlap, K. R., Haynie, W. S., Bejarano, K. A., Washington, T. A., Greene, N. P., American College of Sports Medicine Annual Meeting, "Neither autophagy inhibition nor high intensity interval training alter exercise adaptations during high fat feeding. Megan E. Rosa- Caldwell," American College of Sports Medicine. (May 2019).
- Bejarano, K. A., Haynie, W. S., Perry, R. A., Brown, L. A., Lee, D. E., Brown, J. L., Rosa-Caldwell, M. E., Greene, N. P., Washington, T. A., American College of Sports Medicine Annual Meeting, "Preliminary study: Leucine supplementation exacerbates muscle wasting independent of the ubiquitin-proteasome system.," American College of Sports Medicine. (May 2019).
- Jansen, L. T., Rosa-Caldwell, M. E., Haynie, W. S., Lim, S., Dunlap, K. R., Brown, J. L., Lee, D. E., Perry, R. A., Wiggs, M. P., Washington, T. A., Greene, N. P., American College of Sports Medicine Annual Meeting, "Sex differences in anabolic regulators during development of atrophic pathology in hindlimb-unloading-induced disuse.," American College of Sports Medicine. (May 2019).
- 11. Haynie, W. S., Brown, J. L., Lee, D. E., Rosa-Caldwell, M. E., Perry, R. A., Brown, L. A., Greene, N. P., Washington, T. A., American College of Sports Medicine Annual Meeting, "The development of cancer cachexia negatively impacts skeletal muscle extracellular matrix remodeling.," American College of Sports Medicine. (May 2019).
- 12. Lim, S., Rosa-Caldwell, M. E., Haynie, W. S., Jansen, L. T., Dunlap, K. R., Bejarano, K. A., Brown, J. L., Lee, D. E., Washington, T. A., Wiggs, M. P., Greene, N. P., Advances in Skeletal Muscle Biology in Health and Disease, "Atrophy-related genes are differentially expressed during progression of disuse-induced atrophy in male and female mice.," University of Florida Myology Institute. (March 2019).
- 13. Dunlap, K. R., Rosa-Caldwell, M. E., Haynie, W. S., Jansen, L. T., Lim, S., Orr, R. E., Washington, T. A., Greene, N. P., Advances in Skeletal Muscle Biology in Health and Disease, "Comparative plasma proteomics in muscle atrophy induced by cancer cachexia and hinblimb unloading.," University of Florida Myology Institute. (March 2019).
- 14. Haynie, W. S., Rosa-Caldwell, M. E., Lim, S., Bejarano, K. A., Jansen, L. T., Dunlap, K. R., Greene, N. P., Washington, T. A., Advances in Skeletal Muscle Biology in Health and Disease, "Force Production during the development of cancer cachexia in female mice.," University of Florida Myology Institute. (March 2019).
- 15. Rosa-Caldwell, M. E., Dunlap, K. R., Haynie, W. S., Lim, S., Jansen, L. T., Brown, J. L., Lee, D. E., Washington, T. A., Wiggs, M. P., Greene, N. P., Advances in Skeletal Muscle Biology in Health and Disease, "Mitochondrial abberations during the progression of disuse atrophy differentially affect male and female mice.," University of Florida Myology Institute. (March 2019).
- 16. Ramey S, Rosa-Caldwell ME, Brown JL, Perry RA, Haynie WA, Caldwell AR, Washington TA, Wiggs MP, Greene NP (2018). Cancer Cachexia: Metabolic Changes In Carbohydrate Metabolism Of The Liver. American College of Sports Medicine Annual Meeting, Minneapolis, MN & 2017 Central States Regional Chapter of the American College of Sports Medicine Annual Meeting.
- 17. Rosa-Caldwell ME, Brown JL, Lee DE, Washington TA, Greene NP (2018). Tumor Derived Factors Induce Muscle Mitochondria Hyperpolarization And Subsequent Superoxide Production. American College of Sports Medicine Annual Meeting, Minneapolis, MN.

