Nicholas Perry Greene 155 Stadium Dr 321Q HPER Building Fayetteville, AR 72071

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 Integrative Biology (Muscle and Cardiovascular Physiology) 2010-2013

Robert M. Berne Cardiovascular Research Center, University of Virginia

Charlottesville, VA Mentor: Zhen Yan, Ph.D.

Doctor of Philosophy Kinesiology (Exercise Physiology Emphasis) 2010

Department of Health and Kinesiology, Texas A&M University

College Station, TX

Mentor: Stephen F. Crouse, Ph.D.

Master of Science Exercise Science 2005

Department of Exercise Science, University of South Carolina

Columbia, SC

Mentors: J. Mark Davis, Ph.D. and J. Larry Durstine, Ph.D.

Bachelor of Science Exercise Science 2002

Department of Exercise Science, University of South Carolina

Columbia, SC

Professional Experience

2013-Present	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 Central States Chapter of the American College of Sports Medicine American Physiological Society Society on Sarcopenia, Cachexia & Wasting Disorders

Honors and Awards

- 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 Grant Award, \$2,500. To visit and learn in the laboratory of Dr. James Carson at University of South Carolina
- 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
- 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.
- Session and Taxonomy Winner Texas A&M University Graduate Student Council, 12th 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
- 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

Editorial Boards and Manuscript Review

Editorial Board Member

Sport Medicine and Health Science

Reviewer

Journal of Applied Physiology

Diabetes

Autophagy

Journal of Cachexia, Sarcopenia and Muscle

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

American Journal of Physiology-Regulatory, Integrative and Comparative Physiology

Experimental Physiology

Acta Physiologica

Medicine and Science in Sports and Exercise

Grants Reviewer

- 2017 NIH Skeletal Muscle Biology and Exercise Physiology Study Section Early Career Reviewer October 12, 13, 2017
- 2017 Sydney & J.L. Huffines Institute for Sports Medicine and Human Performance Student Grants Reviewer, Texas A&M University
- 2018- Arkansas Biosciences Institute Grants Review University of Arkansas at Fayetteville Division
- 2018- Chancellor's Discovery, Creativity, Innovation and Collaboration Fund Grants Review, University of Arkansas at Fayetteville

Research Grants

Active

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: 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

Past

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: July 1, 2016 – May 15, 2017

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

Citation Indices and Related Links

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

Dissertation and Thesis Committees Served

Graduate Committee Chair

Megan E. Rosa-Caldwell, Ph.D. Student Kinesiology Seongkyun Lim, Ph.D. Student Kirsten Dunlap, M.S. Student Kinesiology

Graduate Committee Member

Cory Butts, Ph.D. Student. Advisor Dr. Brendon McDermott Richard A. Perry, Ph.D. Student. Advisor Dr. Tyrone A. Washington Matthew Stone, Ph.D. Student. Advisor Dr. Michelle Gray Ashley Binns, Ph.D. Student. Advisor Dr. Michelle Gray

Completed Doctoral Committee Chaired

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

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

Completed Committees Served

Joshua Ragland, M.S.

D. Layne Nixon, M.S. Lemuel Brown, Ph.D.

Honors Undergraduate Theses Served David Skinner, B.S. Whitney Muller, B.S.

Mentored Student Awards

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

Elizabeth K. McBee, Outstanding Undergraduate Student in Exercise Science, College of Education and Health Professions, University of Arkansas, 2015.

Megan E. Rosa-Caldwell, Outstanding Masters Student in Exercise Science, College of Education and Health Professions, University of Arkansas, 2016.

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.

Sarah Ramey, Undergraduate Student Research Award, Central States Regional Chapter American College of Sports Medicine. Awarded October 2017.

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.

Megan E. Rosa-Caldwell, Central States American College of Sports Medicine PhD Student Research Award, 2016.

Megan E. Rosa-Caldwell, DuPont Student Travel Grant, \$500, Central States American College of Sports Medicine PhD Research Award, 2015.

Megan E. Rosa-Caldwell, Central States American College of Sports Medicine Masters Student Research Award, 2015.