- 18. Butts CL, Caldwell AR, Mohler SA, Ganio MS, Greene NP, Kavouras SA, McDermott BP (2018). Combined Effects of Hypohydration, Muscle Damage, and Exertional Hyperthermia on Biomarkers of Acute Kidney Injury. American College of Sports Medicine Annual Meeting, Minneapolis, MN & 2017 Central States Regional Chapter of the American College of Sports Medicine Annual Meeting.
- Haynie WS, Perry RA, Brown LA, Lee DE, Brown JL, Rosa-Caldwell ME, Greene NP, Washington TA (2018). Muscle Morphology is Not Altered in PGC-1α Transgenic Mice following Bupivacaine Injection. American College of Sports Medicine Annual Meeting, Minneapolis, MN.
- 20. Turner KW, Rosa-Caldwell ME, Brown JL, Lee DE, Perry RA, Haynie WA, Washington TA, Wiggs MP, Greene NP (2017). Changes in Liver Fibrosis During the Progression of Cancer-Cachexia in Mice. Central States Regional Chapter of the American College of Sports Medicine Annual Meeting.
- Perry RA, Haynie WS, Bejarano KA, Kim JT, Roberts K, Wolchok JC, Greene NP, Washington TA (2017). Autograft and Physical Activity Improve Force Recovery from Volumetric Muscle Loss. Central States Regional Chapter of the American College of Sports Medicine Annual Meeting.
- 22. Blackwell TA, Brown JL, Lee DE, Rosa-Caldwell ME, Perry RA, Brown LA, Haynie WS, Wiggs MP, Washington TA, Greene NP (2017). Myogenic And Atrophic Signaling In The Progression Of Cancer-cachexia. American College of Sports Medicine Annual Meeting, Denver, CO. Medicine & Science in Sports & Exercise. 49(5S):767, May 2017.
- 23. Greene NP, Brown JL, Rosa-Caldwell ME, Lee DE, Blackwell TA, McCarver HN, Perry RA, Brown LA, Haynie WS, Wiggs MP, Washington TA (2017). Timecourse Of Alterations In Myofiber CSA And Oxidative Phenotype In Progression Of Cancer-cachexia. American College of Sports Medicine Annual Meeting, Denver, CO. Medicine & Science in Sports & Exercise. 49(5S):7-8, May 2017.
- 24. Haynie WS, Perry RA, Brown LA, Lee DE, Brown JL, Rosa-Caldwell ME, Greene NP, Washington TA (2017). Effects Of Muscle Specific Pgc-1a Overexpression At The Onset Of Muscle Regeneration. American College of Sports Medicine Annual Meeting, Denver, CO. Medicine & Science in Sports & Exercise. 49(5S):767-768, May 2017.
- 25. Brown JL, Rosa-Caldwell ME, Lee DE, Blackwell TA, Perry RA, Brown LA, Haynie WS, Wiggs MP, Washington TA, Greene NP (2017). Cancer-cachexia Upregulates Autophagy Machinery. American College of Sports Medicine Annual Meeting, Denver, CO. Medicine & Science in Sports & Exercise. 49(5S):771, May 2017.
- 26. Perry RA, Haynie WS, Brown LA, Brown JL, Rosa-Caldwell ME, Lee DE, Baum JI, Smith-Blair N, Greene NP, Washington TA (2017). The Combined Effect of Obesity & Pulmonary Arterial Hypertension on the Gastrocnemius in Zucker Rats. American College of Sports Medicine Annual Meeting, Denver, CO. Medicine & Science in Sports & Exercise. 49(5S):801, May 2017.
- 27. Rosa-Caldwell ME, Brown JL, Lee DE, Blackwell TA, Perry RA, Haynie WS, Brown LA, Washington TA, Greene NP (2017). Muscle Specific Overexpression PGC-1α1 Promotes Exercise Adaptations During Western Diet Regardless Of Exercise Volume. American College of Sports Medicine Annual Meeting, Denver, CO. Medicine & Science in Sports & Exercise. 49(5S):1018-1019, May 2017.
- 28. Rosa-Caldwell ME, Brown JL, Lee DE, Perry RA, Haynie WA, Caldwell AR, Washington TA, Wiggs MP, Greene NP (2018). Alterations in Hepatic Protein Synthetic Signaling During the Progression of Cancer Cachexia. Experimental Biology San Diego, CA.