David E. Lee, Central States American College of Sports Medicine Masters Student Research Award Finalist, 2015.

Megan E. Rosa-Caldwell, American Physiological Society Gastrointestinal & Liver Section Poster of Distinction, Experimental Biology, 2017.

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.

Manuscripts (Impact Factors as of Summer 2017)

1. David E. Lee, Kinan Alhallak, Samir V. Jenkins, Isaac Vargas, **Nicholas P. Greene**, Kyle P. Quinn, Robert J. Griffin, Ruud P. M. Dings, Narasimhan Rajaram. A Radiosensitizing Inhibitor of HIF-1 alters the Optical Redox State of Human Lung Cancer Cells *In Vitro*. Accepted for publication in *Scientific Reports* May 31, 2018. Impact Factor = 4.259

- 2. Jacob L. Brown, Megan E. Rosa-Caldwell, David E. Lee, Thomas A. Blackwell, Lemuel A. Brown, Richard A. Perry, Wesley S. Haynie, Justin P. Hardee, James A. Carson, Michael P. Wiggs, Tyrone A. Washington, Nicholas P. Greene. Mitochondrial Degeneration Precedes the Development of Muscle Atrophy in Progression of Cancer-Cachexia in Tumor-Bearing Mice. *J Cachexia Sarcopenia and Muscle*. Epub Ahead of Press August 28, 2017. PMID: 28845591. Impact Factor = 9.697
- 3. Megan E. Rosa-Caldwell, Jacob L. Brown, David E. Lee, Thomas A. Blackwell, Kyle W. Turner, Lemuel A. Brown, Richard A. Perry, Jr., Wesley S. Haynie, Tyrone A. Washington, **Nicholas P. Greene**. Autophagy Activation, Not PGC-1α, may Mediate Exercise-Induced Improvements in Glucose Handling During Diet-Induced Obesity. *Experimental Physiology*. Epub Ahead of Press June 22, 2017. PMID: 28639297. Impact Factor = 2.912
- 4. Kinan Alhallak, Samir V. Jenkins, David E. Lee, **Nicholas P. Greene**, Kyle P. Quinn, Robert J. Griffin, Ruud P. M. Dings, Narasimhan Rajaram. Optical imaging of radiation-induced metabolic changes in radiation-sensitive and resistant cancer cells. *Journal of Biomedical Optics*. 22(6):60502, 2017. PMID: 28622395. Impact Factor = 2.530
- 5. David E. Lee, Jacob L. Brown, Megan E. Rosa-Caldwell, Thomas A. Blackwell, Richard A. Perry, Jr., Lemuel A. Brown, Bhuwan Khatri, Dongwon Seo, Walter G. Bottje, Tyrone A. Washington, Michael P. Wiggs, Byung-Whi Kong, **Nicholas P. Greene**. Cancer Cachexia-Induced Muscle Atrophy: Evidence for Alterations in microRNAs important for Muscle Size. *Physiological Genomics*. 49(5):253-260, 2017. PMID: 28341621. Impact Factor = 3.044
- 6. **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*. Accepted for publication Nov. 14, 2016. PMID: 27875947. Impact Factor = N/A
- 7. Jacob L. Brown, Megan E. Rosa-Caldwell, David E. Lee, Lemuel A. Brown, Richard A. Perry, Kevin L. Shimkus, Thomas A. Blackwell, James D. Fluckey, James A. Carson, Sami Dridi, Tyrone A. Washington, Nicholas P. Greene. PGC-1α4 gene expression is suppressed by the IL-6—MEK—ERK 1/2 MAPK signaling axis and altered by resistance exercise, obesity and muscle injury. Acta Physiologica. 220(2):275-288, 2017. PMID: 27809412. Impact Factor = 4.867
- 8. Megan E. Rosa-Caldwell, David E. Lee, Jacob L. Brown, Lemuel A. Brown, Richard A. Perry Jr, Elizabeth S. Greene, Francisco R Carvallo Chaigneau, Tyrone A. Washington, **Nicholas P. Greene**. Moderate Physical Activity Promotes Basal Hepatic Autophagy in Diet-Induced Obese Mice. *Applied Physiology Nutrition and Metabolism.* 42(2):148-156, 2017. PMID: 28084795. Impact Factor = 2.023
- 9. Richard A. Perry Jr, Lemuel A. Brown, David E. Lee, Jacob L. Brown, Jamie I. Baum, **Nicholas P. Greene**, Tyrone A. Washington. The Akt/mTOR pathway: Data comparing young and aged mice with leucine supplementation at the onset of skeletal muscle regeneration. *Data in Brief.* 8:1426-32, 2016. PMID: 27617277. Impact Factor = N/A
- 10. Richard A. Perry Jr, Lemuel A. Brown, David E. Lee, Jacob L. Brown, Jamie I. Baum, **Nicholas P. Greene**, Tyrone A. Washington. Differential Effects of Leucine Supplementation in Young and Aged Mice at the Onset of Skeletal Muscle Regeneration. *Mech Ageing Dev* 157:7-16, 2016. PMID: 27327351. Impact Factor = 3.087

- 11. David E. Lee*, Jacob L. Brown*, Megan E. Rosa, Lemuel A. Brown, Richard A. Perry, Jr., Tyrone A. Washington, **Nicholas P. Greene**. Translational machinery of mitochondrial mRNA is promoted by physical activity in Western diet-induced obese mice. *Acta Physiologica* 220(2):275-288, 2016. PMID: 27061106. Impact Factor = 4.867
- 12. David E. Lee, Jacob L. Brown, Megan E. Rosa, Lemuel A. Brown, Richard A. Perry, Jr., Michael P. Wiggs, Mats I. Nilsson, Stephen F. Crouse, James D. Fluckey, Tyrone A. Washington, Nicholas P. Greene. microRNA-16 is Downregulated during Insulin Resistance and Controls Skeletal Muscle Protein Accretion. *J Cellular Biochem* 117(8) 1775-1787, 2016. PMID: 26683117. Journal Cover Image. 117(8), 2016. PMID: 27301891. Impact Factor = 3.085
- 13. **Nicholas P. Greene**, David E. Lee, Jacob L. Brown, Megan E. Rosa, Lemuel A. Brown, Richard A. Perry, Jordyn N. Henry, Tyrone A. Washington. Mitochondrial quality control, promoted by PGC-1α, is dysregulated by Western Diet-induced obesity and partially restored by moderate physical activity in mice. *Physiological Reports* 3(7): 12470, 2015. PMID: 26177961. Impact Factor = N/A
- 14. Lemuel A. Brown, David E. Lee, Jillian F. Patton, Richard A. Perry, Jacob L. Brown, Jamie Baum, Nan Smith-Blair, **Nicholas P. Greene**, Tyrone A. Washington. Diet-induced obesity alters anabolic signaling in mice at the onset of muscle regeneration. *Acta Physiologica* 215(1):46-57, 2015. PMID: 26052759. Impact Factor = 4.867
- 15. 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 = 4.142
- 16. Brad S. Lambert, Kevin L. Shimkus, James D. Fluckey, Steven E. Riechman, **Nicholas P. Greene**, Jessica M. Cardin, Stephen F. Crouse. Anabolic Responses to Acute and Chronic Resistance Exercise are Enhanced when Combined with Aquatic Treadmill Exercise. *American Journal of Physiology Endocrinology and Metabolism* 308(3):E192-200. 2014. PMID: 25425002. Impact Factor = 4.142
- 17. **Nicholas P. Greene**, Mats I. Nilsson, Tyrone A. Washington, David E. Lee, Lemuel A. Brown, Alyssa M. Papineau, Kevin L. Shimkus, Elizabeth S. Greene, Stephen F. Crouse, James D. Fluckey. Impaired Exercise-Induced Mitochondrial Biogenesis in the Obese Zucker Rat, Despite PGC-1α Induction, is Due to Compromised Mitochondrial Translation Elongation. *American Journal of Physiology Endocrinology and Metabolism*: 306: E503-511. 2014 PMID: 24398401. Impact Factor = 4.142
- 18. **Nicholas P. Greene*** and Brad S. Lambert*, Alex T. Carradine, Dustin P. Joubert, James D. Fluckey and Stephen F. Crouse. Aquatic Treadmill Training Reduces Blood Pressure Reactivity to Acute Graded Exercise in Previously Sedentary Adults. *Medicine & Science in Sports & Exercise* 46(4):809-16. 2014 *First and second authors claim equal responsibility for this work. PMID: 24056269. Impact Factor = 4.141
- 19. Vitor A. Lira, Mitsuharu Okutsu, Mei Zhang, **Nicholas P. Greene**, Rhianna C. Laker, and Zhen Yan. Autophagy is required for exercise training-induced skeletal muscle adaptation and improved performance. *FASEB Journal*: 27(10): 4184-4193. 2013 PMID: 23825228. Impact Factor = 5.498
- 20. Mats I. Nilsson, Justin P. Dobson*, **Nicholas P. Greene***, Michael P. Wiggs, Kevin L. Shimkus, Elyse V. Wudeck, Amanda R. Davis, Marissa L. Laureano, James D. Fluckey. Abnormal Protein Turnover and Anabolic Resistance to Exercise in Sarcopenic Obesity. *2nd and 3rd authors claim equal