- 29. Lee DE, Brown JL, Rosa-Caldwell ME, Perry RA, Haynie WA, Washington TA, Wiggs MP, Rajaram N, Greene NP (2018). Cancer-Induced Metabolic Cardiotoxicity Characterized Through Optical Metabolic Imaging. Experimental Biology San Diego, CA.
- 30. Brown JL, Lee DE, Rosa-Caldwell ME, Perry RA, Haynie WA, Benson C, Washington TA, Wiggs MP, Greene NP (2018). Protein Synthesis Throughout the Progression of Cancer Cachexia in Tumor-Bearing Mice. Experimental Biology San Diego, CA.
- Greene NP, Brown JL, Rosa-Caldwell ME, Lee DE, Haynie WA, Perry RA, Washington TA, Wiggs MP (2018). Early Mitochondrial Degeneration in the Development of Disuse-Induced Muscle Atrophy. Experimental Biology San Diego, CA.
- 32. Perry RA, Haynie WA, Bejarano K, Kim J, Greene NP, Wolchok JC, Washington TA (2018). The Effects of Physical Activity on Force Recovery from Volumetric Muscle Loss with Autograph Incorporation. Experimental Biology San Diego, CA.
- 33. Rasul R, Jamshihi-Parsian A, Lee DE, **Greene NP**, Dings RPM, Rajaram N, Griffin RJ. Identifying Cancer Stem Cell Characteristics in Lung Cancer Cells Pre-exposed to Hypoxia or Radiation. Biomedical Engineering Society Annual Meeting 2016, Minneapolis, MN
- 34. Perry RA, Brown LA, Lee DE, Brown JL, Rosa-Caldwell ME, **Greene NP**, Washington TA (2016). Differential Effects of Sarcopenic Obesity on Markers of Protein Synthesis in Hearts of C57BL/6J Mice. American College of Sports Medicine Annual Meeting, Boston MA.
- 35. Brown LA, Perry RA, Lee DE, Brown JL, Rosa ME, **Greene NP**, Washington TA (2016). Sarcopenic obesity alters ECM-related gene expression in mouse skeletal muscle. Med Sci Sports Exerc. 48 (5 Suppl 1): 687. PMID 27361129.
- 36. Tedrowe MA, Brown LA, Perry RA, Rosa ME, Brown JL, Lee DE, Greene NP, Washington TA (2016). Effect of diet-induced obesity on matrix metalloproteinase gene expression at the onset of skeletal muscle regeneration. Med Sci Sports Exerc. 48 (5 Suppl 1): 583. PMID 27360903.
- 37. Greene NP, Brown JL, Rosa ME, Lee DE, Brown LA, Perry RA, Washington TA (2016). Differential expression of PGC-1α4 during skeletal muscle regeneration and myogenic differentiation. Med Sci Sports Exerc. 48 (5 Suppl 1): 580-1. PMID 27360894.
- 38. Lee DE, Perry RA, Brown JL, Brown LA, Rosa ME, Crouse SF, Washington TA, Greene NP (2016). Aging and obesity: Mitochondria at the heart of the problem. Med Sci Sports Exerc. 48 (5 Suppl 1): 689. PMID 27361136.
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- 40. Brown JL, Rosa ME, Lee DE, Brown LA, Perry RA, Carson JA, Dridi S, Washington TA, Greene NP. PGC-1α4 Expression Is Downregulated by ERK1/2 MAPK Signaling Axis of IL-6 (2016). Presented at Experimental Biology 2016, San Diego, CA.

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- 42. Perry RA, Brown LA, Lee DE, Rosa ME, Brown JL, Greene NP, Washington TA (2015). Differential Responses to Leucine Supplementation in Young and Aged Mice at the Onset of Skeletal Muscle Regeneration (2015). American College of Sports Medicine Annual Meeting, San Diego, CA. Medicine & Science in Sports & Exercise. 47(5S):961, May 2015.
- 43. Rosa ME, Lee DE, Brown JL, Perry RA, Brown LA, Henry JN, Washington TA, Greene NP (2015). Aberrant Regulation of Mitochondrial Biogenesis in Liver of Western Diet Fed Mice following Voluntary Activity. American College of Sports Medicine Annual Meeting, San Diego, CA. Medicine & Science in Sports & Exercise. 47(5S):489, May 2015.
- 44. Brown JL, Perry RA, Shimkus KL, Lee DE, Rosa ME, Cardin JM, Brown LA, McBee EK, Sharazi-Fard Y, Hogan HA, Fluckey JD, Washington TA, Greene NP (2015). Canonical Mitochondrial Biogenesis And Mitochondrial Translation Following Multiple Bouts Of Disuse. American College of Sports Medicine Annual Meeting, San Diego, CA. Medicine & Science in Sports & Exercise. 47(5S):222, May 2015.
- 45. Greene NP, Lee DE, Brown JL, Rosa ME, Henry JN, Stacy CL, Sexton CM, Brown LA, Perry RA, Washington TA (2015). Mitochondrial mRNA Translation, Driven by PGC-1α, is Dysregulated Following Western Diet in Physically Active Mice. American College of Sports Medicine Annual Meeting, San Diego, CA. Medicine & Science in Sports & Exercise. 47(5S):222, May 2015.
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- 47. Brown LA, Perry RA, Rosa ME, Lee DE, Brown JL, Greene NP, Washington TA (2015). Collagen 3: 1 Is Altered In Diet-induced Obese Mice During Skeletal Muscle Regeneration. American College of Sports Medicine Annual Meeting, San Diego, CA. Medicine & Science in Sports & Exercise. 47(5S):99, May 2015.
- 48. Lee DE, Perry RA, Brown JL, Brown LA, Rosa ME, Washington TA, **Greene NP** (2015). Aging and Obesity: Mitochondria at the Heart of the Problem. Selected as a finalist for Masters Student Award at Annual Meeting of the Central States Regional Chapter of the American College of Sports Medicine, October 15, 2015.
- 49. McBee EK, Brown JL, Perry RA, Shimkus KL, Lee DE, Rosa ME, Cardin JM, Brown LA, Shirazi-Fard Y, Hogan HA, Fluckey JD, Washington TA, **Greene NP** (2015). Autophagy Following Multiple Bouts of Hindlimb Unloading. Presented at Annual Meeting of the Central States Regional Chapter of the American College of Sports Medicine, October 15, 2015.
- 50. Brown JL, Rosa ME, Lee DE, Brown LA, Perry RA, Carson JA, Dridi S, Washington TA, **Greene NP** (2015). PGC-1α4 Gene Expression is Suppressed by the IL-6-ERK1/2 MAPK Signaling Axis. Presented at Annual Meeting of the Central States Regional Chapter of the American College of Sports Medicine, October 15, 2015.

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- 52. Rosa ME, Harris MP, Lee DE, Brown JL, Poole KE, Seija A, Brown LA, Perry RA Jr., Washington TA, Wooten JS, Greene NP. Autophagy Regulation After Diet and Exercise in Non-Alcoholic Fatty Liver Disease (2015). Selected as a finalist for Masters Student Award at Annual Meeting of the Central States Regional Chapter of the American College of Sports Medicine, October 15, 2015.
- 53. Brown LA, Perry RA Jr., Lee DE, Brown JL, Rosa ME, Greene NP, Washington TA. Effects of Sarcopenic Obesity on Gene Expression of the Extracellular Matrix in Skeletal Muscle (2015). Presented at Annual Meeting of the Central States Regional Chapter of the American College of Sports Medicine, October 15, 2015.
- 54. Perry RA Jr., Brown LA, Lee DE, Brown JL, Rosa ME, **Greene NP**, Washington TA. Differential Effects of Age and Obesity on Markers of Protein Synthesis in Hearts of C57BL/6J Mice (2015). Presented at Annual Meeting of the Central States Regional Chapter of the American College of Sports Medicine, October 15, 2015.
- 55. Greene NP, Lee DE, Brown JL, Rosa ME, Brown LA, Perry RA Jr., Washington TA. microRNA-16 is down-regulated in diabetes, controls muscle protein turnover and promotes mitochondrial quality in lipid overload-induced insulin resistance (2015). Presented at Annual Symposium of the Arkansas Bioscience Institute October 6, 2015
- 56. Brown LA, Brown JL, Rosa ME, Lee DE, Perry RA Jr, Hardee JP, Carson JA, Greene NP, Washington TA. Progression of Cancer Cachexia Alters Muscle Lactate Metabolism In ApcMin/+ Mice (2015). FASEB Journal 29: 947.15. 2015.
- 57. Baum J, Smith-Blair N, French WW, Washington TA, **Greene NP**. Aerobic exercise (EX) training does not improve body composition or glycemic control in type 2 diabetic rats with pulmonary hypertension (PH) (2015). FASEB Journal 29:1044.6. 2015.
- 58. Lee DE, Brown JL, Rosa ME, Brown LA, Perry RA Jr., Nilsson MI, Washington TA, Fluckey JD, Greene NP. Differential Responses of Skeletal Muscle microRNAs to Resistance Exercise Training in Diabetes (2014). Presented at Central States ACSM Annual Meeting October 2014.
- 59. Brown JL, Perry RA Jr., Shimkus KL, Lee DE, Rosa ME, Cardin JM, Brown LA, McBee EK, Sharazi-Fard Y, Hogan HA, Fluckey JD, Washington TA, **Greene NP**. Mitochondrial Biogenesis After Repeated Bouts of Disuse (2014). Presented at Central States ACSM Annual Meeting October 2014.
- 60. Rosa ME, Lee DE, Brown JL, Perry RA Jr, Brown LA, Henry JN, Washington TA, Greene NP. Investigating Mitochondrial Autophagy After Voluntary Wheel Running in Western Diet Fed Mice (2014). Presented at Central States ACSM Annual Meeting October 2014.
- 61. Henry JN, Lee DE, Rosa ME, Brown JL, Brown LA, Perry RA Jr., Washington TA, **Greene NP**. Aberrant Regulation of Mitochondrial Biogenesis and Content Following Lifestyle Physical Activity in Western Diet Fed Mice (2014). Presented at Central States ACSM Annual Meeting October 2014.