- responsibility for work. *FASEB Journal*: 27(10): 3905-3916. 2013 PMID: 23804240. Impact Factor = 5.498
- 21. Jorge L. Ruas, James P. White, Rajesh R. Rao, Kevin T. Brannan, Brooke C. Harrison, **Nicholas P. Greene**, Sandra Kleiner, Jun Wu, Jennifer L. Estall, Brian A. Irving, Ian R. Lanza, Kyle A. Rasbach, Mitsuharu Okutsu, K. Sreekumaran Nair, Zhen Yan, Leslie A. Leinwand, Bruce M. Spiegelman. A novel PGC-1α isoform induced by resistance training regulates skeletal muscle hypertrophy. *Cell*: 151(6):1319-31, 2012. PMID: 23217713. Impact Factor = 30.410
- 22. **Nicholas P. Greene**, James D. Fluckey, Brad S. Lambert, Elizabeth S. Greene, Steven E. Riechman, Stephen F. Crouse. Regulators of Blood Lipids and Lipoproteins? PPARδ and AMPK, Induced by Exercise, are Correlated with Lipids and Lipoproteins in Overweight/Obese Men and Women. *American Journal of Physiology Endocrinology and Metabolism*, 303: E1212-1221, 2012. PMID: 22990076. Impact Factor = 4.142
- 23. **Nicholas P. Greene**, Steven E. Martin, Stephen F. Crouse. Acute Exercise and Training Alter Blood Lipid and Lipoprotein Profiles Differently in Overweight and Obese Men and Women. *Obesity* 20(8):1618-27, 2012. PMID 22421926. Impact Factor = 3.873
- 24. 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 Manuscript featured on journal cover. Impact Factor = 4.431
- 25. **Nicholas P. Greene**, Elizabeth S. Greene, Aaron F. Carbuhn, John S. Green, Stephen F. Crouse. VO₂ Prediction and Cardiorespiratory Responses During Underwater Treadmill Exercise. *Research Quarterly for Exercise and Sport* 82(2): 264-273, 2011. PMID 21699106. Impact Factor = 1.815
- 26. Mats I. Nilsson, **Nicholas P. Greene**, Justin P. Dobson, Michael P. Wiggs, Heath G. Gasier, Brandon R. Macias, Kevin L. Shimkus, James D. Fluckey. Insulin resistance syndrome blunts the mitochondrial anabolic response following resistance exercise. *American Journal of Physiology Endocrinology and Metabolism* 299(3): E466-74, 2010. PMID 20606077. Impact Factor = 4.142
- 27. **Nicholas P. Greene**, Bradley S. Lambert, Elizabeth S. Greene, Aaron F. Carbuhn, John S. Green, Stephen F. Crouse. Comparative Efficacy of Water and Land Treadmill Training for Overweight or Obese Adults. *Medicine & Science in Sports & Exercise* 41: 1808-1815, 2009. PMID 19657288. Impact Factor = 4.141

Invited Presentations

- 1. **Nicholas P. Greene***, James A. Carson, James D. Fluckey, Bradley S. Gordon. Emerging Mechanisms for Exercise Effects on Muscle Wasting and Anabolic Resistance. Symposium to be presented at ACSM's 65th 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.