- 62. Stacy C, Lee DE, Brown JL, Rosa ME, Henry JN, Brown LA, Perry RA Jr., Washington TA, **Greene NP**. Effect of Lifestyle Physical Activity and Western Diet on Genes Controlling Mitochondrial Translation (2014). Presented at Central States ACSM Annual Meeting October 2014.
- 63. Sexton CM, Brown JL, Lee DE, Henry JN, Rosa ME, Brown LA, Perry RA Jr., Washington TA, Greene NP. Protein Expression of Mitochondrial mRNA Translation Factors is Driven by PGC-1α (2014). Presented at Central States ACSM Annual Meeting October 2014.
- 64. Brown LA, Perry RA Jr., Brown JL, Lee DE, Rosa ME, **Greene NP**, Washington TA. Hypercholesterolemia does not Inhibit Growth Related Gene Expression During Acute Skeletal Muscle Regeneration (2014). Presented at Central States ACSM Annual Meeting October 2014.
- 65. Perry RA Jr., Brown LA, Lee DE, Brown JL, Rosa ME, **Greene NP**, Washington TA. Differential Responses to Leucine Supplementation in Young and Aged Mice During Skeletal Muscle Regeneration (2014). Presented at Central States ACSM Annual Meeting October 2014.
- 66. Tedrowe MA, Brown LA, Perry RA Jr., Rosa ME, Brown JL, Lee DE, **Greene NP**, Washington TA. Effects of Diet-Induced Obesity on Skeletal Muscle Extracellular Matrix Gene Expression during Regeneration (2014). Presented at Central States ACSM Annual Meeting October 2014.
- 67. Greene NP, Lee DE, Nilsson MI, Washington TA, Shimkus KL, Perticone JI, Crouse SF, Fluckey JD. Gene Expression of Novel Regulators Of Skeletal Muscle Hypertrophy In Obesity: PGC-1α4 And Deptor (2014). American College of Sports Medicine Annual Meeting 2014, Orlando Fl. Medicine & Science in Sports & Exercise. 46(5S):307, May 2014.
- 68. Lee DE, Fluckey JD, Nilsson MI, Brown LA, Shimkus KL, Washington TA, Crouse SF, Greene NP. Mitochondrial Translation Elongation Limits Mitochondrial Biogenesis In The Obese Response To Resistance Exercise (2014). American College of Sports Medicine Annual Meeting 2014, Orlando Fl. Medicine & Science in Sports & Exercise. 46(5S):298, May 2014.
- 69. Papineau AM, Brown LA, **Greene NP**, Washington TA. Leucine Supplementation Decreases Inflammation During Skeletal Muscle Regeneration (2014). American College of Sports Medicine Annual Meeting 2014, Orlando Fl.
- 70. Brown LA, Patton JF, Papineau AM, **Greene NP**, Washington TA. Myogenic Regulatory Factor Gene Expression Is Impaired In Obese Mice During Skeletal Muscle Regeneration (2014). American College of Sports Medicine Annual Meeting 2014, Orlando Fl.
- 71. Lambert BS, Greene NP, Carradine AT, Joubert DP, Fluckey JD, Riechman SE, Crouse SF. Aquatic Treadmill Training Reduces Blood Pressure Reactivity to Physical Stress (2014). American College of Sports Medicine Annual Meeting 2014, Orlando Fl. Medicine & Science in Sports & Exercise. 46(4):809-816, April 2014.
- 72. Perticone JI, Shimkus KL, **Greene NP**, Nilsson MI, Lee DE, Washington TA, Crouse SF, Fluckey JD. The  $\beta$ -TrCP/DEPTOR axis is associated with anabolic dysregulation in diabetic skeletal muscle (2014). Submitted for presentation at Texas A&M University Student Research Week 2014.
- 73. Lee DE, Fluckey JD, Nilsson ME, Brown LA, Shimkus KL, Washington TA, Crouse SF, Greene NP. Mitochondrial Transcription and Translation Initiation Factor Protein Expression Enhancement Through

High-Volume Resistance Training (2013). Presented at Central States ACSM Annual Meeting October 2013.

- 74. **Greene NP**, Lira VA, Chain KH, Zhang M, Hargett SF, Keller SF, Yan Z. Muscle-specific deletion of p38 alpha/beta MAPK improves glucose tolerance and reduces body fat but impairs exercise capacity (2013). FASEB J (27). April 2013.
- 75. Lambert BS, **Greene NP**, Carradine AT, Joubert DP, Fluckey JD, Crouse SF. Aquatic Treadmill Training Reduces Blood Pressure Reactivity to Acute Graded Exercise in Previously Sedentary Adults (2013). International Journal of Exercise Science: Conference Abstract Submissions: 2(5) A4. Feb 2013
- 76. Shimkus KL, Wudeck EV, Shirazi-Fard Y, Nilsson MI, **Greene NP**, Hogan HA, Fluckey JD. DEPTOR Expression Correlates with Muscle Protein Synthesis (2013). International Journal of Exercise Science: Conference Abstract Submissions: 2(5) A7. Feb 2013.
- 77. Lambert BS, **Greene NP**, Carradine AT, Joubert DP, Green JS, Crouse SF. Aquatic treadmill training enhances strength and lean mass gains when combined with resistance training (2013). Presented at the ACSM Annual Meeting 2013.
- 78. Greene NP, Lira VA, Yan Z. Atg6 deficiency exacerbates glucose intolerance in mice on high-fat diet (2012). FASEB Journal. 26:869.18, April 2012.
- 79. Greene NP, Martin SE, Lambert BS, Crouse SF. Differential Effects of Acute and Chronic Exercise on HDL-Cholesterol in Overweight/Obese Men and Women (2010). Medicine & Science in Sports & Exercise. 42(5):530-531, May 2010.
- Lambert BS, Greene NP, Green JS, Crouse SF. Concurrent Resistance and Aquatic Treadmill Training Elicits Greater Lean Mass Gaines than Resistance Training Alone (2010). Medicine & Science in Sports & Exercise. 42(5):389-390, May 2010. Presented at 2010 Texas chapter of the American College of Sports Medicine Annual Meeting, March 2010.
- Martin SE, Glowacki SP, Greene NP, Green JS, Crouse SF. Influence Of Exercise Training On The Lipoprotein-lipid Response To A Single Session Of Exercise (2010). Medicine & Science in Sports & Exercise. 42(5):292, May 2010.
- 82. Crouse SF, Oliver JM, Green JS, Bragg A, Lambert BS, Martin SE, **Greene NP**, Bramhall JP. Lipid Profiles in NCAA Division I Football Players Compared with Non-Athletes (2010). Medicine & Science in Sports & Exercise. 42(5):751, May 2010.
- 83. Nilsson MI, Dobson JP, **Greene NP**, Cummins CB, McHenry E, Cloud WM, Wiggs MP, Biehl AJ, Fluckey JD. Fiber Type-Dependent Suppression of Myocellular Anabolic Response in the Obese Zucker Rat (2010). FASEB Journal. (24) April 2010.
- 84. **Greene NP**, Nilsson MI, Hodlik RO, Fluckey JD, Crouse SF. Influence of Resistance Exercise on AMPK and PGC-1α in the Obese Zucker Rat (2009). Presented at the 14<sup>th</sup> International Biochemistry of Exercise Conference, Guelph, Canada, June 2009.
- 85. Dobson JP, Nilsson MI, **Greene NP**, Wiggs MP, Latham G, Walters S, Fluckey JD. Reduced Muscle Mass in Hindlimb Muscles of Obese Zucker Rats is not due to Suppressed Protein Synthesis (2009). Presented at the 14<sup>th</sup> International Biochemistry of Exercise Conference, Guelph, Canada, June 2009.