- 2. **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.
- 3. **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
- 4. **Nicholas P. Greene**. Mitochondrial Degeneration The Onset of Cancer-Cachexia? Presented at Arkansas Bioscience Institute Annual Symposium 2016, Little Rock, AR Sept 13, 2016.
- 5. **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.
- 6. 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

- 1. 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.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. 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.
- 9. 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.
- 10. 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.
- 11. 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.
- 12. 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.
- 13. 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.
- 14. 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.
- 15. 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.
- 16. 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.
- 17. 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.

- 18. 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
- 19. 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.
- 20. 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.
- 21. 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.
- 22. **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.
- 23. 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.
- 24. Rosa ME, Harris MP, Lee DE, Brown JL, Poole KE, Seija A, Brown LA, Perry RA, Washington TA, Wooten JS, **Greene NP** (2016). Comparing autophagy regulation after weight loss interventions in non-alcoholic fatty liver disease. American College of Sports Medicine Annual Meeting, Boston MA.
- 25. 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.
- 26. Benson C, Lee DE, Brown JL, Rosa ME, Washington TA, **Greene NP**, Wiggs MP. Mitochondrial dysfunction is evident in lewis lung carcinoma-induced muscle wasting. Annual Meeting of the Texas Chapter of the American College of Sports Medicine March 3, 2016.
- 27. 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.
- 28. 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.
- 29. 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.
- 30. 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.
- 31. Lee DE, Brown JL, Rosa ME, Brown LA, Perry RA, Nilsson MI, Washington TA, Crouse SF, Fluckey JD, Greene NP (2015). microRNAs In Skeletal Muscle and Their Response to Resistance Exercise in Insulin Resistant Diabetes. American College of Sports Medicine Annual Meeting, San Diego, CA. Medicine & Science in Sports & Exercise. 47(5S):190, May 2015.
- 32. 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.
- 33. 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.
- 34. 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.
- 35. 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.
- 36. Walker H, Rosa ME, Lee DE, Brown JL, Brown LA, Perry RA Jr, Washington TA, **Greene NP**. Autophagy and Physical Activity in Hepatic Function of Western Diet-Induced Obesity (2015). Presented at Annual Meeting of the Central States Regional Chapter of the American College of Sports Medicine, October 15, 2015.
- 37. 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.
- 38. 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.

- 39. 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.
- 40. **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
- 41. 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.
- 42. 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.
- 43. 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.
- 44. 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.
- 45. 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.
- 46. 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.
- 47. 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.
- 48. 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.
- 49. 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.
- 50. 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.

- 51. 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.
- 52. **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.
- 53. 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.
- 54. 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.
- 55. 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.
- 56. 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.
- 57. Perticone JI, Shimkus KL, **Greene NP**, Nilsson MI, Lee DE, Washington TA, Crouse SF, Fluckey JD. The β-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.
- 58. 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.
- 59. **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.
- 60. 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
- 61. 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.

- 62. 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.
- 63. **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.
- 64. **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.
- 65. 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.
- 66. 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.
- 67. 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.
- 68. 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.
- 69. **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 14th International Biochemistry of Exercise Conference, Guelph, Canada, June 2009.
- 70. 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 14th International Biochemistry of Exercise Conference, Guelph, Canada, June 2009.
- 71. 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 14th International Biochemistry of Exercise Conference, Guelph, Canada, June 2009.
- 72. **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.
- 73. **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.

- 74. 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.
- 75. **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.
- 76. 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.
- 77. 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.
- 78. **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
- 79. 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.
- 80. 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.
- 81. **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 p38α/β 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?

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

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

• Prediction of Oxygen Costs of Exercise on a Water Treadmill

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

Teaching Experience

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-

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)

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)

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

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)