- 86. Nilsson MI, **Greene NP**, Dobson JP, Macias BR, Wiggs MP, Gasier HG, Fluckey JD. Resistance Exercise Does Not Augment Cumulative Muscle Protein Synthesis in the Obese Zucker Rat (2009). Presented at the 14<sup>th</sup> International Biochemistry of Exercise Conference, Guelph, Canada, June 2009.
- 87. Greene NP, Nilsson MI, Lambert BS, Riechman SE, Fluckey JD, Crouse SF. Changes in PPARδ Protein Content following Acute Aerobic Exercise in Human Vastus Lateralis Muscle (2009). Medicine & Science in Sports & Exercise. 41(5) Supplement: 78, May 2009. International Journal of Exercise Science: Conference Abstract Submissions: 2(1) A23. Feb 2009.
- 88. Greene NP, Greene ES, Carbuhn AF, Martin SE, Green JS, Crouse SF. Blood Lipids are not Altered Following Acute Treadmill Exercise in Sedentary, Obese Adults (2008). Medicine & Science in Sports & Exercise. 40(5) Supplement: S57, May 2008.
- 89. Greene ES, Greene NP, Carbuhn AF, Green JS, Crouse SF. Lean Body Mass Increases following 12-Week Aerobic Training with Underwater but not Land Treadmill (2008). Medicine & Science in Sports & Exercise. 40(5) Supplement: S172, May 2008.
- 90. Greene NP, Carbuhn AF, Crouse SF. Blood Pressure Adaptations to 12 Weeks Aerobic Exercise Training: Land vs. Water Treadmill (2008). Presented at Texas A&M University Student Research Week, March 2008.
- 91. Muller A, Hansen BE, Greene NP, Greene ES, Miller GS, Womack JW, Carbuhn AF, Meade T, Crouse SF, Green JS. Body Composition Changes Resulting From Underwater Treadmill Walking Versus Land-Based Treadmill Walking (2007). Medicine & Science in Sports & Exercise: 39(5) Supplement: S322, May 2007.
- 92. Greene ES, Greene NP, Hansen BE, Miller GS, Muller A, Womack JW, Green JS, Carbuhn AF, Meade T, Crouse SF. Comparison of physiological responses to exercise on land versus water treadmill (2007). Medicine & Science in Sports & Exercise: 39(5) Supplement: S483, May 2007.
- 93. Greene NP, Greene ES, Miller GS, Muller A, Hansen BE, Womack JW, Green JS, Carbuhn AF, Meade T, Crouse SF. Prediction of energy costs of exercise on a water treadmill (2007). Medicine & Science in Sports & Exercise: 39(5) Supplement: S482, May 2007
- 94. Carbuhn AF, **Greene NP**, Greene ES, Miller GS, Muller A, Hansen BE, Womack JW, Green JS, Meade TH, Crouse SF. Effects of water compared to land treadmill training for altering the lipid profile (2007). Presented at Texas Chapter of American College of Sports Medicine Annual Meeting. February 2007.
- 95. Chen SC, Davis JM, Matthews EC, Crowley EP, Greene NP, Quig KM, Wilson A, Payn T, Lyerly W, Murphy AE, Carmichael M. Effects of Caffeine and Carbohydrate Ingestion on Physical/Mental Functions During Team Sports Exercise (2006). Medicine & Science in Sports & Exercise. 38(5) Supplement: S36-S37, May 2006.
- 96. **Greene NP**, Crawford GE, Miller GS, Womack JW, Green JS, Crouse SF. Effect of Carbohydrate and Carbohydrate-Protein Supplementation on Power Performance in Collegiate Football Players (2006). Presented at Texas Chapter of American College of Sports Medicine Annual Meeting. February 2006.

# **Other Presentations and Seminars**

University of Arkansas, Department of Health, Human Performance and Recreation Seminar Series, January 2014

• Impaired Regulation of Mitochondrial Quality in Obesity and Diabetes

University of Virginia, Metabolic Interest Group Seminar, August 2012

• Muscle Specific Deletion of  $p38\alpha/\beta$  MAPK and Whole Body Phenotype

University of Virginia, Robert M. Berne Cardiovascular Research Center, Research in Progress Seminar Series, June 2011

• Atg6 in Insulin Resistance: A role for the removal of damaged mitochondria

Texas A&M University Department of Health & Kinesiology, Exercise Physiology Graduate Seminar, January 2010

• PPARs: Potential Mechanisms Regulating Blood Lipid and Lipoprotein Concentrations at Rest and Following Exercise in the Obese

Texas A&M University Department of Health & Kinesiology, Exercise Physiology Graduate Seminar, April 2009

• Effects of Exercise and Obesity on Peroxisome Proliferator-Activated Receptors

Texas A&M University Department of Health & Kinesiology, Exercise Physiology Graduate Seminar, March 2008

• Peroxisome Proliferator-Activated Receptors: A Role for Exercise?

Texas A&M University Department of Health & Kinesiology, Exercise Physiology Graduate Seminar, February 2007

• Prediction of Oxygen Costs of Exercise on a Water Treadmill

# **Teaching Experience**

# Primary Instructor of Record

Research Methods in Health, Human Performance and Recreation - HHPR 5353 Spring 2020

Graduate Physiology of Exercise I - EXSC 5513, University of Arkansas, 2013-

Graduate Physiology of Exercise II - EXSC 6343, University of Arkansas, 2014-

Muscle Metabolism in Exercise - EXSC 5523, University of Arkansas, 2015-

Grant Writing – HHPR 6483, University of Arkansas, 2021-Original Course Developed by Dr. Greene and approved by UA Fall 2020

Laboratory Techniques in Exercise Science - EXSC 3533, University of Arkansas, 2014-

Exercise Prescription - EXSC 4323, University of Arkansas, 2015-

Course Director - Spring 2012 - Cardiovascular Research Center, University of Virginia Special Topics in Cardiovascular Research (BIMS 8064)

# Other Teaching Experience

- Professional Internship-Teaching, Fall 2008 Department of Health & Kinesiology, Texas A&M University Applied Exercise Physiology (KINE 649)
- Graduate Teaching Assistantship, 2003-2005 Department of Exercise Science, University of South Carolina Laboratory instructor for Undergraduate Exercise Physiology and Clinical Exercise Physiology Laboratories (EXSC 530 and 531), Lead GTA Fall 2004-Spring 2005
- Graduate Teaching Assistantship, Summer 2004 and 2005 Department of Exercise Science, University of South Carolina Laboratory Instructor for Graduate Exercise Testing Laboratories (EXSC 784)
- Graduate Teaching Assistantship, Fall 2003 Department of Exercise Science, University of South Carolina Laboratory instructor for Undergraduate Anatomy and Physiology Laboratories (EXSC 223)

Guest Lecture for Human Nutrition (BIOL 1322), February and October 2008, March 2009 - Natural Sciences Department, Biology Division, Blinn College.

• Weight Management and Physical Fitness

Guest Lecture for Graduate Exercise Test/Program (EXSC 784), May 2005 - Department of Exercise Science, University of South Carolina

• Cardiovascular Risk Factor Identification and Stratification

Guest Lectures for Clinical Exercise Physiology (EXSC 531), 2005 - Department of Exercise Science, University of South Carolina

- Cardiovascular Risk Factor Identification and Stratification, February 2005
- Sinus Rhythms and ECG Dysrhythmia, March 2005

Guest lectures for Undergraduate Introduction to Exercise Science (EXSC 191), May 2004 - Department of Exercise Science, University of South Carolina

- Cardiovascular Endurance
- Drugs and Sexually Transmitted Diseases

# **Community Service**

- University of Virginia, "Mini-Medical School" Lab Night, September 2012
  - Molecular Biology of Muscle Plasticity
  - Research laboratory experience for members of the Charlottesville, Va community participating in "Mini-Medical School" to learn the workings of the UVa Health System.
- University of Virginia, Postdoctoral Research Day, Poster Judge, May 2013
- Fayetteville, AR Volunteer aid at Mt. Kessler Trail Run, November 2016
- Volunteer Trail Builder, Hobbs State Park, May 2017 and March 2018
- Parking Team Member and Leader, The Grove Church, Fayetteville, AR, 2013-2016
- Ozark Off Road Cyclists Trail Crew, 2019-Present, Volunteer maintenance, repair and building of multiuse dirt trails at Kessler Mountain Regional Park, Lake Fayetteville, Mt. Sequoyah and Lake Wedington \*\*\*2020 Co-Volunteer of the Year\*\*\*
- Beer Boss, Buffalo Headwaters Challenge Mountain Bike Festival, Ozark Off Road Cyclists, April 2021.

# Palmarès - List of (Athletic) Accomplishments - Finisher

Cycling

- Beach Century Bike Tour October 1, 2011 Virginia Beach, Va (100 miles)
- Shenandoah Valley Bicycle Festival Half-Century July 28, 2012 Harrisonburg, Va (50 miles)
- Lakes and Grapes Century September 3, 2012 Fredericksburg, Va (100 miles)
- Sea Gull Century October 6, 2012 Salisbury, Md (100 miles)

# Running

- Charlottesville Ten Miler March 31, 2012 Charlottesville, Va
- Run for the Dream Half-Marathon May 20, 2012 Williamsburg, Va (13.1 miles)
- Shamrock Marathon March 17, 2013 Virginia Beach, Va (26.2 miles)
- Ozark National Forest Trail Race, 7 mile April 23, 2016 (Lake Wedington, AR)
- War Eagle Trail Running Festival, 10K June 4, 2016 (Hindsville, AR)
- Pumpkin Holler Hunnerd, 10 mile October 15, 2016 (Tahlequah, OK)
- War Eagle Trail Running Festival, 25K June 2, 2017 (Hindsville, AR)
- Pumpkin Holler Hunnerd, 25K October 21, 2017 (Tahlequah, OK)
- Frisco Railroad Run, 50K April 28, 2018 (Willard, Mo)
- Pumpkin Holler Hunnerd, 50K October 20, 2018 (Tahlequah, OK)
- Pumpkin Holler Hunnerd, 50K October 19, 2019 (Tahlequah, OK)